



Colorado M-series

Extended operation guide



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Introduction

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Regulation notices

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Introduction

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1. Name and version of the Canon Production Printing software you licensed.
2. Name and version of open source software modules contained in the above identified Canon Production Printing software of which you legitimately would like to obtain the source code.

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Regulation notices

This offer is valid to anyone in receipt of this information.

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Chapter 1

Introduction

About this guide

This guide is written for worldwide markets. It may contain information related to accessories or licensed functionalities not supported by your local Canon organization or dealer.

Language

Original instructions are in English.

Introduction

The guide addresses the Colorado M-series and is written for the printer operator.

It describes **the complete workflow of the printer**: from setup to the operation, maintenance and troubleshooting of the machine.

Process	Actions	Reference
Before using the system	Components of the printer	Explore the system on page 33
Daily use	Use the RIP software	Configure media in the RIP on page 44
	Load, wind, and cut media	Handle the media on page 41
	Print a job	Print a job on page 167
	Improve quality	Improve quality on page 249
Maintenance	Maintain the print quality	Maintain the print quality on page 176
	Maintain the rest of the printer	Maintain the printer on page 210
Network and security	Network and security options	Configure the network and security settings on page 259
Troubleshooting	Clear jams, stop the printer	General troubleshooting on page 316
	Clean polluted parts	Clean pollution on the printer on page 354

Operator skill level

This guide describes safeguards for the protection of an instructed person. Instructed person is a term applied to persons who have been instructed and trained by a skilled person, or who are supervised by a skilled person, to identify energy sources that may cause pain and to take precautions to avoid unintentional contact with or exposure to those energy sources.

About the users

Introduction

There are various types of users who can use the Colorado M-series each with its own role in the complete workflow.

The various roles can be filled in by the same person or by multiple people. This manual is mainly written for the **Printer operator**.

Prepress operator

- Receives and prepares job
- Uses design suites and RIP front ends to prepare the specific jobs
- Delivers 'ready to print jobs' to the printer operator

Media specialist

- Creates media profiles for new media or applications
- Manages media types and media profiles

Printer operator

- Operates the RIP to process and print jobs
- Manages the jobs, such as pausing, resuming and deleting jobs, loading, winding and cutting media etc.
- Operates the printer and takes care of the daily use
- Maintains the printer, such as cleaning the matrix plate, maintenance station, refilling ink etc.

System administrator

- Configures and manages the network
- Configures and manages the security settings
- Keeps the system up-to-date and secure
- Controls access



NOTE

This guide describes safeguards for the protection of an instructed person. Instructed person is a term applied to persons who have been instructed and trained by a skilled person, or who are supervised by a skilled person, to identify energy sources that may cause pain and to take precautions to avoid unintentional contact with or exposure to those energy sources.

About the Colorado M-series

Introduction

The Colorado M-series is a 1.6 m (64 inch) roll to roll printer, based on the patented UVgel technology. The Colorado M-series has a modular design, so there are numerous configurations possible.

There are 4 basic configurations:

- Colorado M3
- Colorado M3W
- Colorado M5
- Colorado M5W

On the operator panel, the configuration type is displayed at the top right-hand side of the screen.



Safe use

Introduction

When you operate the Colorado M-series you have to take note of the safety precautions and follow the guidelines.

Safety documents

Before you operate the printer read the following documents and follow the instructions:

- The safety chapter in this operation guide
- The MSDS - safety data sheets

For more information, see [Available documentation on page 16](#).

Stickers

Take note of the safety and precaution stickers in and on the machine. You can find an explanation of all the stickers in the safety chapter in this operation guide.

Working with UVgel ink

The Colorado M-series UVgel ink needs to be handled with care. Follow the instructions in this manual to work with ink safely and read all the warnings before you start the procedure. When you have to clean ink protect yourself and follow the prescribed procedure. For more information, see [Guidelines for cleaning uncured ink on page 354](#).

Notes for the reader

Typography

This manual uses the following typography to indicate elements that are part of the user interface.

Typography	Indicates
[Text between square brackets]	Name of a button, tile, setting, value, or other option of the user interface
<Text between angle brackets>	- Name of a key on a keyboard - Name of a variable: item that varies according to the context
Text displayed in courier font	- File path - Command Prompt comment
[Text] →[displayed in] →[menucascade]	Names of options to be used in a fixed order

Safety symbols

Before you use this product, make sure you read and understand the safety information that belongs to the product. Find the safety information on <https://downloads.cpp.canon>. Also be sure to follow all warnings and instructions marked on the product.

This manual uses the following safety symbols to indicate hazards and precautions.

Symbol	Type of symbol	Indicates
	WARNING	Indicates a warning concerning operations that may lead to death or injury to persons if not performed correctly. To use the machine safely, always pay attention to these warnings.
	CAUTION	Indicates a caution concerning operations that may lead to injury to persons if not performed correctly. To use the machine safely, always pay attention to these cautions. This indication can concern hazards that have a specific CAUTION symbol. The 'hot surface', 'electric shock', 'moving parts' and 'laser beam' cautions are listed below.
	CAUTION	Hot surface Indicates a caution concerning operations that may lead to injury to persons if not performed correctly. To use the machine safely, always pay attention to these cautions.
	CAUTION	Electric shock Indicates a caution concerning operations that may lead to injury to persons if not performed correctly. To use the machine safely, always pay attention to these cautions.
	CAUTION	Moving parts Indicates a caution concerning operations that may lead to injury to persons if not performed correctly. To use the machine safely, always pay attention to these cautions.

Symbol	Type of symbol	Indicates
	CAUTION	Laser beam Indicates a caution concerning operations that may lead to injury to persons if not performed correctly. To use the machine safely, always pay attention to these cautions.
	IMPORTANT	Indicates an operational requirement or restriction. Read these items carefully in order to prevent damage to equipment, software, data, media, or property.
	NOTE	Indicates a clarification of an operation or contains additional explanations for a procedure. Reading these notes is highly recommended.

Body protection symbols

This manual uses the following body protection symbols to indicate that it is important to protect yourself before performing a specific task or action.

Symbol	Type of symbol	Indicates
	IMPORTANT	Hand protection Wear the mentioned type of gloves when you perform this task or action.
	IMPORTANT	Eye protection Use the mentioned type of eye protection when you perform this task or action.
	IMPORTANT	Body protection Wear the mentioned type of body protection when you perform this task or action.
	IMPORTANT	Foot protection Wear the mentioned type of safety footwear when you perform this task or action.

Available documentation

Introduction

This manual is part of a complete documentation set. The following table shows a complete overview of the available documentation.

Available documentation



NOTE

For up-to-date documentation: visit the downloads website <https://downloads.cpp.canon>, select your printer and language, and find all the support information.

Documentation	Available
Operation guide - User manual	• On the downloads website under the product name. • Available as a PDF file in multiple languages.
Extended operation guide - User manual	• On the downloads website under the product name. • Available as a PDF file in multiple languages.
Online help	• Embedded in the application via a weblink. • Available in multiple languages.
MSDS - Safety data sheet	• On the downloads website under the product name. • Available as a PDF file.
Care and Use poster	• On the downloads website under the product name. • Available as a PDF file.
Technical guides, such as profiling guides	• On the downloads website under the product name. • Available as a PDF file.
PRISMAguide XL documentation	• On the downloads website under PRISMAguide XL. • Available as a PDF file.

Instruction videos

Scan the following QR code or follow the link to see the available instruction videos.



 [Instruction videos](#)

Optional features

Introduction

Software licenses provide extra options for the Colorado M-series. Depending on the printer type, licenses are standard or optional.

Available options (licenses)

1. FLXfinish+

With this license, the operator is allowed to use the matte print modes and the mixed matte/gloss print mode; otherwise only glossy print modes are available.

This license is also required to print in Backlit mode.

2. Print inside and double sided

The license allows:

- printing on the inner side of the media
- winding the media with the printed side to the inside

This makes double sided prints possible.

Double-sided printing is only guaranteed in Matte modes, otherwise the printed side will stick to the print surface. So for double-sided printing, it is also required to have a FLXfinish+ license.

3. Second roll in the drawer

Without the license, media can only be loaded into position 1 in the drawer. For inside printing, the media is still allowed into position 2, since the media is still fed through the slot for position 1.

4. White ink

With this license, the operator is allowed to use white ink print modes.

For installed Colorado M-series configurations this upgrade requires:

1. The license for white ink
2. A printhead for white ink
3. A service visit for installation and calibration of the printhead

You can downgrade the license for white ink. This is non-reversible.

5. Temporary speed license M5

You can temporarily upgrade a Colorado M-series M3/M3W configuration to M5/M5W. The temporary speed license is available per month and only allows use of 700 ml ink bottles.

6. Colorado M-series speed license M5

You can upgrade a Colorado M-series M3/M3W configuration to M5/M5W. This gives you access to the M5/M5W print modes. An M5/M5W configuration can use both 700 ml and 1000 ml ink bottles.

Available hardware options

1. Jumbo roll interface

Interface kit to enable jumbo roll feeding for an M5/M5W configuration.

2. Colorado M-series magnetic media kit

Hardware kit to enable use of magnetic media.

Options per printer type

Option	M3	M3W	M5	M5W
FLXfinish+	O	O	O	O

Option	M3	M3W	M5	M5W
Print inside and double sided	O	O	O	O
Second roll in the drawer	O	O	O	O
White ink	O	X	O	X
Temporary speed license M5	O	O	-	-
Colorado M-series speed license M5	O	O	X	X
Jumbo roll interface	-	-	O	O
Colorado M-series magnetic media kit	O	O	O	O

X: standard

O: optional

-: not applicable

Chapter 2

Safety information

Safety and Environment Information

Important Safety and Environment User Information

Before using your printing system, make sure that it is properly installed and that you have read and understand the User Documentation in order to operate the system safely and in accordance with its functional offerings. When using your machine make sure to always comply with the User Documentation.

Warning and caution indicators

In order to warn and make aware all persons operating the machine of possible risks, dangers and/or hazards, safety warning labels have been applied where required. For safe operation it is important to understand the meaning of every label. Make sure you read and understand all label descriptions before you start operating the machine.

In order to avoid potential hazards, make sure that preventive and remedial maintenance is executed by skilled persons and/or service technicians only.

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Canon Production Printing reserves the right to revise this publication and to make changes from time to time in the content hereof without obligation to notify any person of such revision or changes.

The websites of the regional Canon sales offices are listed on the cover of the User Documentation. There you can find the addresses of the local Canon sales offices.

Canon Production Printing and its suppliers may collect, combine and use non-personal machine and (individual) user information and data you provide using the machine. Information on what type of information and data is retrieved or received and how access or entry to such information and data by Canon Production Printing and its suppliers is secured please visit Canon Production Printing Terms of Use and Privacy Statement at <https://cpp.canon>.

Notes

- In some regions where this product is sold the following product name(s) may be registered as model number(s).

Product name	Model number
Colorado M-series • Colorado M3 • Colorado M3W • Colorado M5 • Colorado M5W	Océ 01079
RFID Reader	Océ 01087

- Depending on the context, the terms “printer”, “system”, “machine”, and “equipment” used in the User Documentation mean the printing system for which this User Documentation shall apply.
- Some consumables and materials designated to be used by this machine are accompanied with Safety Data Sheets. Please refer to the corresponding Safety Data Sheets for specific Safety and Environment information and operating instructions. You may download the actual Safety Data Sheets and Product Safety Data Sheets from the support site of your product at <https://downloads.cpp.canon/>.
- The machine bears the CE-mark to show conformance with applicable legal EEA-requirements. If applicable, the relevant CE Declaration of Conformity is part of the User Documentation. You may also download it from the support site of your product at <https://downloads.cpp.canon/>.

Canon Production Printing shall not be liable for damages from:

- Failure to comply with the User Documentation;
- Work performed incorrectly on the machine;
- Unauthorized modifications.

The following indicators are used in the User Documentation to identify and categorize the level of the seriousness of hazard:

Symbol	Type	Description
	WARNING	Indicates a warning concerning operations that may lead to injury or even death to persons if not performed correctly. To use the machine safely, always pay attention to these warnings.
	CAUTION	Indicates a caution concerning operations that may lead to injury to persons if not performed correctly. To use the machine safely, always pay attention to these cautions.
	IMPORTANT	Indicates operational requirements and restrictions. Be sure to read these items carefully to operate the machine correctly, and avoid damage to the machine or property.
	PROHIBITED	Indicates an operation that must not be performed. Read these items carefully, and make sure not to perform the described operations.
	NOTE	Indicates a clarification of an operation, or contains additional explanations for a procedure. Reading these notes is highly recommended.

If applicable the following Personal Protection indicators are used in the User Documentation and on the machine:

Symbol	Type	Description
	Mandatory action	Wear protecting gloves as prescribed in this document when performing a task or action in this area.
	Mandatory action	Read the user instruction manual/user documentation before starting work or before operating equipment or machinery.

The following labels are used to identify and categorize the hazard level:

Label	Type	Description
	Warning	General warning sign.
	Warning	Electricity: Hazardous electrical voltage inside. Do not remove cover.
	Caution	Hot surface: Take care to avoid direct contact with hot surfaces.
	Caution	Optical radiation: Take care to avoid injury to eyes and skin when in the vicinity of optical radiation.
	Caution	Sharp element: Take care to avoid injury from sharp elements.
	Caution	Crushing of hands: Take care to avoid injury to hands when in the vicinity of equipment with moving mechanical parts.

Label	Type	Description
	Warning	Electricity: Warning, shock hazard. Disconnect all power plugs from their electrical outlet before you start a maintenance or repair action.
	Warning	Electricity: Double-pole neutral fusing. Risk of electric shock. Disconnect mains before servicing.
	Warning	Electricity: The machine must be connected to a grounded power outlet.
	Caution	Electricity: High leakage current. The machine must always be connected to a grounded power outlet.

Persons for ITE (LVD) machines according Directive 2014/35/EU

- **Instructed person**

This User Documentation describes safeguards for the protection of an instructed person. Instructed person is a term applied to persons who have been instructed and trained by a skilled person, or who are supervised by a skilled person, to identify energy sources that may

cause pain and to take precautions to avoid unintentional contact with or exposure to those energy sources.

Power source



WARNING

- Put the power plug directly into a power outlet that has the same configuration as the plug. The use of an adapter can result in an inadequate power supply. If a proper power outlet is not available, ask a qualified electrician to perform the installation.
 - This machine has two power connections. Do not connect both mains power cables to same building branch circuit.
-



IMPORTANT

- Do not connect the machine to a mains voltage or frequency which differs from the value stated on the power marking label. When a connection to a different mains voltage or frequency is required, contact your authorized service representative.
-

Grounding / Power cord



WARNING

- Do not scratch, abrade, heat, twist, bend, or place a heavy object on the power cord or cause any other damage to it. The use of a damaged power cord (e.g. exposed core wire or broken wire) could result in an electrical shock, fire or malfunction of the machine. If the power cord is damaged, immediately switch off the power switch and unplug the power cord from the power outlet. Contact your authorized service representative.
 - Do not use a multiple outlet adapter or an extension lead. Contact your authorized service representative if an extension lead is required. The use of an extension cord may result in fire or electrical shock.
 - Do not use any power cord other than the one provided. Never use the power cord with any other electrical device.
 - Only use a power cord that is fitted with a protective earth conductor.
 - When the machine has to be connected via a wall socket, place the machine close to a wall socket that is easily accessible. The power plug serves as a disconnecting device.
 - Do not route the power cords in such a way that they can be stepped on or tripped over.
 - Connect the power cord to a power outlet that is equipped with a protective earthing (PE) terminal.
 - This equipment is not designed for connection to an IT power system. An IT power system is a voltage network in which the neutral wire is not connected to earth.
-

Installation



WARNING

- The machine may be transported, assembled, installed, moved and repaired only by an authorized service representative.
 - The installation of accessories and options not permitted for the machines may constitute a violation of the Safety Regulations and Directives, and can also damage the machine.
 - Consult your authorized service representative for details on which accessories and options are permitted for the machine.
 - Only use cables specified by the manufacturer.
 - Place the machine on a horizontally level surface of sufficient support.
 - Do not place the machine in a location that is subject to vibrations and shocks.
 - Do not use flammable sprays, liquids or gases near the product as this can cause fire.
-

Space requirements and operation precautions



WARNING

- The machine must be connected to an air exhaust (to the outside atmosphere) or must contain the filters and proper room ventilation for keeping the chemical emission below the limits. See the Product Safety Data Sheet (PSDS) for the ventilation recommendations.
 - For keeping the chemical emission below the limits do not place the machine in a room which is too small or insufficiently ventilated. See the Product Safety Data Sheet of the machine for the ventilation recommendations.
-

Operation



WARNING

- Do not lean, lie or stand on any part of the machine, including parts that can be pulled outwards (e.g. media drawers).
 - Read the User Documentation carefully before operating the machine. In case of any questions or uncertainties regarding the content of this document, contact your authorized sales or service representative.
 - Make sure that no objects (e.g. jewelry chains, paper clips, coins) or liquids can get into the interior of the machine. Do not place containers with fluid on top of or near the machine.
 - Disconnecting the product from the mains-supply network (unplug, power-switch) might result in damage to the system.
 - Do not open any door when the machine is starting up or running, unless the control panel displays a message that asks you to open one or more doors.
 - If you operate the machine remotely, make sure that nobody is working on the machine.
-



CAUTION

- This equipment is not suitable for use in locations where children are likely to be present.
-

Maintenance, repair and modification



WARNING

- Do not modify the machine. Modifying the machine can cause a hazard like fire, electrical shock or other injuries or jeopardize given warranties.
 - Only perform maintenance activities as described in the User Documentation.
 - Only instructed or skilled persons are allowed to maintain the machine, to avoid any risk and not to jeopardize given warranties.
 - Do not bridge or disable any safety interlock devices. Disabling or otherwise defeating safety interlock devices will cease their function as safety guard and may create hazardous conditions for all people operating the machine.
 - Use compressed air only to clean the platen.
-



CAUTION

- Repairs to the machine may only be performed by authorized service representatives.
 - Service areas may only be opened by authorized service representatives. Do not remove covers and panels that are fixed to the machine. Some parts of the machine may have a hazardous electrical component, hazardous heat source or a laser beam source inside that could cause an electrical shock or other injuries.
-

Relocation of the machine



CAUTION

- Disconnect the power cord and other cables before you move the machine.
 - Only skilled person(s) are allowed to move the machine.
-

Actions in response to problems



WARNING

- In case smoke and/or fire is noticed:
 - Immediately try to close in a safe way all machine covers and doors so that the smoke or fire stays within the enclosure of the machine. Prevent personal injury during closing of these doors and covers.
 - Immediately cut off the electrical power to the machine by disconnecting the mains plug or proper disconnecting device. Make sure that the machine cannot be switched on any more.
 - Immediately inform the emergency response services.

Poisonous gases can be produced in any fire. They can also result from a fire in this machine. Keep into account: Canon Production Printing systems are designed in such a way that fire is encapsulated within the enclosure, thus preventing the further spread of fire to the customer's premises.

- In case of damage to the covers, power cable, operating elements, or in case of penetration of fluids or foreign bodies, disconnect the machine from the power supply and contact your authorized service representative.
-

Consumables, supplies and maintenance materials



WARNING

- Do not throw ink or ink containing parts or contaminated parts into an open flame.
 - Do not leave ink or ink containing parts or contaminated parts within reach of children.
 - Store consumables, supplies and maintenance materials away from any food and drinks.
 - Be careful when handling fluids. Clean up spilled fluids immediately.
-



CAUTION

- Only use the materials the manufacturer recommends and that are developed for the machine.
 - Use maintenance materials and other materials for their intended purpose only.
 - Ink polluted gloves are considered chemical waste and must be disposed according to local regulations.
 - Dispose of waste of consumables, supplies and maintenance materials and its packaging containing residues according to federal, state and local regulations.
 - From the point of view of occupational health and safety it is not recommended that people who are sensitive to chemicals (e.g. people with asthma) work with ink or chemicals.
-

UV ink



CAUTION

- UV inks can be harmful if not properly handled. Cumulative exposure can lead to sensitization. Follow always the ink related Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.
- Avoid skin contact with ink and uncured printed media.
- Curing of media of the Canon Production Printing supported media-list is tested and considered sufficient under standard conditions.
- After a printer error, wear gloves to handle the unfinished print.
- Wear safety glasses with side shields when handling ink or maintenance materials. Follow always the ink related Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.
- Wear gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the ink related Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.
- If a glove, sleeve or apron is contaminated with ink follow the ink related Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.
- Do not reuse single-use gloves.
- Do not handle prints without gloves if the ink is not properly cured.
- Ink polluted gloves and uncured media are considered chemical waste and must be disposed according to local regulations.
- If ink contacts your skin: clean immediately with soap and water. Do not use alcohol or other solvents.
- If ink contacts your eye(s) flush with water, consult the ink related Safety Data Sheet (SDS) and contact a doctor.
- Inks are not suitable for food-related or children-related applications.
- Always measure the media thickness and set the print carriage height correctly for that media. Printing at an incorrect height causes excessive emissions of UV light and UV ink (mist).
- All waste containing uncured UV ink is hazardous and must be disposed of separately according to local regulations. Do not mix ink waste with non-hazardous waste (household, office, etc.). Do not allow ink waste to reach sewage systems or drinking water supplies. Ink waste includes maintenance pads, cloths, gloves and any other material containing uncured or partly cured UV ink. Dispose Ink waste according to federal, state and local regulations.
- Discard the ink bottle or maintenance material bottle if it shows any sign of wear, physical damage (cracking or leaking) or at expiry (date), according to federal, state and local regulations.

UV light (UV lamps)



CAUTION

- Avoid looking directly at the UV light.

Liquid Crystal Display (LCD)



CAUTION

- Do not touch or ingest fluids from a broken Liquid Crystal Display (LCD). When clothes or skin come into contact with the fluid, immediately clean the clothes and skin with soap and water. After eye contact, immediately rinse the eyes with a washing lotion for at least 15 minutes and consult a physician.
 - Do not rub, press or touch the (LCD) display surface with a hard material, because the polarizer at the surface can be easily scratched. The LCD module can get damaged when you drop, pinch too hard or punch the module, as it is made of glass. When glass breaks, be careful you do not get injured by pieces of glass.
-

Printing room (pollution)



IMPORTANT

- Keep your printing room environments clean. This prevents dust buildup inside the printer and avoids damage to the machine.

Disposal of parts



WARNING

- All parts are produced according to the sustainability policy of Canon Production Printing. You can discard all used parts into a common dustbin, or follow your local or national sustainability and waste disposal procedures.
-

Magnetic parts



WARNING

- This machine contains static magnetic part(s) where there may be a risk of interference with Active Implanted Medical Devices (AIMD) e.g. cardiac pacemakers. Persons with an AIMD please keep at a safe distance. For more information please contact: Canon Production Printing.
-

Commissioning, disassembly, recycling and disposal



CAUTION

- For any information (e.g. requirements) about commissioning, disassembly, recycling, and disposal of CPP machines and/or materials (e.g. packaging waste, supplies, consumables) in your country or state please consult your local Canon NSO, Canon RSHQ and/or dealer.
-

Safety System

Safety System

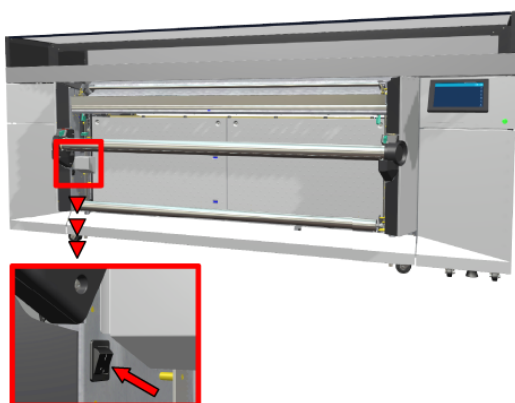


CAUTION

- Winder

Do not position the tension bar when there is no media present. Keep your fingers away because the tension bar can fall down.

The winder has an emergency stopping device; It is located on the winder. Activating this emergency stopping device stops all winder motion.



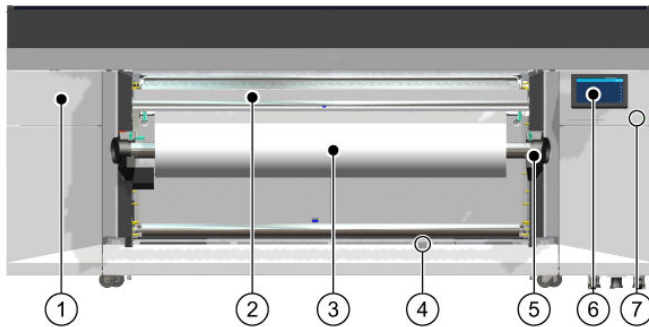
Chapter 3

Explore the system

The components of the printer - media output side

Introduction

From the media output side you can access the operator panel, access the roll winder, collect your print, or replace the knife.

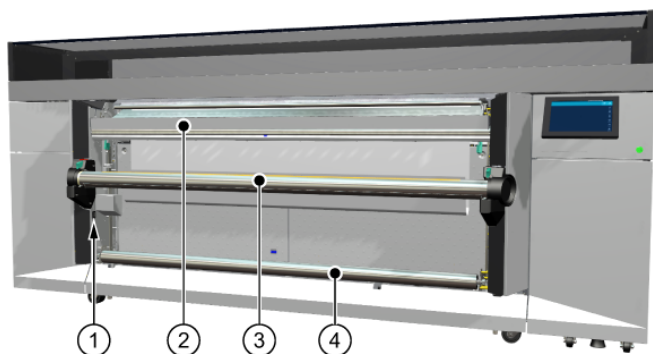


Number	Component
1	Knife compartment
2	Guide plate
3	Take-up media roll
4	Power switch
5	Roll winder
6	Operator panel
7	On/off button

The components of the roll winder

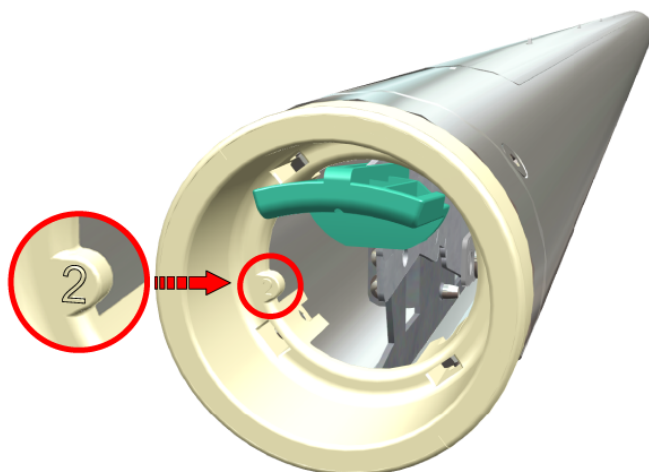
Introduction

The roll winder is located on the media output side and can be used to wind the printed media.



Number	Component
1	Power switch winder
2	Guide plate
3	Take-up media shaft*
4	Tension bar

*For inside winding, you need the take-up media shaft with a gear that is marked with the number 2.

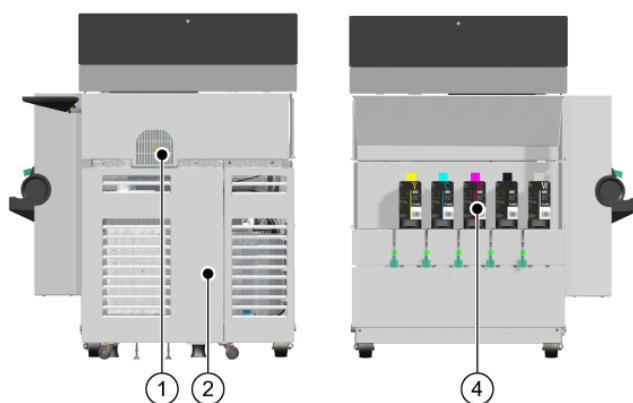


The components of the printer sides

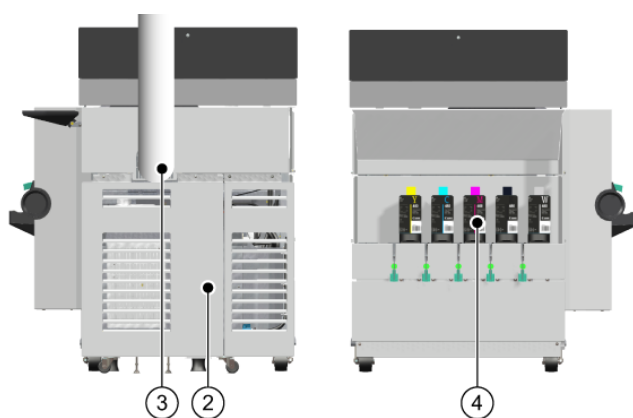
Introduction

On both printer sides you can perform maintenance actions.

Filter configuration



Exhaust configuration

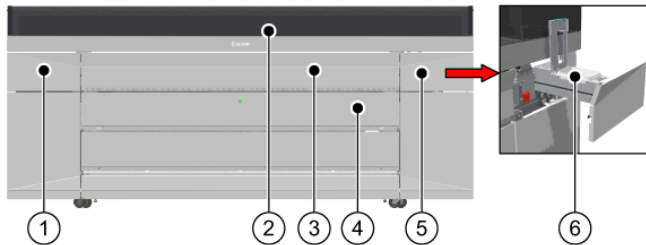


Number	Component
1	Filter fan (filter configuration)
2	Chiller
3	Exhaust (exhaust configuration)
4	Ink bottle

The components of the printer - media input side

Introduction

From the media input side you can load media, open the top cover, get access to the maintenance tray and printhead maintenance.

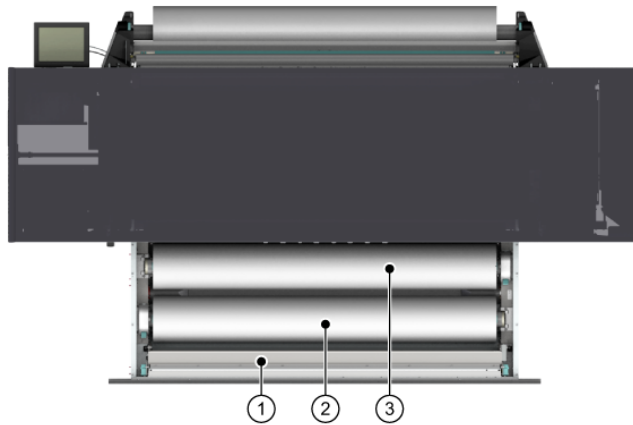


Number	Component
1	Manual maintenance door
2	Top cover
3	Media cover
4	Media drawer
5	Maintenance drawer
6	Maintenance tray

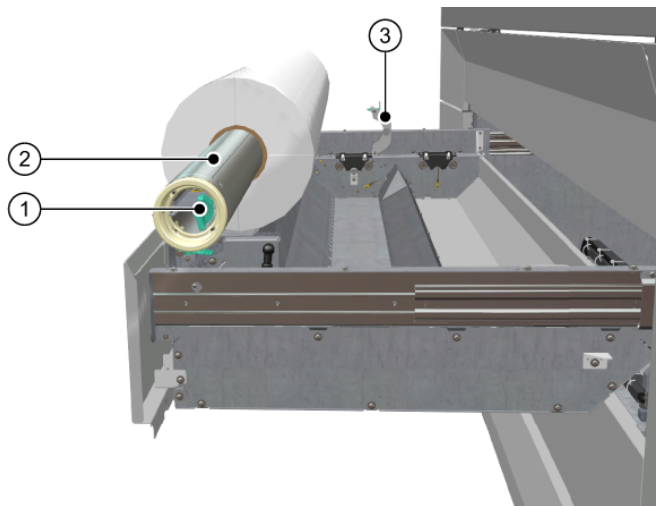
The components of the media drawer

Introduction

You can open the media drawer on the media input side to load your media rolls.



Number	Component
1	Roll loading station
2	Media roll (position 1)
3	Media roll (position 2)

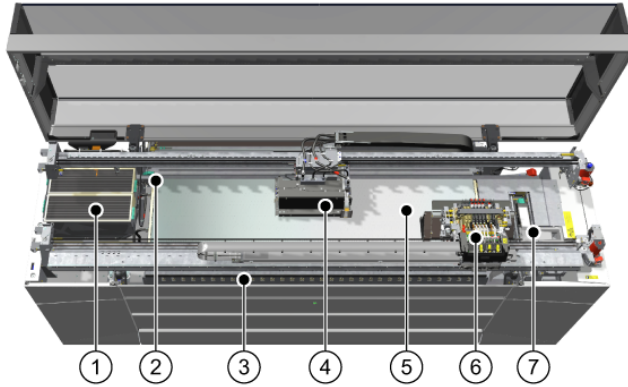


Number	Component
1	Locking mechanism
2	Feed media shaft
3	Roll clamp

The components of the printer - top cover open

Introduction

When you open the top cover you can access the carriages, the platen area and perform several maintenance actions.



Number	Component
1	Filter (filter configuration)
2	Knife
3	X-tran rollers
4	Curing carriage
5	Platen
6	Printhead carriage
7	Maintenance station

Chapter 4

Handle the media

Media specifications

MEDIA

Item	Specification
Roll width	From 279 mm (11 inch) to 1625 mm (64 inch)
Print margin	5.3 mm * (0.21 inch)
Roll weight	Up to 50 kg (110 lb.)
Roll diameter	Up to 220 mm (8.7 inch)
Media thickness	Up to 0.8 mm (0.03 inch)
Media input	Print side wound-in or out (licensed) Double-sided printing possible (licensed) Automatic and manual feed
Number of input rolls	2 (automatic roll-feeding and -switching depending on media used) (licensed)
Media take-up system	Both loose and tight winding possible

* 5.3 mm (0.21 inch) is the minimum print margin (no Automatic Advance correction). Print margins are 8.9 mm (0.35 inch) with Normal Automatic Advance Correction, 17.5 mm (0.69 inch) with Enhanced Automatic Advance Correction and 22.7 mm (0.84 inch) for Robust Automatic Advance Correction.

General workflow for using media

Introduction

Use the following workflow to handle the media correctly.

Step	Action
1	Configure media in the RIP on page 44 . Download and install a media profile, and manage the profiles in the RIP.
2	Prepare media for printing on page 89 . Load a media roll in the media drawer, a core on the roll winder and calibrate your media.
3	Print with or without winding on page 125 . Print without winding or tape media to the take-up roll core to wind media, with or without a tension bar.
4	Cut and unload media on page 153 . Cut media and unload a roll from the winder and the media drawer.

Configure media in the RIP

Manage media profiles in ONYX

Introduction



IMPORTANT

Changing the media settings can cause damage to your printer which may void your machine warranty service.

It is recommended to have a media profile for each media type.

You can use ONYX as the RIP software to manage media profiles. You can:

- [Install a downloaded media profile in ONYX on page 45](#)
- [Create a new media profile in ONYX on page 47](#)
- [Copy an existing media profile and edit it in ONYX on page 48](#)
- [Sync and delete media types in ONYX on page 53](#)

For more information on the use of ONYX use the ONYX documentation

Install a downloaded media profile in ONYX

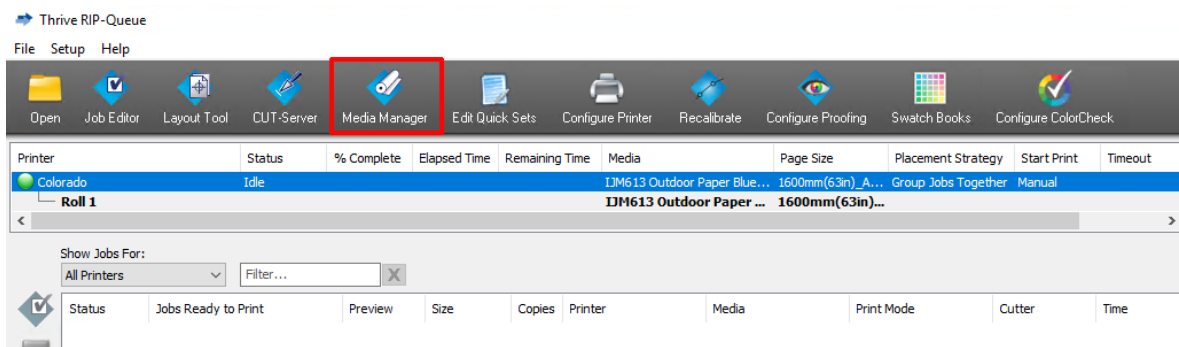
Before you begin

First make sure you download a Colorado M-series media profile, saved in a media library file (*.OML or *.prninst including the driver) for ONYX.

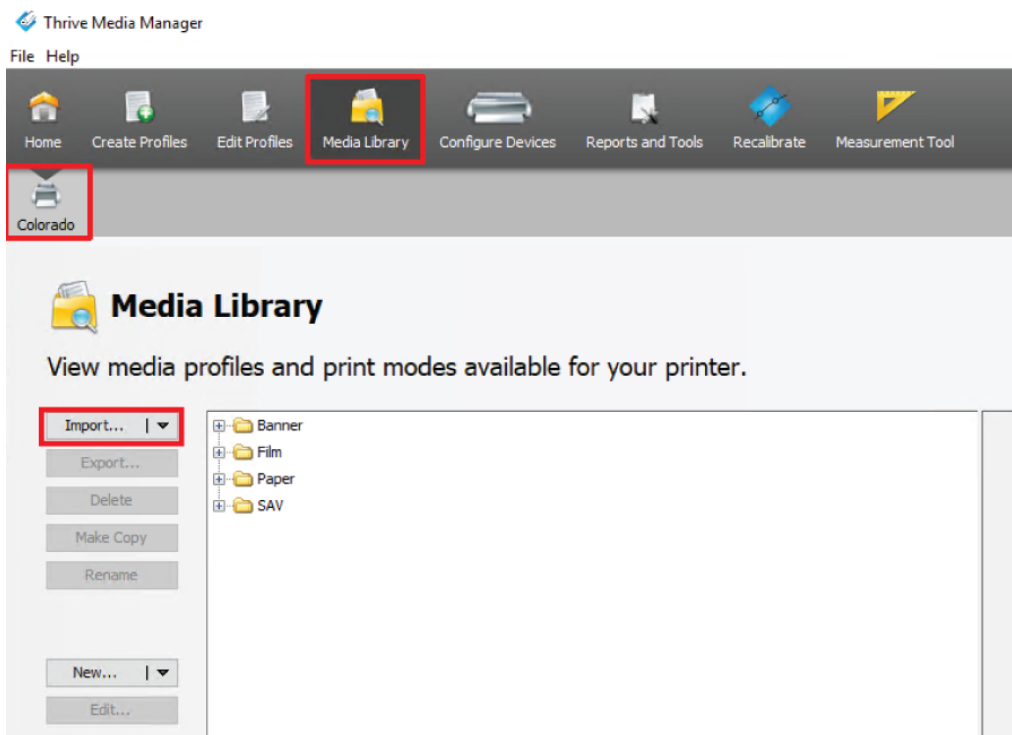
You can download a media profile via ONYX Media Manager or via your local sales and support channel. Media profiles are also available on graphiPLAZA.

Procedure

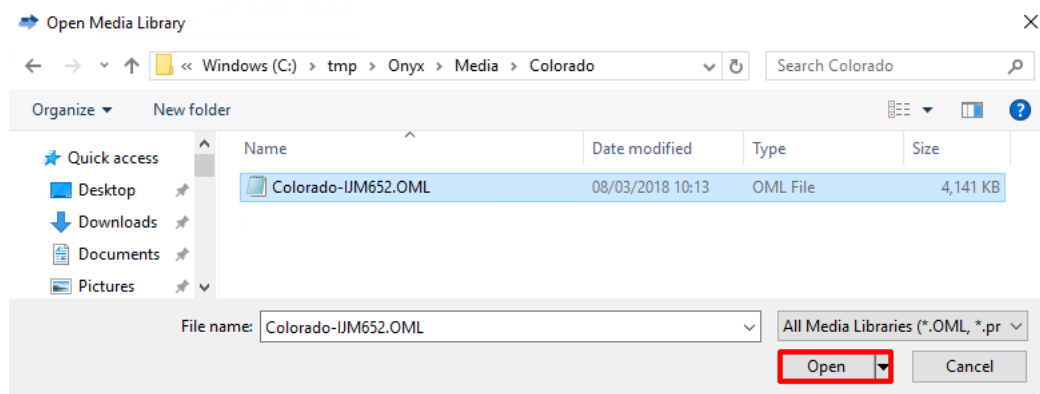
1. Open the ONYX RIP queue.
2. Click on [Media Manager]. The Media Manager application opens.



3. Click on the Colorado M-series printer icon and click on [Media library] above.



- Click on [Import], browse to find your media library files, and click on [Open].



- Click on [Ok]. A new window opens listing the media profiles in the selected file.
- Select the media profiles you want to import and click on [Import]. The window closes.
- Click on [Ok] to close the [Configure printer] window.
- In the RIP queue you can see that the media profiles are installed and can be used.

Create a new media profile in ONYX

Introduction

When you are working with a new media that does not have a profile, you can create a new profile in ONYX.



NOTE

Profiling is an expert task which requires additional information and tools not covered by this manual. Contact your local support organization when you want to create or change media profiles.

For more information, see [Colorado colour management resources on graphiPLAZA](#).

Copy an existing media profile and edit it in ONYX

Introduction

You can also use an existing media profile as a basis and edit the settings in ONYX.



IMPORTANT

Copy a media profile with the correct media category. Do not change the media category, this can cause damage to the printheads.

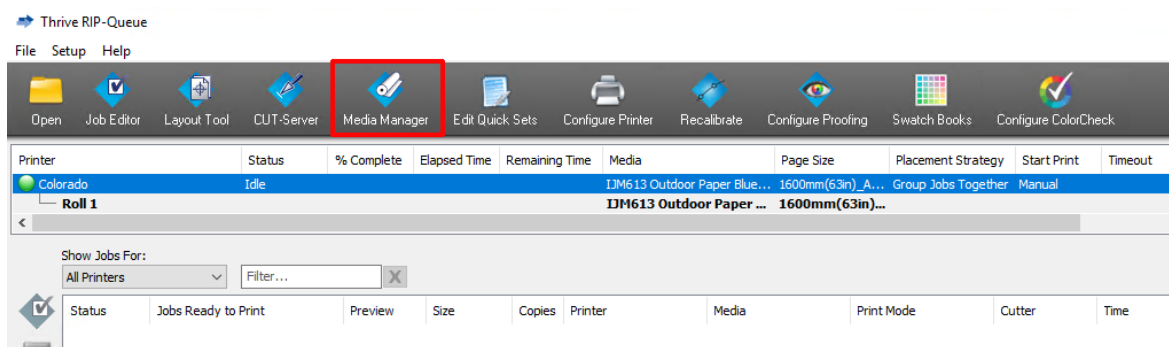


NOTE

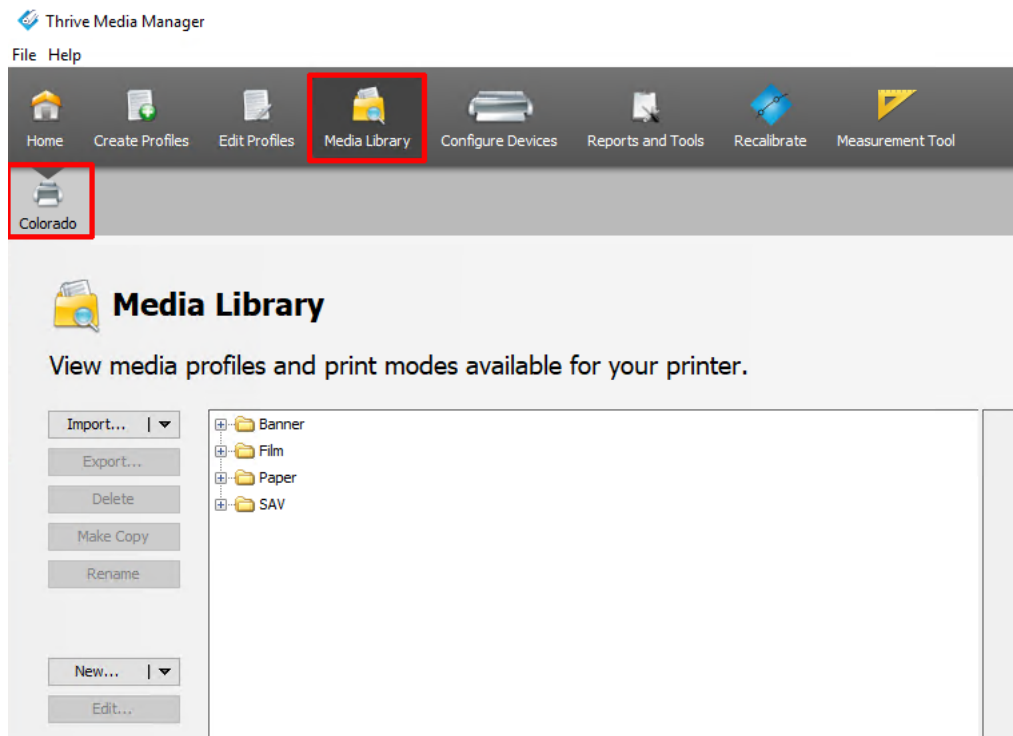
This manual provides you with basic information in order to create and change media profiles. Profiling is an expert task which requires additional information and tools not covered by this manual. Contact your local support organization when you want to create or change media profiles.

Procedure

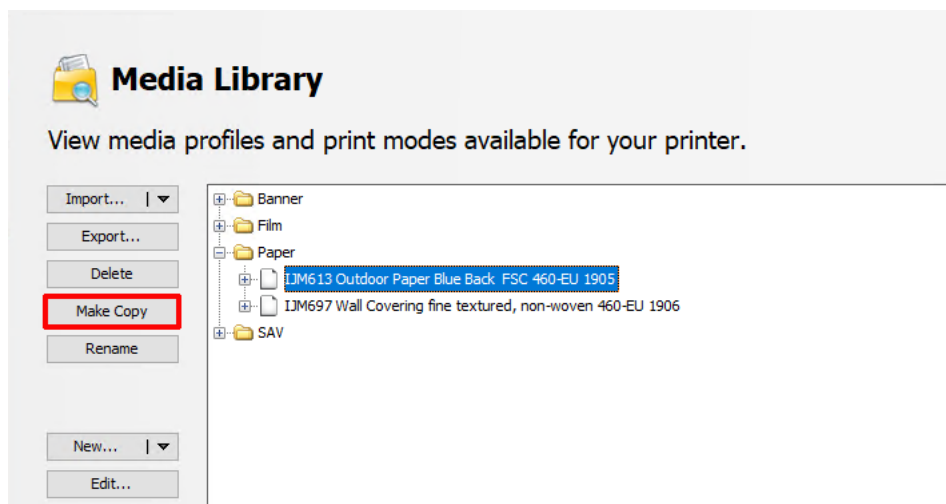
1. Open the ONYX RIP queue.
2. Click on [Media Manager]. The Media Manager application opens.



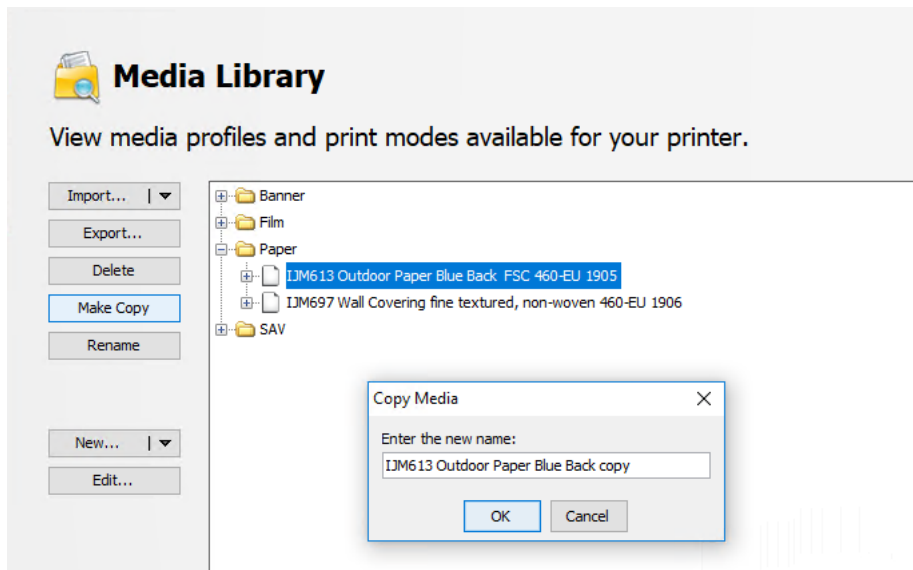
3. Click on the Colorado M-series printer icon and click on [Media library] above.



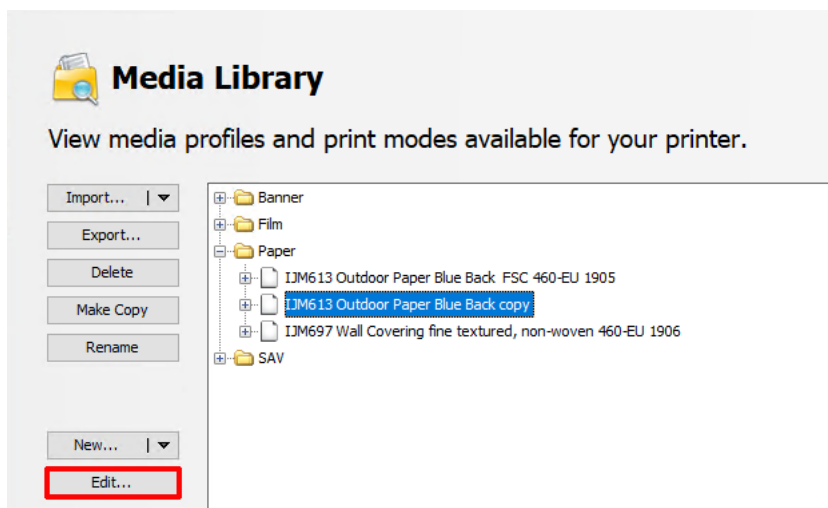
4. Select the media profile from the list and click on [Make Copy]. A new window opens.



5. Fill in the new media profile name and click on [Ok].



6. Select the new media profile from the list and click on [Edit].



A new window opens.

7. Click on the 'Next' icon. For more information on the general steps use the ONYX documentation.
8. You can change the media settings under [Basic Media Profile Settings].

9. Click on [Media options]. A new window opens.

Create a new Media Profile (ICC Workflow)

Progress Menu

- New Media Profile
- Basic Media Profile Settings
- Basic Print Mode Settings
- Drop Size Control
- Ink Restrictions
- Calibration
- Ink Limits
- ICC Profile
- ONYX AccuBoost™ ICC Profile
- Mode Created

Basic Media Profile Settings

- Select the Ink Configuration to use: CMYK
- Select the process colors to use for rendering images: CMYK
- Define the printer specific settings for this media profile: **Media Options**
- Configure spot colors: Spot Color Setup
- Select the page sizes you would like to include:

Page Size Name	Selected
1000mm(39in)_AAC_ENHANCED	☒
1000mm(39in)_AAC_NORMAL	☒
1000mm(39in)_AAC_OFF	☒
1067mm(42in)_AAC_ENHANCED	☒
1067mm(42in)_AAC_NORMAL	☒
1067mm(42in)_AAC_OFF	☒
- Select Print Label Color: K

10. Check the **media settings**. For more information, see [Change the media settings on page 76](#).



IMPORTANT

Do not change the media category, this can cause damage to the printheads. Check the media thickness as your new media might have a different thickness than the media of the copied media profile.

Media Characteristics

Media Type Name: IJM613 Outdoor Paper Blue Back copy

Media Category: Paper

Automatic Advance Correction: Normal

Print Gap: Medium

Zone A Vacuum Strength: 50

Zone B Vacuum Strength: 50

Zone C Vacuum Strength: 50

Zone D Vacuum Strength: 30

Zone E Vacuum Strength: 30

Winding Tension: No tension bar

Requires Manual Loading: ☐

Suitable for Printer/Cutter: ☒

Outer Core Diameter: 79

Media Thickness: 150

Moist Sensitivity: 0

☒ Layout Preview

☒ Printer Does Copies (Only for "Print Jobs Individually")

OK Cancel

11. Give the media a new [Media Type Name] and click on [Ok]. The window closes.



NOTE

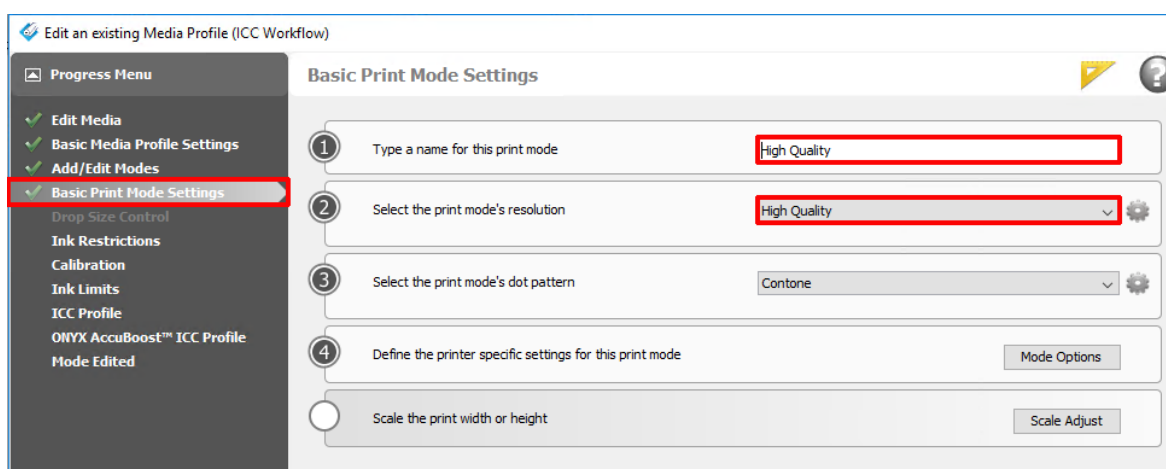
Check that the media type name is changed. Default it should be the same as the media profile name. You can also choose a different media type name, as long as it is unique. Also check all the other settings.

12. Click on the 'Next' icon to follow the steps.
13. You can select the **print mode** under [Add/ Edit Modes]. For more information, see [Select a print mode on page 84](#).
14. You can change the specific print mode settings under [Basic Print Mode Settings].

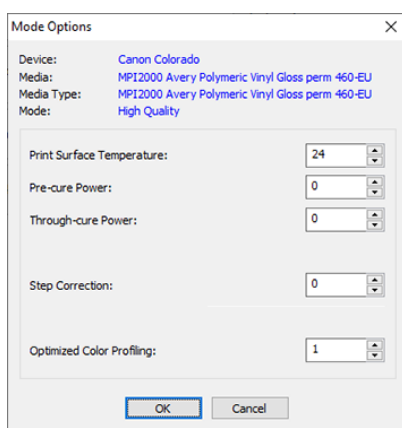


NOTE

Fill in the same name as the selected print mode to avoid confusion.



15. Click on [Mode options]. A new window opens.
16. You can change the rest of the **media settings**. For more information, see [Change the media settings on page 76](#).



17. Click on [Ok]. The window closes.
18. Finish all the steps to create the media profile.

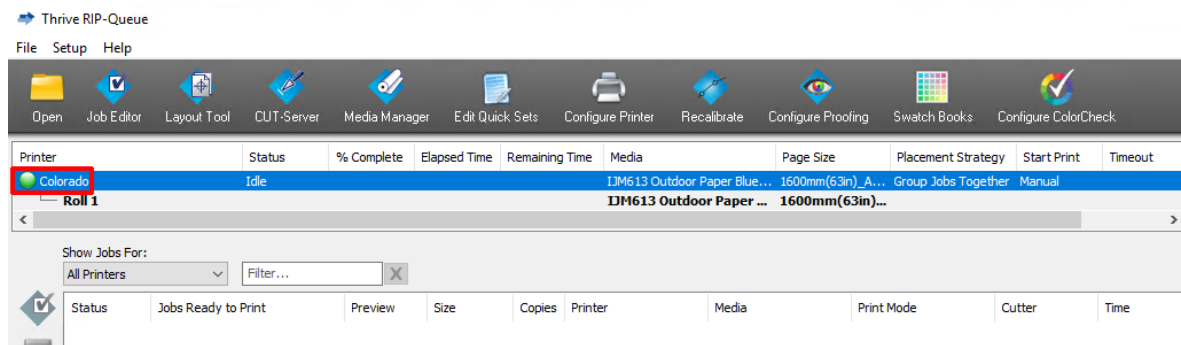
Sync and delete media types in ONYX

Introduction

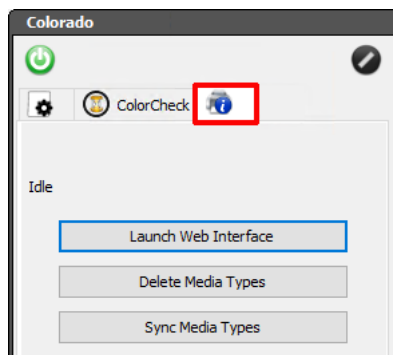
After you downloaded or created the media profiles in ONYX, you can sync them with the printer so they become visible as media types on the operator panel. Sometimes you also want to delete media types from this list.

Procedure

1. Open the ONYX RIP queue.
2. Select the Colorado M-series printer name.



3. In the top right pane click on [Device Info].



4. To sync media types:
 1. Click on [Sync Media Types].



NOTE

Always sync media types after you made an import.

The synced media become visible on the operator panel under, [Media]→[Media type].

5. To delete media types:
 1. Click on [Delete Media Types].
 2. Select the media types to be deleted from the list.
You can select multiple media types with the Windows controls (shift and control).

3. Click on [Ok] to delete the selected media from the printer.
The selected media are deleted from the list on the operator panel under, [Media]→[Media type].

Manage media profiles in Caldera

Introduction



IMPORTANT

Changing the media settings can cause damage to your printer which may void your machine warranty service.

It is recommended to have a media profile for each media type.

You can use Caldera as the RIP software to manage media profiles. You can:

- [Install a downloaded media profile in Caldera on page 56](#)
- [Create a new media profile in Caldera on page 59](#)
- [Copy an existing media profile in Caldera and edit it on page 60](#)
- [Sync and delete media types in Caldera on page 64](#)

For more information on the use of Caldera use the Caldera documentation.

Install a downloaded media profile in Caldera

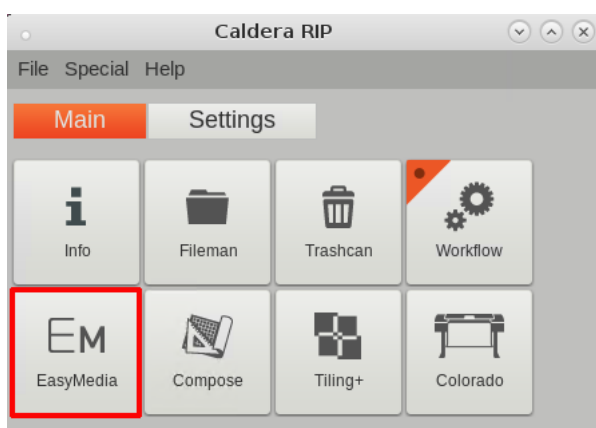
Before you begin

First make sure you download a Colorado M-series media profile via your local sales and support channel, saved in a calpatch file for Caldera (*.calpatch).

Media profiles are also available on graphiPLAZA.

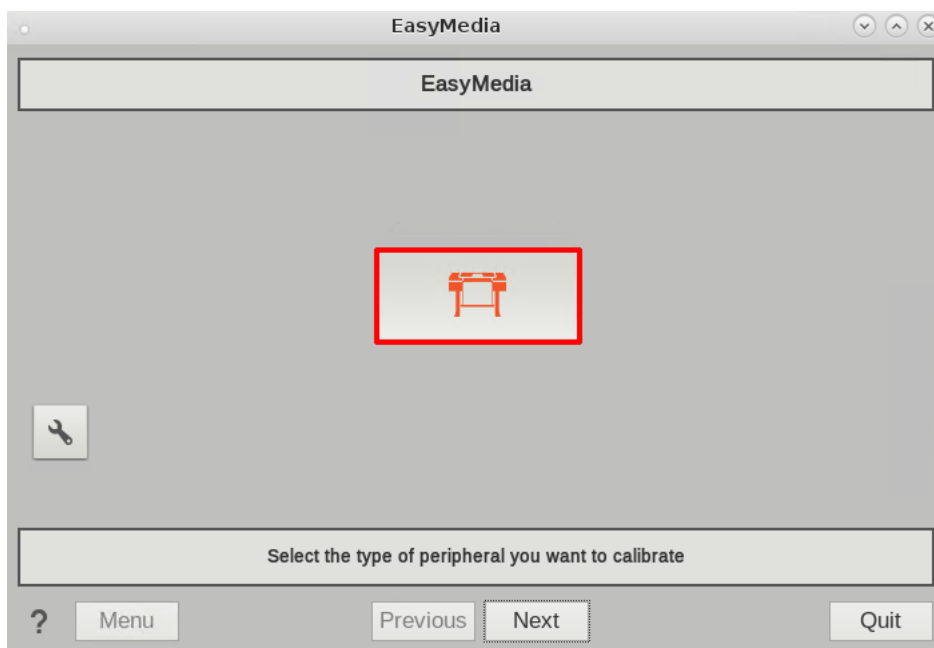
Procedure

1. Open Caldera.
2. Double-click on the [EasyMedia] icon.



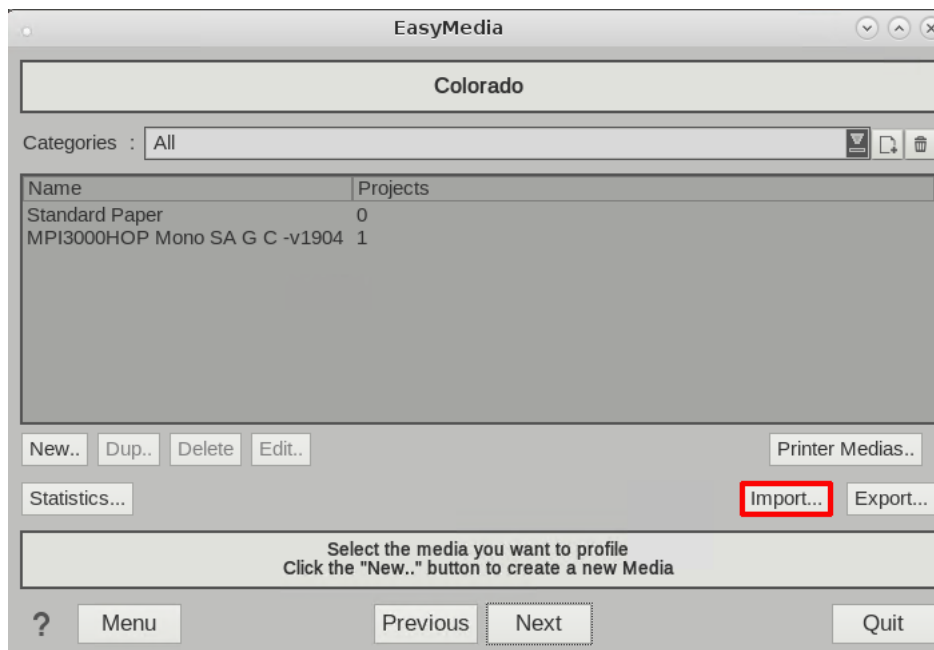
A window opens.

3. Select the printer icon and click on [Next].



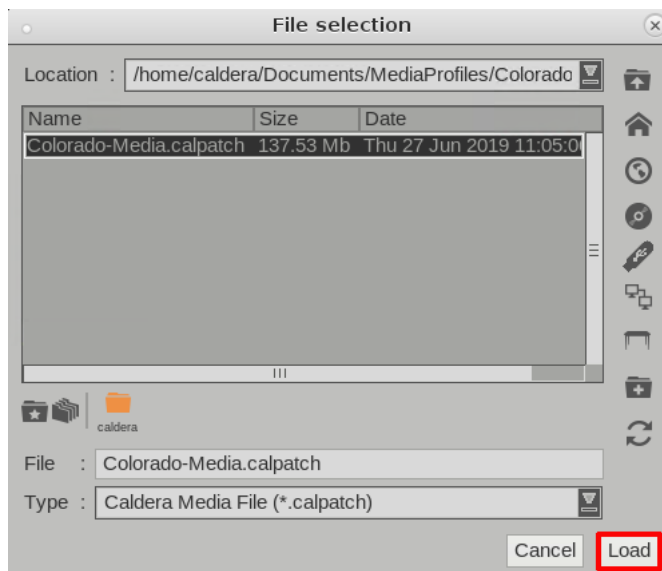
4. Select your printer and click on [Next].

- Click on [Import...].



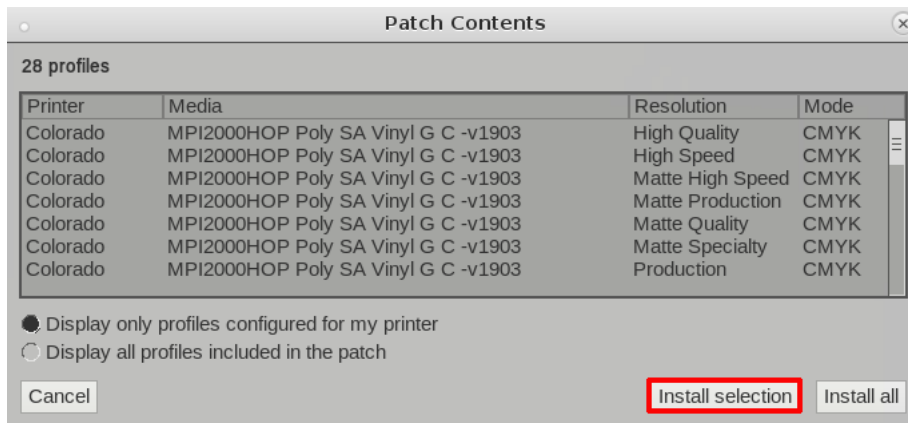
A window opens.

- Click on [Install patch].
The file selection window opens.
- Browse to your calpatch file (*.calpatch) and click on [Load].



A window with profiles opens.

8. Select the profiles you want to install and click on [Install selection].



9. A message appears with the number of installed profiles, click on [Ok].

Create a new media profile in Caldera

Introduction

When you are working with a new media that does not have a profile, you can create a new profile in Caldera.



NOTE

Profiling is an expert task which requires additional information and tools not covered by this manual. Contact your local support organization when you want to create or change media profiles.

For more information, see [Colorado colour management resources on graphiPLAZA](#).

Copy an existing media profile in Caldera and edit it

Introduction

You can also use an existing media profile as a basis and edit the settings in Caldera.

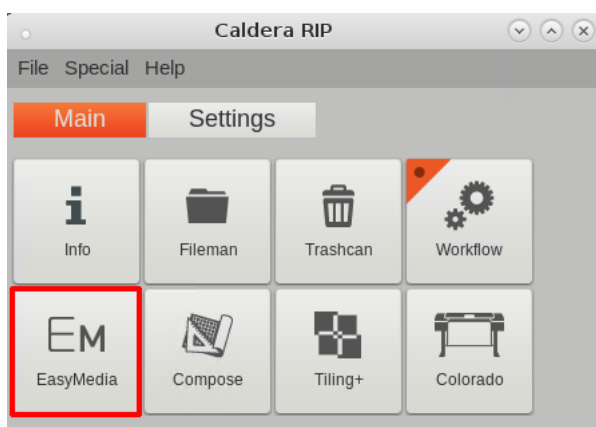


NOTE

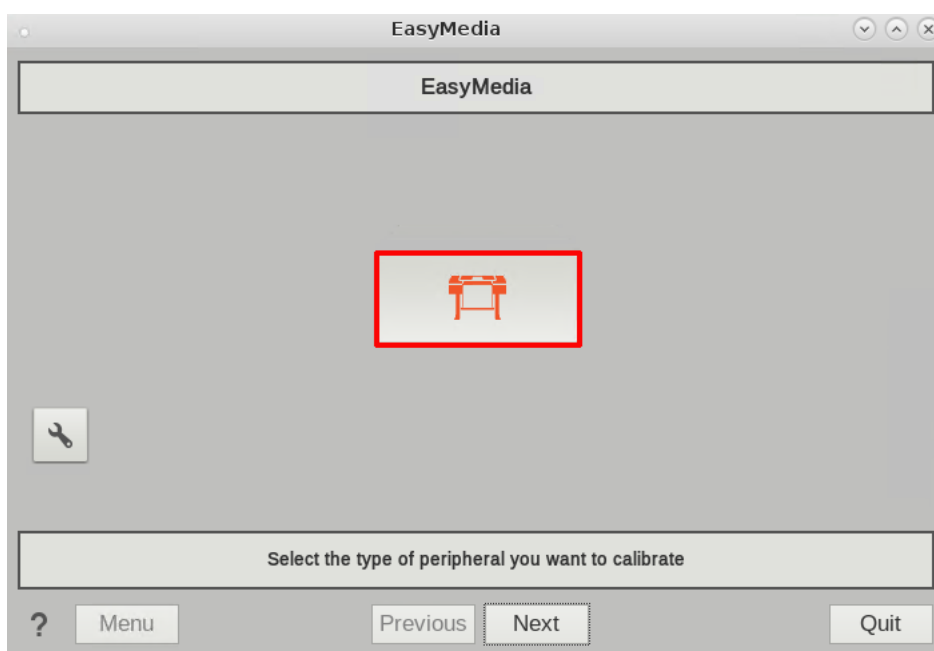
This manual provides you with basic information in order to create and change media profiles. Profiling is an expert task which requires additional information and tools not covered by this manual. Contact your local support organization when you want to create or change media profiles.

Procedure

1. Open Caldera.
2. Double-click on the [EasyMedia] icon in the ApplicationBar. A window opens.



3. Select the printer icon and click on [Next].

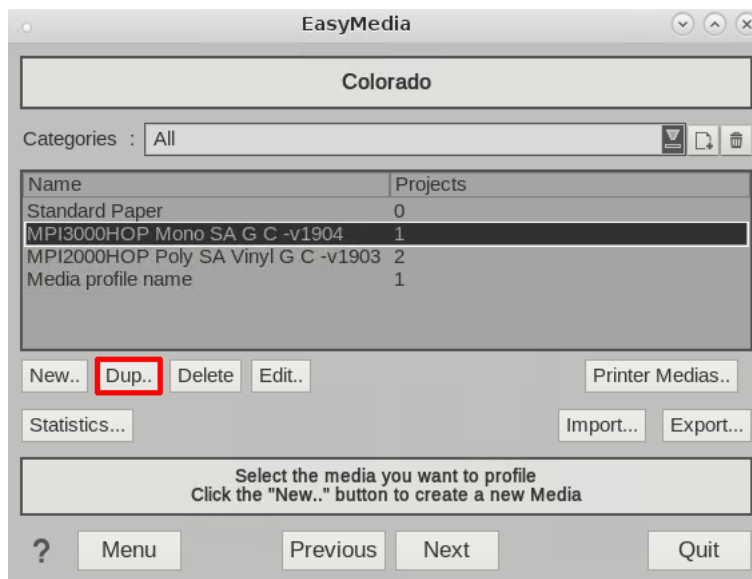


4. Select your printer and click on [Next].
5. Select the media profile you want to copy and edit.

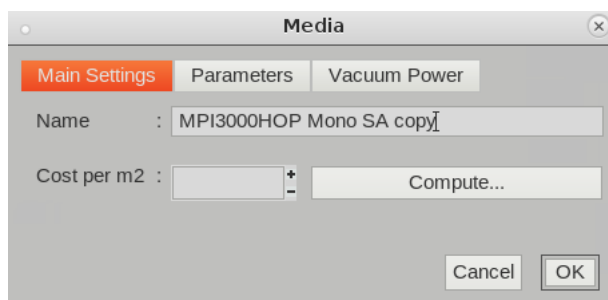
**NOTE**

Make sure you choose a media profile with the preferred **media category**, as you cannot change the media category of a media profile in Caldera. For more information, see [Choose a media category on page 74](#).

6. Click on [Dup..]. A window opens.



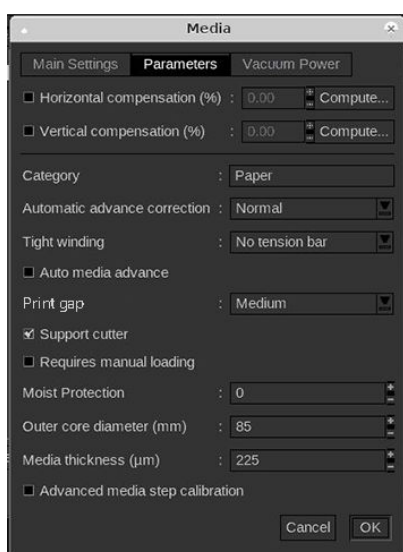
7. Fill in the values in the media window. For more information on the general settings use the Caldera documentation.
8. Fill in the new media profile name under [Main Settings].



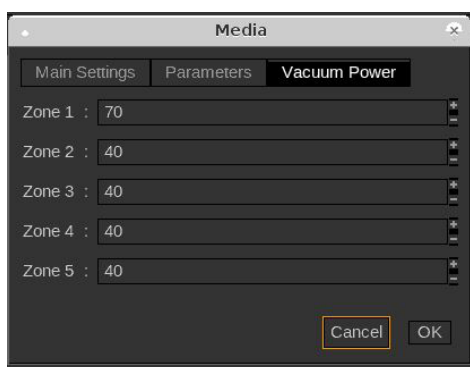
9. Check the **media settings**:
 - Under [Parameters]: [Change the media settings on page 76](#).

**NOTE**

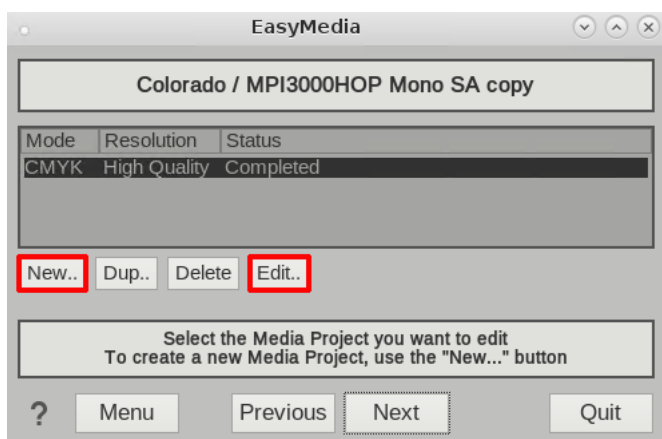
You cannot change the media category of a media profile in Caldera. Check especially the media thickness as your new media might have a different thickness than the media of the copied media profile.



- Under [Vacuum Power]: [Change the media settings on page 76.](#)

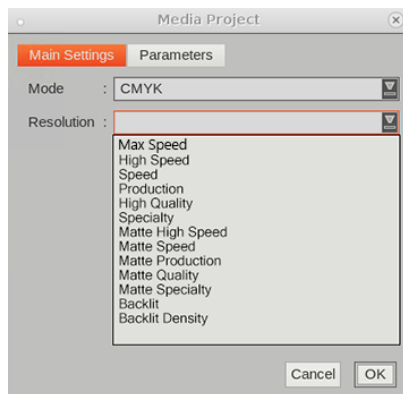


10. Click on [Ok]. The window closes.
11. Click on [Next].
12. Click on [New..] to create a new media project (print mode with media settings), or select a media project from the list and click on [Edit..] to edit.

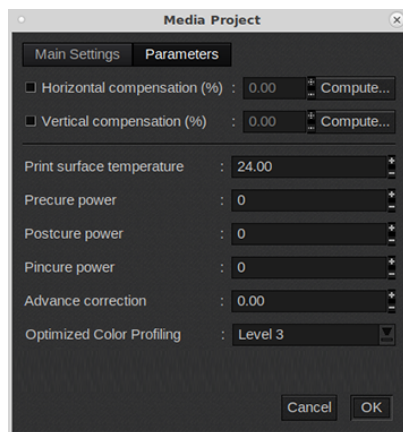


13. You can change the rest of the **media settings**:

- Under [Resolution]: [Select a print mode on page 84.](#)



- Under [Parameters]: [Change the media settings on page 76.](#)

**14.** Click on [Ok] and if needed follow the rest of the steps.

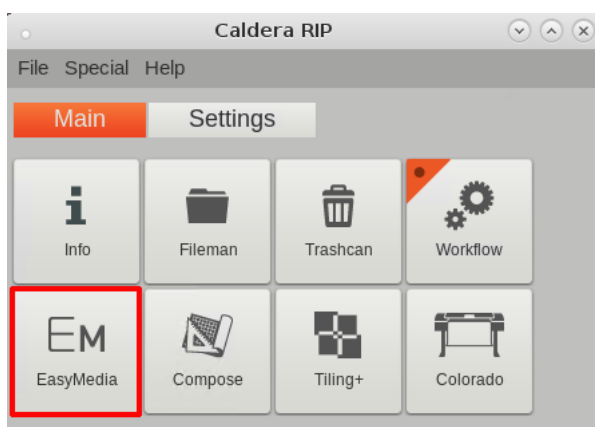
Sync and delete media types in Caldera

Introduction

Caldera synchronizes all changes automatically, but you can also manually sync the media profiles with the printer so they become visible as media types on the operator panel instantly. Sometimes you also want to delete media types from this list.

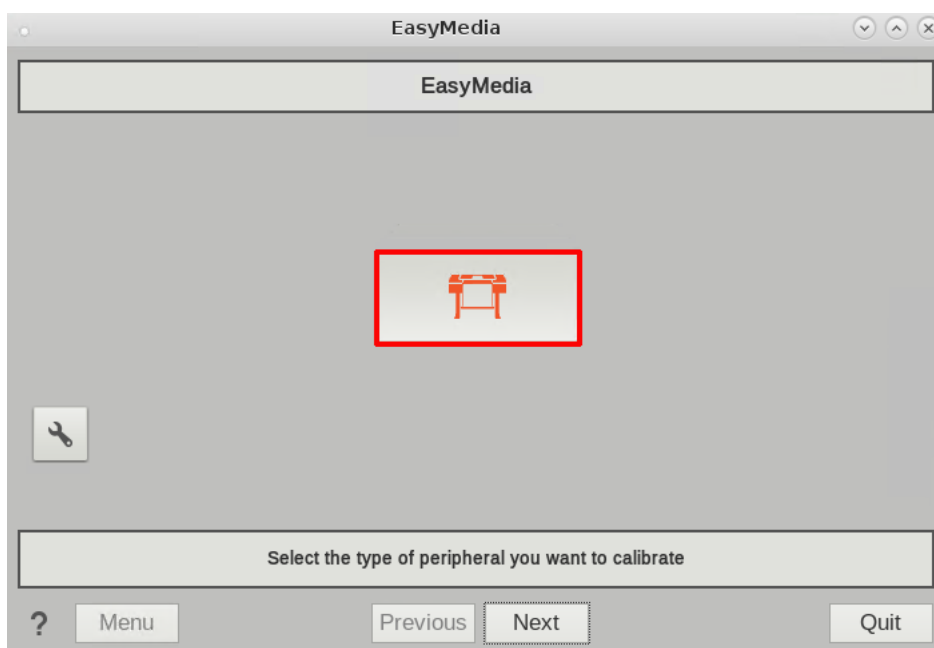
Procedure

1. Open Caldera.
2. Double-click on the [EasyMedia] icon.



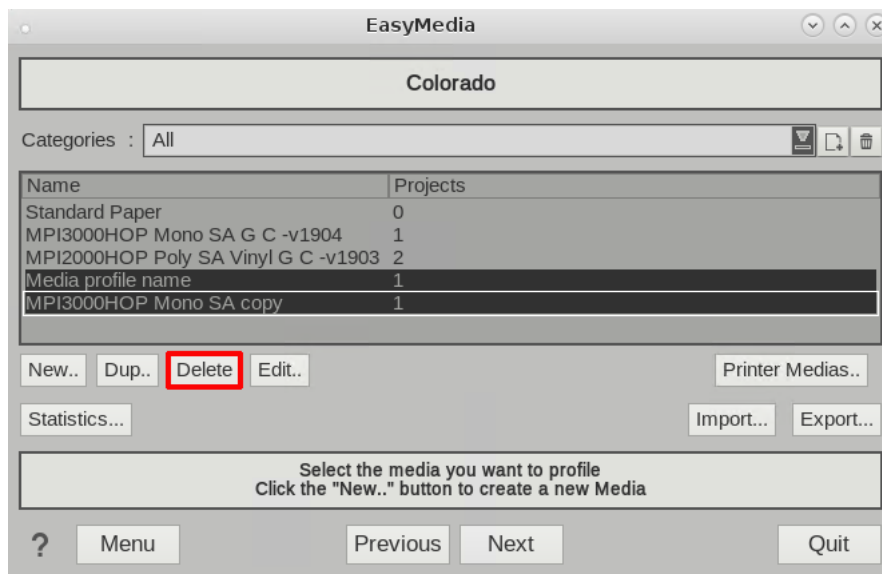
A window opens.

3. Select the printer icon and click on [Next].



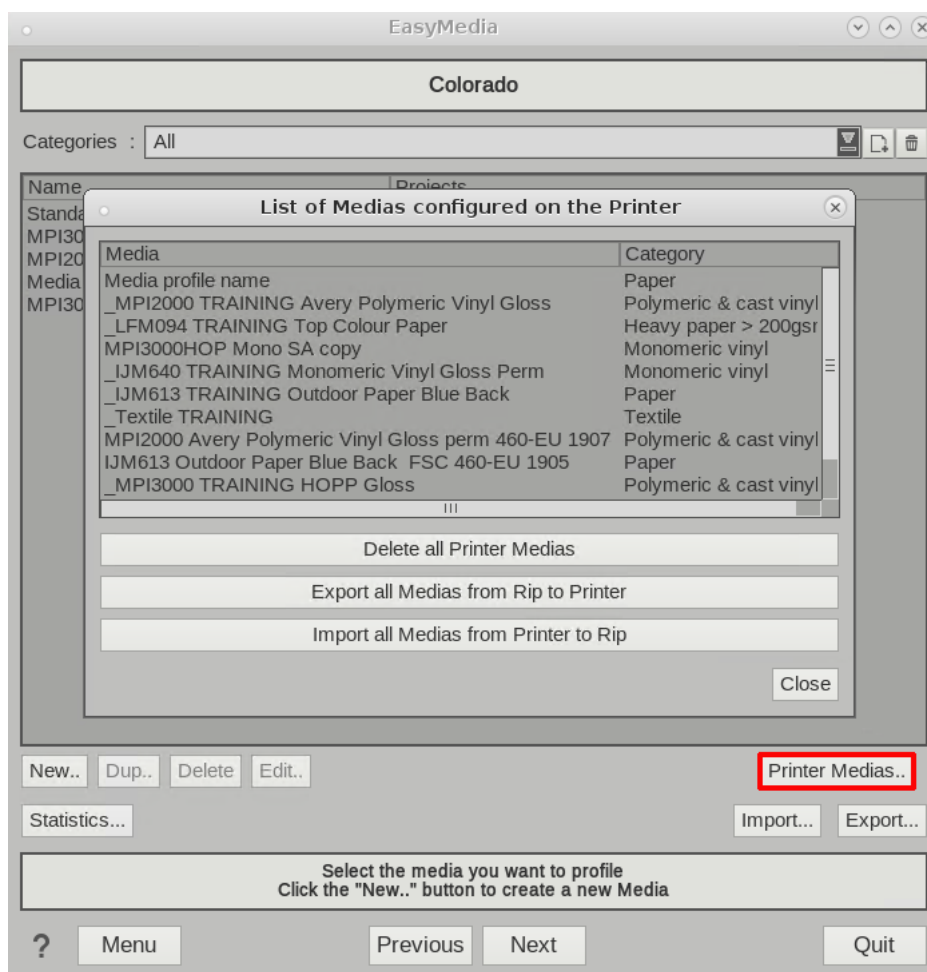
4. Select your printer and click on [Next].
5. To delete media types:

1. From the list of media, select one or more media types you want to delete.



2. Click on [Delete] and confirm per media type. The media types are immediately removed from the printer.
They are removed from the list on the operator panel under, [Media]→[Media type].
6. To delete all media types from the printer:

1. Click on [Printer Medias]. A new window opens with all the media types known in the printer.



2. Click on [Delete all Printer Medias] to delete all the media types on the printer.



NOTE

All media types on the printer are deleted, this also includes media types added via other RIPs.

7. To sync media types:

1. Click on [Export all Medias from Rip to Printer] to sync the media types of the RIP with the printer.
They are removed from the list on the operator panel under, [Media]→[Media type].

FLXfinish⁺ in the RIP

Introduction

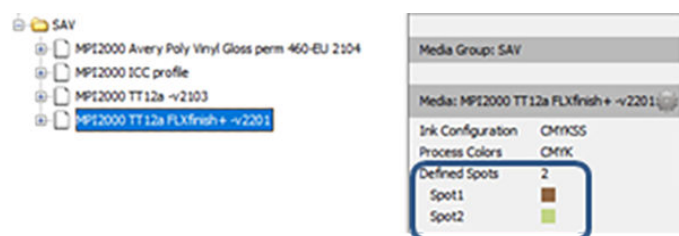
In order to use FLXfinish⁺ applications, a CMYKSS profile with a FLXfinish⁺ print mode is needed. These media profiles can be downloaded from [graphiPLAZA](#) and [Mediaguide.cpp.canon](#). A media profile with FLXfinish⁺ print mode can also be created from scratch, using the profiling documentation from the Colorado M-series. This documentation can be found on [graphiPLAZA](#) and on the downloads website <https://downloads.cpp.canon> under the product name.

Media profile settings for Onyx

In order to print both matte and gloss, the media profile needs to be a CMYKSS profile.

To check this, select the media profile in the media manager. The information regarding spot colors will be provided on the right hand side. If the media is set up correctly, it will show:

- CMYKSS at the ink configuration
- 2 defined spots



Media profile settings for Caldera

Caldera does not need to use a CMYKSS profile. The current CMYK profiles can have FLXfinish⁺ added to it. The only thing that needs to be done is that either the [Gloss High Quality] print mode is copied to FLXfinish⁺ or that a FLXfinish⁺ print mode is made from scratch.

PDF file settings for Onyx

In order to verify if the PDF file is made up correctly, some things need to be checked.

1. Open the PDF file in Job Editor.
2. Select the correct media profile and print mode.

When the file has been made up for FLXfinish⁺:

- [Output] should equal [CMYK + 2 spots]
- [Format] in the [Source Image] section should equal [CMYK + 2 spots].

Media Name:
MPI2000 TT 12a FLXfinish+ -v2201

Print Mode:
FLXfinish+

Output: **CMYK + 2 Spots**

Ink Setup: **CMYKSS**

Color Management

All ICC Profiles On

Change Profiles...

☒ Use Spot Color Replacement Table

Source Image

Format: **CMYK + 2 Spots, 8 bits**

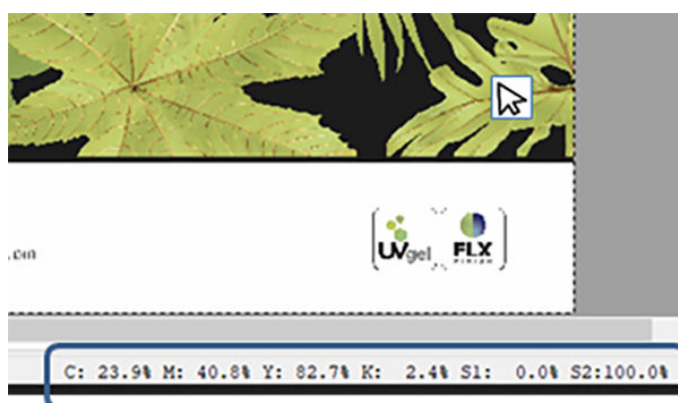
Resolution: 221.45 DPI

Size: 8.25" x 8.25"

Pixels: 1827 x 1827

File Size: 36.2 M

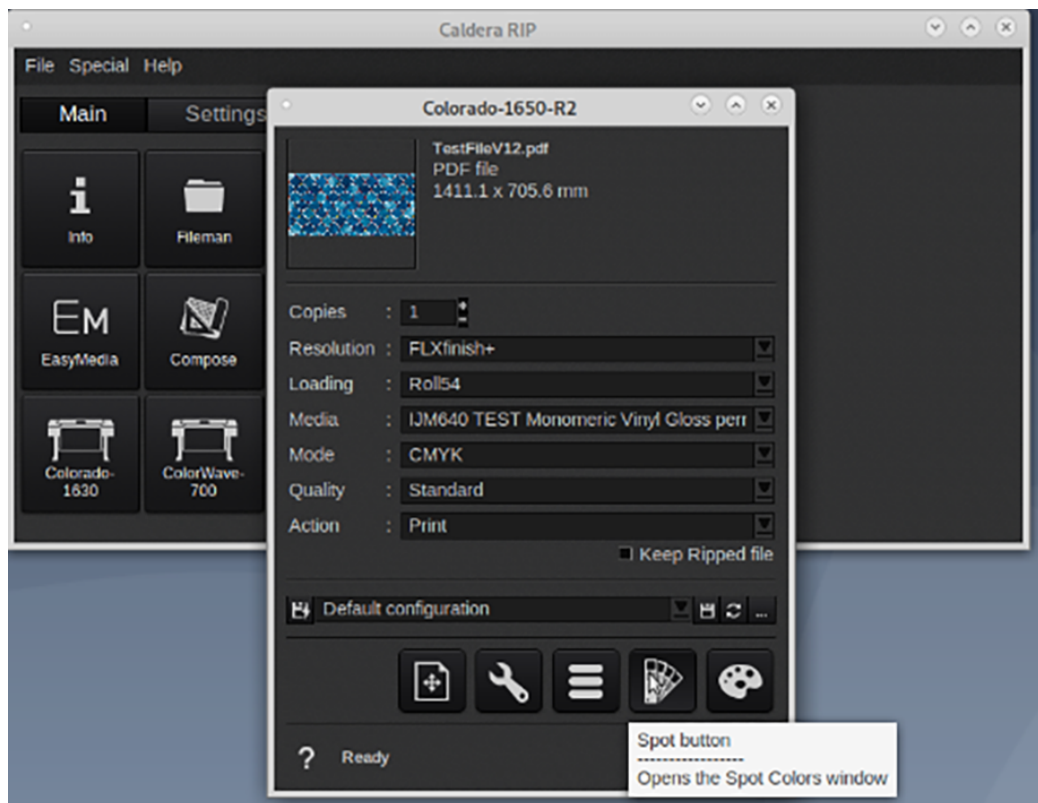
3. To check that the gloss part will be printed: hover the mouse over an area in the image that should be printed in gloss. Check at the bottom of the Job Editor whether there is a CMYK value and Spot2 value. If that is the case, the PDF file is made up correctly and will be printed in matte and gloss when using the FLXfinish+ print mode.



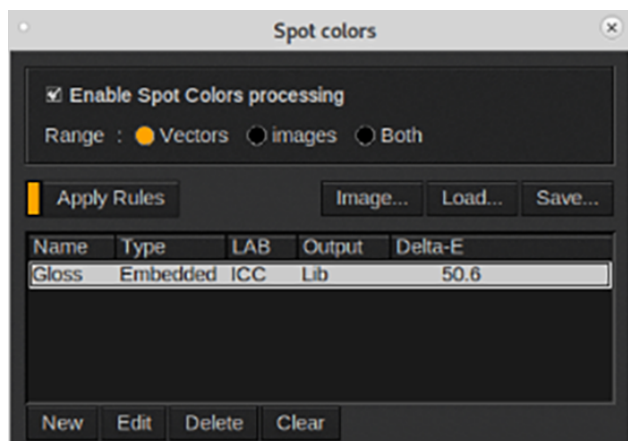
PDF file settings for Caldera

In order to verify if the PDF file is made up correctly, some things need to be checked.

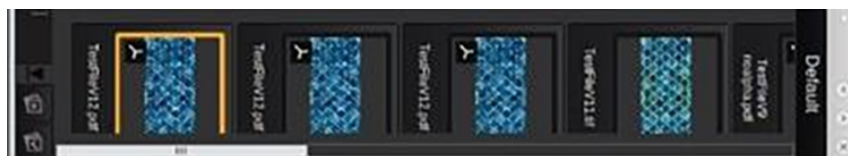
1. Open the correct printer version.
2. Set the correct media profile and print mode.
3. Drag the desired FLXfinish+ PDF file to the image selection area.
4. Go to the Spot button.



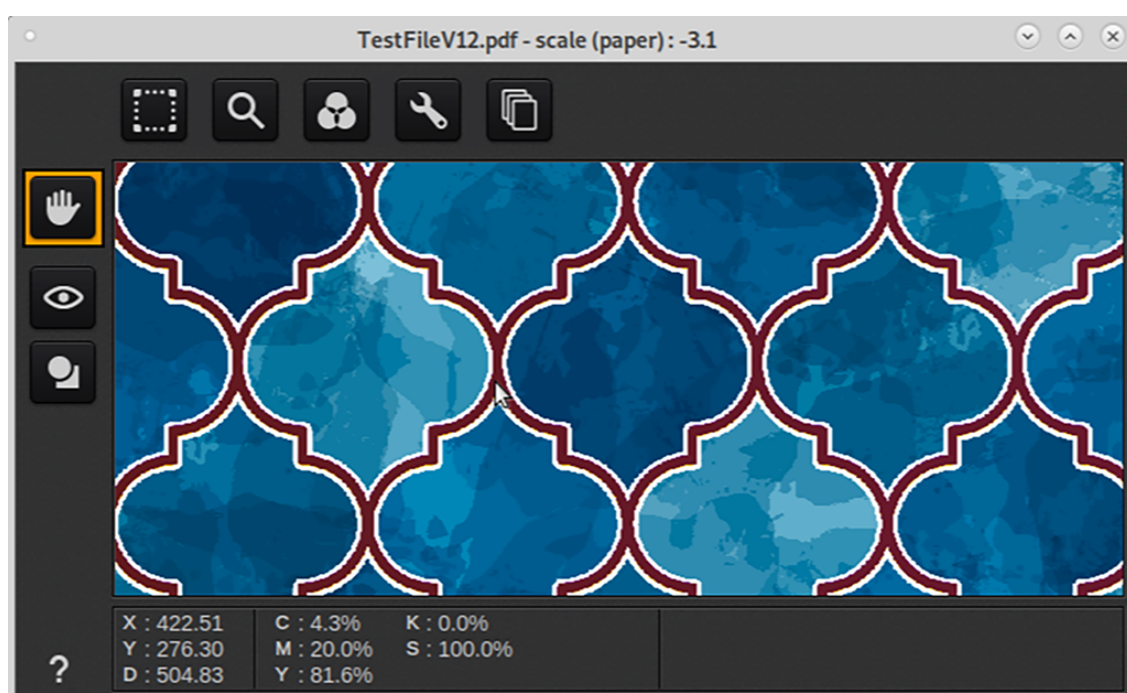
5. Check if Spot Color [Gloss] is present under [Spot Colors].



6. Double-click on the file itself in the files window. This will allow the file to be opened and checked on the CMYK and Spot color percentages.



7. Hovering the mouse over the Spot Color area should give a CMYK value and a Spot Color value named S.



White ink in the RIP

Introduction

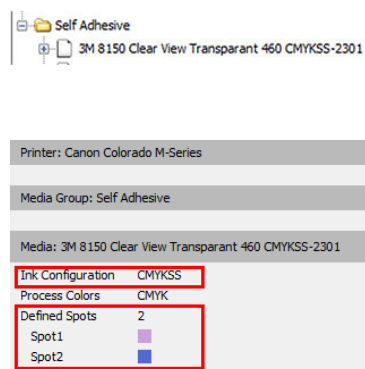
In order to print white applications, the media profile needs to be a CMYKSS profile with white print modes. These media profiles can be downloaded from [graphiPLAZA](#) and [Mediaguide.cpp.canon](#).

A media profile with white print modes can also be duplicated from a generic media, or created from scratch using the profiling documentation from the Colorado M-series. This documentation can be found on [graphiPLAZA](#) and on the downloads website <https://downloads.cpp.canon> under the product name.

Media profile settings for Onyx

Check the media profile and print mode at the following location:

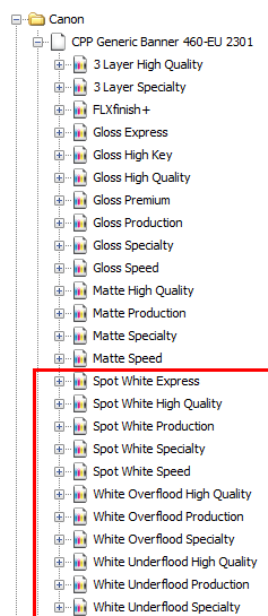
Go to the media manager, select the media profile and the information regarding spot colors will be provided on the right. If the media is set up correctly, it will show CMYKSS at ink configuration and 2 defined spots.



NOTE

It is possible that different colors for Spot1/ White and Spot2/ FLXfinish+ are used per media profile. The media profile is set properly as long as there are two spots defined. The colors used for Spot1/ White and Spot2/FLXfinish+ is a matter of preference.

To check if the white print modes are available, click on + on the left-hand side of your media profile to expand the list and view the print modes.



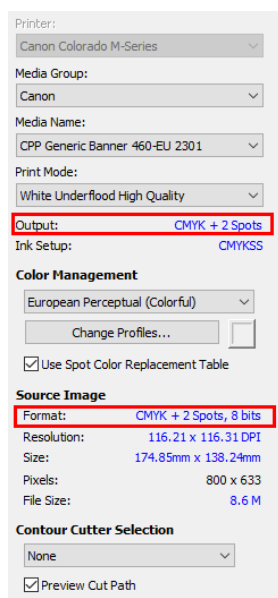
PDF file settings for Onyx

In order to verify if the PDF file is prepared correctly, you need to check the output and format settings.

1. Open the PDF file in Job Editor.
2. Select the correct media profile and print mode.

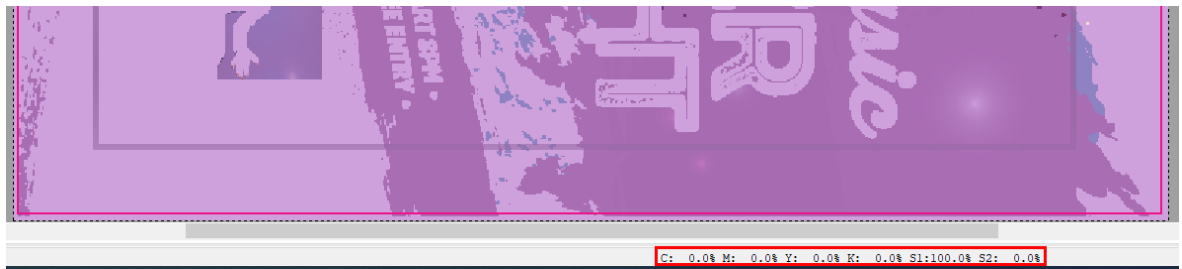
When the file has been made up for White ink:

- [Output] should equal [CMYK + 2 spots].
- [Format] in the [Source Image] section should equal [CMYK + 2 spots].



3. To check that the White part will be printed, hover the mouse over an area in the image that should be printed in White. Check at the bottom of the Job Editor whether there is a CMYK

value and Spot1 value. If that is the case, the PDF file is made up correctly and will be printed in white when using the white print modes.



Choose a media category

Introduction

You can choose a media category when you copy or change a media profile in the RIP.

When to do

Only when you create a new media profile or edit an existing media profile you can change the media category. It is advised to use the Colorado M-series media profiles and not change the media category. Only advanced users or application specialists should edit media profiles and have to choose the media category.



NOTE

This manual provides you with basic information in order to create and change media profiles. Profiling is an expert task which requires additional information and tools not covered by this manual. Contact your local support organization when you want to create or change media profiles.

Before you begin

The location of the media category setting differs, depending on the RIP you are using. For more information, see [Manage media profiles in ONYX on page 44](#), [Manage media profiles in Caldera on page 55](#).

Media categories

Use the information on the sticker of the media box, to choose the right media category. When it is difficult to decide, use the overview to choose the correct category.

Media category	Characteristics
Paper	• Can be torn by hand • Is humid sensitive: will deform permanently after exposure to water
Light paper < 120 gsm (32 lb bond)	• Can be torn by hand • Is humid sensitive: will deform permanently after exposure to water
Heavy paper > 200 gsm (54 lb bond)	• Can be torn by hand • Is humid sensitive: will deform permanently after exposure to water  NOTE The following exceptions are classified under this media category: textile wallcovering, wallcovering (solid vinyl with non-woven backing), wallcovering (solid vinyl and blown vinyl with paper backing), wallcovering (solid vinyl with textile backing), wallcovering (non-woven glass-fiber), wallcovering (Woodchip - Raufaser).

Media category	Characteristics
Self-adhesive	• Usually a smooth surface • Have a liner • Self-adhesive  NOTE The following exceptions are classified under this media category: wallcovering (embossed self-adhesive vinyl), wallcovering (self-adhesive textile), wallcovering (polymeric and cast self-adhesive vinyl), perforated media (with liner), transparent media (with opaque liner).
Light banner < 400 gsm (221 lb bond)	• Smooth surface • Is flexible • Cannot be torn by hand
Heavy banner > 400 gsm (221 lb index)	• Smooth surface • Is flexible • Cannot be torn by hand
Light film	• Smooth surface •
Film	• Smooth surface • Is difficult to tear by hand
Thick film > 200um	• Smooth surface • Is difficult to tear by hand
Canvas	• Made of cotton • Rough surface • Heavy media weight • Cannot be torn by hand
Textile	• Made of polyester • Soft and flexible • Low level of stiffness • Cannot be torn by hand

Change the media settings

Introduction

You can change the media settings of a media profile in the RIP.

When to do

Only when you create a new media profile or edit an existing media profile you can tune the media settings. It is advised to use the Colorado M-series media profiles and not change the media settings. Only advanced users or application specialists should edit media profiles and have to tune the media settings.



IMPORTANT

Changing the media settings can cause damage to your printer which may void your machine warranty service.



NOTE

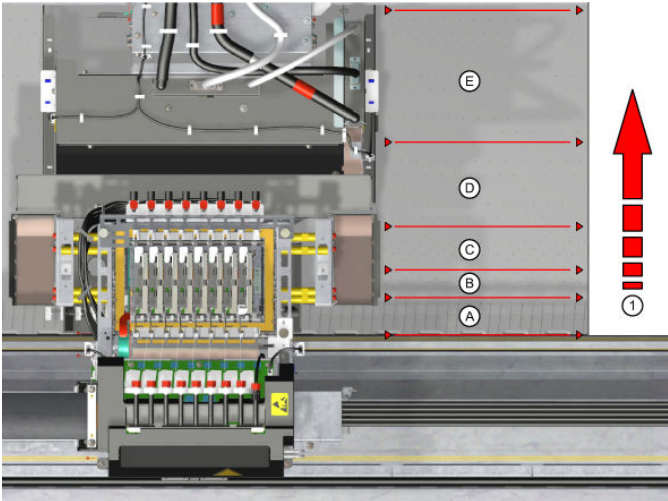
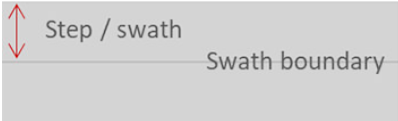
- Changing the media settings can result in poor print quality.
- This manual provides you with basic information in order to create and change media profiles. Profiling is an expert task which requires additional information and tools not covered by this manual. Contact your local support organization when you want to create or change media profiles.

Before you begin

The location of the media settings differs, depending on the RIP you are using. For more information, see [Manage media profiles in ONYX on page 44](#), [Manage media profiles in Caldera on page 55](#).

Media settings

[Media setting]	Description
[Automatic advance correction]	Prints yellow, black or white markers on the media that the printer uses as guidance to optimize the media step accuracy. • Select [Normal] to print the yellow markers. • Select [Enhanced] to print the black markers. • Select [Robust] to print thicker markers. • Select [Use white markers] to print white markers. • Select [None] when you do not want to print markers. Use [Normal] as a default. Typically for smooth, white, opaque, non-reflective media types, or when your applications demand markers that are not visible with the naked eye. Use [Enhanced] for textured and reflective media. Use [Robust] for very textured and patterned media. Select [Use white markers] for fully transparent, dark, or mirror-like media. You can combine this setting with other marker settings. On white media, the printer detects black markers better than yellow markers. Take note that black markers are visible with the naked eye, unlike the yellow markers. Black markers may have to be cut out from the printed output, depending on your applications. When the printer cannot read the markers, due to the media type used, a message appears on the operator panel. Select [None] when yellow, black and white markers cannot be read. See Solve specific quality problems on page 333. The use of markers has influence on the width of the print: [None] adds no width but uses the 5.3 mm (0.21 inch) default margin, [Normal] 8.9 mm (0.35 inch) margin, [Enhanced] 17.5 mm (0.69 inch) margin, [Robust] 22.7 mm (0.9 inch) margin.  NOTE • This setting is enabled for all print modes except [Gloss High Key], [Gloss Express] and [Gloss Speed].

[Media setting]	Description
[Vacuum power]	Controls the suction of the media on the platen. Per media category default values are used for each of the five zones available. Only change the vacuum power when you encounter problems: • Make sure the values for zones A, B, and C are always higher than for zones D and E. • Increase the vacuum power with steps of 10% when the vacuum power appears to be too low, e.g. when media is not flat on the printer platen. • Decrease the vacuum power with steps of 10% when the vacuum power appears to be too high, e.g. when the leading edge of the media is blocked halfway across the printer platen, or when dark tracks are visible around the swath boundary¹ and graininess is poor within swaths. • Do not set the values below 30% when [Winding tension] is set to [No tension bar] or [Locked tension bar]. • Always re-calibrate the media after you changed the vacuum power. Location of the zones A, B, C, D, E, with (1) media transport direction:  ¹ Swath boundary. Two adjoining swaths/passes of the printhead must be positioned without overlap (dark lines), or gap (white lines). 
[Winding tension]	Controls winding. For printing without winding or for winding without tension bar select [No tension bar]. For certain media types it is necessary to wind the media with a tension bar in order to let it run smoothly. Select [Tension bar] for media that is flexible and buckle-sensitive but not too stiff. Select [Locked tension bar] for media that is very stiff. Depending on what is selected here, the operator panel will display a request for taping media, locking, or placing a tension bar.  NOTE After you have changed the setting, make sure to reload the media roll in the media drawer. Only then the change will take effect.

[Media setting]	Description
[Auto media advance]	Prevents pinch roller marks that can occur on sensitive media while it sits idle in the loaded position or while it lies on the printer platen for more than two minutes. When you create a new media profile, [Auto media advance] is disabled by default. When enabled, this setting advances the media past the pressure point at the start of a print job or at the request of a manual cut. Depending on the media position, the setting can spool forward a longer media length.  NOTE • After you have changed the setting, make sure to reload the media roll in the media drawer. Only then the change will take effect. • After you finish printing on sensitive media, it is advised to roll up the media roll in the media drawer.
[Manual loading]	Use this setting when you print on flexible or curled media. Mostly used with a leading strip of rigid media. Width detection will be done just before printing at the position of the printhead. You can open the top cover and you can place the media manually in position.
[Suitable for printer cutter]	Controls the use of the printer cutter. Disable the use of the automatic cutter when it is not suitable for the media type, for example with textile, canvas or heavy banners. When disabled the printer will request the operator to cut the media manually.  NOTE After you have changed the setting, make sure to reload the media roll in the media drawer. Only then the change will take effect.
[Outer core diameter]	Fill in the outer core diameter of the media roll in millimeters. With this information and the data collected while printing jobs, the printer will calculate the remaining media length. If the [Remaining length] is displayed as [Unknown] on the operator panel, continue printing until the remaining media length can be calculated.  NOTE After you have changed the setting, make sure to reload the media roll in the media drawer. Only then the change will take effect. ►

[Media setting]	Description
[Media thickness]	Fill in the thickness of the media before the media is loaded for the first time. This value represents the total thickness of the media, e.g. for self-adhesive vinyl, PVC including the liner. The media thickness determines the printhead carriage height and must be set correctly in order to perform printhead carriage calibration.  NOTE • An incorrect setting of the media thickness can lead to a wrong calculation of the length of the media on the media roll. • The media thickness must be set correctly and is crucial for good print quality. Incorrect media thickness can lead to print quality artefacts like banding or unsharp fonts and even can cause media touches which can damage the printhead. • After you have changed the setting, make sure to reload the media roll in the media drawer. Only then the change will take effect.
[Moist sensitivity]	Prevents to print on media that might have been affected by humidity or moisture. When you create a new media profile, [Moist sensitivity] is disabled by default: the value is set to 0. When enabled, the printer spools the media forward at the start of a print job or at the request of a manual cut after the defined inactivity time limit is reached: where value[1] is the longest time (1800 sec.), [2] (250 sec.), and [3] the shortest time (120 sec.). By spooling the media forward, the part of the media that is on the platen or that sits idle in the loaded position is not used to print on. It is advised to use the moist sensitivity setting when you use paper-based media that is sensitive to and exposed to temperature and humidity variation. This way you prevent printing on waved and wrinkled media and the print quality is not compromised.  IMPORTANT Incorrect moist sensitivity can cause waved and wrinkled media. This can lead to a carriage crash and can damage the machine, which may void your machine warranty service.  NOTE • After you have changed the setting, make sure to reload the media roll in the media drawer. Only then the change will take effect. • After you finish printing on sensitive media, it is advised to roll up the media roll in the media drawer.
[Print Gap]	The Print Gap controls the height of the carriage with respect to the media. The print gap can be set to "Medium" or "High". Default setting is "Medium". High position should only be used when experimenting with new media, to prevent the printhead from touching the medium. Some print quality artifacts can appear when the carriage is too far from the media surface. These artifacts can be reduced by choosing the "Medium" print gap option. However, a smaller print gap increases the chance on media touches.

[Media setting]	Description
[Advanced media step calibration]	With this setting you can enable or disable an additional calibration. SAV media is more sensitive to a certain OD banding. With this calibration the paperstep is optimized for this OD banding. For SAV media this setting is automatically enabled. This setting can be disabled to reduce media calibration time and media waste. This additional calibration is intended for SAV media and should be enabled to get the optimal performance. In exceptional cases for media with OD banding enabling this setting might reduce the OD banding.
[Suitable for edge detection]	With this setting the printer automatically detects the position and width of media. This prevents pollution of the print surface. The printer can not automatically detect dark and transparent media. For these media, disable [Suitable for edge detection]. In this case the printer relies on the media width that you enter, and assumes that the media is positioned in the center of the printer.

Print mode setting	Description
[Print surface temperature]	Controls the temperature of the platen. Generally there is no need to change this settings. Therefore recommended to keep this setting as defined in the media profile, and only adjust after consulting with an application specialist.
[Precure power]	Controls the curing intensity of the LED for the first part of the curing zone. Default value is 0. Tune by decreasing or increasing the setting and minimize gloss banding, especially in dark areas. When you turn the [Precure power] completely off ink adhesion can improve, but this can result in gloss banding. The LED is off when the value is set to -5. Tune with small steps of 1 or 2 at a time.  CAUTION Changing the curing settings can result in insufficient curing of the UV-ink layer. When you have changed the settings, wear Colorado M-series approved gloves the first time you handle the printed output to prevent any possible contact with uncured ink.  IMPORTANT Changing the curing settings can result in insufficient curing of the UV-ink layer. Especially in combination with the [Moist protection] setting there is a risk the printer can get polluted. When the machine is polluted make sure you clean it or call your local service representative.

Print mode setting	Description
[Throughcure/ Postcure power]	Controls the curing intensity of the LED for the subsequent part of the curing zone. Default value is 0. Increase to get rid of smudges (due to rubbing) or not fully cured ink. Decrease to minimize the appearance of a white haze on dark areas. Decrease to limit heating of the media. The LED cannot be turned off.  CAUTION Changing the curing settings can result in insufficient curing of the UV-ink layer. When you have changed the settings, wear Colorado M-series approved gloves the first time you handle the printed output to prevent any possible contact with uncured ink.  IMPORTANT Changing the curing settings can result in insufficient curing of the UV-ink layer. Especially in combination with the [Moist protection] setting there is a risk the printer can get polluted. When the machine is polluted make sure you clean it or call your local service representative.  Smudging
[Pincure power]	Controls the curing intensity of the LED for matte print modes. Default value is 0. Increase or decrease for minor adjustment of the gloss value, for respectively lower or higher gloss value. Decrease to lower the heat load on sensitive media. Decrease to diminish eventual visibility of print surface suction holes in case of very thin media. The LED cannot be turned off.  CAUTION Changing the curing settings can result in insufficient curing of the UV-ink layer. When you have changed the settings, wear Colorado M-series approved gloves the first time you handle the printed output to prevent any possible contact with uncured ink.  IMPORTANT Changing the curing settings can result in insufficient curing of the UV-ink layer. Especially in combination with the [Moist protection] setting there is a risk the printer can get polluted. When the machine is polluted make sure you clean it or call your local service representative.

Print mode setting	Description
[Advance correction (Caldera) / Step correction (ONYX)]	Controls the average step size for the selected media and print mode. Only change this setting when media calibration, [Automatic advance correction], and decreasing the vacuum settings do not help enough in improving the print quality. Decrease for smaller steps, in case of constant light lines (at the swath boundary). Increase for larger steps, in case of constant dark lines. When both light and dark lines are present, you cannot correct it via this setting.  NOTE • The [Automatic advance correction] setting will still work when you use [Advance correction/Step correction]. • The change of this setting is only applied to a job when the queue is empty. Send jobs one by one to make sure that the changes are applied
[Print direction]	There are two options for this setting: • Bidirectional is the default option. • A monodirectional option is available for all print modes at half productivity. Monodirectional means that the engine prints and cures only in one direction.
[High Density]	Available for matte print modes on textured media. Ink coverage +25%
[Optimized color profiling]	The [Optimized color profiling] level is set as part of the color profiling sequence. When the level is set to 1 , no color corrections are made. In case of wrinkles, increase the [Optimized color profiling] in order to reduce the ink limit in an optimized way. This will reduce the risk of wrinkles.
[Adhesion]	There are two options for this setting: • [Normal] is the default option. • [Enhanced] is available for white ink print modes. Use this setting when adhesion of ink to media is low. This setting reduces print speed.
[Flood Fill (Gloss)]	Only for FLXfinish⁺. When this setting is checked and there is no gloss layer, the print is fully Gloss. When this setting is not checked and there is no gloss layer, the print is fully Matte.
[Flood Fill (White)]	Only for white ink print modes. When this setting is checked, the printer generates a white flood fill. This substitutes white spot data.
[Define layers]	Only for white ink print modes. Define the layer structure for multilayer prints.

Select a print mode

Introduction

You can select a print mode that best suits your application. Choose a gloss, matte or mixed matte/gloss finish and select your print mode in the RIP software.

The location of the print modes differs, depending on the RIP you are using. For more information, see [Manage media profiles in ONYX on page 44](#), [Manage media profiles in Caldera on page 55](#).

Print modes



NOTE

- The available print modes can differ, depending on the media type configuration in the RIP.
- A monodirectional option is available for all print modes at half productivity.

Print mode	Passes	M3 & M3W m ² /h (ft ² /h)	M5 & M5W m ² /h (ft ² /h)
[Gloss High Key]	1	111 (1195)	159 (1709)
[Gloss Express]	1	78 (840)	114 (1229)
[Gloss Speed]	2	55 (592)	80 (861)
[Gloss Production]	3	39 (420)	57 (610)
[Gloss High Quality]	4	29 (312)	40 (427)
[Gloss Premium]	6	22 (237)	27 (290)
[Gloss Specialty]	8	19 (215)	20 (222)

Gloss print modes

Print mode	Passes	M3 & M3W m ² /h (ft ² /h)	M5 & M5W m ² /h (ft ² /h)
[Matte Express]	3	36 (388)	46 (495)
[Matte Speed]	4	27 (291)	38 (409)
[Matte Production]	5	22 (237)	31 (333)
[Matte High Quality]	6	18 (194)	27 (290)
[Matte Specialty]	8	13 (140)	20 (215)
[Backlit]	8	18 (194)	20 (215)
[Backlit Density]	14	10 (108)	10 (108)

Matte print modes

Print mode	Passes	M3/M3W & M5/M5W m ² /h (ft ² /h)
[FLXfinish ⁺]*	14	7 (75)

Mixed Matte/Gloss print mode

* FLXfinish⁺ has 6 passes for gloss and 8 for matte.

Print mode	Layer structure	Passes	M3W m ² /h (ft ² /h)	M5W m ² /h (ft ² /h)
[Spot White Express]	1: CMYKW	4	27 (291)	36 (388)
[Spot White Speed]	1: CMYKW	5	22 (237)	30 (323)
[Spot White Production]	1: CMYKW	6	18 (194)	24 (258)
[Spot White High Quality]	1: CMYKW	8	13 (140)	18 (194)
[Spot White Specialty]	1: CMYKW	12	9 (129)	12 (129)
[White Overflow Speed]	2: CMYK-W	3+4	20 (215)	
[White Overflow Production]	2: CMYK-W	4+6	14 (151)	
[White Overflow High Quality]	2: CMYK-W	6+8	10 (108)	
[White Overflow Specialty]	2: CMYK-W	8+12	7 (75)	
[White Underflood Speed]	2: W-CMYK	4+3	20 (215)	
[White Underflood Production]	2: W-CMYK	6+4	14 (151)	
[White Underflood High Quality]	2: W-CMYK	8+6	10 (108)	
[White Underflood Specialty]	2: W-CMYK	12+8	7 (75)	
[3 Layers High Quality]	3: CMYK-W-CMYK	6+8+6	7 (75)	
[3 Layers Specialty]	3: CMYK-W-CMYK	8+12+8	5 (54)	
[5 Layers High Quality]	5: CMYK-W-B-W-CMYK	6+8+8+8+6	4 (43)	
[5 Layers Specialty]	5: CMYK-W-B-W-CMYK	8+12+8+12+8	3 (32)	

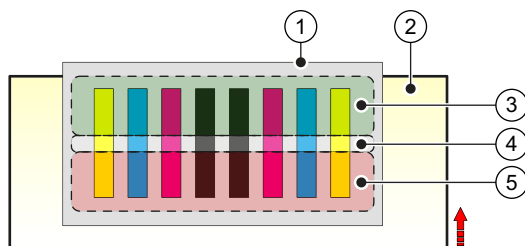
White print modes

FLXfinish⁺

For Colorado M-series a print mode exists that allows you to combine matte and gloss finishes in one print. This print mode is called FLXfinish⁺.

To use FLXfinish⁺ you do not need any additional varnish channels or extra printheads.

When using the FLXfinish⁺ print mode, the printhead is divided into zones that are dedicated to matte or gloss printing. Because both finishes can be applied simultaneously, media is not retracted or moved around between printing of gloss and matte sections.



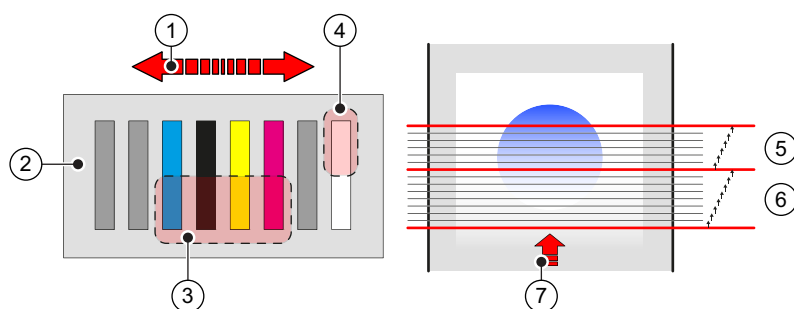
Number	Component
1	Printhead carriage
2	Media
3	Gloss part
4	Unused
5	Matte part

White ink

For Colorado M-series M3W and M5W configurations, there are print modes that allow you to print with white ink.

To use white ink, you need a license and a printhead suitable for white ink.

When using white print modes, the printhead is divided into zones that are dedicated to white or CMYK printing. White and CMYK layers are printed simultaneously.



Number	Component
1	Printhead carriage movement direction
2	Printheads
3	Unused nozzles (CMYK)
4	Unused nozzles (white)
5	Media steps building the second layer (CMYK)
6	Media steps building the first layer (white)
7	Media transport direction

Media in combination with gloss and matte print modes

Printmode	Gloss							Matte*							Mixed*	
	Gloss High Key	Gloss Express	Gloss Speed	Gloss Production	Gloss High Quality	Gloss Premium	Gloss Specialty	Matte Express	Matte Speed	Matte Production	Matte High Quality	Matte Specialty	Backlit	Backlit Density	FLXfinish+	
Speed M3 (m²/h)	111	78	55	39	29	22	19	36	27	22	18	13	18	10	7	
Speed M5 (m²/h)	159	114	80	57	40	27	20	46	38	31	27	20	20	10	7	
Speed M3 (ft²/h)	1195	840	592	420	312	237	215	388	291	237	194	140	194	108	75	
Speed M5 (ft²/h)	1709	1229	861	610	427	290	222	495	409	333	290	215	215	108	75	
Media	Application															
MC Paper	POP										R					
Coated Paper	POP (wallpaper)				R						R					
Uncoated Paper	Wrappings (wallpaper)										R					
Vinyl	Wallcovering (textured)				R						R					
PVC banner	Indoor/outdoor Banner; Mesh			R						R						
Self Adhesive	Fleet graphics; Window graphics; Stickers; Decals				R							R				
Self Adhesive (Cast)	Fleet graphics											R				
Soft-signage	Frontlit SEG											R				
Soft-signage	Backlit SEG												R			
Film	Backlit												R			
Film	Frontlit/rollup banner						**					R				
Canvas	Canvas										R					
Magnetic	Magnetic				R						R					

R	Recommended		Good quality for most applications
	Best quality for most applications		Low quality applications
	Media (types) that are suitable for gloss print modes and are smooth with no or minimal texture. Main applications: retail, interior decor, packaging, labels		

* Matte and mixed matte/gloss print modes can only be used if the FLXfinish+ license is installed.

** For Film -frontlit/rollup-, in gloss mode, the quality is heavily media dependent by wrinkle or inkspread.

Uncoated paper: gloss print mode is not recommended because the curing quality is not guaranteed.

Media in combination with white print modes

	Layers	1					2								3	5		
	Printmode	Spot White Express	Spot White Speed	Spot White Production	Spot White High Quality	Spot White Specialty	White Underflood Speed	White Underflood Production	White Underflood High Quality	White Underflood Specialty	White Overflood Speed	White Overflood Production	White Overflood High Quality	White Overflood Specialty	3 Layers High Quality	3 Layers Specialty	5 Layers High Quality	5 Layers Specialty
	Speed M3 (m²/h)	27	22	18	13	9	20	14	10	7	20	14	10	7	7	5	4	3
	Speed M5 (m²/h)	36	30	23	18	12												
	Speed M3 (ft²/h)	291	237	194	140	129	215	151	108	75	215	151	108	75	75	54	43	32
	Speed M5 (ft²/h)	388	323	258	194	129												
Media	Application																	
Transparent films & Self Adhesives	Window Graphics																	
	Spot White				R													
	Underflood & Overflood								R				R					
	Double sided																	
	Same image														R			
	Different image																	R
Translucent film & Textiles	Day Night														R			
	Day Night Switch																R	
Colored Paper	POP & Wallpaper								R				R					
Colored Banner	Indoor / Outdoor banner								R									
Colored Magnetic									R									

R	Recommended		Good quality for most applications
	Low quality applications		Best quality for most applications

Print surface temperature

For optimal print quality the following print surface temperatures are recommended.

Media type	Print mode category				
	Gloss	Matte	Backlit	FLXfinish ⁺	White
Porous media	X*	24°C (75°F)	24°C (75°F)	X*	24°C (75°F)
Other media	24°C (75°F)	24°C (75°F)	34°C (93°F)	21°C (70°F)	36°C (97°F)

* This combination of media type and print mode is not recommended.

Prepare media for printing

Load a media roll (position 1)

Introduction

This topic describes how to load a media roll in position 1.



NOTE

You can use an optional grip lock to insert the feed media shaft into the core of the new media roll. You can load a media roll without the optional grip lock. This procedure describes both situations.

Before you begin

Before you load a roll on the printer:

- Make sure you have added a media profile with the correct media type via the RIP. For more information, see [Configure media in the RIP on page 44](#).
- Check the media width of your roll before loading. When your media width is not present in the list on the operator panel, you can type it in.
- Put on gloves to avoid pollution of the paper by your fingerprints.



CAUTION

- **Watch your fingers when you handle the media roll.**
- **Loading heavy media, 25 kg (55 lb) or more, has to be done by two people or with the help of external lifting tools.**



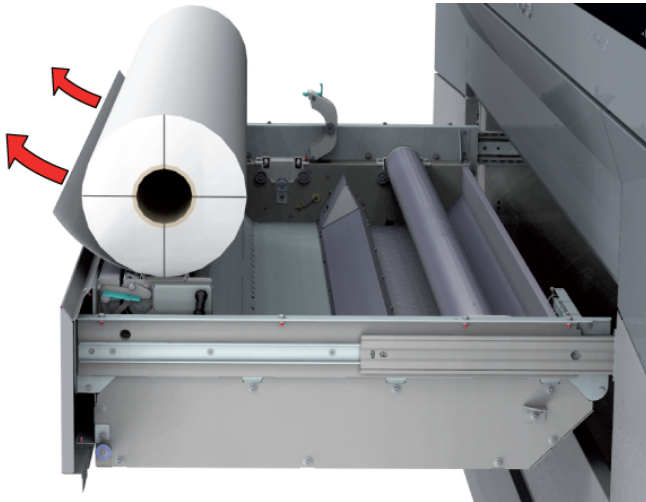
IMPORTANT

- Do not use dented or damaged media rolls to prevent damage to the printheads.
- Only open the media drawer when the indicator light on the drawer is on. Do not open the drawer when the light is off, you can damage the machine.

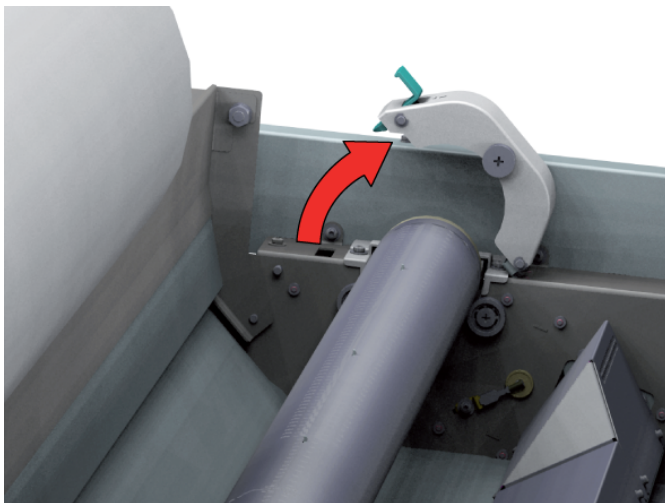
Procedure

1. Pull firmly to open the media drawer.

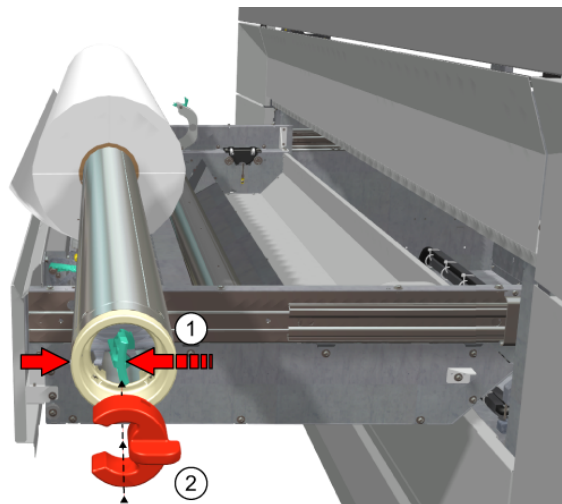
2. Place the new media roll, with the media flap on the bottom and towards you, on the roll loading station.



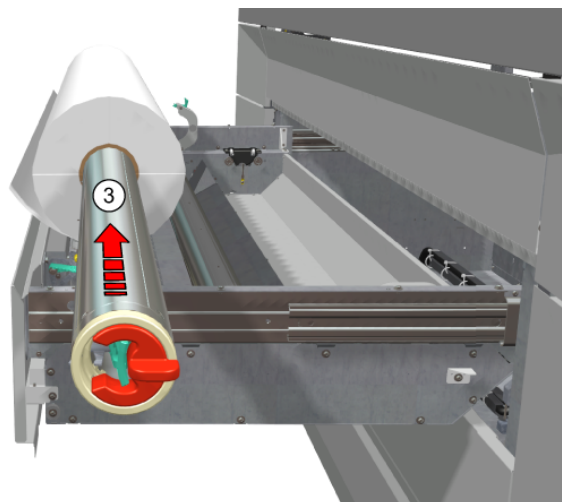
3. Pull the lever and open the clamp.



4. Take the feed media shaft out of the drawer.
5. Insert the feed media shaft into the core of the new media roll. You can use the optional grip lock for this step.
With the optional grip lock:
 1. Pull (1) the handle of the locking mechanism towards you.
 2. Place the grip lock (2) in the feed media shaft.



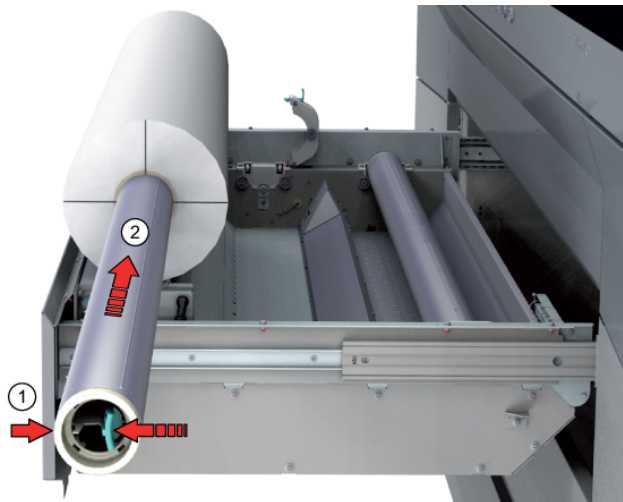
3. Slide (3) the media shaft into the side of the core of the new media roll.



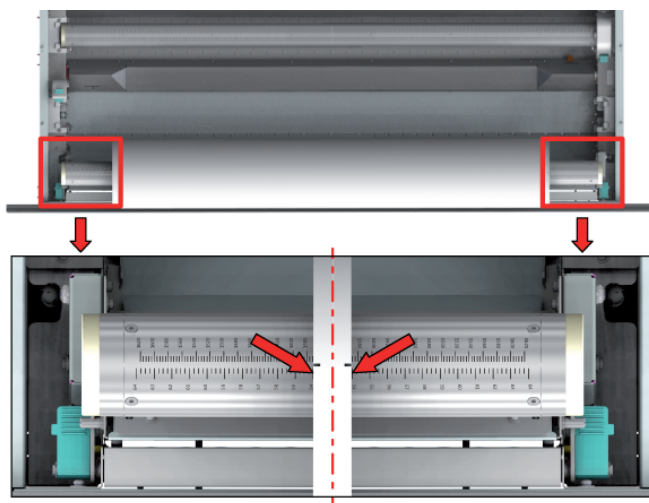
4. Remove the grip lock.

Without the optional grip lock:

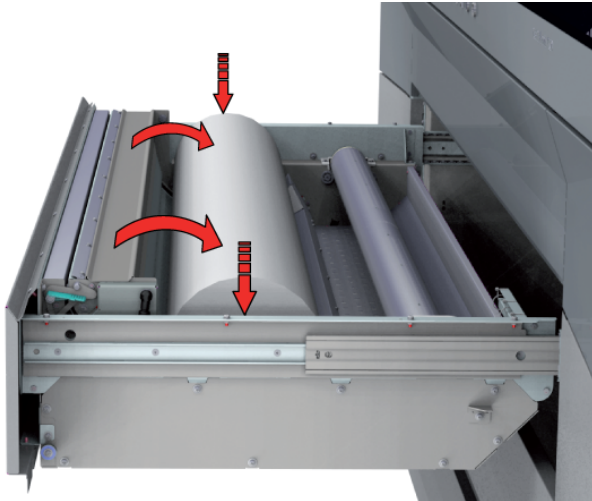
1. Pull (1) the handle of the locking mechanism towards you.
2. Slide (2) the media shaft into the side of the core of the new media roll.



6. Accurately align the roll on the media shaft. Place it on the corresponding media size with the help of the ruler. Check on the left and right side of the roll if both are aligned on the same size.



7. Release the handle of the locking mechanism.
8. Remove the tapes from the new media roll, if present. Place the media roll in the media drawer.

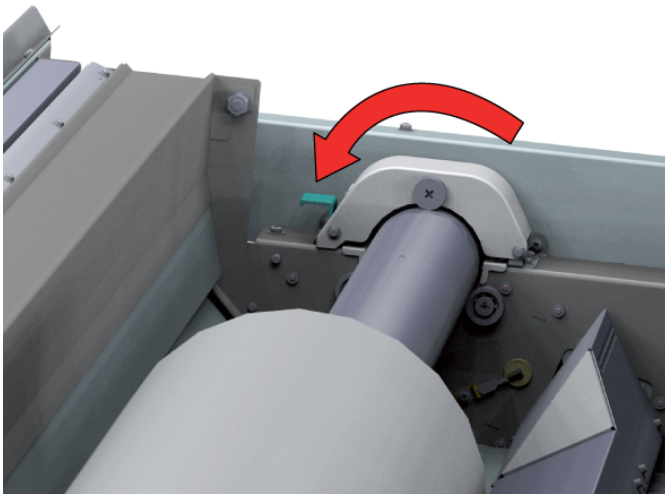


9. Close the clamp firmly.

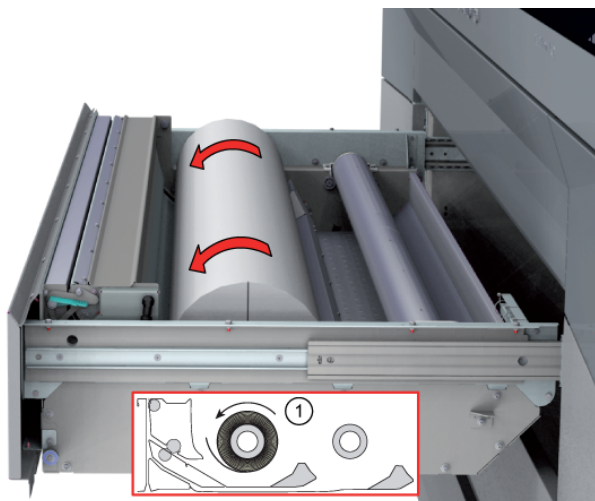


IMPORTANT

Make sure you close the clamp completely until you hear a click, otherwise the roll can come loose and can damage the machine.



10. Use both hands to turn the media roll backwards (1) until the media flap has passed the metal paper guide.

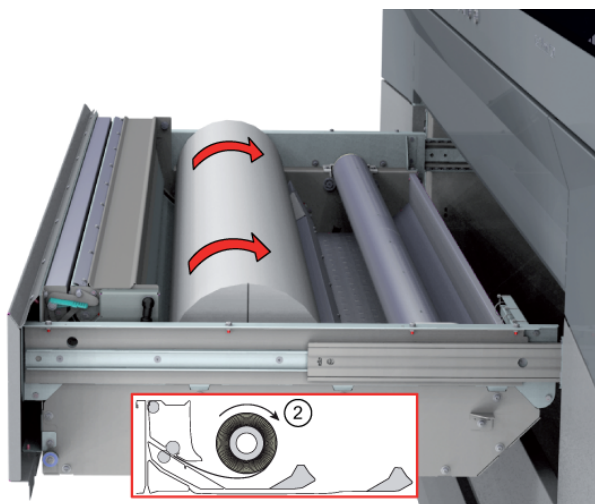


11. Use both hands to move the media forward and slide it under the metal paper guide (2) until the media is transported automatically. You will hear a beeping sound when the media is correctly fed and loaded.



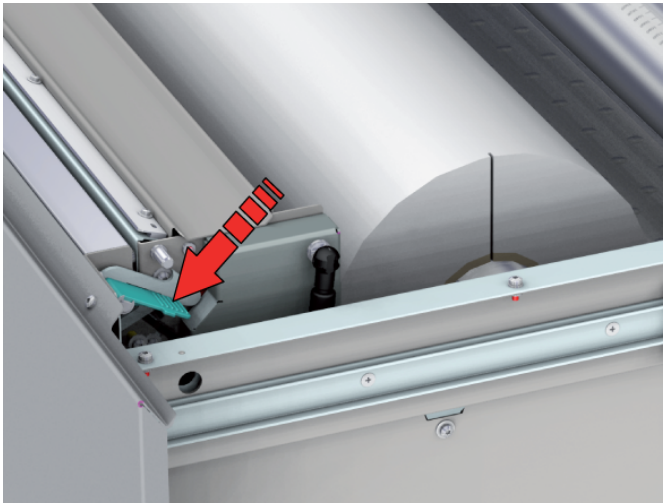
IMPORTANT

Make sure media is always rolled up evenly on the core. Do not load media that is not rolled up evenly (telescoping) as it can damage the machine.

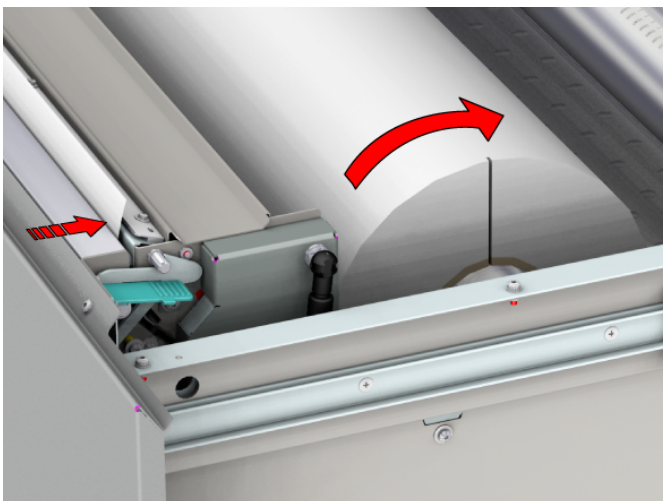


When the printer does not take the media (no beeping sound), you can feed the media manually. The manual feeding option is recommended for flexible and difficult to load media, such as canvas and textiles.
For manual feeding:

1. Push the handles on the left and right side of the loading station to open the media feed.



2. Use both hands to move the media forward and slide the media under the metal paper guide until you see it coming out on top.
3. Close the media feed.



4. If necessary, you can manually cut the leading edge of the media when it has not been cut straight. Take a knife and cut the media in the cutting guide.

**NOTE**

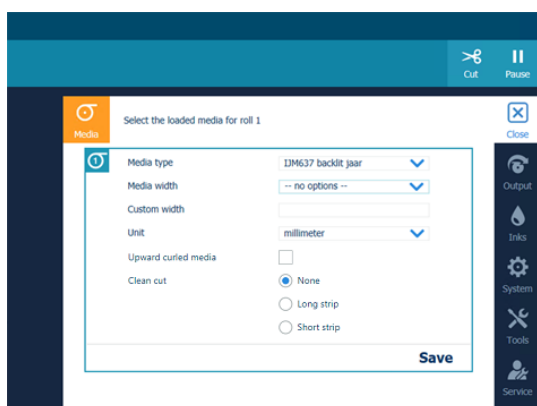
Always use a straight cut leading edge for media types that are more difficult to transport (e.g. canvas).

12. Close the media drawer carefully. The operator panel displays the message that new media is detected.

**IMPORTANT**

Do not open the media drawer when the indicator light is off, you can damage the machine.

13. On the operator panel, select the correct media type and fill in the media width.



14. When the media you use has an upward curl select [Upward curled media].
This setting persists as long as the media is assigned. When enabled, the system feeds the media to the output position. You can then open the top cover and guide the media. After you close the top cover, the media is transported to the clamp. Open the top cover and guide the media again. Printing starts after these actions have been completed.
15. Select if and what type of clean cut you want the printer to make, when you use the media for the first time.
For winding with a tension bar or with a locked tension bar the clean cut is neglected.
16. Tap on [Save].



NOTE

For the highest output quality, it is advised to always perform a media calibration when you load a new media type or a new media width. For more information, see [Calibrate the media on page 120](#).

Load a media roll (position 2)

Introduction

An optional second media roll can be loaded to your printer for optimal productivity.



NOTE

You can use optional grip lock to insert the feed media shaft into the core of the new media roll. You can load a media roll without the optional grip lock. This procedure describes both situations.

Before you begin

Before you load a roll on the printer:

- Make sure you have added a media profile with the correct media type via the RIP. For more information, see [Configure media in the RIP on page 44](#).
- Check the media size of your roll before loading. When your media size is not present in the list on the operator panel, you can type it in.
- Put on gloves to avoid pollution of the paper by your fingerprints.



CAUTION

- **Watch your fingers when you handle the media roll.**
- **Loading heavy media, 25 kg (55 lb) or more, has to be done by two people or with the help of external lifting tools.**

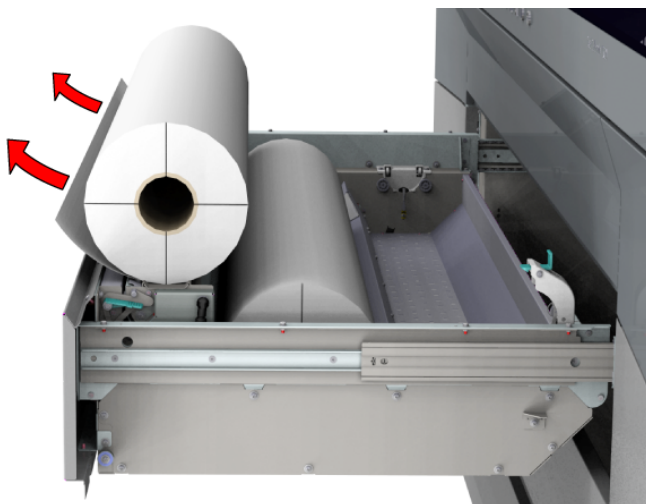


IMPORTANT

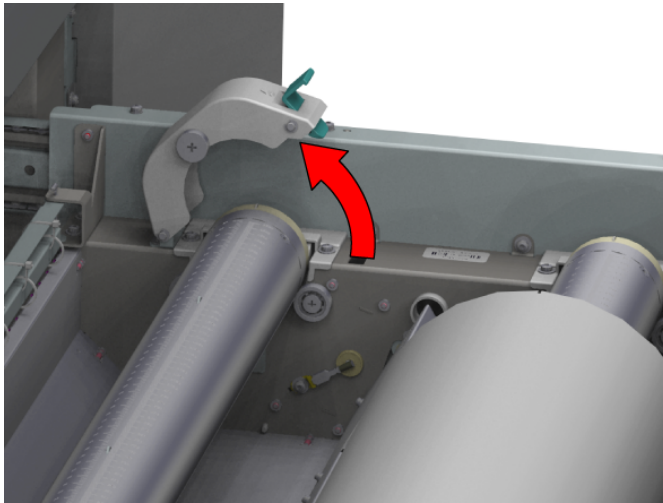
- Do not use dented or damaged media rolls to prevent damage to the printheads.
- Only open the media drawer when the indicator light on the drawer is on. Do not open the drawer when the light is off, you can damage the machine.

Procedure

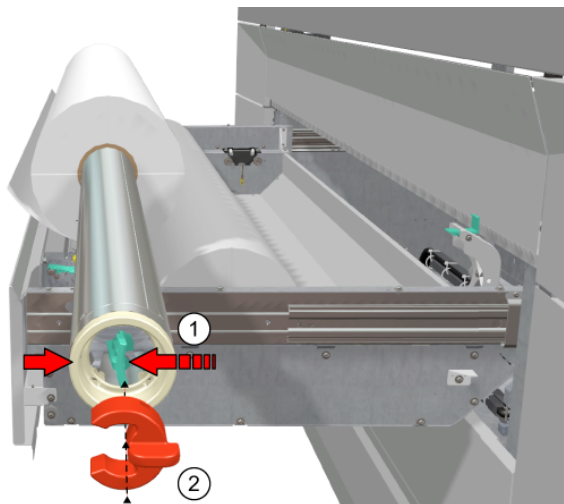
1. Pull firmly to open the media drawer.
2. Place the new media roll, with the media flap on the bottom and towards you, on the roll loading station.



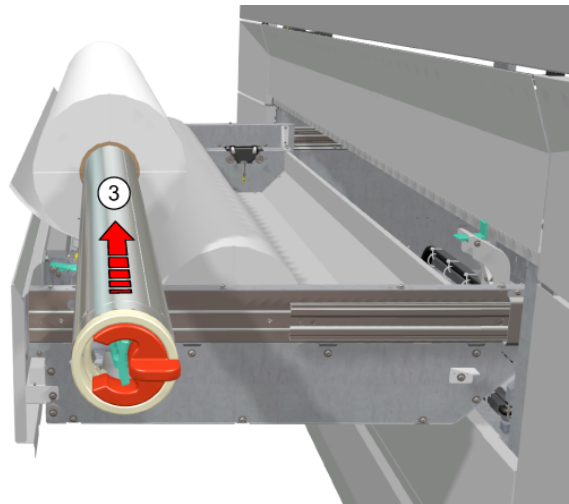
3. Pull the lever and open the clamp.



4. Take the feed media shaft out of the drawer.
5. Insert the feed media shaft into the core of the new media roll. You can use the optional grip lock for this step.
With the optional grip lock:
 1. Pull (1) the handle of the locking mechanism towards you.
 2. Place the grip lock (2) in the feed media shaft.



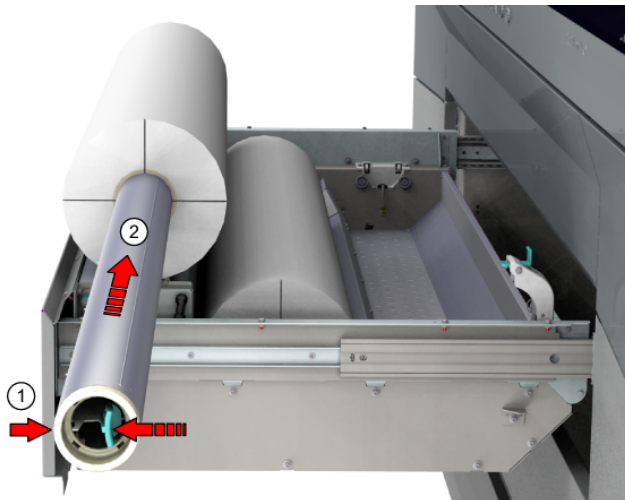
3. Slide (3) the media shaft into the side of the core of the new media roll.



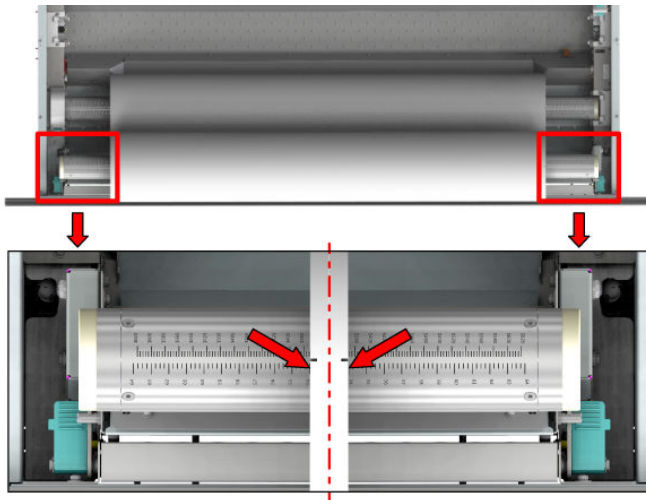
4. Remove the grip lock. Place it on the cover beside the media drawer.

Without the optional grip lock:

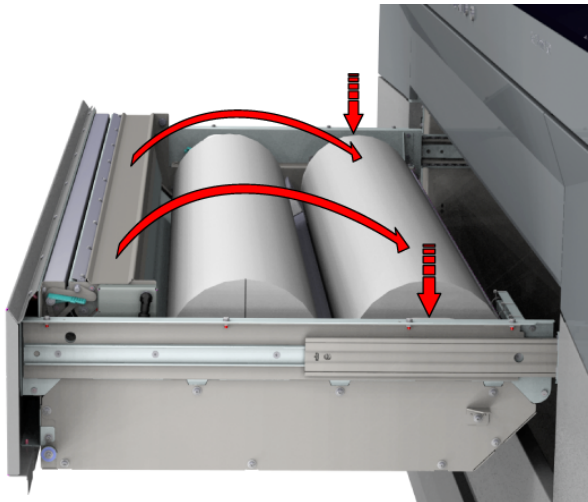
1. Pull (1) the handle of the locking mechanism towards you.
2. Slide (2) the media shaft into the side of the core of the new media roll.



6. Accurately align the roll on the media shaft. Place it on the corresponding media size with the help of the ruler. Check on the left and right side of the roll if both are aligned on the same size.



7. Release the handle of the locking mechanism.
8. Remove the tapes from the new media roll, if present. Place the media roll in the media drawer.

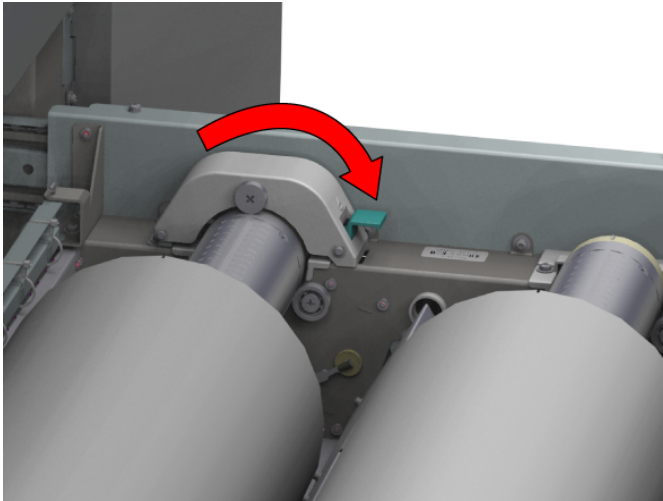


9. Close the clamp firmly.

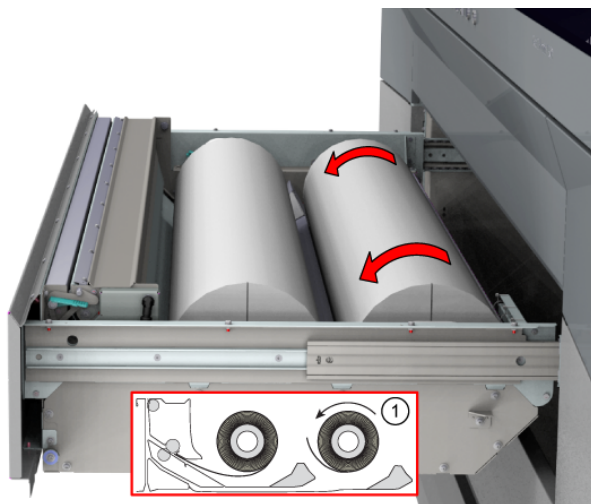


IMPORTANT

Make sure you close the clamp completely until you hear a click, otherwise the roll can come loose and can damage the machine.



10. Use both hands to turn the media roll backwards (1) until the media flap has passed the metal paper guide.

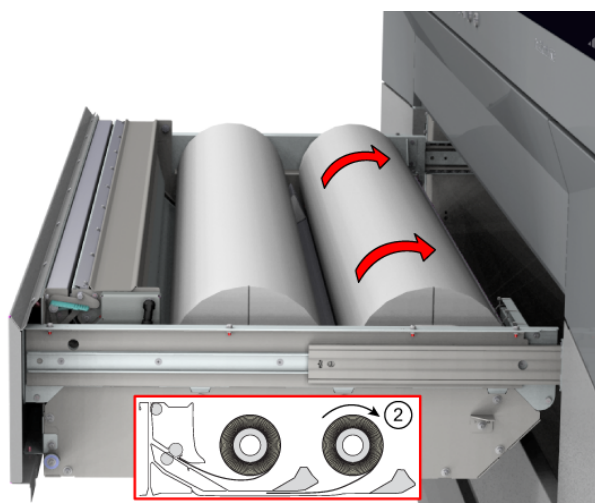


11. Use both hands to move the media forward and slide it under the metal paper guide (2) until the media is transported automatically. You will hear a beeping sound when the media is correctly fed and loaded.



IMPORTANT

Make sure media is always rolled up evenly on the core. Do not load media that is not rolled up evenly (telescoping) as it can damage the machine.



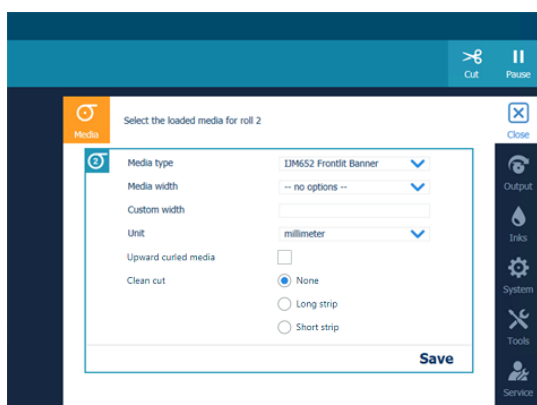
12. Close the media drawer carefully. The operator panel displays the message that new media is detected.



IMPORTANT

Do not open the media drawer when the indicator light is off, you can damage the machine.

13. On the operator panel, select the correct media type and fill in the media width.



14. When the media you use has an upward curl select [Upward curled media].
This setting persists as long as the media is assigned. When enabled, the system feeds the media to the output position. You can then open the top cover and guide the media. After you close the top cover, the media is transported to the clamp. Open the top cover and guide the media again. Printing starts after these actions have been completed.
15. Select if and what type of clean cut you want the printer to make, when you use the media for the first time.
For winding with a tension bar or with a locked tension bar the clean cut is neglected.

16. Tap on [Save].



NOTE

For the highest output quality, it is advised to always perform a media calibration when you load a new media type or a new media width. For more information, see [Calibrate the media on page 120](#).

Load a media roll for inside printing

Introduction

You can load a media roll to print on the inside.



NOTE

- We recommend to use inside printing only in combination with a locked tension bar, see [Print and wind with a locked tension bar on page 134](#).
- When you print on the inside both roll positions are used. You load the media roll at roll position 2. You cannot use a second roll at position 1.
- You can use optional grip lock to insert the feed media shaft into the core of the new media roll. You can load a media roll without the optional grip lock. This procedure describes both situations.

Before you begin

Before you load a roll on the printer:

- Make sure you have added a media profile with the correct media type via the RIP. For more information, see [Print and wind with a tension bar on page 129](#).
- Check the media size of your roll before loading. When your media size is not present in the list on the operator panel, you can type it in.
- Put on gloves to avoid pollution of the paper by your fingerprints.



CAUTION

- **Watch your fingers when you handle the media roll.**
- **Loading heavy media, 25 kg (55 lb) or more, has to be done by two people or with the help of external lifting tools.**



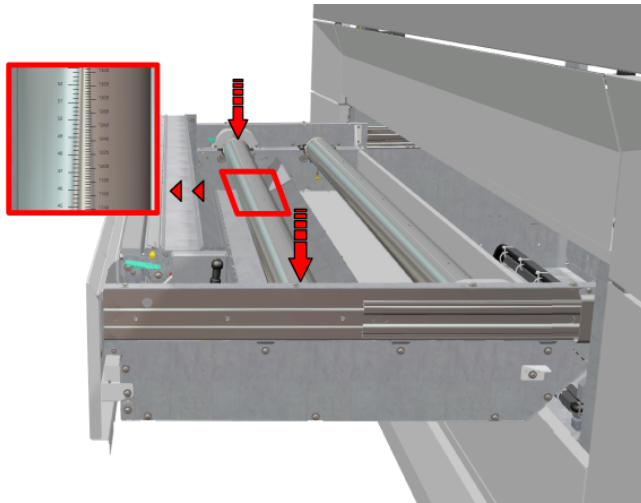
IMPORTANT

- Do not use dented or damaged media rolls to prevent damage to the printheads.
- Only open the media drawer when the indicator light on the drawer is on. Do not open the drawer when the light is off, you can damage the machine.

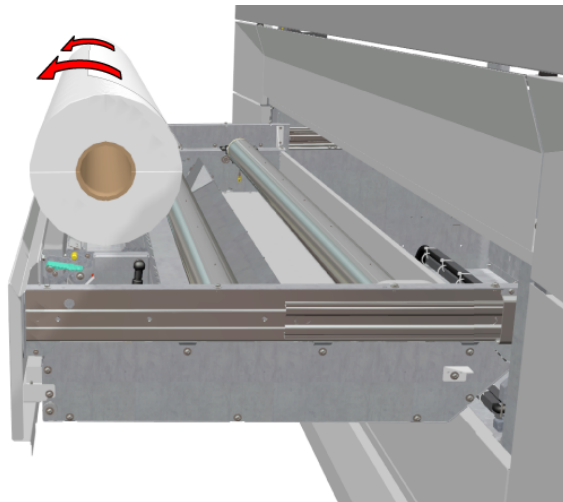
Procedure

1. Pull firmly to open the media drawer.
2. Unload the media roll in position 1. For more information, see [Unload a media roll from the drawer on page 162](#).

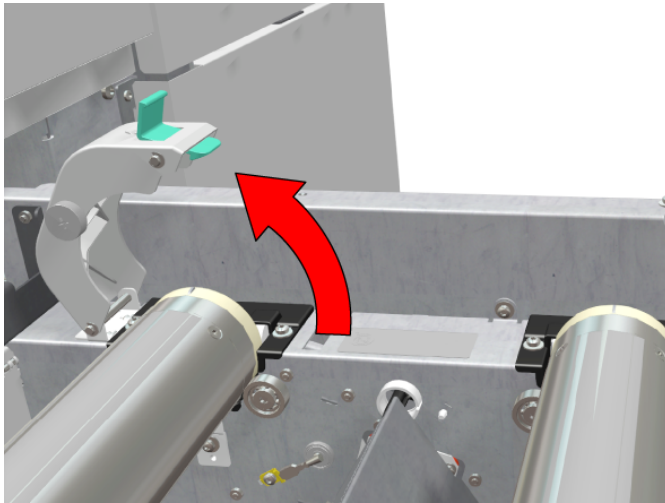
- Put the feed media shaft back into the drawer with the ruler and the pins of the locking mechanism facing up to prevent damage to the media. Firmly close the clamp. Make sure you close the clamp completely until you hear a click.



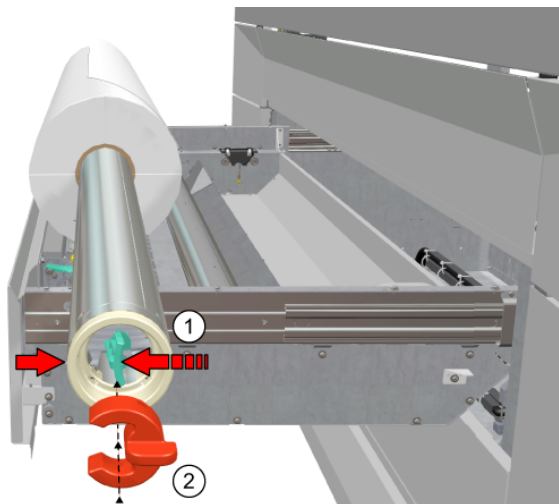
- Place the new media roll, with the media flap on top and towards you, on the roll loading station.



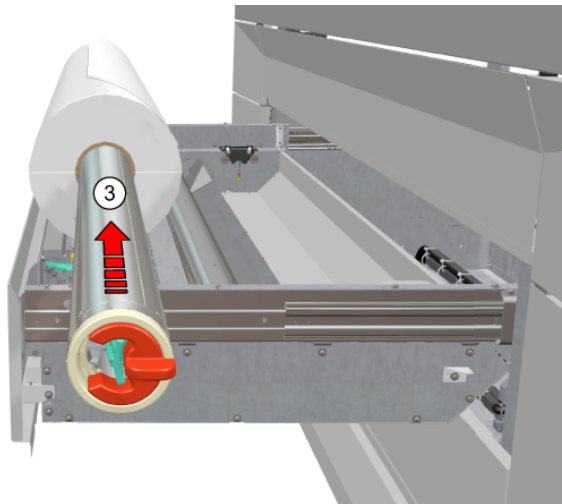
5. Pull the lever and open the clamp of position 2.



6. Take the feed media shaft out of the drawer.
7. Insert the feed media shaft into the core of the new media roll. You can use the optional grip lock for this step.
With the optional grip lock:
 1. Pull (1) the handle of the locking mechanism towards you.
 2. Place the grip lock (2) in the feed media shaft.



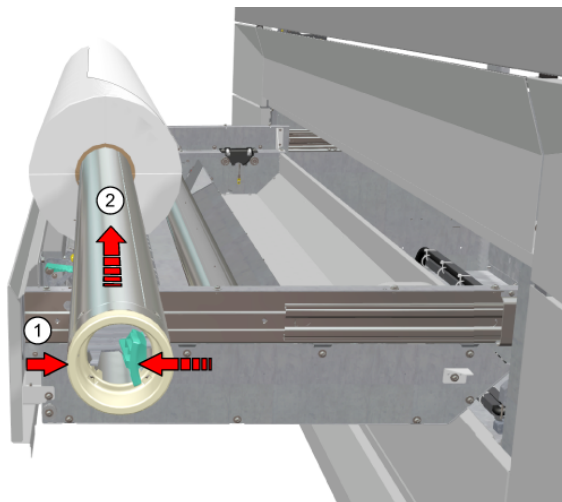
3. Slide (3) the media shaft into the side of the core of the new media roll.



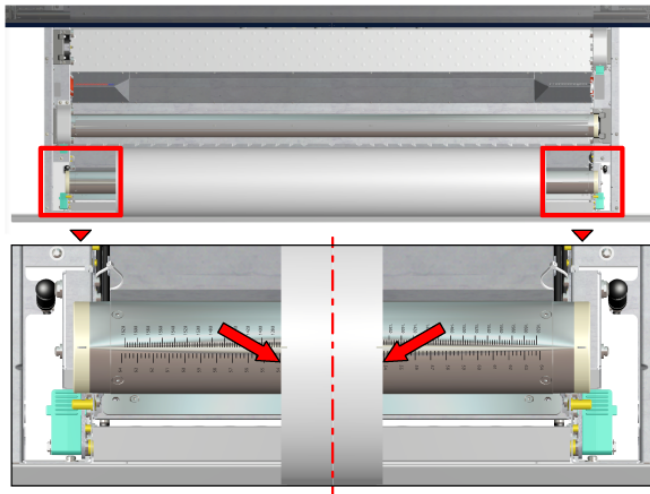
4. Remove the grip lock. Place it on the cover beside the media drawer.

Without the optional grip lock:

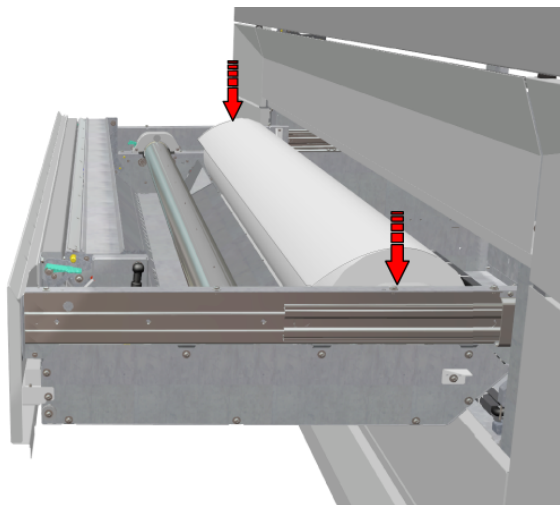
1. Pull (1) the handle of the locking mechanism towards you.
2. Slide (2) the media shaft into the side of the core of the new media roll.



8. Accurately align the roll on the media shaft. Place it on the corresponding media size with the help of the ruler. Check on the left and right side of the roll if both are aligned on the same size.



9. Release the handle of the locking mechanism.
10. Remove the tapes from the new media roll, if present. Place the media roll in the media drawer.

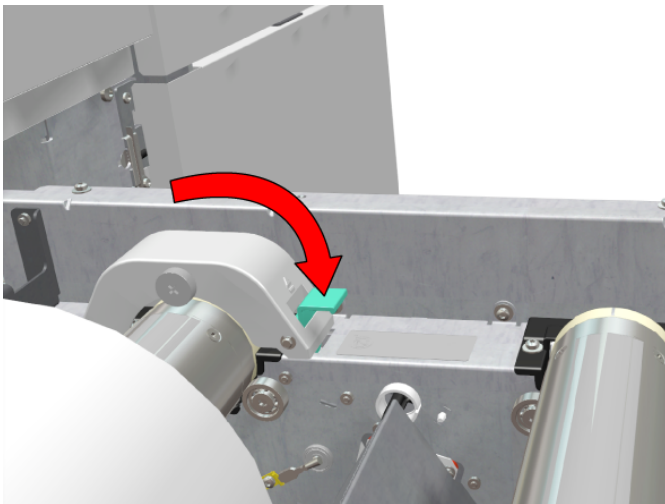


11. Close the clamp firmly.



IMPORTANT

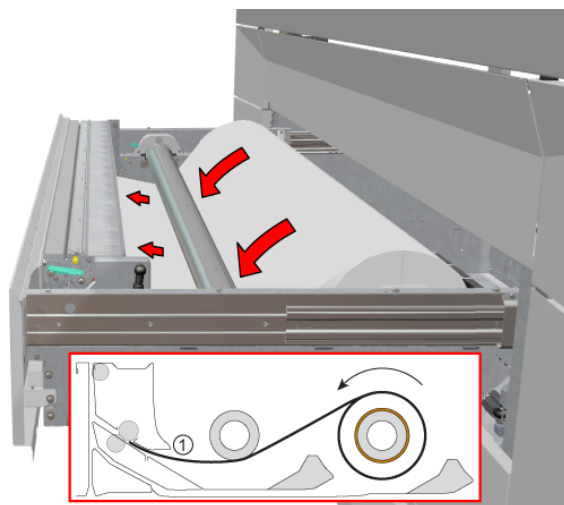
Make sure you close the clamp completely until you hear a click, otherwise the roll can come loose and can damage the machine.



12. Use both hands to turn the media roll backwards and slide the media under the metal paper guide (1) until the media is transported automatically. You will hear a beeping sound when the media is correctly fed and loaded.

**IMPORTANT**

Make sure media is always rolled up evenly on the core. Do not load media that is not rolled up evenly (telescoping) as it can damage the machine.

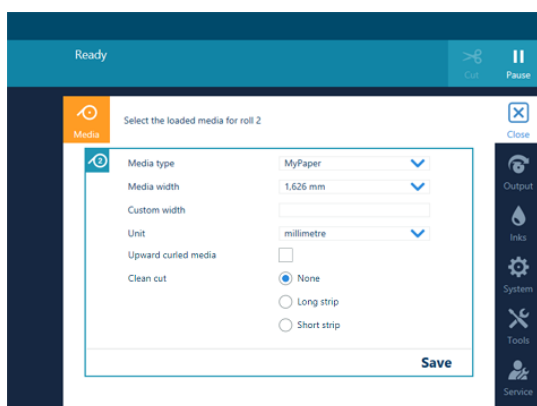


13. Close the media drawer carefully. The operator panel displays the message that new media is detected and an icon in the top left corner indicates that a roll is loaded for inside printing. This can take 5 seconds.

**IMPORTANT**

Do not open the media drawer when the indicator light is off, you can damage the machine.

14. On the operator panel, select the correct media type and fill in the media width.



15. When the media you use has an upward curl select [Upward curled media].
This setting persists as long as the media is assigned. When enabled, the system feeds the media to the output position. You can then open the top cover and guide the media. After you close the top cover, the media is transported to the clamp. Open the top cover and guide the media again. Printing starts after these actions have been completed.
16. Select if and what type of clean cut you want the printer to make, when you use the media for the first time.
For winding with a tension bar or with a locked tension bar the clean cut is neglected.
17. Tap on [Save].



NOTE

For the highest output quality, it is advised to always perform a media calibration when you load a new media type or a new media width. For more information, see [Calibrate the media on page 120](#).

Load flexible media for outside printing

Introduction

When you load flexible media in the printer, such as canvas and textiles, manual feeding and the use of the tension bar are recommended. You can configure the settings for manual feeding and the tension bar in the RIP. You can also use the help of rigid media to feed the flexible media more easily in the paper path.

Follow the procedure below to attach a leading strip of rigid media to your flexible media. This technique will prevent media transportation issues.

In case you cut the media after printing, the media roll is unloaded. To print on the flexible media again, you must redo the procedure to attach a leading strip of rigid media.

This procedure describes the steps for outside printing. For outside printing it is recommended to load the flexible media in position 1.

Video:  [How to print on flexible media.](#)

Before you begin

Before you load a roll on the printer:

- Make sure you have added a media profile with the correct media type via the RIP. For more information, see [Configure media in the RIP on page 44](#).
- Check the media width of your roll before loading. When your media width is not present in the list on the operator panel, you can type it in.
- Put on gloves to avoid pollution of the paper by your fingerprints.



CAUTION

- **Watch your fingers when you handle the media roll.**
- **Loading heavy media, 25 kg (55 lb) or more, has to be done by two people or with the help of external lifting tools.**



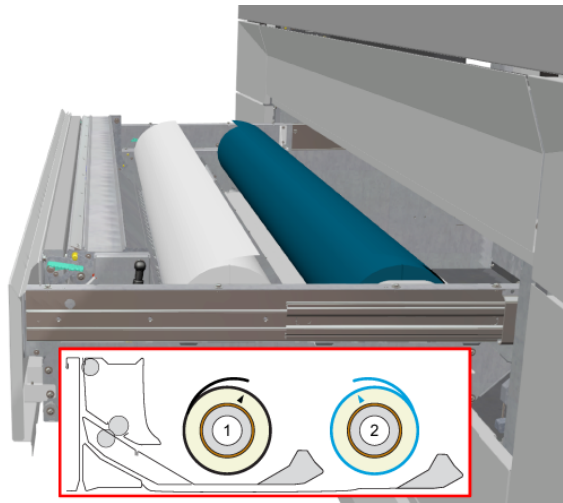
IMPORTANT

- Do not use dented or damaged media rolls to prevent damage to the printheads.
- Only open the media drawer when the indicator light on the drawer is on. Do not open the drawer when the light is off, you can damage the machine.

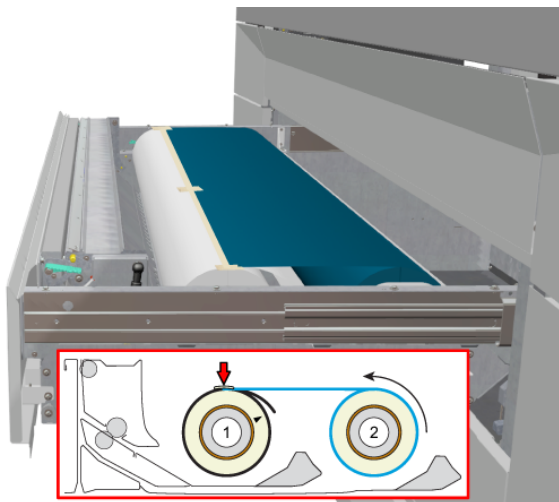
Procedure

1. Pull firmly to open the media drawer.
2. Load the media roll of flexible media in position 1, with the media flap on top pointing away from you.

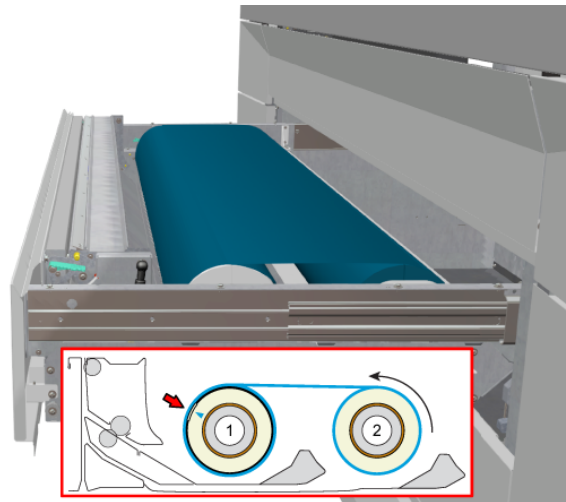
3. Load a media roll of rigid media in position 2, with the media flap on top and towards you.



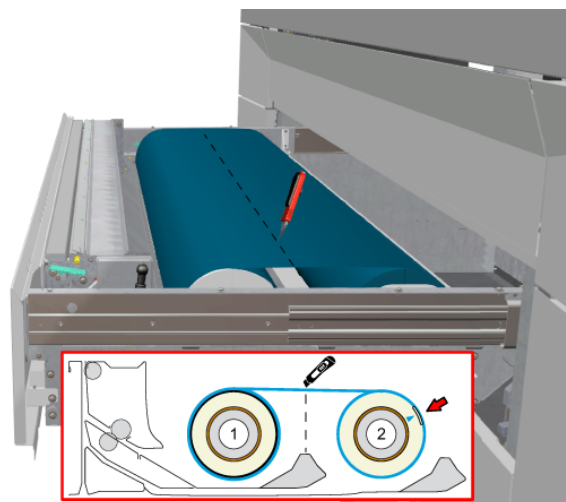
4. Take the leading edge of the rigid media and tape it to the roll of flexible media.
1. Tape first the center and the sides of the media.
 2. Then, tape along the leading edge of the media.



5. Use both hands to turn the media roll in position 1 towards you. Add ± 80 cm (31.5 inch) of rigid media to the flexible media roll.



6. Take a knife and cut the rigid media manually.



7. Pull the media from the flexible media roll in position 1 until the taping position is at the media loading position.
8. Tape the leading edge of flexible media on top of the rigid media.
 1. Tape first the center and the sides of the media.
 2. Then, tape along the leading edge of the media.
9. Use both hands to turn the flexible media roll in position 1 backward.
10. Take a knife and cut the media in the cutting guide to get a straight leading edge. Always use a straight cut leading edge to prevent damage to the printheads.

11. Use both hands to turn the flexible media roll and slide the media under the metal paper guide until the media is transported automatically. You will hear a beeping sound when the media is correctly fed and loaded.



IMPORTANT

Make sure media is always rolled up evenly on the core. Do not load media that is not rolled up evenly (telescoping) as it can damage the machine.

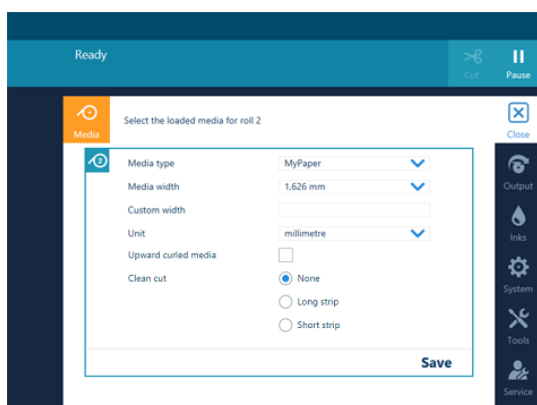
12. Close the media drawer carefully. The operator panel displays the message that new media is detected and an icon in the top left corner indicates that a roll is loaded for inside printing. This can take 5 seconds.



IMPORTANT

Do not open the media drawer when the indicator light is off, you can damage the machine.

13. On the operator panel, select the correct media type and fill in the media width.



14. When the media you use has an upward curl select [Upward curled media]. This setting persists as long as the media is assigned. When enabled, the system feeds the media to the output position. You can then open the top cover and guide the media. After you close the top cover, the media is transported to the clamp. Open the top cover and guide the media again. Printing starts after these actions have been completed.
15. Tap on [Save].



NOTE

For the highest output quality, it is advised to always perform a media calibration when you load a new media type or a new media width. For more information, see [Calibrate the media on page 120](#).

After you finish

After the flexible media is loaded, a print job does not start automatically. First you have to:

1. Feed the media. For more information see [Feed and retract media manually on page 141](#).
2. Transport the media on the platen to the desired position. For more information see [Transport media by distance on page 144](#), [Transport media by manual control on page 143](#).

Load flexible media for inside printing

Introduction

When you load flexible media in the printer, such as canvas and textiles, manual feeding and the use of the tension bar are recommended. You can configure the settings for manual feeding and the tension bar in the RIP. You can also use the help of rigid media to feed the flexible media more easily in the paper path.

Follow the procedure below to attach a leading strip of rigid media to your flexible media. This technique will prevent media transportation issues.

In case you cut the media after printing, the media roll is unloaded. To print on the flexible media again you must redo the procedure to attach a leading strip of rigid media.

This procedure describes the steps for inside printing. For inside printing it is recommended to load the flexible media in position 1.

Video:  [How to print on flexible media](#) (video shows outside printing).

Before you begin

Before you load a roll on the printer:

- Make sure you have added a media profile with the correct media type via the RIP. For more information, see [Configure media in the RIP on page 44](#).
- Check the media width of your roll before loading. When your media width is not present in the list on the operator panel, you can type it in.
- Put on gloves to avoid pollution of the paper by your fingerprints.



CAUTION

- **Watch your fingers when you handle the media roll.**
- **Loading heavy media, 25 kg (55 lb) or more, has to be done by two people or with the help of external lifting tools.**



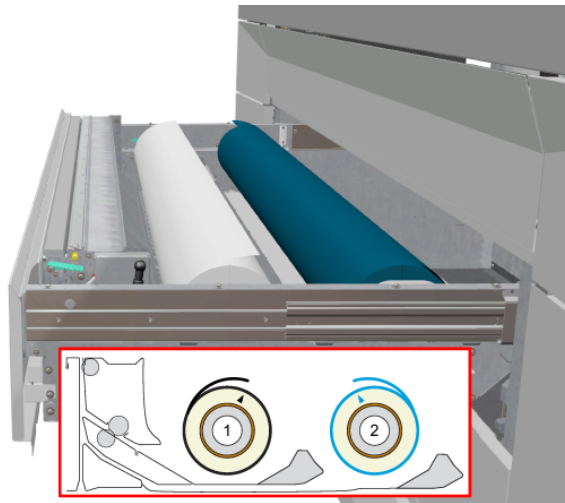
IMPORTANT

- Do not use dented or damaged media rolls to prevent damage to the printheads.
- Only open the media drawer when the indicator light on the drawer is on. Do not open the drawer when the light is off, you can damage the machine.

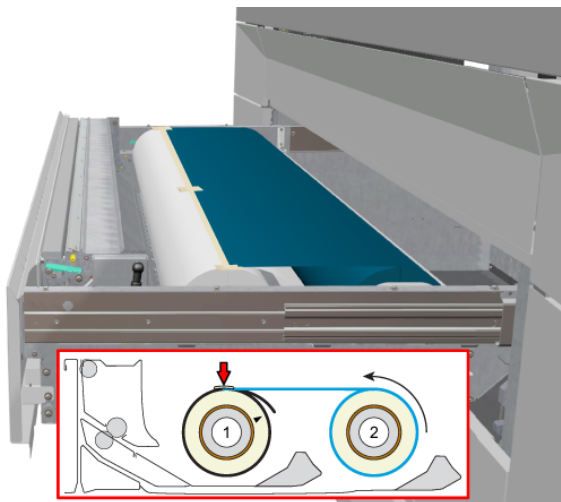
Procedure

1. Pull firmly to open the media drawer.
2. Load the media roll of flexible media in position 1, with the media flap on top pointing away from you.

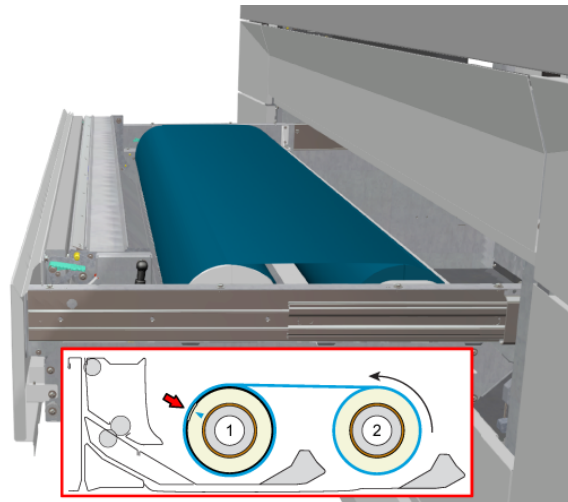
3. Load a media roll of rigid media in position 2, with the media flap on top and towards you.



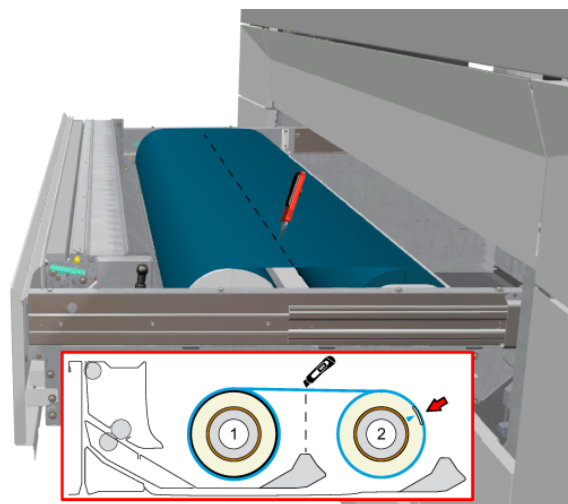
4. Take the leading edge of the rigid media and tape it to the roll of flexible media.
1. Tape first the center and the sides of the media.
 2. Then, tape along the leading edge of the media.



5. Use both hands to turn the media roll in position 1 towards you. Add ± 80 cm (31.5 inch) of rigid media to the flexible media roll.



6. Take a knife and cut the rigid media manually.



7. Pull the media from the flexible media roll in position 1 until the taping position is at the media loading position.
8. Tape the leading edge of flexible media on top of the rigid media.
 1. Tape first the center and the sides of the media.
 2. Then, tape along the leading edge of the media.
9. Use both hands to turn the flexible media roll in position 1 backward.
10. Take a knife and cut the media in the cutting guide to get a straight leading edge. Always use a straight cut leading edge to prevent damage to the printheads.
11. Unload the media roll in position 2. For more information, see [Unload a media roll from the drawer on page 162](#).
12. Unload the flexible media roll from roll position 1.

13. Rotate the flexible media roll and place the roll with the media flap on top pointing towards you in roll position 2.
14. Put the feed media shaft back into the drawer with the ruler and the pins of the locking mechanism facing up to prevent damage to the media. Firmly close the clamp. Make sure you close the clamp completely until you hear a click.
15. Use both hands to turn the flexible media roll and slide the media under the metal paper guide until the media is transported automatically. You will hear a beeping sound when the media is correctly fed and loaded.



IMPORTANT

Make sure media is always rolled up evenly on the core. Do not load media that is not rolled up evenly (telescoping) as it can damage the machine.

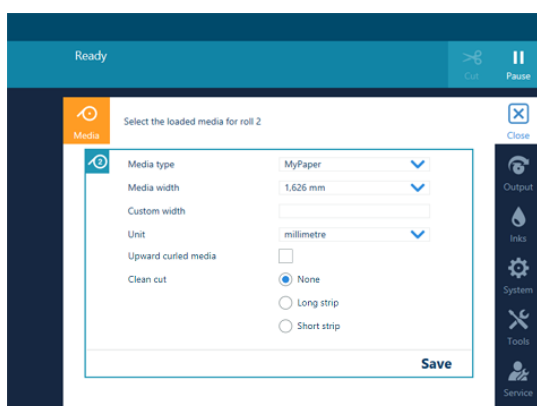
16. Close the media drawer carefully. The operator panel displays the message that new media is detected and an icon in the top left corner indicates that a roll is loaded for inside printing. This can take 5 seconds.



IMPORTANT

Do not open the media drawer when the indicator light is off, you can damage the machine.

17. On the operator panel, select the correct media type and fill in the media width.



18. When the media you use has an upward curl select [Upward curled media]. This setting persists as long as the media is assigned. When enabled, the system feeds the media to the output position. You can then open the top cover and guide the media. After you close the top cover, the media is transported to the clamp. Open the top cover and guide the media again. Printing starts after these actions have been completed.
19. Tap on [Save].



NOTE

For the highest output quality, it is advised to always perform a media calibration when you load a new media type or a new media width. For more information, see [Calibrate the media on page 120](#).

After you finish

After the flexible media is loaded, a print job does not start automatically. First you have to:

1. Feed the media. For more information see [Feed and retract media manually on page 141](#).

2. Transport the media on the platen to the desired position. For more information see [*Transport media by distance on page 144*](#), [*Transport media by manual control on page 143*](#).

Calibrate the media

Introduction

In case of print quality issues you should always perform a media calibration.

It is advised to calibrate media when you have loaded a new media type or media width.



NOTE

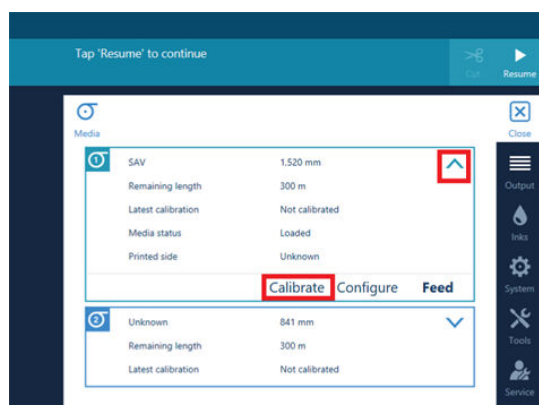
Media calibration is type and width dependent. When you have two different sizes of the same media type you must perform calibration for each size.

Also the leading edge position of the media before starting the calibration is important. If the calibration is started from the media in the drawer, the calibration also optimizes the lead-in (movement of the leading edge over the platen) to prevent white or black lines in the first meter of the print when printing. This part is not done when the leading edge already passed the end of the platen. E.g. because of a manual feed.

Media profiles configured with a lock tension bar (see link: [Print and wind with a locked tension bar](#)) do not have the lead-in calibration part. So be aware when changing the [Winding tension] settings or applying leading edges before calibrating.

Procedure

1. On the operator panel tap on the [Media] icon on the right.
2. Tap on the arrow to select the roll you want to calibrate and tap on [Calibrate].



The printer starts the calibration. Two small prints are made that can be disposed. This process can take several minutes.

3. When the calibration is finished a message will appear on the operator panel, tap on [OK].

Add a leading or trailing strip

Introduction

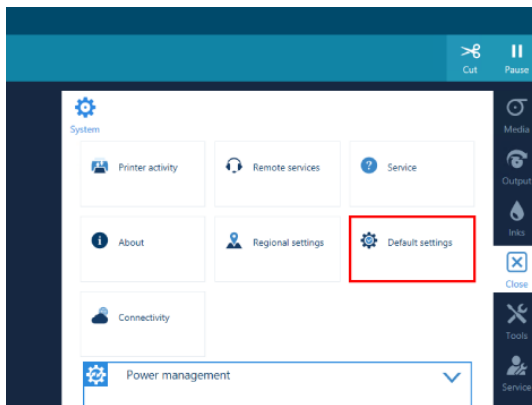
You can define the length of a leading or trailing strip. The strip is added by default to every print job from this moment on.

When to do

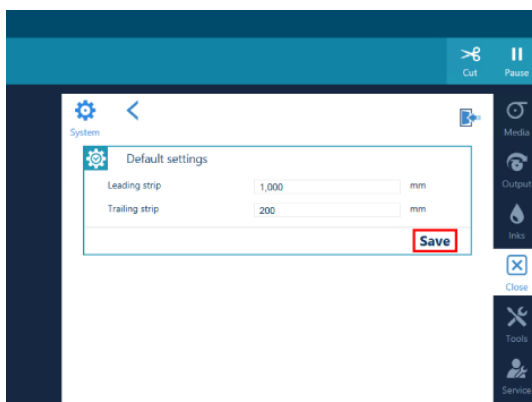
- You can add a leading strip before a job, to add white space when using it with finishers, such as for taping media to the winder.
- You can add a trailing strip after the job, to add white space after an image before you make a cut.

Procedure

1. On the operator panel, tap on the [System] icon on the right.
2. Tap on [Default settings].



3. Tap on the box after [Leading strip] or [Trailing strip] and fill in the length you prefer. When you fill in 0 no strip will be added.



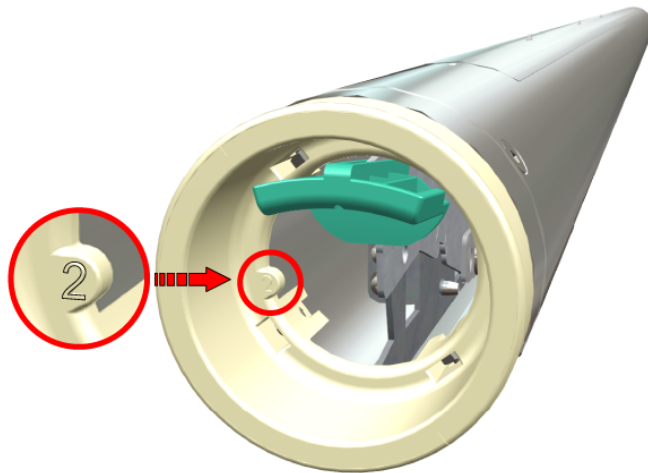
4. Tap on [Save] to save the settings.

Load a take-up roll core onto the roll winder

Introduction

When you want to wind media, you must load a take-up roll core onto the roll winder first.

For inside winding, you need the take-up media shaft with a gear that is marked with the number 2.

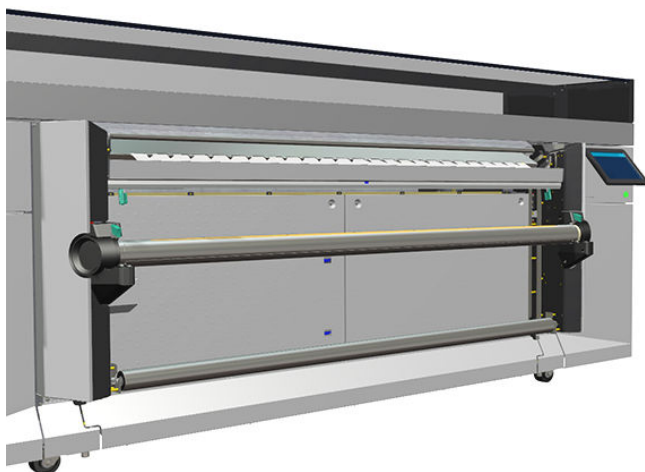


IMPORTANT

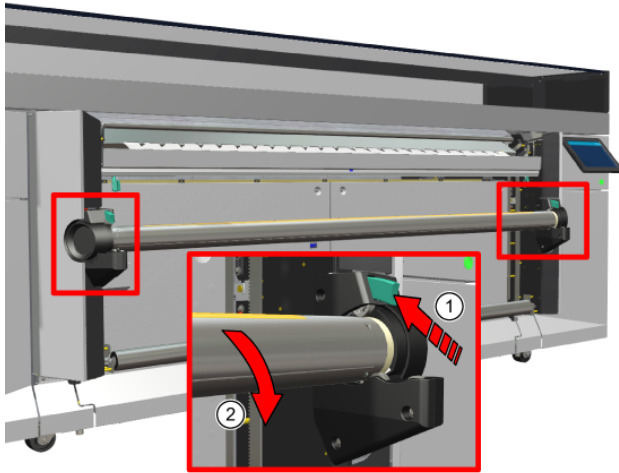
Make sure you use the core of an empty media roll with the same width or wider as the media you are printing on.

Procedure

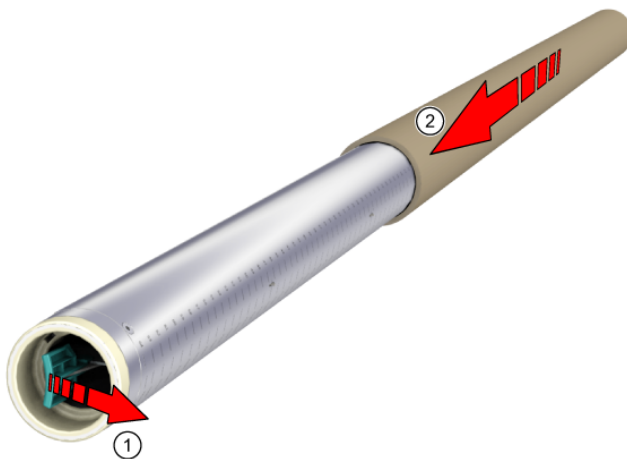
1. Locate the winder on the media output side.



2. Push the green levers on both sides of the take-up media shaft. Remove the take-up media shaft from the winder.

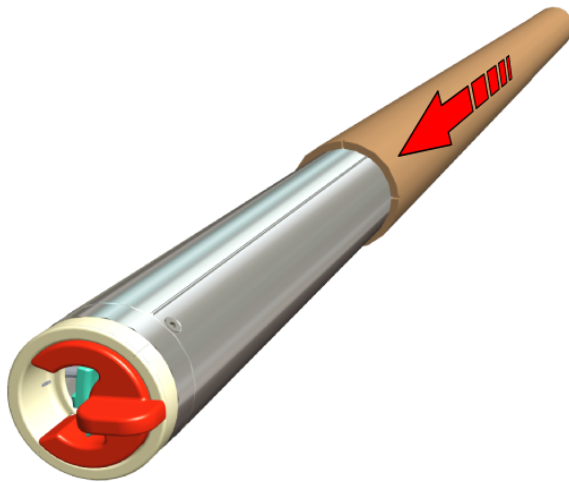


3. Pull the handle of the locking mechanism inside the core towards you. Take the empty media roll core and slide it on the media shaft.

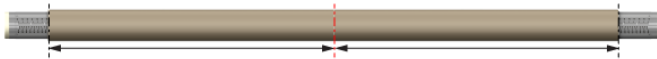


You can use optional grip lock to insert the media shaft into the core of the new media roll:

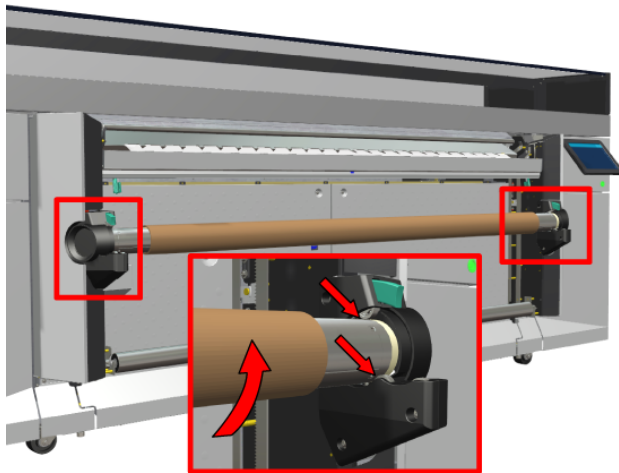
1. Pull the handle of the locking mechanism inside the core towards you.
2. Place the grip lock in the feed media shaft.
3. Take the empty media roll core and slide it onto the media shaft.



4. Center the core on the media shaft.



5. Push to place the media shaft back on the winder. Make sure it clicks in place.



After you finish

You can now wind media onto the core, for more information see [Print and wind without a tension bar on page 126](#), [Print and wind with a tension bar on page 129](#), [Print and wind with a locked tension bar on page 134](#).

Print with or without winding

Winding options

Introduction

For the Colorado M-series there are several winding options depending on the type of media you are using.



NOTE

It is very important to select the correct winding option. If you choose the wrong option this can lead to print quality and winding issues.

Overview

In a media profile a media category is used that corresponds with the loaded media type. Each media category uses default media settings. One of the media settings is [Winding tension] that controls the winding tension that best fits the media type.

For more information, see [Change the media settings on page 76](#).

Options	Media category	[Winding tension] value	Media characteristics
Print and wind without a tension bar on page 126 Print without winding on page 139 AutoCut on page 157	Polymeric & cast vinyl Monomeric vinyl Film Light paper Paper	[no tension bar]	The media can be transported well and is not too flexible.
Print and wind with a tension bar on page 129	Heavy banner Light banner Textile Canvas	[tension bar]	The media is flexible and sensitive for buckling, but not too stiff.
Print and wind with a locked tension bar on page 134	Thick film Heavy paper	[locked tension bar]	The media is stiff.

Print and wind without a tension bar

Introduction

Winding media without a tension bar, loose winding, is used for most media that can be transported well and is not too flexible.

Before you begin

- The use of the tension bar is set in the media type configuration in the RIP software. For winding without a tension bar you must select [no tension bar] under [Winding tension]. For more information, see [Change the media settings on page 76](#).
- Make sure you have loaded a take-up roll on the roll winder. For more information, see [Load a take-up roll core onto the roll winder on page 122](#).
- The printer is ready to print.

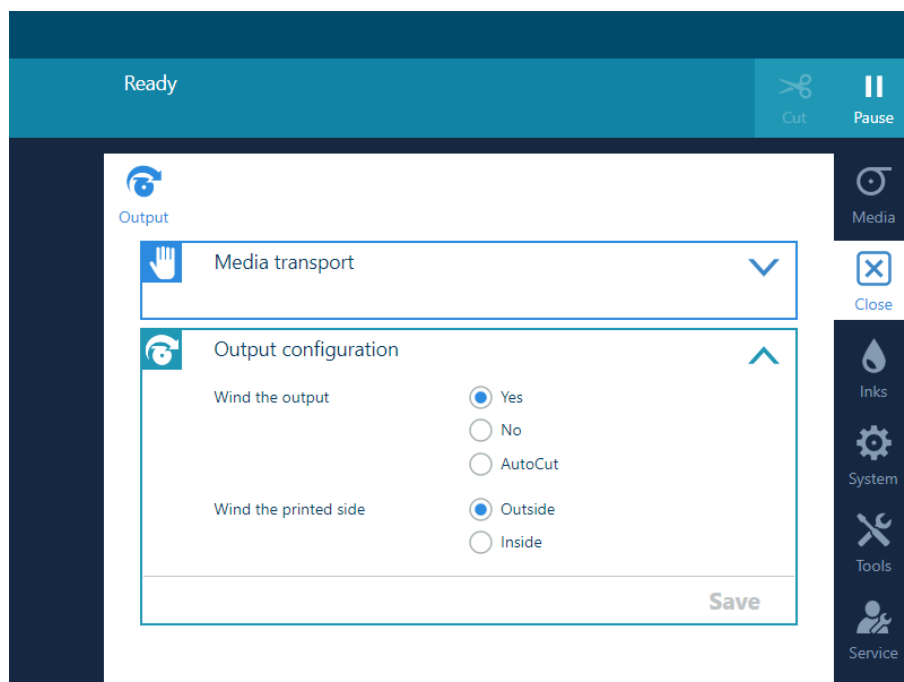


CAUTION

- **Do not position the tension bar when there is no media present. Keep your fingers away because the tension bar can fall down.**
- **The winder has an emergency stopping device; It is located on the winder. Activating this emergency stopping device stops all winder motion.**

Procedure

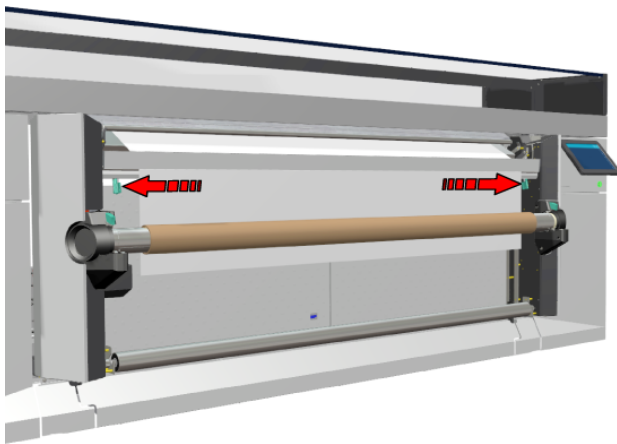
1. On the operator panel tap on the [Output] icon.
2. Tap on [Output configuration].
3. Make sure [Wind the output] is set to [Yes].



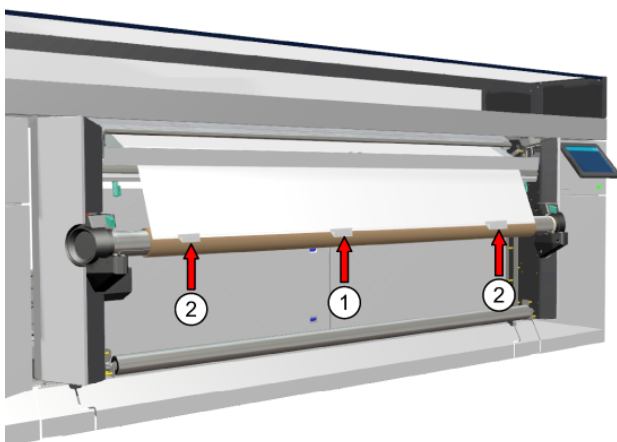
**NOTE**

Make sure you set the output configuration in time, as you cannot change the configuration once the media has passed the clamp.

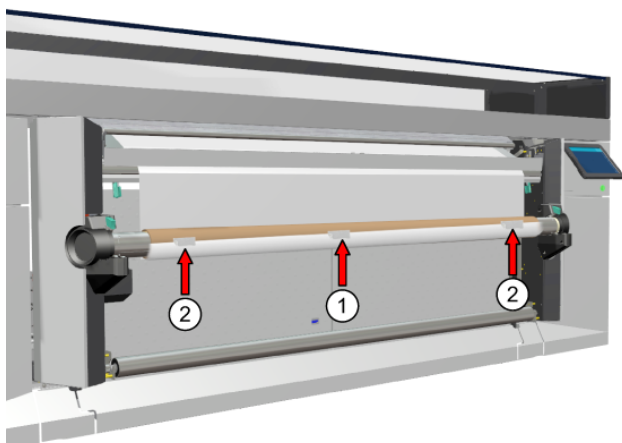
4. Optional (licensed): set [Wind the printed side] to [Outside] or [Inside].
The default value is [Outside]. When the setting is not available, the output will be wound with the printed side to the outside.
5. Start a print job.
The printer will continue printing. The clamp closes when the media reaches the tape position, and the operator panel gives a message indicating you can tape the media.
6. Make sure the media guides are out of the way as they can damage the media.



7. Take the leading edge of the media and align it on the core.
8. Tape first the center and then the sides of the media to the core, as shown on the operator panel.
For outside winding feed the media along the front of the core, for inside winding feed the media along the back of the core.
for outside winding:



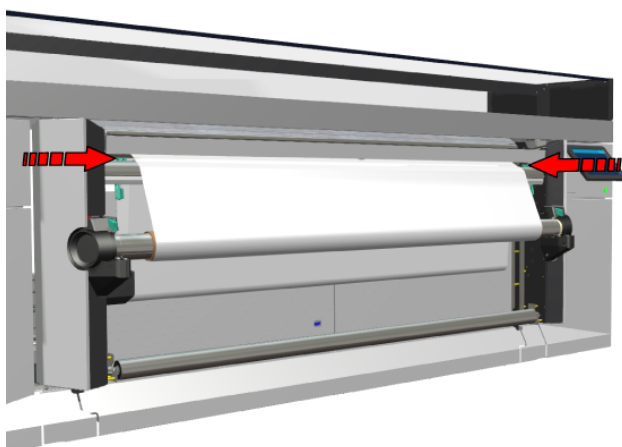
for inside winding:



NOTE

In order to prevent winding issues when winding the media in the opposite direction of the roll in the drawer, the media has to be taped with enough tapes over the full width of the roll to straighten the curling edge.

9. Move the media guides towards the middle to align with the media.



10. On the operator panel tap on [Ready].
The printer continues printing while winding the job.

After you finish

When you want to stop winding you have to cut the media. For more information, see [Cut the media on page 153](#), [Cut the media \(manual\) on page 155](#).

Print and wind with a tension bar

Introduction

Winding media with a tension bar, tight winding, is only used for flexible media in order to prevent media transportation issues. Media that is flexible and sensitive for buckling, but not too stiff, can be wound with a tension bar in unlocked position.

Before you begin

- The use of the tension bar is set in the media type configuration in the RIP software. For winding with a tension bar, you must select [tension bar] under [Winding tension]. For more information, see [Change the media settings on page 76](#).
- Make sure you have placed a take-up roll core on the roll winder. For more information, see [Load a take-up roll core onto the roll winder on page 122](#).
- Make sure you have tape ready.
- The printer is ready to print.



CAUTION

- **Do not position the tension bar when there is no media present. Keep your fingers away because the tension bar can fall down.**
 - **The winder has an emergency stopping device; It is located on the winder. Activating this emergency stopping device stops all winder motion.**
-

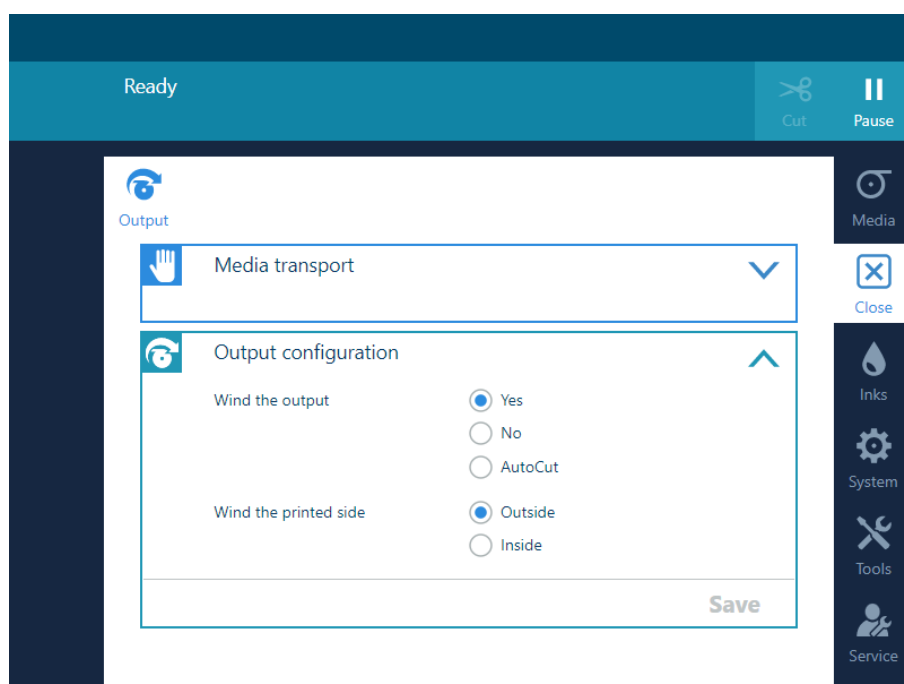
Procedure

1. On the operator panel tap on the [Output] icon.
2. Tap on [Output configuration].
3. Make sure [Wind the output] is set to [Yes] .

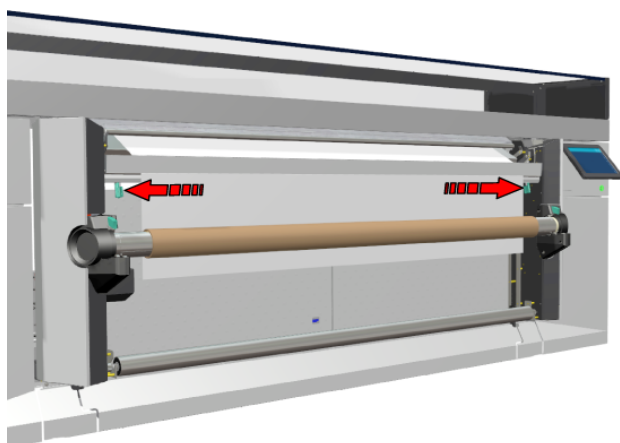


NOTE

Make sure you set the output configuration in time, as you cannot change the configuration once the media has passed the clamp.



4. Optional (licensed): set [Wind the printed side] to [Outside] or [Inside].
The default value is [Outside]. When the setting is not available, the output will be winded with the printed side to the outside.
5. Start a print job.
The printer spools the media until it reaches the tape position. The clamp closes and the operator panel gives a message indicating you can tape the media.
6. Make sure the media guides are out of the way as they can damage the media.



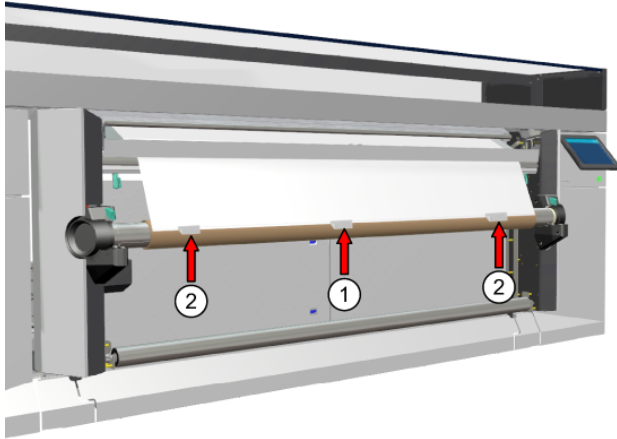
7. Take the leading edge of the media and align it on the core.



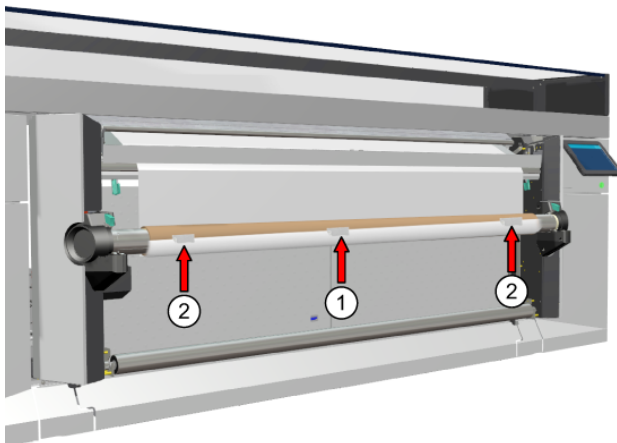
NOTE

In case of flexible media use a ruler to ensure that the media is exactly centered on the core.

8. Tape first the center and then the sides of the media to the core, as shown on the operator panel. For outside winding feed the media along the front of the core, for inside winding feed the media along the back of the core.
for outside winding:



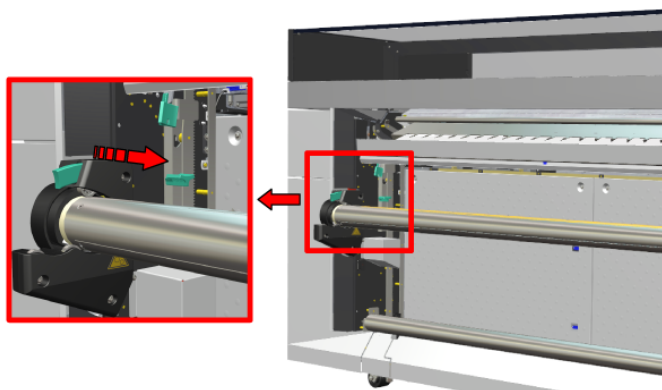
for inside winding:



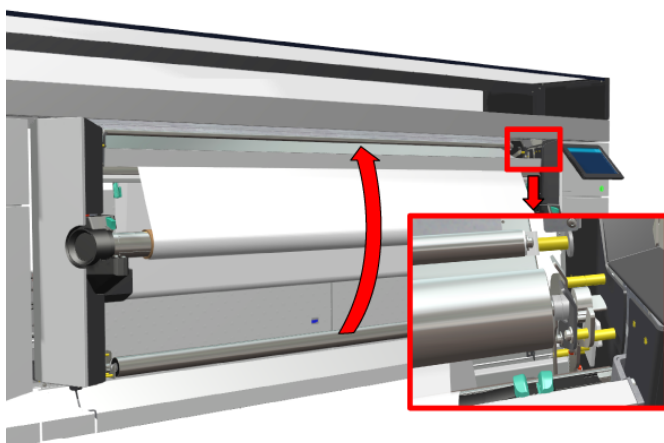
NOTE

In order to prevent winding issues when winding the media in the opposite direction of the roll in the drawer, the media has to be taped with enough tapes over the full width of the roll to straighten the curling edge.

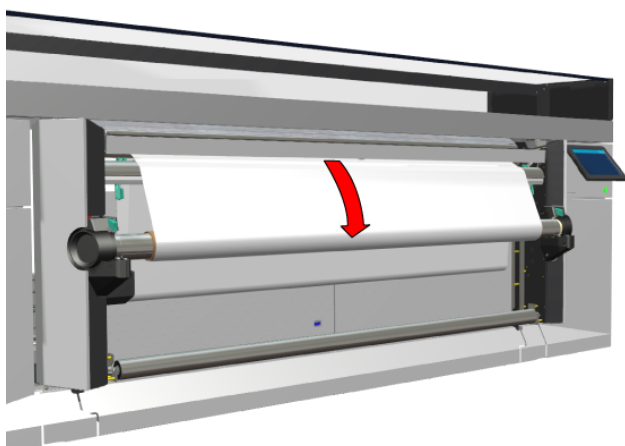
9. Place the tension bar lever in unlocked position.



10. Lift up the tension bar and place it correctly on top of the media.



11. On the operator panel tap on [Ready].
The printer starts printing while winding the job. Make sure the tension bar follows the media when the blouse is formed.



After you finish

When you want to stop winding you have to cut the media. For more information, see [Cut the media on page 153](#), [Cut the media \(manual\) on page 155](#).

Print and wind with a locked tension bar

Introduction

Winding media with a locked tension bar is only used for stiff media, in order to prevent media transportation issues.

Before you begin

- The use of the tension bar is set in the media type configuration in the RIP software. For winding with a locked tension bar, you must select [locked tension bar] under [Winding tension]. For more information, see [Change the media settings on page 76](#).
- Make sure you have placed a take-up roll core on the roll winder. For more information, see [Load a take-up roll core onto the roll winder on page 122](#).
- Make sure you have tape ready.
- The printer is ready to print.



CAUTION

- **Do not position the tension bar when there is no media present. Keep your fingers away because the tension bar can fall down.**
 - **The winder has an emergency stopping device; It is located on the winder. Activating this emergency stopping device stops all winder motion.**
-

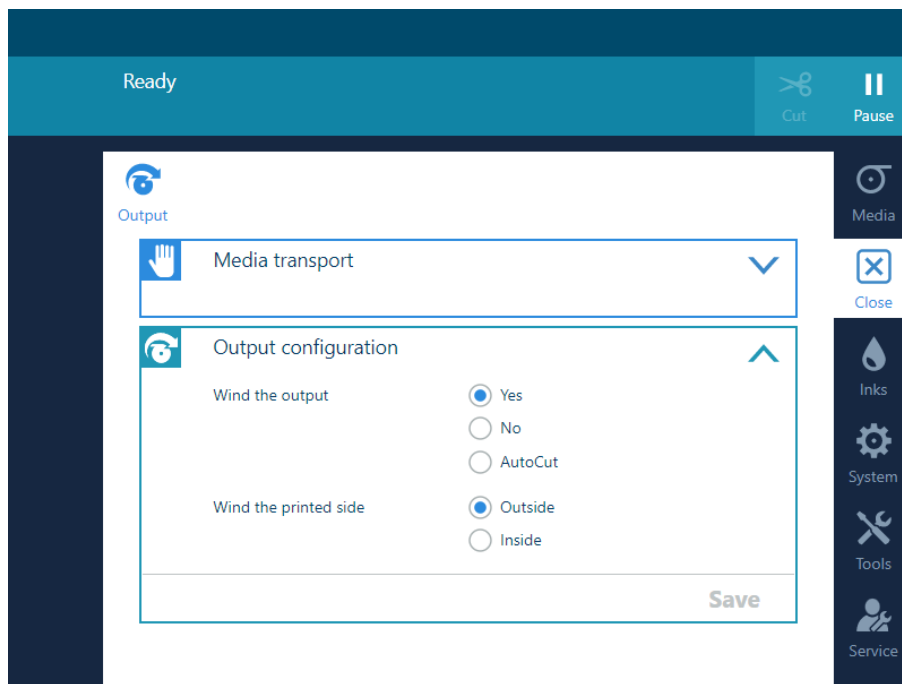
Procedure

1. On the operator panel tap on the [Output] icon.
2. Tap on [Output configuration].
3. Make sure [Wind the output] is set to [Yes].

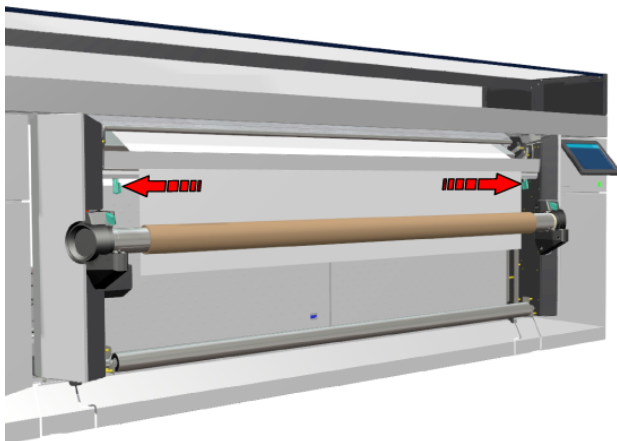


NOTE

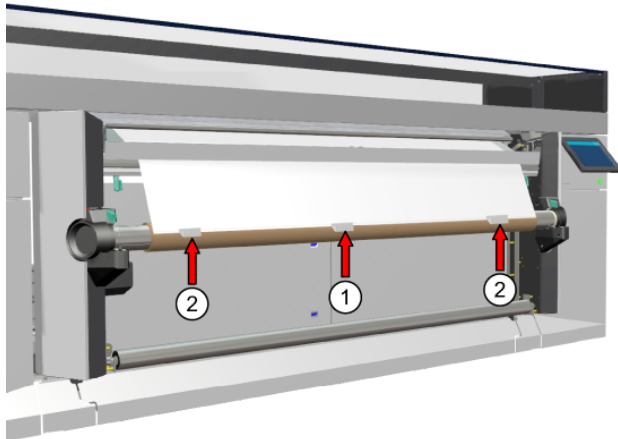
Make sure you set the output configuration in time, as you cannot change the configuration once the media has passed the clamp.



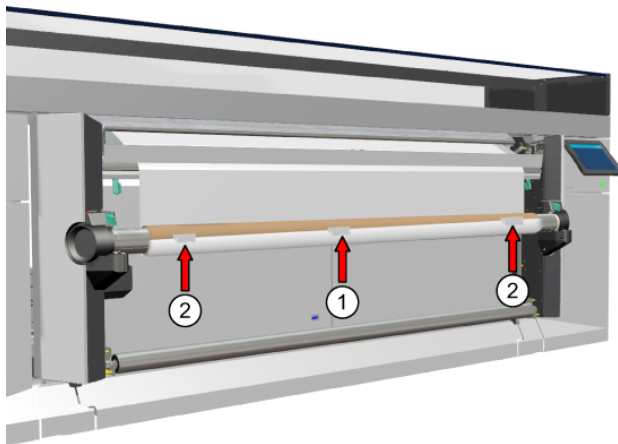
4. Optional (licensed): set [Wind the printed side] to [Outside] or [Inside].
The default value is [Outside]. When the setting is not available, the output will be wound with the printed side to the outside.
5. Start a print job.
The printer spools the media until it reaches the tape position. The clamp closes and the operator panel gives a message indicating you can tape the media.
6. Make sure the media guides are out of the way as they can damage the media.



7. Take the leading edge of the media and align it on the core.
8. Tape first the center and then the sides of the media to the core, as shown on the operator panel.
For outside winding feed the media along the front of the core, for inside winding feed the media along the back of the core.
for outside winding:



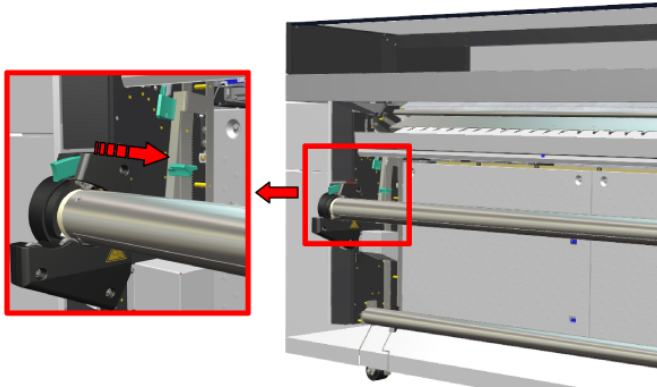
for inside winding:



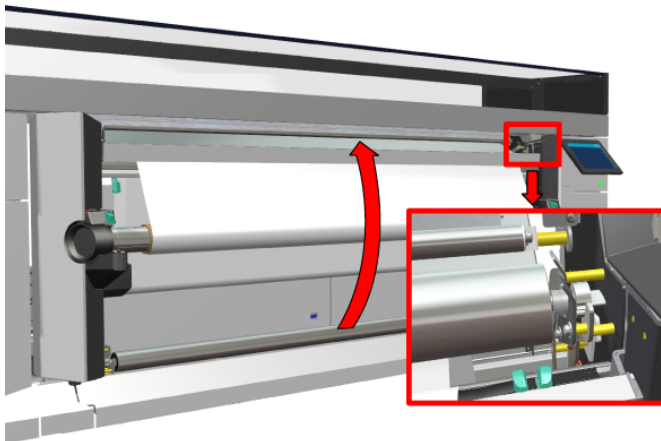
NOTE

In order to prevent winding issues when winding the media in the opposite direction of the roll in the drawer, the media has to be taped with enough tapes over the full width of the roll to straighten the curling edge.

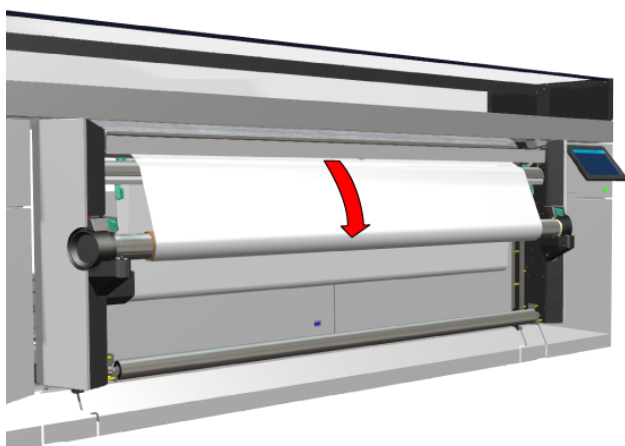
9. Place the tension bar lever in locked position.



10. Lift up the tension bar and place it correctly on top of the media.



11. On the operator panel tap on [Ready].
12. Move the media guides towards the middle to align with the media. Tap on [Ready].
The printer starts printing while winding the job. Make sure the tension bar falls into the locked position.



After you finish

When you want to stop winding you have to cut the media. For more information, see [Cut the media on page 153](#), [Cut the media \(manual\) on page 155](#).

Print without winding

Introduction

If media can be transported well and is not too flexible, you can print without winding.

Before you begin

- Check the media category of your media. Media categories that need a tension bar cannot be printed without winding.
- Printing without winding is set in the media type configuration in the RIP software. For printing without winding you must select [no tension bar] under [Winding tension]. For more information, see [Change the media settings on page 76](#).
- The printer is ready to print.

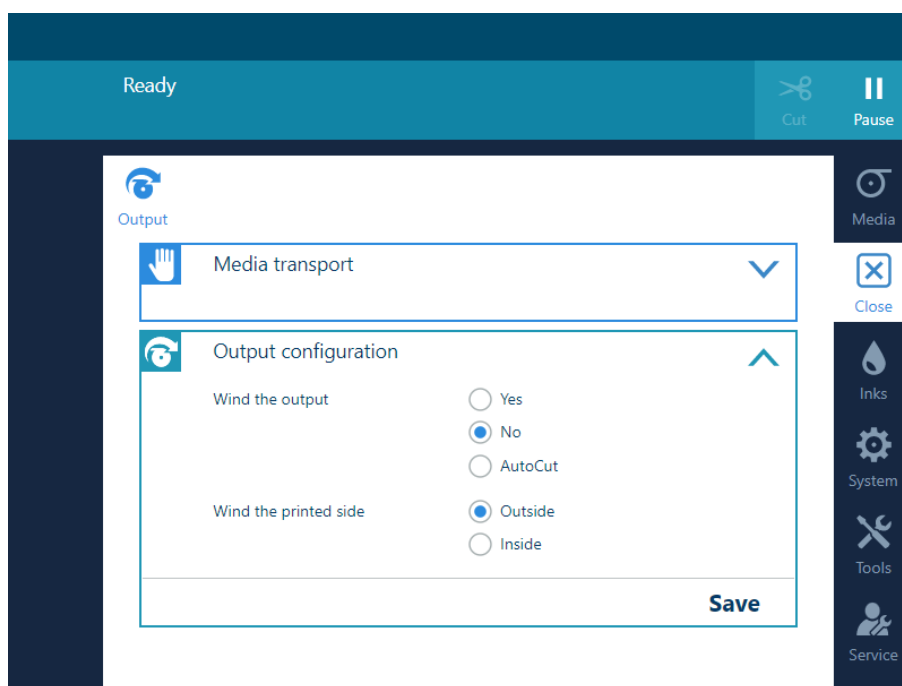
Procedure

1. On the operator panel tap on the [Output] icon.
2. Tap on [Output configuration].
3. Make sure [Wind the output] is set to [No].

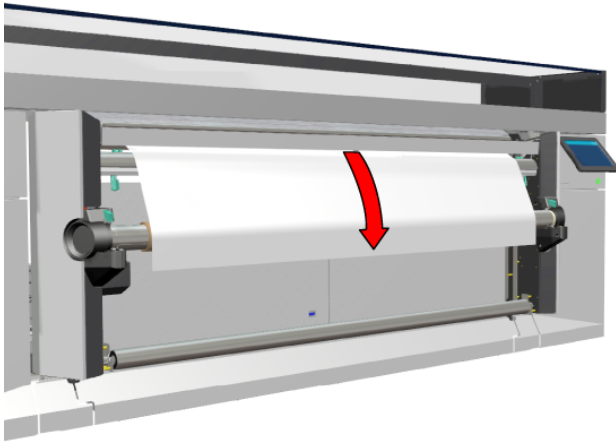


NOTE

Make sure you set the output configuration in time, as you cannot change the configuration once the media has passed the clamp.



4. Start a print job. The printer continues printing without winding.



After you finish

When you want to stop printing without winding you have to cut the media. For more information, see [Cut the media on page 153](#), [Cut the media \(manual\) on page 155](#).

Move media manually

Introduction

You can move media manually.

This gives you the option to move the media before and between jobs.

You can:

- Feed and retract media, see [Feed and retract media manually on page 141](#)
- Transport media by manual control, see [Transport media by manual control on page 143](#)
- Transport media by distance, see [Transport media by distance on page 144](#)

Feed and retract media manually

Introduction

You can feed the media to the platen or to the tape position, without sending a print job.

Feed flexible media manually

When you feed the media manually, the printhead carriage will move over the media to scan the side edges.

If the media you use requires a leading strip of rigid media then it is required to check the [Requires Manual Loading] setting in the [Media Characteristics] section of the RIP software. With this setting the scan will take place just before printing.



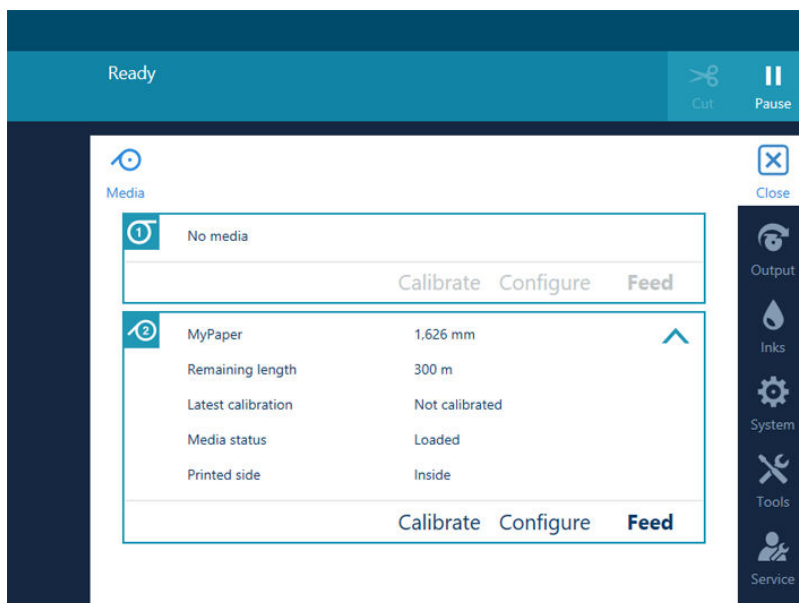
NOTE

The setting [Requires Manual Loading] only works when [Winding tension] is set to [Tension bar] or [Locked tension bar].

Procedure

1. Load the media. For more information see [Prepare media for printing on page 89](#).
2. On the operator panel tap on the [Media] icon on the right.
3. Tap on the arrow to select the roll you want to feed.

4. Tap on [Feed]. The printer feeds the media in the correct position to tape the media or to start printing, depending on the type of media.



5. Tap on [Retract] to retract the media to the drawer.



NOTE

You can retract the media only when the media is not yet at the taping position.

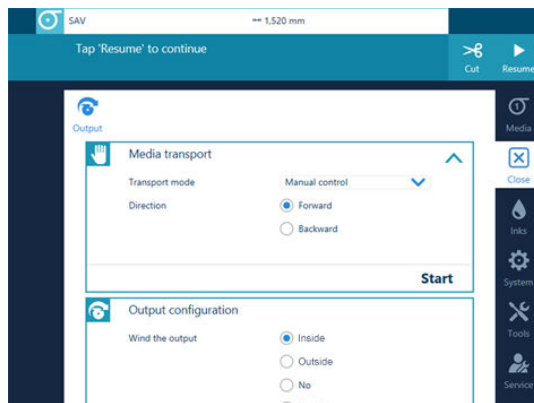
Transport media by manual control

Introduction

You can move the media before and between jobs.

Procedure

1. On the operator panel tap on the [Output] icon.



2. Select [Manual control] as [Transport mode].
3. Select the transport direction.
 - [Forward] will transport the media towards the winder.
 - [Backward] will transport the media back in the direction of the drawer.
4. Tap on [Start].
The media will move in the direction you selected. A stop option becomes available.



IMPORTANT

When media transport is started in the forward direction, the system will keep spooling media until the roll is empty.



NOTE

Backward transport is limited by the available media on the platen and the winder. No media will be removed from the winder. It is not possible to move printed media back into the drawer.

5. Tap on [Stop] to stop the transport.



NOTE

Depending on the settings [Moist sensitivity] and [Auto media advance] the actual print position can vary. [Moist sensitivity] timers are restarted after the movement has been stopped.

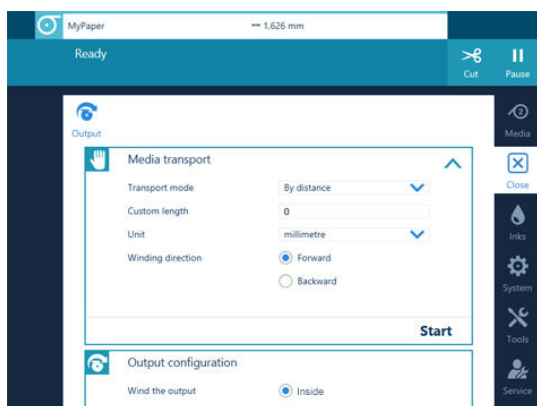
Transport media by distance

Introduction

You can move the media before and between jobs.

Procedure

1. On the operator panel tap on the [Output] icon.



2. Select [Distance] as [Transport mode].
3. Select the winding direction.
 - [Forward] will transport the media towards the winder.
 - [Backward] will transport the media back in the direction of the drawer.
4. Enter the [Custom length].
5. Tap on [Start].



NOTE

Backward transport is limited by the available media on the platen and the winder. No media will be removed from the winder.
It is not possible to move printed media back into the drawer.

6. Tap on [Stop] to stop the transport.



NOTE

Depending on the settings [Moist sensitivity] and [Auto media advance] the actual print position can vary. [Moist sensitivity] timers are restarted after the movement has been stopped.

Print on the inside of a media roll

Introduction

To print on the inside of a media roll, load the media roll for inside printing.

Procedure

1. Load the media roll for inside printing on position 2 in the media drawer, see [Load a media roll for inside printing on page 104](#).
2. Choose a print option depending on the type of media you are using. For more information see [Print with or without winding on page 125](#).

Print double-sided with automatic cut

Introduction

Colorado M-series offers the possibility to print on the inside as well as on the outside of the media, which indirectly provides the user a way to print double-sided. For this you need the license Print inside and double sided.

To print double-sided you print on the inside of the media.

Video:  [How to print double-sided.](#)

Before you begin

RIP

- In [Media Characteristics], set automatic advance correction (AAC) to [Enhanced] to achieve an optimal x-registration.
AAC prints yellow, white, or black markers on the media that the printer uses as guidance to optimize the media step accuracy. See "Change the media settings" in the operation guide.
- In [Placement strategy]→[General], make sure that the left and right are identical.
- In [Placement strategy]→[Options], make sure that the space between copies values are 0.

Printer

- Use the tension bar (locked).
In case the media is normally (single-sided) printed without tension bar, switch to the locked tension bar mode.
You can change this tension bar setting for the media type in the RIP. Change from [No tension bar] to [Locked tension bar].
- Use a matte print mode, preferably the same mode for both sides.
- Do not enable automatic media advance or moist sensitivity settings.
- If necessary calibrate the media.

Tools

- A media suitable for double sided printing.
- 2 empty cores with the same width as the media you want to use.
- A roll of tape.



Strip	Function	Length of the strip
1	Leading strip	1600 mm (63 inch)
2	Lead-in image	250 mm (9.84 inch)
3	Lead-out image	250 mm (9.84 inch)
4	Trailing strip	1600 mm (63 inch)
5	Leading strip	1600 mm (63 inch)
6	Lead-in image	250 mm (9.84 inch)

Be aware you have to rotate the job for the inside 180 degrees.

The lead-in and lead-out images are used by the AAC to measure and correct for additional media step errors caused by the ink layer of side 1, while printing side 2.

Procedure

1. Load a media roll on position 2 in the media drawer, with the flap pointing towards you.
2. Pull the media towards you.
3. Uncurl the media using an empty roll.
4. Turn the media back onto the roll in the drawer.
5. Load the media in the inside printing manner, see [Load flexible media for inside printing on page 115](#).
6. Place a new empty take-up roll core and push the media shaft back on the winder.
7. On the operator panel tap on the [Media] icon.
Select the required media and media width.

8. On the operator panel tap on the [Default settings][System] icon and change the leading and trailing edge length to 1600mm (63 inch).
9. Prepare a nest of prints for the outside of the media in one of the supported RIP software applications.
In ONYX the nesting function is called [Group jobs]. Change the group setting from [Conserve media] to [Group jobs together]. The RIP will not change the order of the images and will treat all jobs in the group as 1 image.
The nest includes:
 - a lead-in image (in any color)
 - the user images
 - a lead-out image (in any color)



NOTE

Please note that when you apply additional space between the separate images, you have to subtract this additional space from the 1600 mm (63 inch) at the trailing edge.

10. Submit the job to the printer and follow the instructions on the operator panel to print side 1.
 11. Tape the media to the empty take-up media roll core.
 12. Place the tension bar.
 13. Lock the tension bar.
 14. Adjust the position of the media guides on the left and right side.
 15. On the operator panel tap the [Completed] when you are ready to start the print job.
 16. Cut the media automatically when the print is completed and follow the instructions on the operator panel.
 17. Remove the take-up media roll from the winder, see [Unload a take-up media roll from the roll winder on page 159](#) in the operation guide.
 18. Place a new empty take-up roll core and push the media shaft back on the winder.
This ends the printing procedure of side 1.
 19. Prepare the nest of prints for side 2 of the double-sided print in one of the supported RIP software applications.
The nest includes:
 - a lead-in image (in any color)
 - the user images
- 

NOTE
Depending on the application you may need to rotate or mirror the images for side 2.
20. Load the media roll for inside printing on position 2 in the media drawer, with the flap pointing towards you.
 21. Load the media in the inside printing manner.
 22. On the operator panel change the trailing strip to 250 mm (9.84 inch) in the [Default settings].
 23. Submit the job to the printer and follow the instructions on the operator panel to print the second side.
 24. Repeat the actions of step 11 to 15 you did for printing side 1.
 25. Remove the take-up media roll from the winder.

Print double-sided with manual cut

Introduction

Colorado M-series offers the possibility to print on the inside as well as on the outside of the media, which indirectly provides the user a way to print double-sided. For this you need the license Print inside and double sided.

To print double-sided you print on the inside of the media.

Video:  [How to print double-sided.](#)

Before you begin

RIP

- In [Media Characteristics], set automatic advance correction (AAC) to [Enhanced] to achieve an optimal x-registration.
AAC prints yellow, white, or black markers on the media that the printer uses as guidance to optimize the media step accuracy. See "Change the media settings" in the operation guide.
- In [Placement strategy]→[General], make sure that the left and right are identical.
- In [Placement strategy]→[Options], make sure that the space between copies values are 0.

Printer

- Use the tension bar (locked).
In case the media is normally (single-sided) printed without tension bar, switch to the locked tension bar mode.
You can change this tension bar setting for the media type in the RIP. Change from [No tension bar] to [Locked tension bar].
- Use a matte print mode, preferably the same mode for both sides.
- Do not enable automatic media advance or moist sensitivity settings.
- If necessary calibrate the media.

Tools

- A media suitable for double sided printing.
- 2 empty cores with the same width as the media you want to use.
- A roll of tape.



Strip	Function	Length of the strip
1	Leading strip	1600 mm (63 inch)
2	Lead-in image	250 mm (9.84 inch)
3	Lead-out image	250 mm (9.84 inch)
4	Trailing strip with a cutting line	1600 mm (63 inch)
5	Leading strip	1600 mm (63 inch)
6	Lead-in image	250 mm (9.84 inch)

Be aware you have to rotate the job for the inside 180 degrees.

The lead-in and lead-out images are used by the AAC to measure and correct for additional media step errors caused by the ink layer of side 1, while printing side 2.

Procedure

1. Load a media roll on position 2 in the media drawer, with the flap pointing towards you.
2. Pull the media towards you.
3. Uncurl the media using an empty roll.
4. Turn the media back onto the roll in the drawer.
5. Load the media in the inside printing manner, see [Load flexible media for inside printing on page 115](#).
6. Place a new empty take-up roll core and push the media shaft back on the winder.

7. On the operator panel tap on the [Media] icon.
Select the required media and media width.
8. On the operator panel tap on the [Default settings][System] icon and change the leading and trailing edge length to 1600mm (63 inch).
9. Prepare a nest of prints for the outside of the media in one of the supported RIP software applications.
In ONYX the nesting function is called [Group jobs]. Change the group setting from [Conserve media] to [Group jobs together]. The RIP will not change the order of the images and will treat all jobs in the group as 1 image.
The nest includes:
 - a lead-in image (in any color)
 - the user images
 - a lead-out image (in any color)

**NOTE**

Please note that when you apply additional space between the separate images, you have to subtract this additional space from the 1600 mm (63 inch) at the trailing edge.

10. Submit the job to the printer and follow the instructions on the operator panel to print the first side.
 11. Tape the media to the empty take-up media roll core.
 12. Place the tension bar.
 13. Lock the tension bar.
 14. Adjust the position of the media guides on the left and right side.
 15. On the operator panel tap the [Completed] when you are ready to start the print job.
 16. Cut the media manually beneath the printed line when the print is completed and follow the instructions on the operator panel.
 17. Remove the take-up media roll from the winder, see [Unload a take-up media roll from the roll winder on page 159](#) in the operation guide.
 18. Cut the media precisely on the printed line. Do this outside of the printer.
 19. Place a new empty take-up roll core and push the media shaft back on the winder.
This ends the printing procedure of side 1.
 20. Prepare the nest of prints for side 2 of the double-sided print in one of the supported RIP software applications.
The nest includes:
 - a lead-in image (in any color)
 - the user images
- 

NOTE
Depending on the application you may need to rotate or mirror the images for side 2.
21. Load the media roll for inside printing on position 2 in the media drawer, with the flap pointing towards you.
 22. Load the media in the inside printing manner.
 23. On the operator panel change the trailing strip to 250 mm (9.84 inch) in the [Default settings].
 24. Submit the job to the printer and follow the instructions on the operator panel to print the second side.

- 25.** Repeat the actions of step 11 to 15 you did for printing side 1.
- 26.** Remove the take-up media roll from the winder.

Cut and unload media

Cut the media

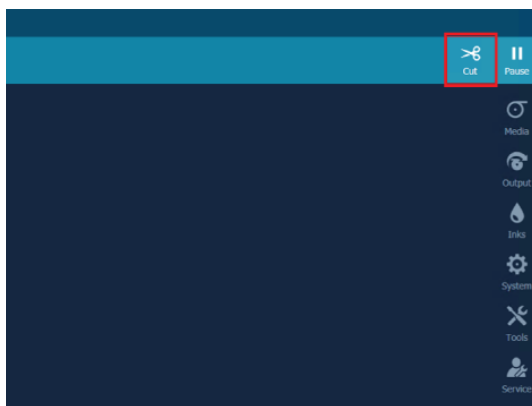
Introduction

When you cut media, the printer uses the embedded knife.

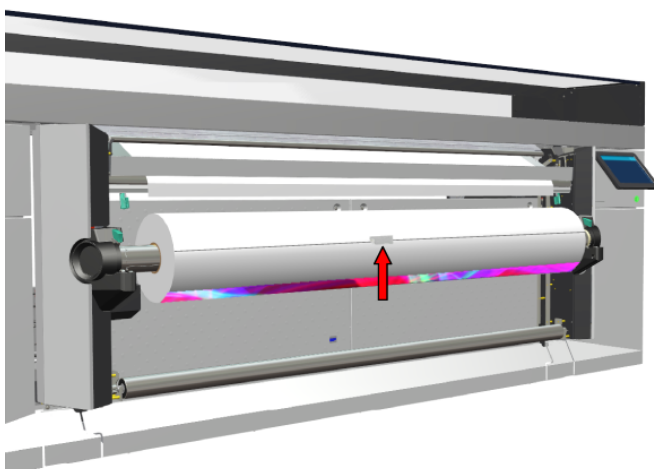
You can also cut the media manually with your own knife. How the media is cut depends on the media type configuration in the RIP. For more information, see [Change the media settings on page 76](#).

Procedure

1. On the operator panel tap on the [Cut] icon on the top right.



2. Move the media guides to the sides.
3. When a tension bar is present, a window telling you to remove the tension bar opens. Remove the tension bar from the media path and tap on [Completed]. The embedded knife cuts the media.
4. Tape the trailing edge to the take-up media roll in case of winding.



After you finish

You can now remove the take-up roll from the roll winder. For more information, see [Unload a take-up media roll from the roll winder](#) on page 159.

Cut the media (manual)

Introduction

When you manually cut media, the printer does not use the embedded knife but you have to use your own knife or pair of scissors.

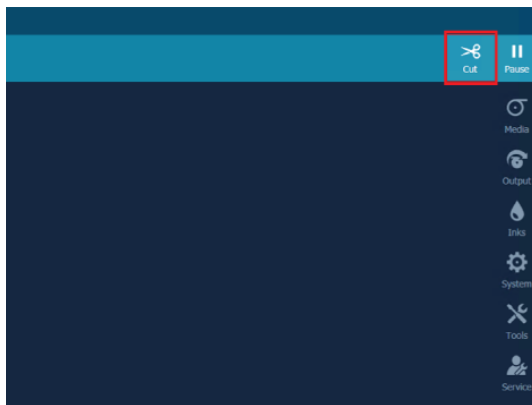
How the media is cut depends on the media type configuration in the RIP. For more information, see [Change the media settings on page 76](#).

Before you begin

Use a knife or pair of scissors that is sharp enough to cut the media.

Procedure

1. On the operator panel tap on the [Cut] icon on the top right.
The printer transports the media automatically. The operator panel displays a request to make a manual cut.

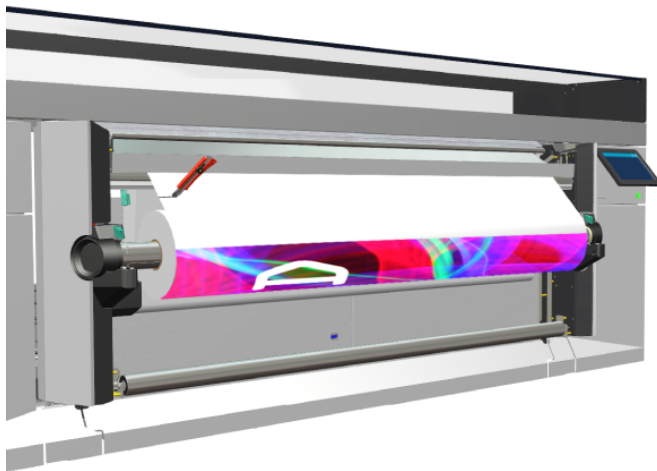


2. Move the media guides to the sides.
3. When a tension bar is present, a window telling you to remove the tension bar opens. Remove the tension bar from the media path.
4. Use a knife to cut the media. Cut the media as close as possible to the take-up roll.

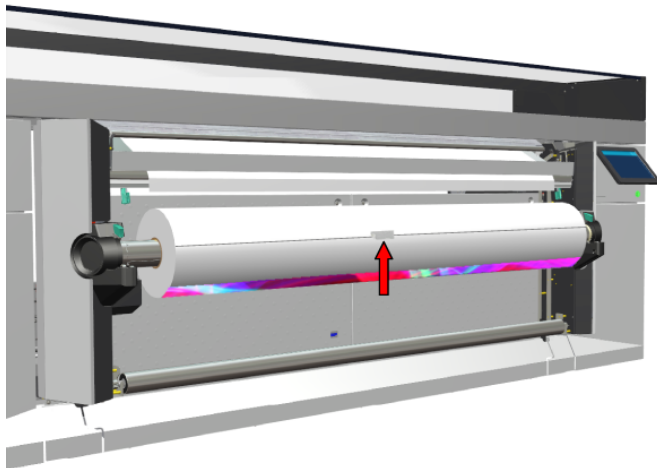


IMPORTANT

Cut as indicated in the illustration. Check that nothing is blocking the cutting path.



5. Tape the trailing edge to the take-up media roll in case of winding.



6. After you finish, tap on [Completed] on the operator panel.

After you finish

You can now remove the take-up media roll from the roll winder. For more information, see [Unload a take-up media roll from the roll winder on page 159](#).

AutoCut

Introduction

When you want to print a job in sheets, you can choose to cut the media automatically after each copy. For AutoCut, the printer uses the embedded knife.



NOTE

Media categories that need a tension bar or request a manual cut cannot be cut automatically after each copy.

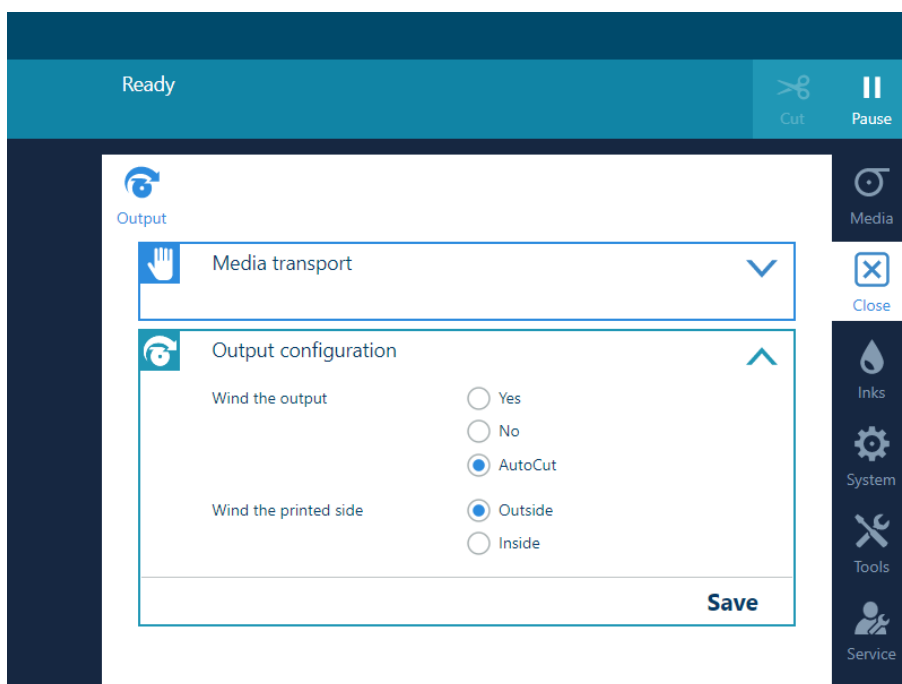
Before you begin

- Printing with a cut after each copy is set in the [Output configuration] on the operator panel.
- It is highly recommended to change the [Output configuration] only when the queue is empty.

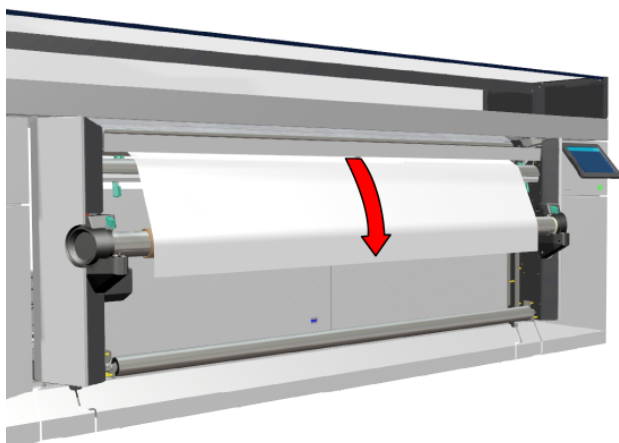
Procedure

1. Check the media category of your media and make sure the media type configuration is set correctly in the RIP:
 1. Set [Winding tension] to [no tension bar].
 2. Check the box in front of [Suitable for printer cutter].
 3. Check the box in front of [Printer does copies].
2. When you want to add white space between each copy, you have to define a leading or trailing strip in the RIP:
 1. Open the layout preview of your job in the RIP.
 2. Fill in the leading or trailing strip and make sure the value of the [Intercopy spacing] is the sum of their lengths.
If you had defined a leading or trailing strip by default on the operator panel, reset the values to 0.
3. On the operator panel tap on the [Output] icon.
4. Tap on [Output configuration].

5. Make sure [Wind the output] is set to [AutoCut].



6. Start a print job.
The embedded knife automatically cuts the media after each image has been printed.



7. Collect your output at the printer.

After you finish

When you want to stop cutting after each copy you can change the output configuration again, after the jobs are completed and the queue is empty .

Unload a take-up media roll from the roll winder

Introduction

When you want to collect the printed output you have to unload the take-up media roll from the roll winder.

Before you begin

Make sure you have cut the media. For more information, see [Cut the media on page 153](#) and [Cut the media \(manual\) on page 155](#).

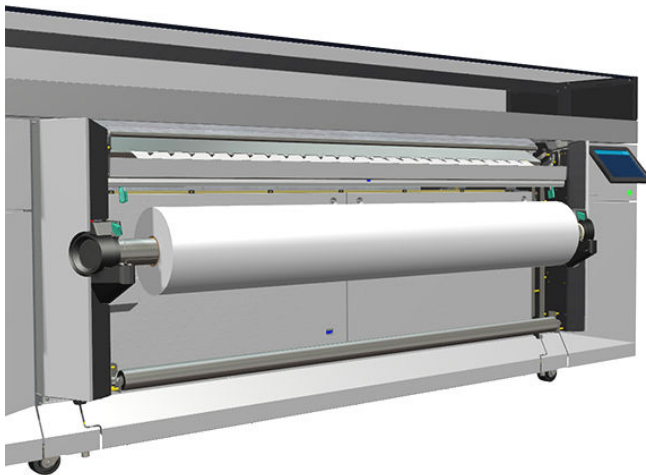


CAUTION

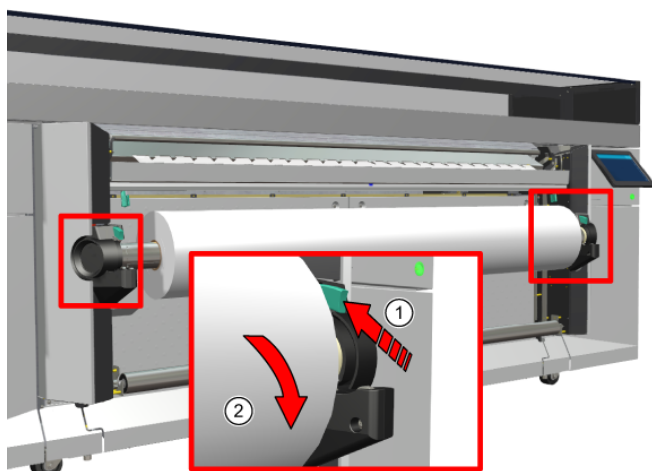
- Watch your fingers when you handle the media roll.
- Lifting heavy media, 25 kg (55 lb) or more, has to be done by at least two people or with the help of external lifting tools.

Procedure

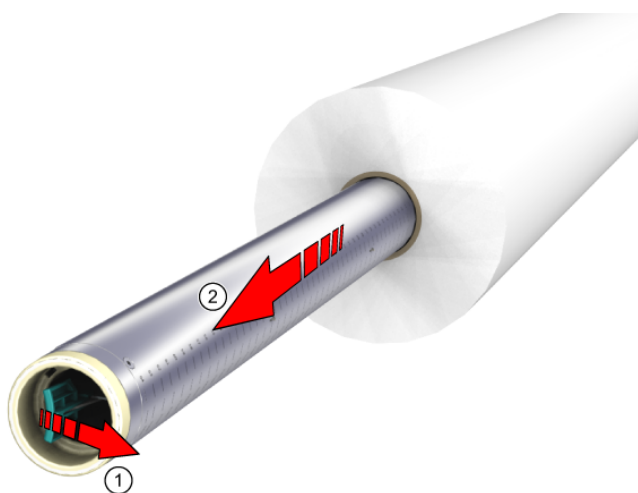
1. Locate the winder on the media output side.



2. Push the green levers on both sides of the take-up media roll. Remove the take-up media roll from the winder.

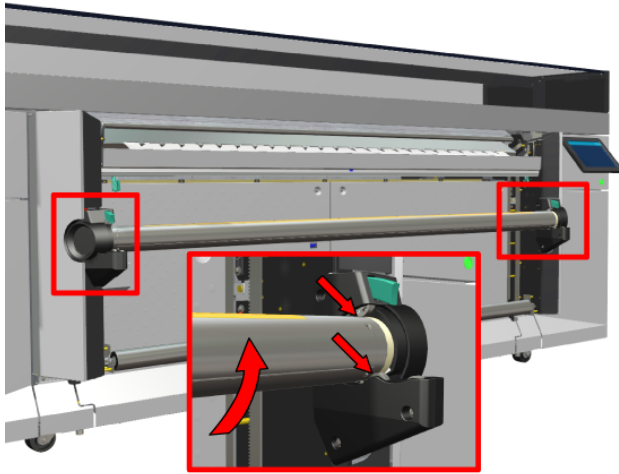


3. Place the take-up media roll on a sturdy surface.
4. Pull the handle of the locking mechanism inside the core towards you. Remove the media shaft from the core of the media roll.



5. You can place a new empty take-up roll core, for more information see [Load a take-up roll core onto the roll winder on page 122](#).

6. Push to place the media shaft back on the winder. Make sure it clicks in place.



Unload a media roll from the drawer

Introduction

Unload a media roll from the drawer when you want to load a new media roll.



CAUTION

- **Watch your fingers when you handle the media roll.**
- **Lifting heavy media, 25 kg (55 lb) or more, has to be done by at least two people or with the help of external lifting tools.**



IMPORTANT

- Handle the media roll with care. A dented media roll can damage the printer.
- Only open the media drawer when the indicator light on the drawer is on. Do not open the drawer when the light is off, you can damage the machine.

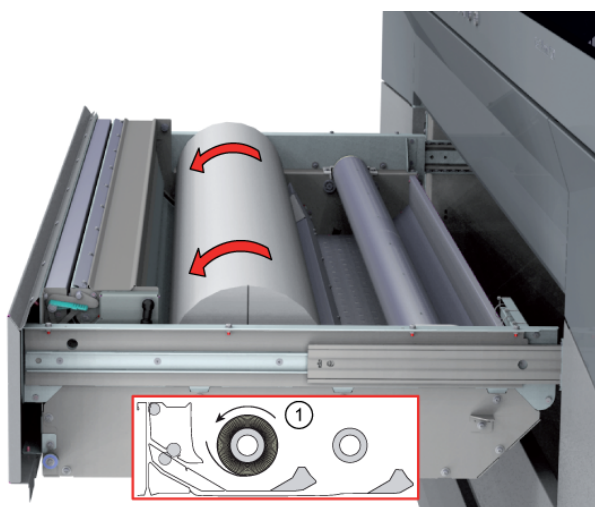


NOTE

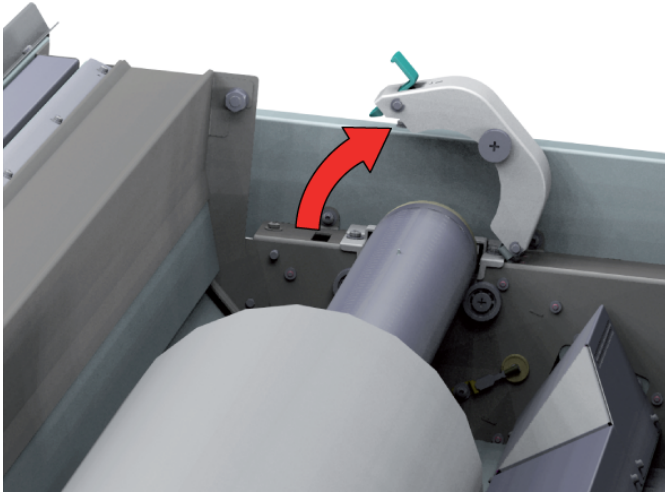
Put on gloves to avoid pollution of the paper by your fingerprints.

Procedure

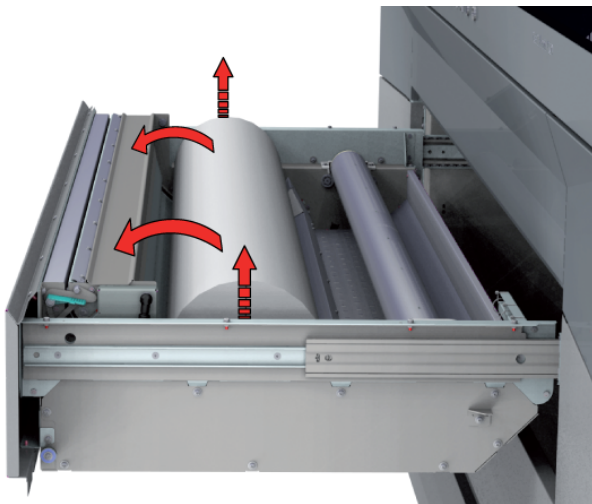
1. Pull firmly to open the media drawer.
2. Use both hands to turn the media roll backwards (1) and remove the media from the metal paper guide.



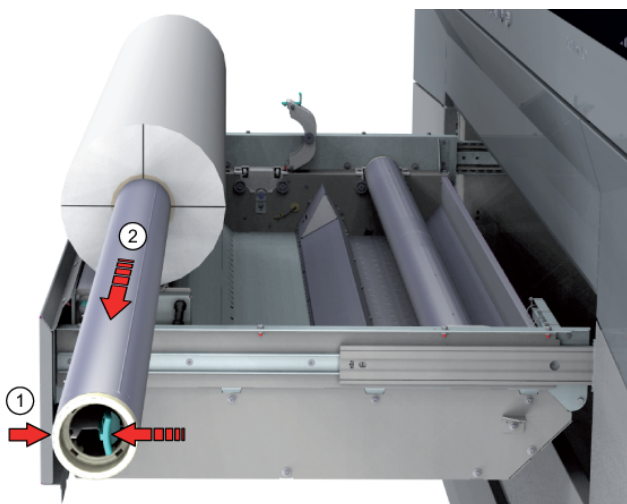
3. Pull the lever and open the clamp.



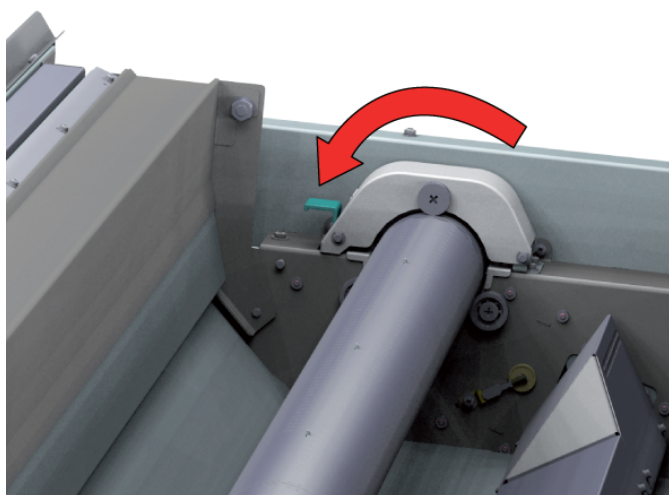
4. Lift up and take out the media shaft with the media roll, and put it on the roll loading station.



5. Pull (1) the handle of the locking mechanism towards you.
Remove (2) the media shaft from the core of the media roll.



6. Load a new media roll, for more information see [Load a media roll \(position 1\) on page 89](#). Or put the feed media shaft back into the drawer and firmly close the clamp. Make sure you close the clamp completely until you hear a click.



7. Remove the media roll from the roll loading station.
Store it in a safe place, so that it cannot fall over or roll away.
8. Close the media drawer carefully.

Chapter 5

Print a job

General workflow for printing a job

Introduction

There is a general workflow for using the Colorado M-series explained in this manual.



1. RIP

Prepare and submit a job in one of the supported RIP software applications. You can install media profiles and also add or change media profiles and types here. For more information, see [Configure media in the RIP on page 44](#) or check the website of your RIP supplier for documentation.

2. Operator panel

Check your job and other jobs in the queue here. Pause, resume and remove a job, or cut the media after a certain job.

You can also perform special actions via the operator panel, such as starting maintenance actions or configuring the printer's system and connectivity settings.

3. Printing

Once your job has been submitted and passed the queue the printer prints your job in sheets or roll-to-roll.

4. Mobile app

You can monitor the printer via the PRISMA remote app on your mobile device. The app gives you alerts when operator action is required on media, maintenance or when other actions are coming up.

Print a job

Introduction

You can submit and print a job via the RIP.

When to do

Make sure you have one of the supported RIP applications installed and connected to the printer.

Procedure

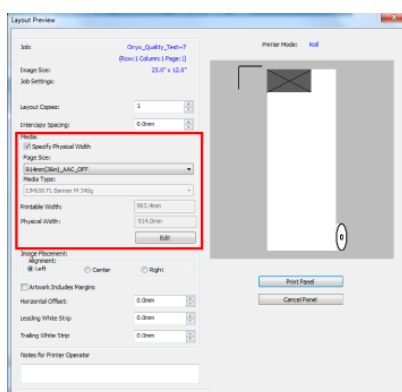
1. Open the RIP.
2. Load one or more files you want to print.
3. Make sure you use a correct media profile for the media you want to print on.
For more information, see [Configure media in the RIP on page 44](#) or check the website of your RIP supplier for documentation.

4. Submit the job.

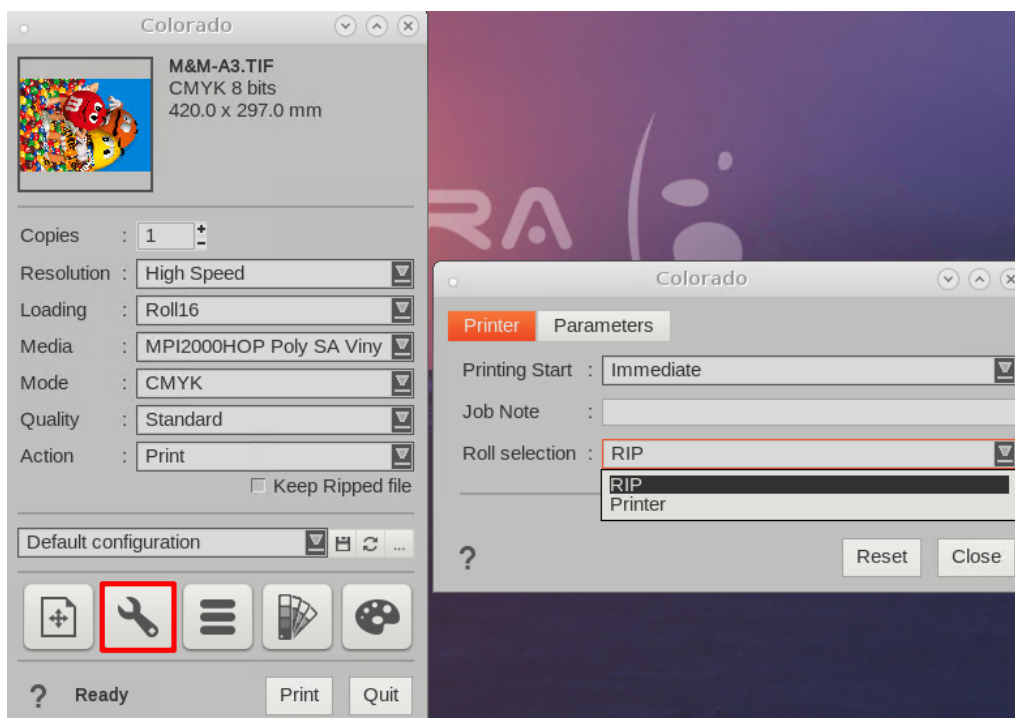


NOTE

- When you have problems submitting your job, check if the physical width in the RIP corresponds with the width of the media roll.
Take into account the margin used for [Automatic advance correction] (_AAC_NONE, _AAC_NORMAL, _AAC_ENHANCED, _AAC_ROBUST). You can check the value that is used for the [Automatic advance correction] setting in the RIP
Also take into account that in print mode FLXfinish+ a margin with a width of 15 mm (0.59 inch) is used.
- In ONYX check the box in front of [Specify Physical Width] when you want to set the page size and physical width manually.



- In Caldera you can choose to let the printer or the RIP do the roll selection. Click on the wrench icon and under [Roll selection], select [Printer] or [RIP].



5. Collect your output at the printer.

If requested, tape the media for winding. For more information, see [Print and wind without a tension bar on page 126](#), [Print and wind with a tension bar on page 129](#), or [Print and wind with a locked tension bar on page 134](#).

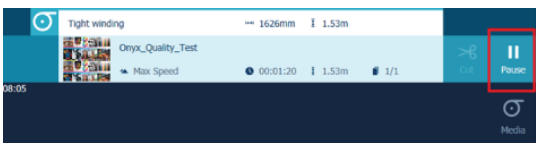
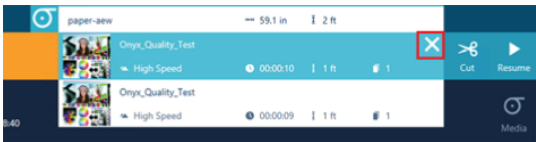
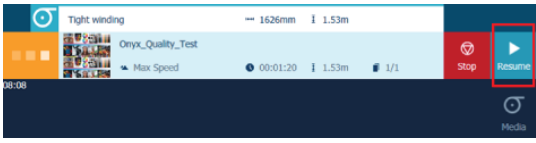
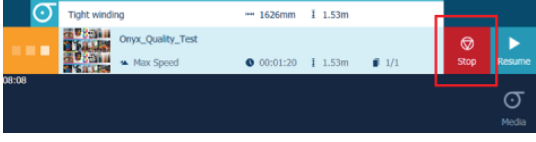
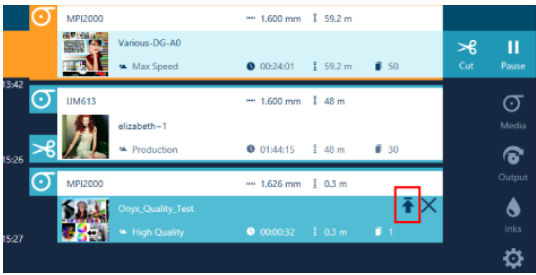
Perform actions on a submitted job

Introduction

On the operator panel you can control your job.

Procedure

1. Submit a job to the printer.
2. On the operator panel, you see the job appearing in the queue, at the top of the screen. The job on top is the active job.

Action		
Pause	Tap the [Pause] icon. The printer pauses the job when the image has been printed.	
Cancel	Tap the job in the header. The [Cancel] icon appears. Tap [Cancel] to cancel the job.	
Re-sume	When the printer is pausing, the [Resume] icon appears. Tap [Resume] to continue printing.	
Stop	When the printer is pausing, the [Stop] icon appears. Tap [Stop] to stop printing. The image that has been printed is cured. The queue is stopped.	
Move up	Tap to select a job from the queue. Tap on the [Move up] icon to move the job up in the queue.	

Status on the operator panel

Introduction

The operator panel indicates when an operator attention is required via colors and symbols.

Colors on the operator panel

When you see an orange or red color indication on the operator panel, tap the tile with the color to see what action is required. You can take action if necessary.

Color	Example	Description	Status
Light-blue		Operator action is coming up in the future, for some actions you can already prepare, e.g.: 'You can refill ink', 'A cut is planned', 'Not calibrated media'.	The system is operational.
Orange icon		In the near future an orange warning will appear, unless action is taken.	The system is operational.
Orange		Operator action is possible or required to keep the system running, e.g.: 'You should refill ink', 'You should perform maintenance', 'You should load the correct media type'.	The system stays operational and most of the time can continue its action for now.
Red		Operator action is required now, e.g.: 'You must refill ink to continue printing', 'You must remove media from the paper path to continue printing'.	The system is blocked and will only continue when the indicated action has been performed by the operator.

Indicators on the operator panel

Indicators on the operator panel want to get your attention to make you aware of an operator action that is coming up (typically used in the queue).

Color	Example	Description	Status
Media (request)		Load required media for this job. Load a roll with the requested media type and width. The roll width can also be bigger than the size that is requested.	When the indicator is orange and this job becomes the active job, the system is paused until you solve the issue.
Cut (request)		Cut the media after this job.	When the indicator is orange and this job is finished, the system is paused until you solve the issue.

Color	Example	Description	Status
Attention (indication)		Operator attention is required. When this icon appears in the queue you have to be aware that most likely the media will run out during this job.	The system continues the action if possible.

Use the PRISMAsync Remote Control app

Introduction

With the PRISMAsync Remote Control app you can monitor your Colorado M-series at a distance.

Before you begin

To use the PRISMAsync Remote Control app you need a mobile device with:

- Google Android 8.0 or higher
- Apple iOS 12.5.5 or higher
- Remote connection on the printer must be enabled and working. For more information, see [Test PRISMAsync Remote Control on page 284](#).



NOTE

You do not need a license for the PRISMAsync Remote Control app. For more information, see the PRISMAsync Remote Control guide on the downloads website <https://downloads.cpp.canon> under the product name.

Procedure

1. Make sure the System administrator has added your email address as a PRISMAsync cloud services user for the Colorado M-series. For more information, see [Configure PRISMAsync Remote Control on page 282](#).
2. Download the PRISMAsync Remote Control app via the Google Play Store or Apple App Store onto your mobile device.
3. Open the PRISMAsync Remote Control app on your mobile device.
4. Log in with your Google or Microsoft account that has been registered by the System administrator. The app opens and shows one or more printers you are connected to.
5. Tap on the wheel icon on the bottom of the screen to configure the settings of the app.
6. Use the app for:
 - **Events:** see events and alerts, such as printing, roll empty, ink empty, all jobs finished, maintenance tray full, replace filters, refill chiller, replace lubricators.
 - **Printers:** monitor and view the status of one or multiple printers at one glance. Swipe to mute the notifications.
 - **Configuration:** configure the settings of the app.

Chapter 6

Maintain the system

Maintain the print quality

Guidelines to maintain the print quality

Introduction

To keep the printer in optimal condition it is very important to perform printhead and system maintenance actions regularly. These maintenance actions can be performed at any time to solve print quality problems, for example after a media crash.

You can start the maintenance actions from the operator panel. Depending on the situation there are three different scenario's to choose from:

1. Automatic maintenance
2. Manual maintenance
3. Periodic maintenance

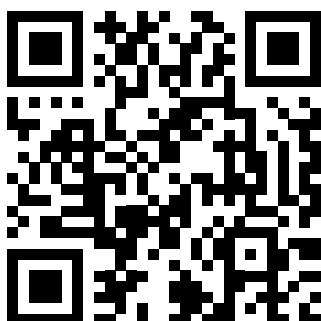
Depending on the chosen scenario a number of maintenance actions will be done automatically by the printer and/or the operator.

For more details see video [▶ *Guidelines to maintain the print quality*](#)

Maintenance videos

The maintenance actions are explained in separate maintenance procedure videos.

Click on [▶ *Instruction videos*](#) or scan the following QR code to visit the instruction videos main page.



Action	Procedure
Automatic nozzle optimization	Video: ▶ <i>Automatic nozzle optimization</i>
Clean the nozzles	Video: ▶ <i>Clean the nozzles</i>
Clean the maintenance station	Clean the maintenance station on page 186
	Video: ▶ <i>Clean the maintenance station</i>
Clean the matrix plate area and the black protection cover	Clean the matrix plate area and the black protection cover on page 188
	Video: ▶ <i>Clean the matrix plate</i>

Action	Procedure
Clean the MC Scanner	Clean the MC scanner on page 192 Video: ▶ Clean the MC scanner
Clean the platen	Clean the platen on page 195 Video: ▶ Clean the platen
Clean the buffer plate	Clean the buffer plate on page 198 Video: ▶ Clean the buffer plate
Vacuum the chiller and check the fluid level	Vacuum the chiller and check the fluid level on page 200 Video: ▶ Vacuum the chiller and check the fluid level
Clean the ink unit	Clean the ink unit on page 203 Video: ▶ Clean the ink unit
Clean the mirrors	Clean the mirrors on page 205 Video: ▶ Clean the mirrors
Clean the ruler	Clean the ruler on page 208 Video: ▶ Clean the ruler

Overview of maintenance actions to maintain the print quality

Automatic maintenance

This is the shortest of the three maintenance procedures. Automatic maintenance is performed fully by the printer, the operator only has to start the procedure. Always start with automatic maintenance first in case of print quality problems.

Action	Procedure
The printer performs a purge and wipe to clean the nozzles.	Video: ▶ Clean the nozzles You can select the option [Automatic nozzle optimization]. A test pattern will be printed that will be checked by the system to obtain the best print quality. Video: ▶ Automatic nozzle optimization

Manual maintenance

When automatic maintenance has not worked sufficiently then start manual maintenance in case of print quality problems. Manual maintenance is mainly done by the operator. You can also start manual maintenance in case of a paper jam or crash. For more information, see [Improve quality on page 249](#).

Action	Procedure
Clean the maintenance station	Clean the maintenance station on page 186 Video: ▶ Clean the maintenance station
Clean the matrix plate area.	Clean the matrix plate area and the black protection cover on page 188 Video: ▶ Clean the matrix plate

Action	Procedure
Clean the MC scanner.	Clean the MC scanner on page 192 Video: ▶ Clean the MC scanner
Clean the platen.	Clean the platen on page 195 Video: ▶ Clean the platen
Clean the buffer plate.	Clean the buffer plate on page 198 Video: ▶ Clean the buffer plate
The printer performs a purge and wipe to clean the nozzles.	Video: ▶ Clean the nozzles You can select the option [Automatic nozzle optimization]. A test pattern will be printed that will be checked by the system to obtain the best print quality. Video: ▶ Automatic nozzle optimization

Incident-based (quality problems, paper jam, crash)

Periodic maintenance

Periodic maintenance is a variety of mandatory maintenance actions that have to be performed by the operator. Periodic maintenance has to be done when the operator panel gives a warning. This is at least once a month, and depending on the ink usage, between 7 and 30 days.



IMPORTANT

You must perform all periodic maintenance indicated on the operator panel, to guarantee the print quality.

Action	Procedure
Clean the maintenance station	Clean the maintenance station on page 186 Video: ▶ Clean the maintenance station
Clean the matrix plate area.	Clean the matrix plate area and the black protection cover on page 188 Video: ▶ Clean the matrix plate
Clean the mirrors.	Clean the mirrors on page 205 Video: ▶ Clean the mirrors
Clean the MC scanner.	Clean the MC scanner on page 192 Video: ▶ Clean the MC scanner
Clean the platen.	Clean the platen on page 195 Video: ▶ Clean the platen
Clean the buffer plate.	Clean the buffer plate on page 198 Video: ▶ Clean the buffer plate
Vacuum the chiller and check the fluid level.	Vacuum the chiller and check the fluid level on page 200 Video: ▶ Vacuum the chiller and check the fluid level
Clean the ink unit.	Clean the ink unit on page 203 Video: ▶ Clean the ink unit

Action	Procedure
The printer performs a purge and wipe to clean the nozzles.	Video: ▶ Clean the nozzles You can select the option [Automatic nozzle optimization]. A test pattern will be printed that will be checked by the system to obtain the best print quality. Video: ▶ Automatic nozzle optimization

For more information on how to start automatic, manual and periodic maintenance, see [Start automatic maintenance on page 180](#), [Start manual maintenance on page 182](#), [Start periodic maintenance on page 184](#).

Clean the nozzles by purge and wipe

In all three maintenance procedures the nozzles are cleaned by a purge and wipe action. During the purge actions every nozzle is refilled with new ink. The old ink including any pollution will be pushed out to the printhead nozzle area. Next a wiper removes the ink including the nozzle pollution from the nozzle area. This results in an optimally cleaned printhead.

Automatic nozzle optimization

In all maintenance procedures you can select the option [Automatic nozzle optimization].

During printing the system uses a mechanism called PAINt, to check if all nozzles are functioning. If a nozzle is detected as fail, PAINt will compensate this failing nozzle by a good working nozzle. PAINt can detect the majority of the causes for a failing nozzle during the print.

When you enable [Automatic nozzle optimization] the printer will create a test print on which each individual nozzle will print a pattern. A camera will scan the printed pattern. If the camera detects a missing pattern and PAINt did not detect this nozzle as failing, the nozzle will be switched off permanently. The failing nozzle is compensated by another nozzle for all print jobs, which results in a good print quality.

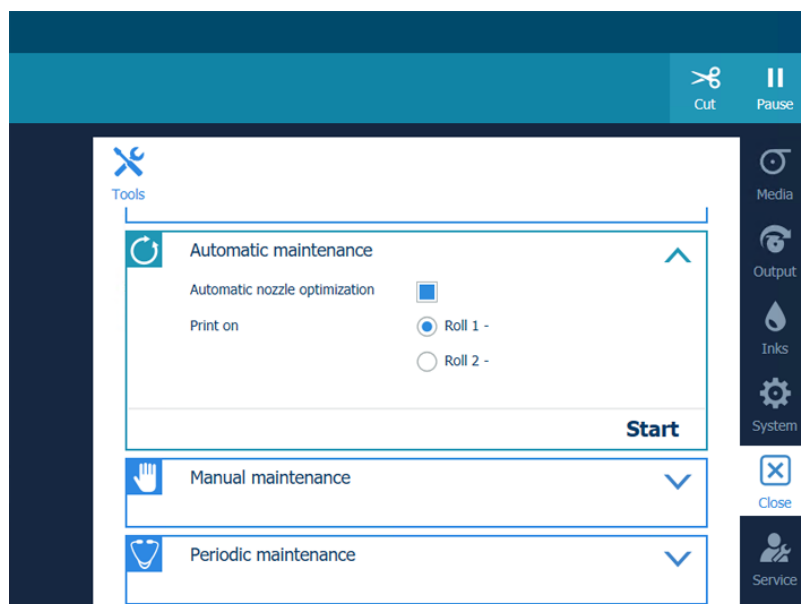
Use a smooth, white, opaque, non-reflective media when you select Automatic nozzle optimization.

Start automatic maintenance

Introduction

Start automatic maintenance in case of quality issues.

The printer performs a purge and wipe and optionally you can print a nozzle optimization chart to optimize the print quality.



Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Automatic maintenance].
3. When you are experiencing print quality issues, we recommend that you select the [Automatic nozzle optimization]. The small test chart printed is measured by the MC scanner and the recovered nozzles will be switched on again. This will improve the print quality again. If you do not select the [Automatic nozzle optimization], the problem nozzles will remain the status "do not use". Prerequisite is that the printhead area and matrix plate are clean (cleaned during manual maintenance).
 1. Make sure [Automatic nozzle optimization] is selected.
 2. Select a roll to print the nozzle optimization chart on.

**NOTE**

The nozzle optimization chart can only be printed on media of one of the following categories:

- Heavy paper > 200 gsm (54 lb bond)
- Paper 120-200 gsm (32-54 lb bond)
- Film
- Polymeric & cast self-adhesive vinyl
- Thick film > 200 um (0.0079 inch)

On the other media categories, these procedures cannot be performed.

When no roll is loaded with one of the above mentioned categories, no roll will be indicated for the automatic nozzle optimization.

Use a media width that is as large as possible and larger than 840 mm (33 inch) in order to get the best optimization results.

The [Automatic nozzle optimization] takes about 5 minutes. The printer will print a test chart and optimize the print quality.

4. Tap on [Start].

The printer starts the purge and wipe and then prints the chart in case you selected it.

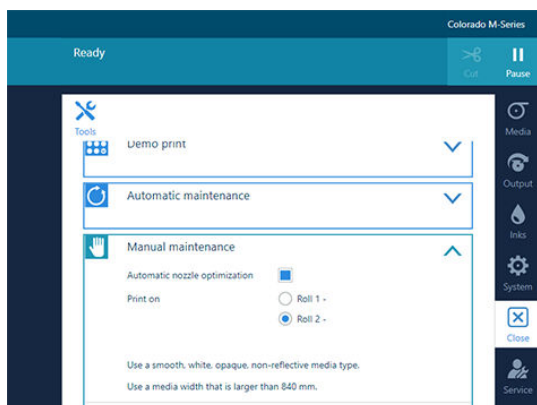
Start manual maintenance

Introduction

In case of quality issues that are not solved by automatic maintenance with nozzle optimization, start manual maintenance.

Perform any or all of the listed actions on the operator panel.

You can print a nozzle optimization chart to optimize the nozzles.



Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Manual maintenance].



NOTE

We recommend that you check the [Automatic nozzle optimization] when you are experiencing print quality issues. After you have cleaned the matrix plate and the printheads the recovered nozzles have to be switched on again (if you do not check this option the nozzles will keep the status "do not use").

3. When you want to print nozzle optimization charts to optimize the nozzles:
 1. Make sure [Automatic nozzle optimization] is selected.
 2. Select a roll to print the nozzle optimization charts on.

**NOTE**

The nozzle optimization chart can only be printed on media of one of the following categories:

- Heavy paper > 200 gsm (54 lb bond)
- Paper 120-200 gsm (32-54 lb bond)
- Film
- Self-adhesive
- Thick film > 200 µm (0.0079 inch)

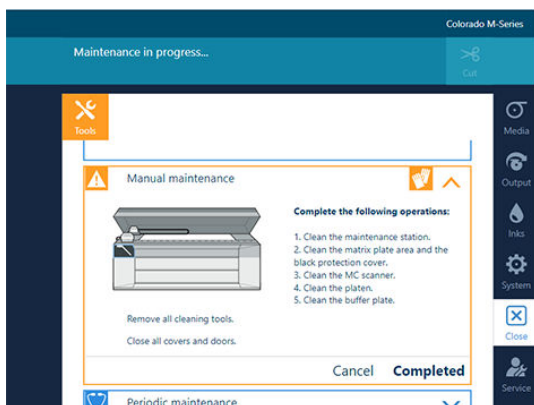
On the other media categories, these procedures cannot be performed.

When no roll is loaded with one of the above mentioned categories, no roll will be indicated for the automatic nozzle optimization.

Use a media width that is as large as possible and larger than 840 mm (33 inch) in order to get the best optimization results.

The [Automatic nozzle optimization] takes about 10 minutes. The printer will print two charts and optimize the print quality.

4. Tap on [Start].
5. Perform any or all of the listed actions:
 1. [Clean the maintenance station on page 186](#)
 2. [Clean the matrix plate area and the black protection cover on page 188](#)
 3. [Clean the MC scanner on page 192](#)
 4. [Clean the platen on page 195](#)
 5. [Clean the buffer plate on page 198](#)

**IMPORTANT**

Wait until the [Completed] button turns black and the printhead carriage is in maintenance position, before you open the top cover and start cleaning.

Start periodic maintenance

Introduction

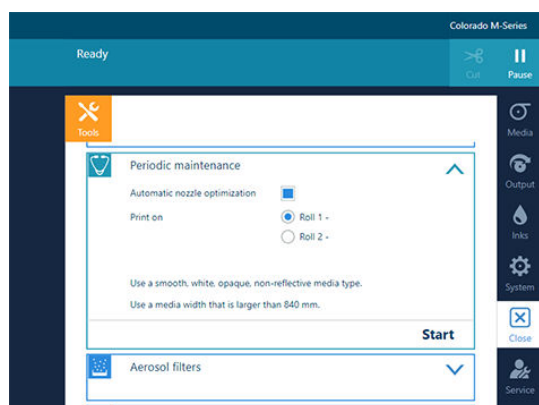
Start periodic maintenance when the operator panel gives a warning.

Periodic maintenance contains a variety of mandatory maintenance actions and the possibility to print a nozzle optimization chart to optimize the nozzles.



IMPORTANT

You must perform all periodic maintenance actions when indicated, otherwise the printer functions are not guaranteed.



Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Periodic maintenance].
3. When you want to print nozzle optimization charts to optimize the nozzles:
 1. Make sure [Automatic nozzle optimization] is selected.
 2. Select a roll to print the nozzle optimization charts on.



NOTE

The nozzle optimization chart can only be printed on media of one of the following categories:

- Heavy paper > 200 gsm (54 lb bond)
- Paper 120-200 gsm (32-54 lb bond)
- Film
- Self-adhesive vinyl
- Thick film > 200 µm (0.0079 inch)

On the other media categories, these procedures cannot be performed.

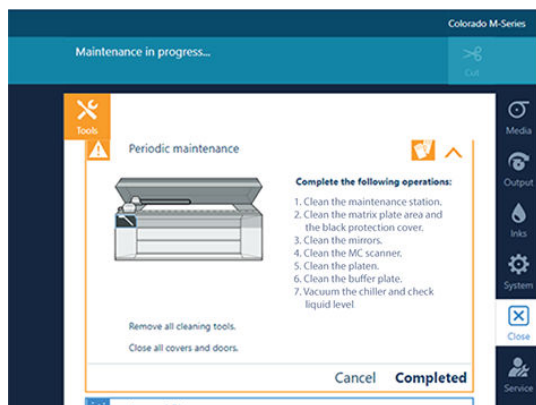
When no roll is loaded with one of the above mentioned categories, no roll will be indicated for the automatic nozzle optimization.

Use a media width that is as large as possible and larger than 840 mm (33 inch) in order to get the best optimization results.

The [Automatic nozzle optimization] takes about 10 minutes. The printer will print two charts and optimize the print quality.

4. Tap on [Start].

5. Perform all off the listed actions:
1. *Clean the maintenance station on page 186*
 2. *Clean the matrix plate area and the black protection cover on page 188*
 3. *Clean the mirrors on page 205*
 4. *Clean the MC scanner on page 192*
 5. *Clean the platen on page 195*
 6. *Clean the buffer plate on page 198*
 7. *Vacuum the chiller and check the fluid level on page 200*
 8. *Clean the ink unit on page 203*

**IMPORTANT**

Wait until the [Completed] button turns black and the printhead carriage is in maintenance position, before you open the top cover and start cleaning.

Clean the maintenance station

Introduction

The maintenance station plays an important role to keep the printheads optimally cleaned.

Video:  [Clean the maintenance station](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths and swabs
- Cleaning liquid (Cleaner MB - Methyl benzoate)
- Cleaning liquid (IPA)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

- **Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.**

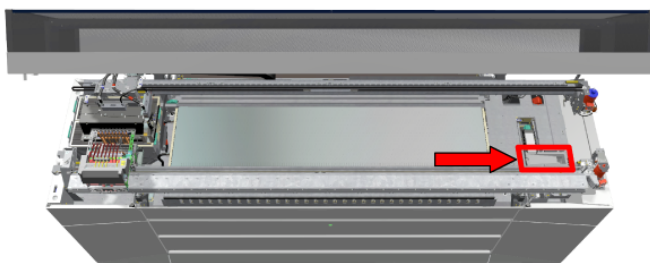


IMPORTANT

Use the prescribed cleaning liquid. Do not use any other cleaners.

Procedure

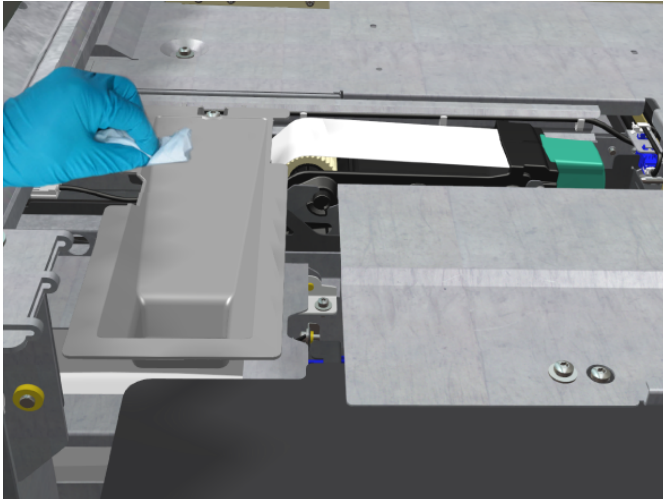
1. Start the maintenance action via the operator panel. For more information, see [Start manual maintenance on page 182](#).
2. Put on the Colorado M-series approved gloves.
3. Open the top cover from the media input side.
4. Locate the purge tray on the right-hand side.
The purge tray is located in the maintenance station.



5. Take a lint free cloth and clean the purge tray. Clean until all residue ink is gone.

**CAUTION**

Be careful to touch, the purge tray can be hot. Allow 5 minutes to cool down before cleaning.



6. If necessary, dampen a lint free cloth with cleaner IPA to remove any remaining ink.
7. Dispose the gloves, cloths and swabs as chemical waste according to local regulations.
8. Close the top cover.

**IMPORTANT**

Make sure all covers are closed correctly to prevent cured ink in your system.

9. On the operator panel tap [Completed] to end the maintenance action or continue to the next action, [Clean the matrix plate area and the black protection cover on page 188](#).

Clean the matrix plate area and the black protection cover

Introduction

The area around the matrix plate must be cleaned regularly. This includes the anti-reflective strips and mirror edges.

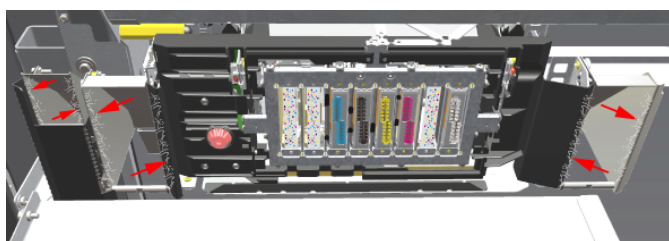


NOTE

The operator panel gives a warning to perform this procedure at least once a month, and depending on the ink usage, between 7 and 30 days.

During the use of the printer, dust and fibers from the media can accumulate on the edges of the anti-reflective strips and mirrors of the printhead carriage. If these fibers touch the surface of the paper during printing, they can wipe through the uncured ink and can cause print quality issues.

These print quality issues can easily be mistaken for printhead issues, as these fibers are stuck to the carriage. To prevent unnecessary service calls or printhead replacements, the edges of the anti-reflective strips and mirrors need to be cleaned regularly.



Video:  [Clean the matrix plate](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Swabs
- Cleaning liquid (Cleaner MB - methyl benzoate)
- Cleaner IPA



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.



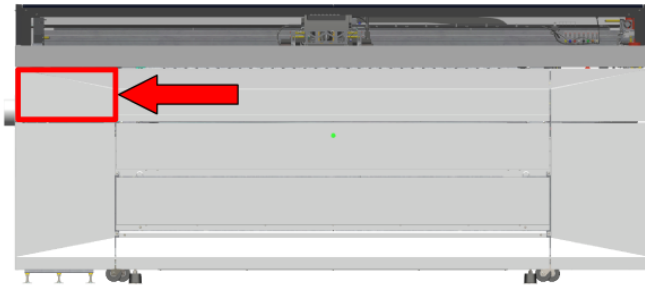
IMPORTANT

Use the prescribed cleaning liquid. Do not use any other cleaners.

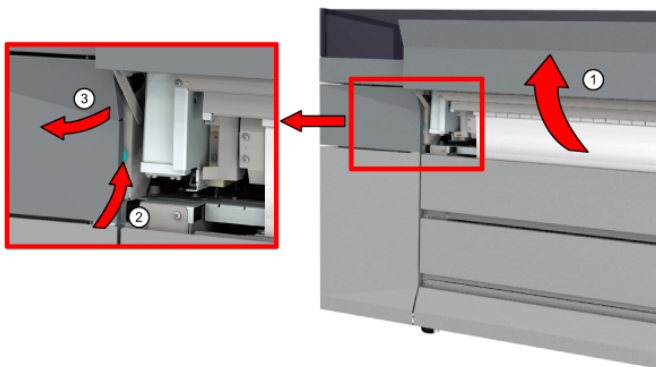
Procedure

1. Start the maintenance action via the operator panel. For more information, see [Start manual maintenance on page 182](#) or [Start periodic maintenance on page 184](#).
2. Put on the Colorado M-series approved gloves.

3. Go to the media input side and locate the manual maintenance door on the left.



4. Open the media cover (1) and lift the lever of the manual maintenance door on the left (2). Close the cover before starting the maintenance to avoid bumping into it.



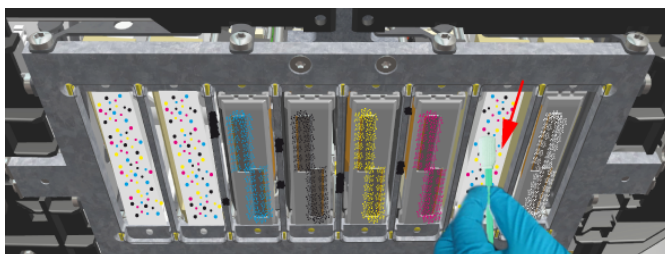
5. Open the manual maintenance door (3). A light is switched on.



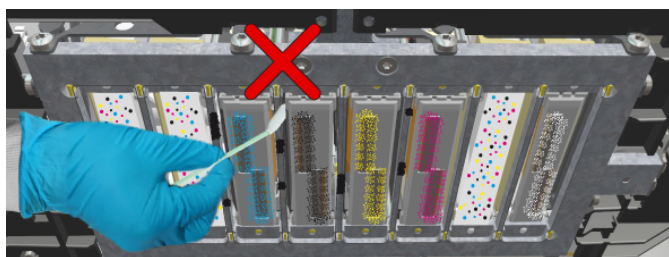
IMPORTANT

Do not use any external light source to prevent curing of the ink and damage to the printheads.

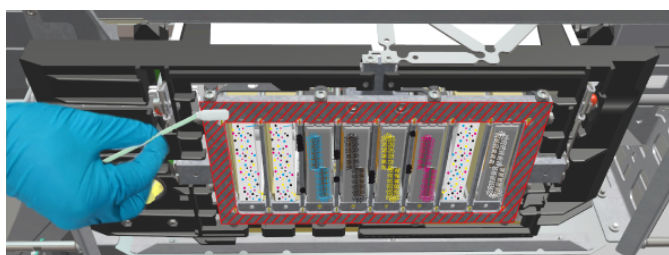
6. Locate the matrix plate in the compartment.
7. Take a Colorado M-series approved swab.
8. Dampen the swab with cleaner MB and clean the dummy printheads, until all visible residue ink is gone.
Depending on the printer configuration there are 3 or 4 dummy printheads.



- Do not touch the active printheads. When you touch them, you could damage the printheads.
- Never put the swab between a printhead and the matrix plate area.



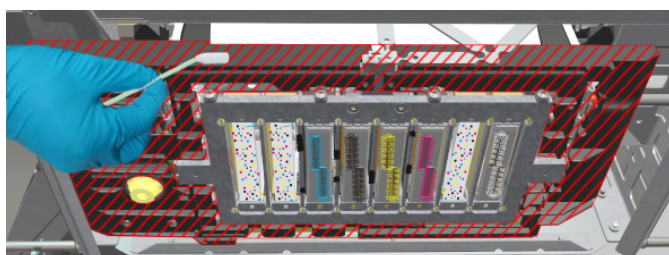
9. Dampen a new swab with cleaner MB and clean the outer edge of the matrix plate until all visible residue ink is gone.



IMPORTANT

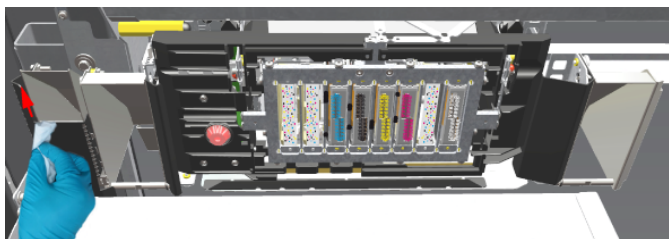
- Make sure to end the cleaning procedure within 5 minutes, when you use the cleaning liquid. The printer has to perform automatic maintenance after, to make sure the cleaning liquid does not damage the printheads.
- Use as many swabs as necessary.

10. Locate the black protection cover and inspect if it is polluted with ink, media dust or fibers.
11. In case of pollution, take a new swab and clean the black protection cover especially the protruding parts (red indicated area).

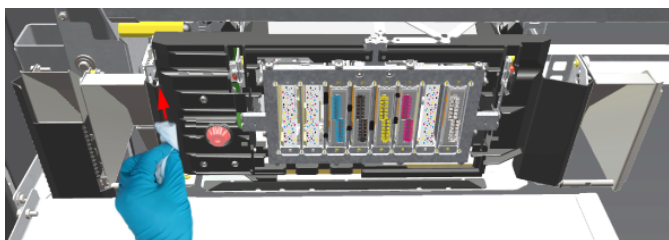


12. Only when necessary, dampen a new swab with the cleaner IPA and clean the polluted parts of the black protection cover again.
13. Make sure that all residue ink is removed.

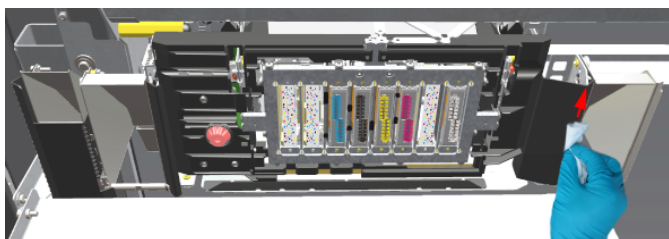
14. Use a lint free cloth with cleaner IPA to clean the edges of the left mirrors.



15. Use a lint free cloth with cleaner IPA to clean the left black anti-reflective strip.



16. Use a lint free cloth with cleaner IPA to clean the edges of the right mirror and the right anti-reflective strip.



17. Dispose the gloves and swabs as chemical waste according to local regulations.

18. Close the manual maintenance door and the media cover.



IMPORTANT

Make sure all covers are closed correctly to prevent cured ink in your system.

19. On the operator panel tap [Completed] to end the maintenance action.

Clean the MC scanner

Introduction

The MC scanner is used for the measurement of printed test patterns. The MC scanner must be cleaned regularly.

When you see pollution on the MC scanner, immediately clean the scanner.

Cleaning the MC scanner has to be done at least once a month.

Video:  [Clean the MC scanner](#)



NOTE

When you get error **5713: advance media correction not working**, most probably the MC scanner is polluted, clean the scanner.

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Cleaning liquid (IPA)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).

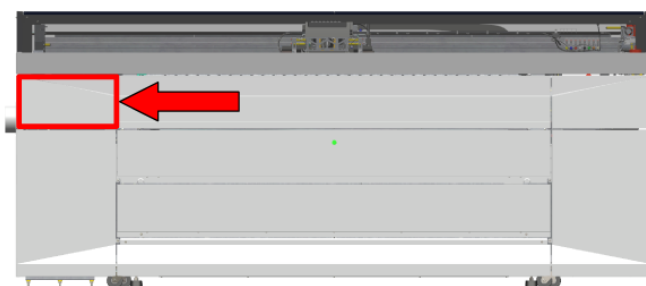


CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

Procedure

1. Start the maintenance action via the operator panel. For more information, see [Start manual maintenance on page 182](#) or [Start periodic maintenance on page 184](#).
2. Put on the Colorado M-series approved gloves.
3. Go to the media input side and locate the manual maintenance door on the left.



4. Open the media cover (1) and lift the lever of the manual maintenance door on the left (2).

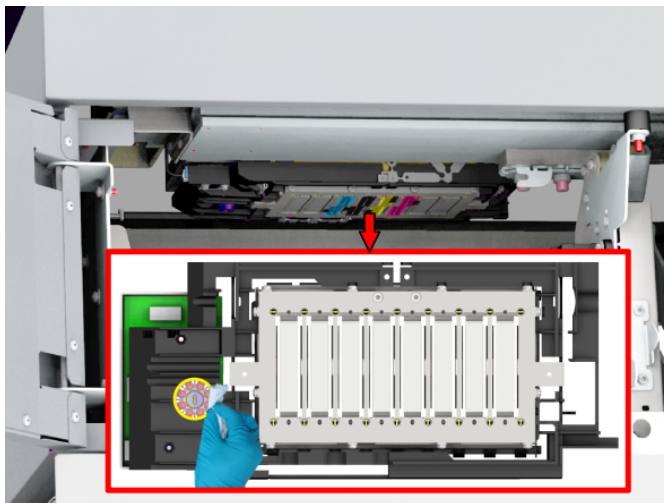


5. Open the manual maintenance door (3). A light is switched on.

**IMPORTANT**

Do not use any external light source to prevent curing of the ink and damage to the printheads.

6. Locate the MC scanner (indicated by the yellow circle) next to the matrix plate in the compartment.



7. Dampen a lint free cloth with the cleaner IPA and clean then glass plate in front of the MC scanner.

**IMPORTANT**

Only clean the glass plate of the MC scanner. Do not touch the nozzle areas of the printhead. When you touch the nozzle areas you can damage the printhead.

**IMPORTANT**

Use the prescribed cleaning liquid. Do not use any other cleaners.

**IMPORTANT**

This cleaning liquid (IPA) is not used for cleaning the maintenance drawer and heated parts of the maintenance station.

8. Make sure that all residue ink is removed.
9. Carefully wipe the glass plate dry.
10. Dispose the gloves and cloths as chemical waste according to local regulations.
11. Close the manual maintenance door and the media cover.



IMPORTANT

Make sure all covers are closed correctly to prevent cured ink in your system.

12. On the operator panel tap [Completed] to end the maintenance action.

Clean the platen

Introduction

When you see pollution on the platen or on the back of your print, immediately clean the platen.

It is advised to clean the platen regularly to keep the printer in the best condition.

Video:  [Clean the platen](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Rough lint free cloths
- Cleaning liquid (IPA)
- Compressed air duster
- Micro cleaning brushes (2,5 mm / 0.1 inch)
- Scraper



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.



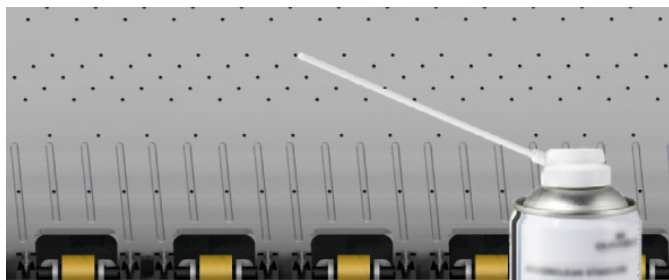
CAUTION

Do not use compressed air duster in any way other than described in this procedure.

Procedure

1. Start the maintenance action via the operator panel. For more information, see [Start manual maintenance on page 182](#) or [Start periodic maintenance on page 184](#).
2. Put on the Colorado M-series approved gloves.
3. Open the top cover from the media input side.
4. If present, remove the media from the paper path. For more information, see [Remove media from the paper path on page 325](#)
5. Examine the platen:
 - When you see uncured ink on the platen, dab the area with a lint free cloth to avoid rubbing ink into the suction holes.
 - When you see cured ink residue, use a scraper to remove the ink carefully.

6. Use the compressed air duster to open the suction holes.



NOTE

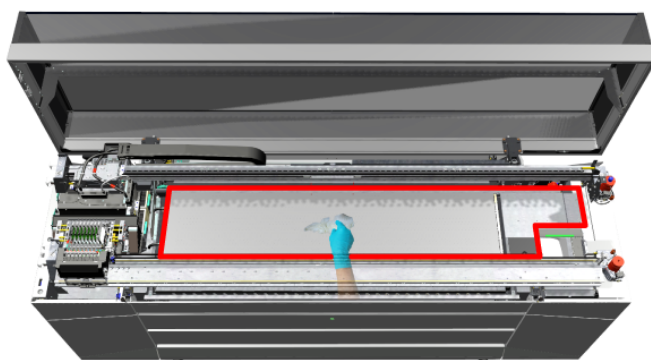
If necessary, you can also use a 2,5 mm (0.1 inch) micro cleaning brush.

7. Dampen a rough lint free cloth with the cleaning liquid and clean the complete platen area. If necessary, you can clean the area surrounding the maintenance station as well.



IMPORTANT

- Use the prescribed cleaning liquid. Do not use any other cleaners.
- Do not wet the platen directly, as you can damage the printheads.
- Do not clean outside the indicated area to avoid damaging the system.

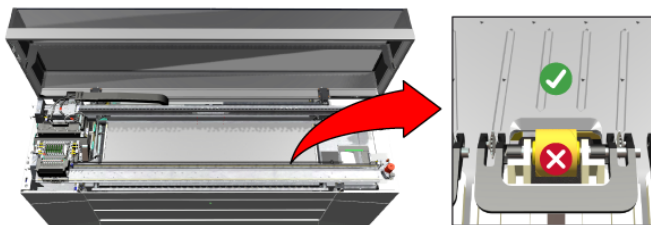


8. When all residue ink is removed, take a new and clean lint free cloth to wipe the complete platen.



IMPORTANT

Do not clean the transport rollers. When the rollers are polluted call your local service representative.



9. Dispose the gloves, cloths, and micro cleaning brushes as chemical waste according to local regulations.

10. Close the top cover.
11. On the operator panel tap [Completed] to end the maintenance action.

After you finish

Reload the media. For more information, see [Load a media roll \(position 1\) on page 89](#).

Clean the buffer plate

Introduction

When the printer is polluting your media with for example uncured ink or glue, check the buffer plate. In case of pollution, you can clean the buffer plate.

Video:  [Clean the buffer plate](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Cleaning liquid (IPA)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).

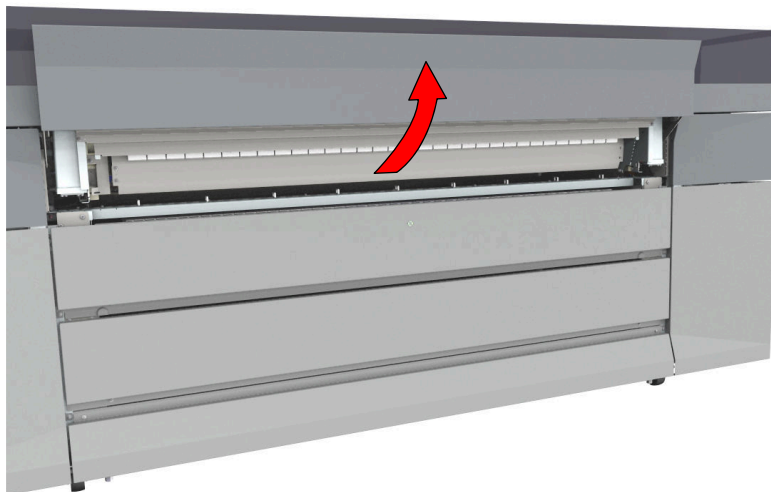


CAUTION

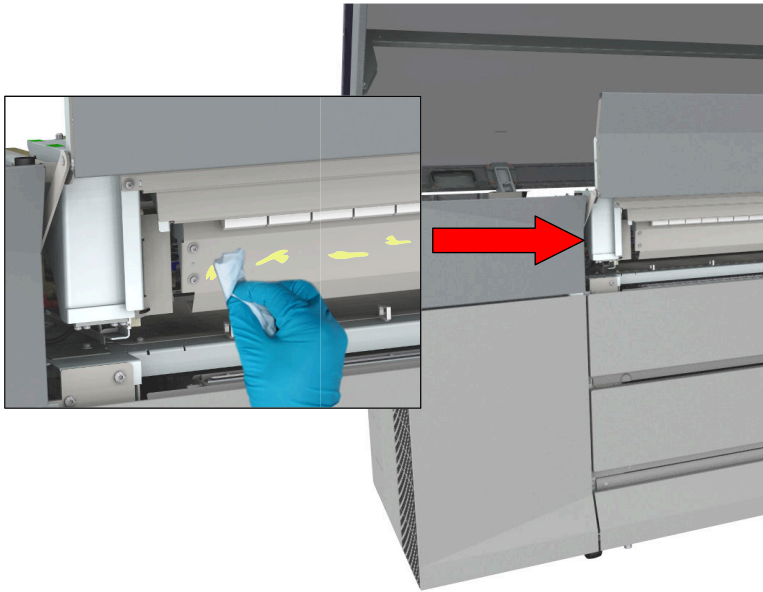
Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

Procedure

1. Put on the Colorado M-series approved gloves.
2. Go to the media input side and open the media cover.



3. Inspect if the buffer plate is polluted.



4. Take a lint free cloth and clean the buffer plate.
5. Dampen the cloth with the cleaning liquid to remove any remaining ink.

**IMPORTANT**

Use the prescribed cleaning liquid. Do not use any other cleaners.

6. Dispose the gloves, cloths and pin as chemical waste according to local regulations.
7. Close the media cover.

Vacuum the chiller and check the fluid level

Introduction

It is advised to vacuum the chiller every month to keep the printer in the best condition. Vacuuming the chiller is part of periodic maintenance so the operator panel gives a warning when you should vacuum the chiller. Always check the fluid level when you vacuum the chiller.

Video: [▶ Vacuum the chiller and check the fluid level](#)

Before you begin

Use Colorado M-series prescribed:

- Screwdriver (Torx-25)
- Vacuum cleaner with a brush head

Check the fluid level

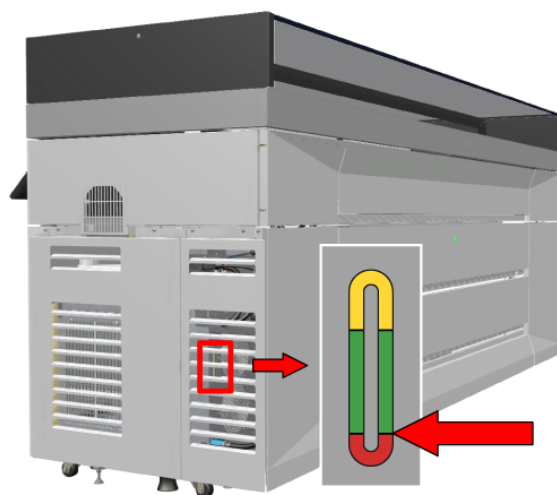
To check the fluid level, locate the level gauge glass behind the right-hand side of the cover.



NOTE

Do not remove this section of the cover. You can see the level gauge glass through the openings in the cover.

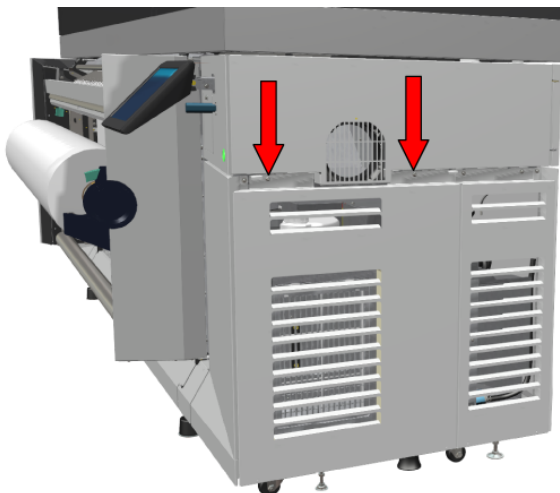
If the fluid level is near the bottom of the green zone, you must refill the chiller.



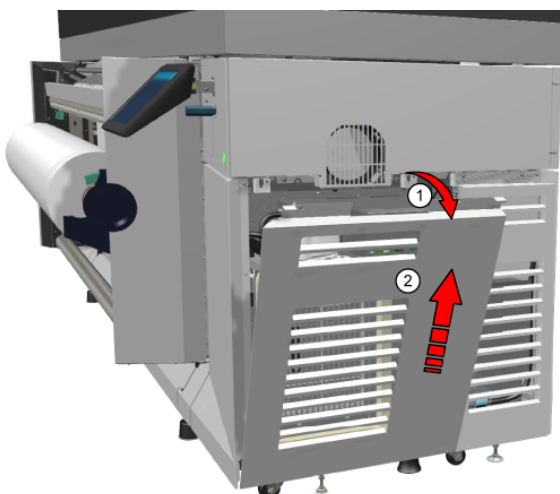
Procedure

1. Go to the chiller side and locate the cover under the fan.

2. Unscrew the left and right screws on top of the cover with the Torx-25.



3. Lift the cover a little up and towards you (1), then lift it up fully and take it out (2).

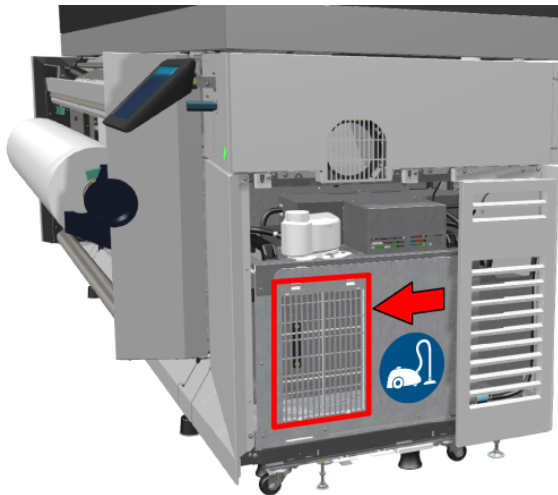


4. Vacuum the condenser surface as indicated. Make sure you remove all the collected dust. Do not remove any parts of the chiller.



CAUTION

Vacuum the surface with care, make sure you do not damage the condenser surface.



5. Place the cover back into position.
6. Fasten the left and right screws on top of the cover.
7. When you vacuumed the chiller as part of periodic maintenance, on the operator panel tap on [Completed] to end the maintenance action.

Clean the ink unit

Introduction

It is advised to clean the ink unit regularly to keep the printer in the best condition. You can clean the ink unit when you replace a bottle or during periodic maintenance. When you see ink pollution, immediately clean the affected area.

Video:  [Clean the ink unit](#).

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Cleaning liquid (IPA)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.



IMPORTANT

Use the prescribed cleaning liquid. Do not use any other cleaners.

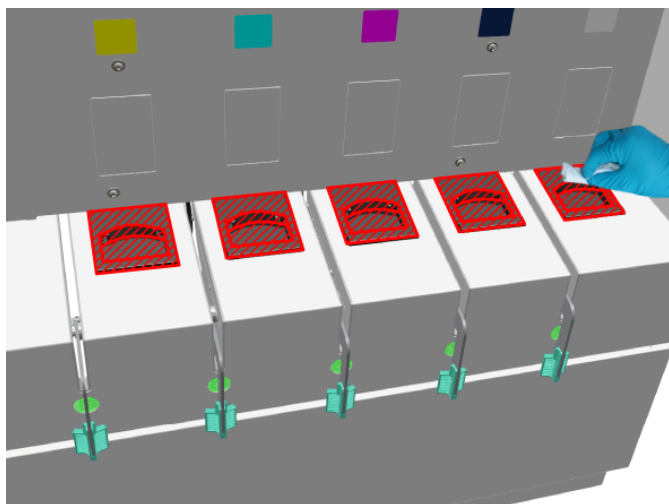
Procedure

1. Go to the side of the printer where the ink bottles are located.
2. Put on the Colorado M-series approved gloves.
3. Move down the green handle which is located left of the bottle you want to replace. Do not hold the bottle while you move the handle.



4. Take the empty bottle out of the slot.

5. Dispose the bottle as chemical waste according to local regulations.
If preferred and possible, you can repeat the steps to take out all bottles.
6. Take a lint free cloth and clean the indicated areas surrounding the slots until all residue ink is gone.
If necessary, dampen a swab with the cleaning liquid to remove any remaining ink.



7. When all residue ink is removed, dispose the gloves and cloths as chemical waste according to local regulations.

Result

If preferred and possible, you can place new bottles and refill ink. If the machine is not equipped with white ink, the order of the bottles from left to right is YCMK. If the machine is equipped with white ink, the order of the bottles from left to right is YCMKW. For more information, see [Refill ink on page 210](#).

Clean the mirrors

Introduction

When you see pollution on the mirrors or on the glass plate in front of the mirror funnel, immediately clean these parts.

It is advised to clean the mirrors and the glass plate in front of the mirror funnel regularly to keep the printer in the best condition.

Video:  [Clean the mirrors](#).

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Demineralized water



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

Procedure

1. Make sure the printer is not printing.
2. Put on the Colorado M-series approved gloves.
3. Open the top cover from the media input side.
4. Carefully push the printhead carriage to the left in manual maintenance position.

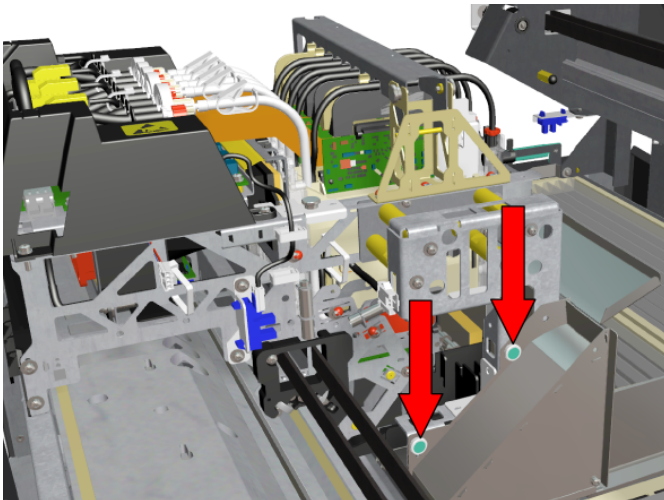
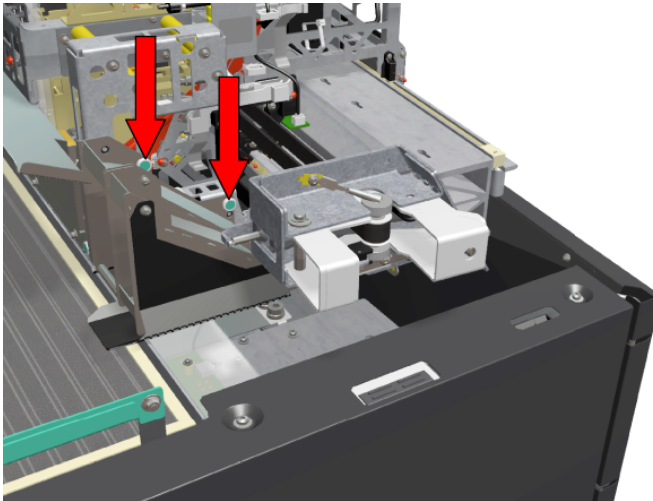
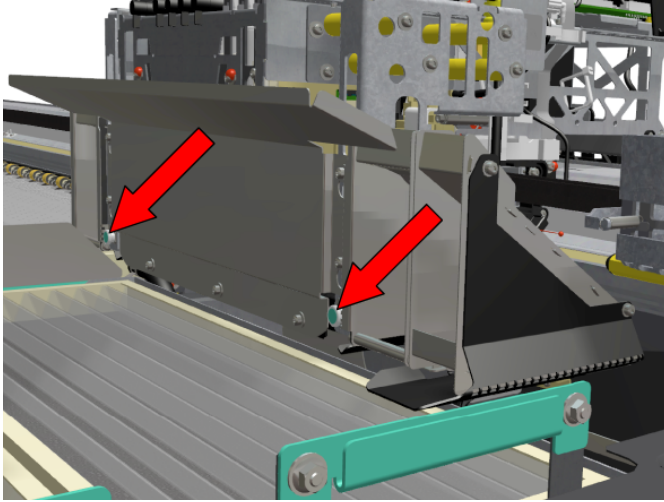


IMPORTANT

Touch the printhead carriage on the covered area only, otherwise you can damage the printheads.

5. Locate the mirror boxes on both sides of the printhead carriage.

6. Unscrew the six green screws of the mirror boxes manually.



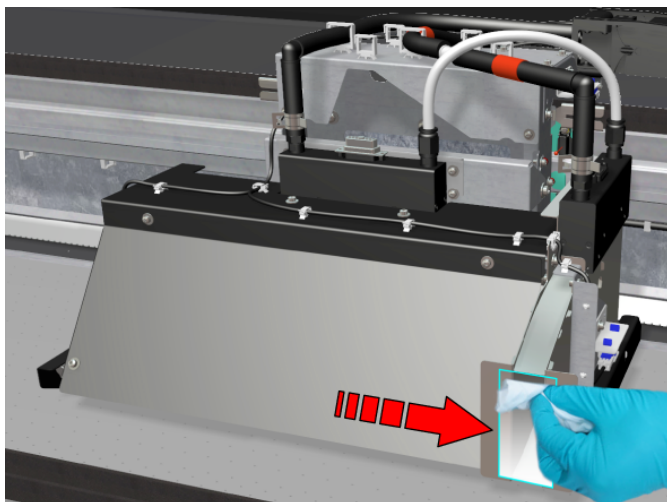
7. Dampen a lint free cloth with the demineralized water and clean all mirrors on the inside of the mirror boxes.

There are 3 mirrors.

**IMPORTANT**

Use demineralized water, do not use any other liquid.

8. Make sure that all matte deposits are removed.
9. Carefully wipe the mirror boxes dry.
10. Place the mirror boxes back into position.
11. Fasten the screws, hand tight.
12. Carefully push the printhead carriage and the curing carriage past each other to ensure they do not touch each other.
13. Locate the mirror funnel on the curing carriage.



14. Dampen a lint free cloth with the demineralized water and clean the glass plate in front of the mirror funnel.

**IMPORTANT**

Use demineralized water, do not use any other liquid.

15. Make sure that all matte deposits are removed.
16. Carefully wipe the glass plate dry.
17. Dispose the gloves and cloths as chemical waste according to local regulations.
18. Close the top cover.

Clean the ruler

Introduction

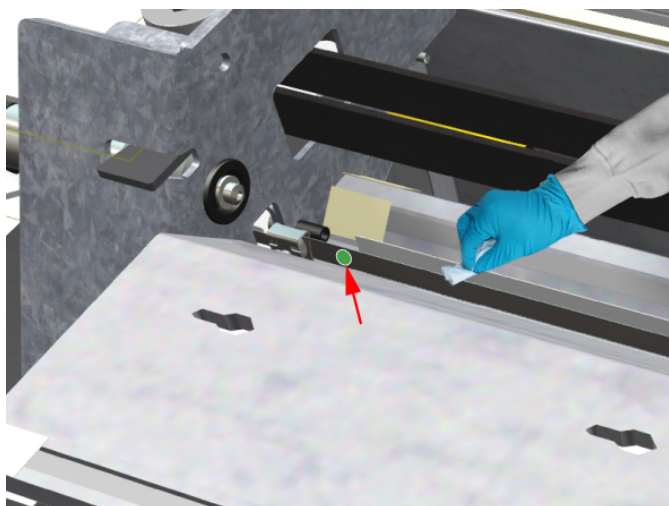
The printer uses a ruler to control the printhead carriage. A polluted ruler interferes with control of the printhead carriage. In case of pollution, you can clean the ruler.

Video:  [Clean the ruler](#).



NOTE

You can clean a ruler marked with a green dot. Do not clean a ruler that is not marked with a green dot.



When to do

If the operator panel shows error **5709**, clean the ruler.

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Cleaning liquid IPA



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

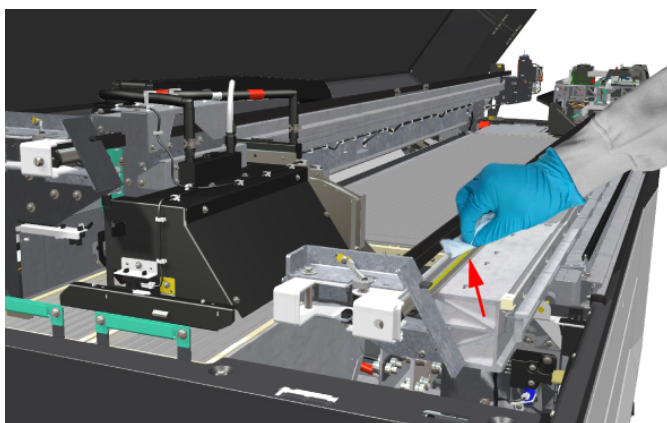


IMPORTANT

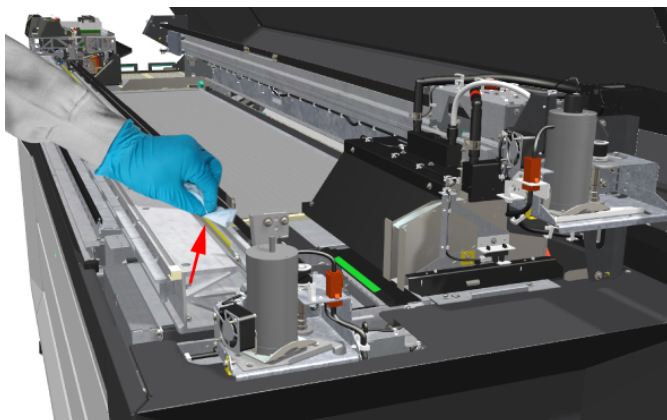
Use the prescribed cleaning liquid. Do not use any other cleaners.

Procedure

1. Open the top cover of the printer.
2. Put on the Colorado M-series approved gloves.
3. Dampen a lint free cloth with the cleaner IPA and clean the left side of the ruler until you reach the printhead carriage. Make sure that the lint free cloth covers the front and back of the ruler.



4. Close the top cover.
5. Start the maintenance action via the operator panel. Make sure that the [Automatic nozzle optimization] is deselected. For more information, see [Start periodic maintenance on page 184](#).
6. Wait until the printhead carriage is in cleaning position.
7. Open the top cover.
8. Dampen a lint free cloth with the cleaner IPA and clean the right-hand side of the ruler.



9. Dispose the gloves and cloths as chemical waste according to local regulations.
10. Close the top cover.
11. On the operator panel, tap [Completed] to end the maintenance action.

Maintain the printer

Refill ink

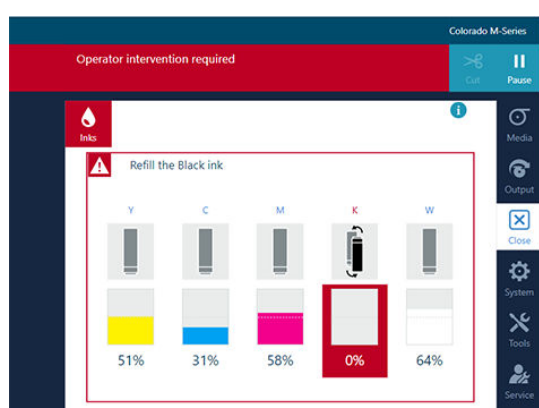
Introduction

You can refill ink easily without the risk of spilling ink.

A Colorado M-series M3/M3W configuration only allows use of 700 ml ink bottles.

A Colorado M-series M5/M5W configuration can use both 700 ml and 1000 ml ink bottles.

On the operator panel tap on the [Inks] icon on the right. You see an overview of the ink bottles and levels of remaining ink:



- Read the messages above the ink bottles to understand the status of the ink level and the ink bottles. The message indicates when ink is running out or is of the wrong color, bottles are not present, wrong, invalid or expired.
- When the operator panel gives an orange warning, a bottle is not present, invalid, wrong or expired, or it is advised to refill ink for a specific color as the ink is running out.
- When ink is about to expire within 28 days or is expired, the operator panel gives a red warning and the operator is asked to confirm to continue printing. This will appear every day until the ink status is not expired or almost expired.
The ink dialog contains instructions to make clear that printhead warranty is voided if expired ink is used.
- When the operator panel gives a red warning for another reason, you must refill ink for a specific color. The printing process is stopped until you have refilled the ink.
- For more detailed information on the status, tap the blue information icon at the top right hand corner.
- When one of the LED lights located next to the bottles is on (not blinking), you can refill ink for the related color.
- If the machine is not equipped with white ink, the order of the bottles from left to right is YCMK.
- If the machine is equipped with white ink, the order of the bottles from left to right is YCMKW.
- When you see ink pollution, immediately clean the affected area. For more information, see [Clean the ink unit on page 203](#).

Before you begin



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.



IMPORTANT

- Make sure you use official Colorado M-series ink.
UNDER CERTAIN CONDITIONS, INCLUDING WHEN A USED, REFILLED OR THIRD PARTY INK HAS BEEN DETECTED, THE PRINTER WILL OPERATE UNDER SAFE MODE. THIS MODE IS DESIGNED TO PROTECT THE PRINTER AND THE PRINTHEADS FROM DAMAGE DUE TO UNEXPECTED INK INTERACTION, RESULTING IN DIFFERENT AUTOMATIC MAINTENANCE BEHAVIOR AND IS ACTIVE WHEN THE OPERATOR PANEL DISPLAYS IT. FOR OPTIMAL PERFORMANCE USE ORIGINAL INK. THE PRINT SYSTEM, THE INK AND THE PRINTHEADS ARE DESIGNED AND ENGINEERED IN CLOSE RELATION TO PROVIDE UNCOMPROMISING PRINT QUALITY, CONSISTENCY, PERFORMANCE, DURABILITY AND RUNNING COSTS WITH EVERY PRINT. CANON PRODUCTION PRINTING DOES NOT WARRANT THE PERFORMANCE OF THE PRINT SYSTEM WHEN OPERATED OUTSIDE OF ENVIRONMENTAL SPECIFICATIONS OR WHEN SAFE MODE IS ACTIVE.
- DO NOT USE INK THAT HAS PASSED THE EXPIRATION DATE. WHEN INK IS GOING TO EXPIRE IN THE MACHINE YOU GET A WARNING. MAKE SURE YOU USE UP THE INK BEFORE THE EXPIRATION DATE, AS EXPIRED INK CAN DAMAGE THE MACHINE. YOU CAN REFILL INK AGAIN WHEN EXPIRED INK HAS RUN OUT. IF YOU REFILL VALID INK ONTO EXPIRED INK, THE OPERATOR PANEL WILL DISPLAY AN AVERAGE EXPIRATION DATE.
- When one of the LED lights located next to the bottles is off, you cannot refill ink for the related color. Do not take the bottles out of the slots.
- When the LED light located next to the bottle is blinking slowly, something is wrong. Do not move the green handle, you can damage the machine. Check the operator panel for an explanation of the issue. When you cannot solve it, call your local Service representative.

Procedure

1. On the operator panel tap on the [Inks] icon on the right.
2. Check which one or more colors ink has to be refilled or if something is wrong with the bottles.
3. Go to the side of the printer where the ink bottles are located.
4. Put on the Colorado M-series approved gloves.
5. Move down the green handle which is located left of the bottle you want to replace.
Do not hold the bottle while you move the handle.



IMPORTANT

When the LED light located next to the bottle is off, you cannot refill ink for the related color. Do not take the bottle out of the slot.



6. Take the empty bottle out of the slot.
7. Dispose the bottle as chemical waste according to local regulations.
8. Take a new ink bottle with the same color and shake it well for at least 10 seconds.



IMPORTANT

You must shake a white ink bottle for at least 30 seconds.

9. Place the bottle at an angle in the slot. Push the bottle upright until it clicks in place.



IMPORTANT

Make sure the bottle is aligned with the other bottles. If the bottle is not placed correctly and you use force on the green handle, it can break.

The LED light under the handle slot starts blinking fast, wait until the LED light stops blinking. When the LED light stays on you can continue.



IMPORTANT

When the LED light under the handle starts blinking slowly something is wrong. Do not move the green handle. A message is displayed on the operator panel explaining the issue.

10. Move the green handle back up as far as it will go.

**IMPORTANT**

Do not hold the bottle. In case the handle is resistant, repeat step 9.

The ink will pour out of the bottle. The bottle is locked into place. You can leave the bottle in.

**NOTE**

When it is possible to fill a second bottle, you have to wait 15 minutes. The LED light under the handle will light up again when this is possible.

11. Dispose the gloves as chemical waste according to local regulations.

Replace the maintenance tray

Introduction

Replace the maintenance tray when the system gives a warning.

- The operator panel gives an orange warning when you can replace the maintenance tray.
- The operator panel gives a red warning when you must replace the maintenance tray. The printing process is stopped until you have replaced the maintenance tray.

Video:  [Replace the maintenance tray](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Maintenance tray



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.



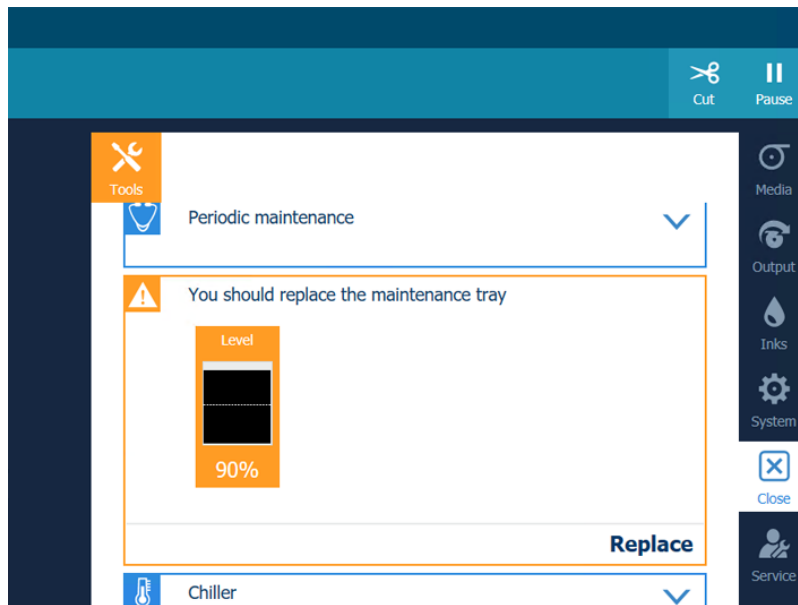
IMPORTANT

Only open the maintenance drawer when the operator panel displays a message allowing you to open it.

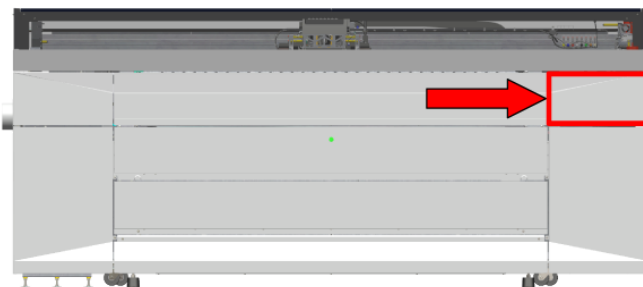
Procedure

1. On the operator panel tap on the [Tools] icon on the right.

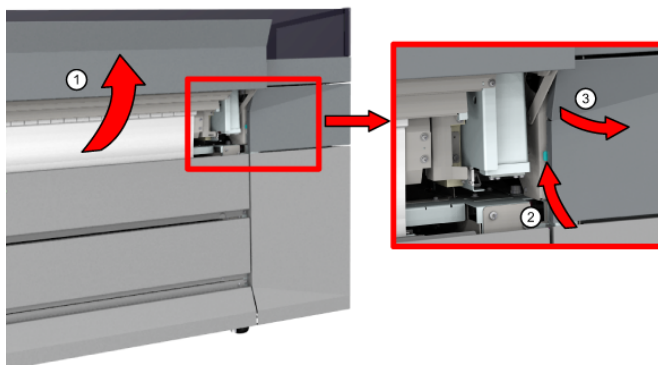
2. Go to [Maintenance tray].



3. Tap on [Replace] and read the instructions.
4. Put on the Colorado M-series approved gloves.
5. Go to the media input side and locate the maintenance drawer on the right.



6. Open the media cover (1) and lift the lever of the maintenance drawer on the right (2).



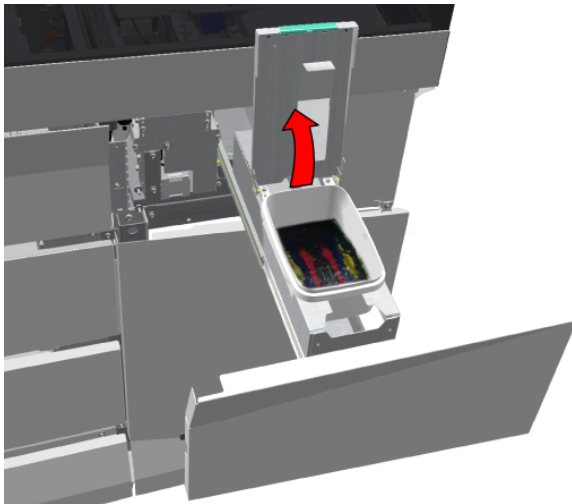
7. Pull carefully to slide the maintenance drawer to the front (3). Make sure to extend the drawer completely.



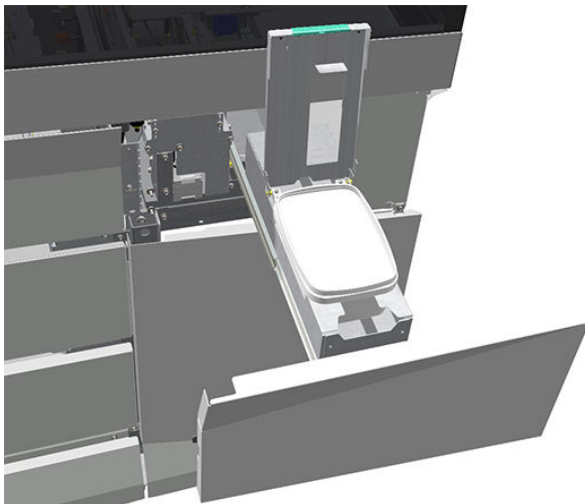
CAUTION

Open the maintenance drawer very carefully to not let the ink splash and spill.

8. Lift the metal holder up.



9. Put the lid on the tray.



10. For both hands, put your thumb on the lid and your other fingers under the side reel. Squeeze to click and seal the lid completely.

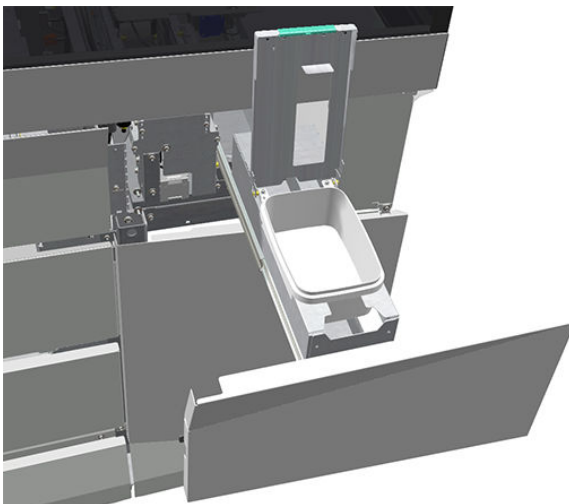


11. Lift the maintenance tray out with both hands on the sides of the tray. Dispose the sealed maintenance tray as chemical waste according to local regulations.
12. Take a lint free cloth and clean the drawer and holder on the inside and outside until all residue ink is gone.
13. Take a new and empty maintenance tray and place it in the maintenance drawer.



IMPORTANT

Do not place the lid on the new maintenance tray, as ink can spill that will damage the machine.



14. Close the metal holder.
15. Dispose the gloves as chemical waste according to local regulations.
16. Push and close the maintenance drawer.

17. On the operator panel tap [Replaced] to confirm you replaced a full maintenance tray with an empty maintenance tray and end the action.

Replace the tissue cassette

Introduction

You can replace the tissue cassette without service assistance.

Video:  [Replace the tissue cassette](#)

- The operator panel gives an orange warning when you can replace the tissue cassette.
- The operator panel gives a red warning when you must replace the tissue cassette.
- You can take out a partially used tissue cassette and place it back later.

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Tissue cassette



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Go to [Tissue cassette].
3. Tap on [Replace] and read the instructions.



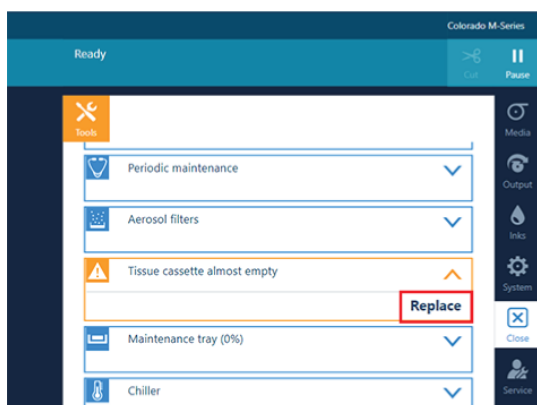
NOTE

In software version 4.0 you do not tap on [Replace]. You must carefully push the printhead carriage to the left in manual maintenance position.

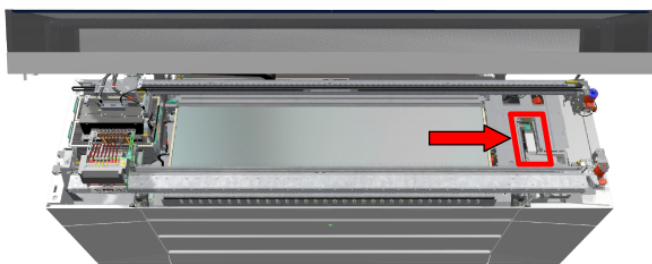


IMPORTANT

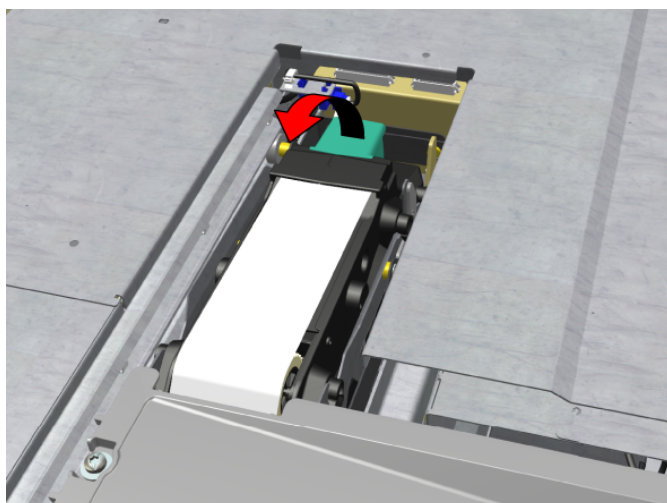
Touch the printhead carriage on the covered area only, otherwise you can damage the printheads.



4. Move to the media input side and wait until the carriage has moved into position.
5. Put on the Colorado M-series approved gloves.
6. Open the top cover.
7. Locate the maintenance station with the tissue cassette on the right hand side.

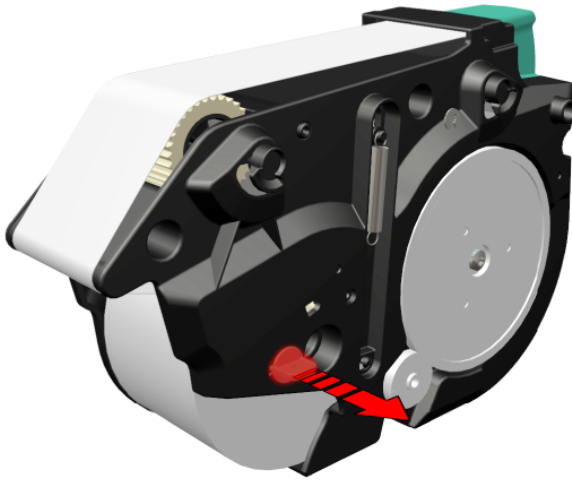


8. Hold the green handle of the tissue cassette between your thumb and index finger. Lift upwards to remove the tissue cassette.

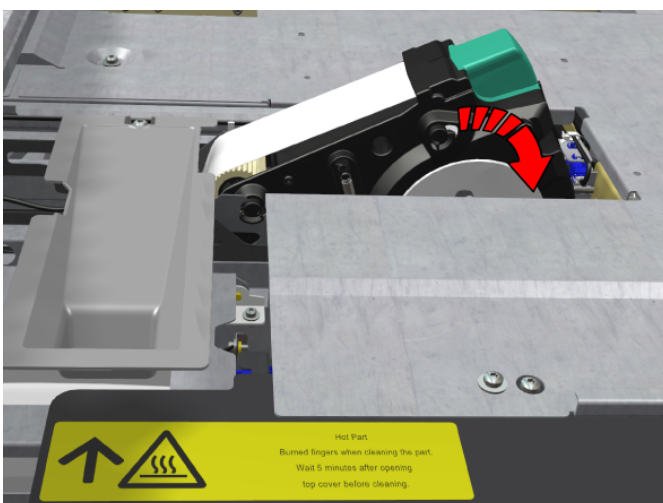
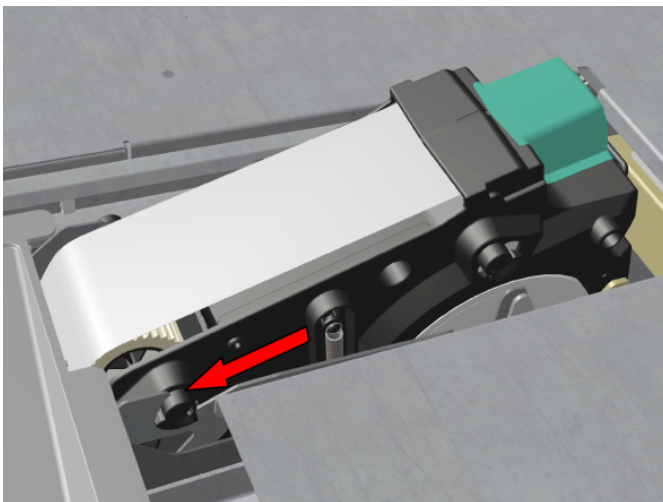


9. Dispose the tissue cassette as chemical waste according to local regulations.
10. Take a new tissue cassette

11. Remove the transport lock from the new tissue cassette.

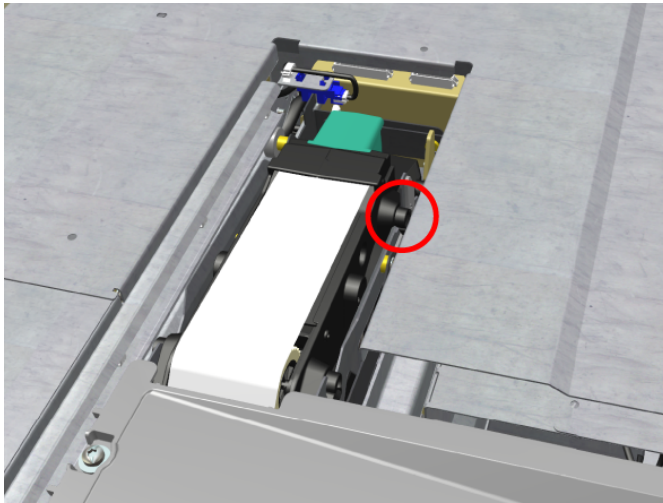


12. Place the new tissue cassette into the slot.

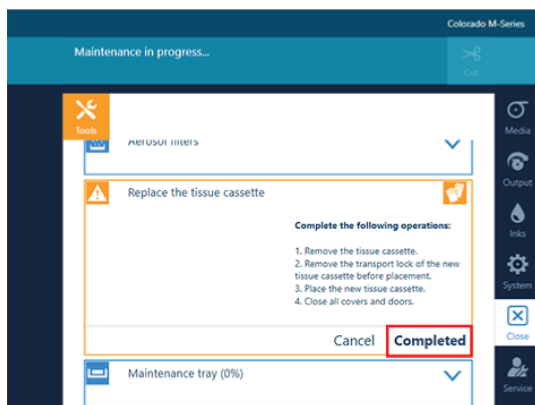


Replace the tissue cassette

Make sure the tissue cassette is fully inserted into the holder.



13. Dispose the gloves as chemical waste according to local regulations.
14. Close the top cover.
15. On the operator panel, tap on [Completed] to end the maintenance action. The counter will be reset.



Replace the knife

Introduction

Replace the knife when the knife does not cut your media correctly anymore.

Video:  [Replace the knife](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Screwdriver (Torx-25) for the cover
- Screwdriver (Torx-6) for the knife
- Knife



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).

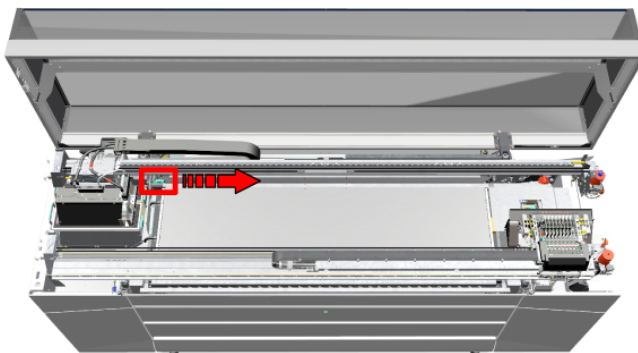


CAUTION

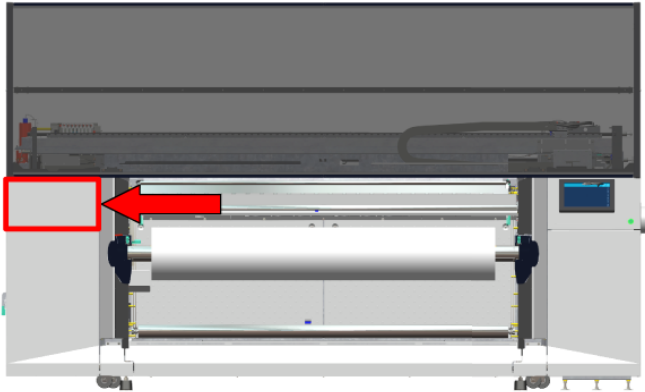
Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

Procedure

1. Open the top cover from the media input side.
2. Put on the Colorado M-series approved gloves.
3. Locate the knife and move it from the left to the right.



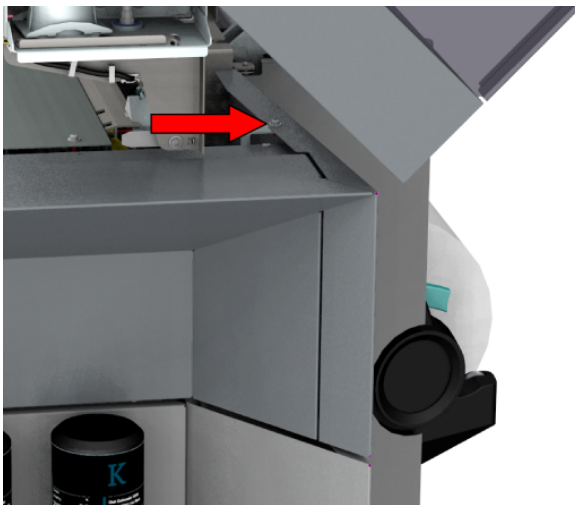
4. Go to the media output side and locate the knife compartment cover on the left.



5. Unscrew the screw on top of the cover with the Torx-25.



CAUTION
Mind your head.



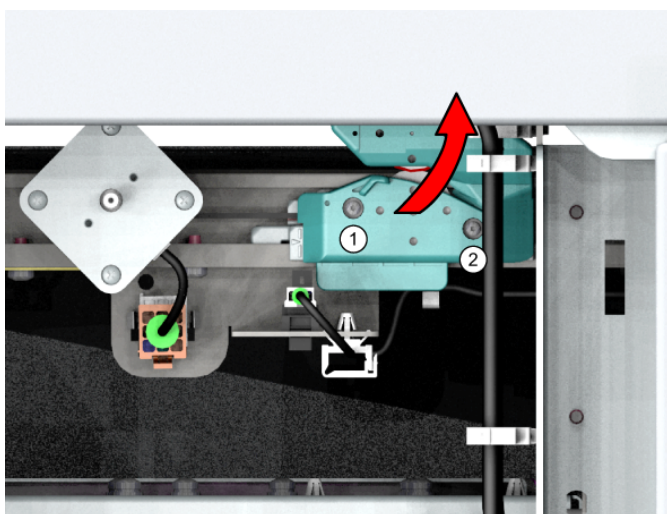
6. Lift the cover up and take it out.



7. Locate the knife in the top right part of the compartment.
8. Unscrew the two screws of the knife (1-2) with the Torx-6.

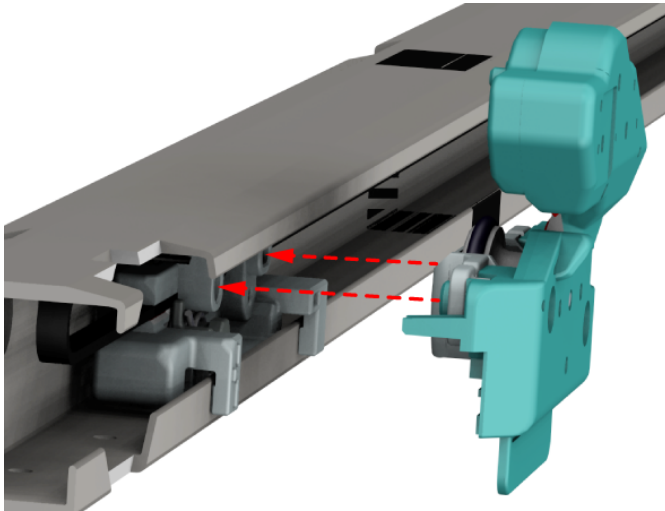
**NOTE**

Hold a piece of paper under the knife to collect any falling screws. This way you make sure you do not lose any of the screws inside the machine.



9. Take the knife out.
Make sure you position the knife in such a way it does not hit the sensor.

10. Place a new knife with the wheel top-first in the rails and let it fall into position. Test to make sure the knife slides well on the rails.



11. Fasten the two screws, hand tight.
12. Place the knife compartment cover back into position.
13. Fasten the screw on top of the cover.
14. Dispose the gloves as chemical waste according to local regulations.
15. Close the top cover from the media input side.

Replace the filters

Introduction

Your printer can be equipped with emission filters or an external exhaust. When the printer is equipped with filters, these filters must be replaced regularly. You can replace the filters without service assistance:

- The operator panel gives an orange warning when you can replace the filters.
- The operator panel gives a red warning when you must replace the filters. The printing process is stopped until you have placed new filters.

Video:  [Replace the filters.](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Filters



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).

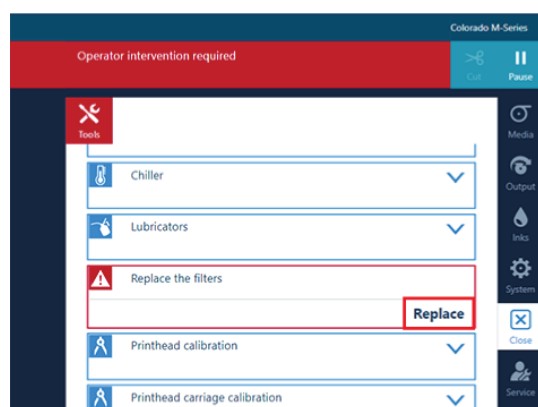


CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

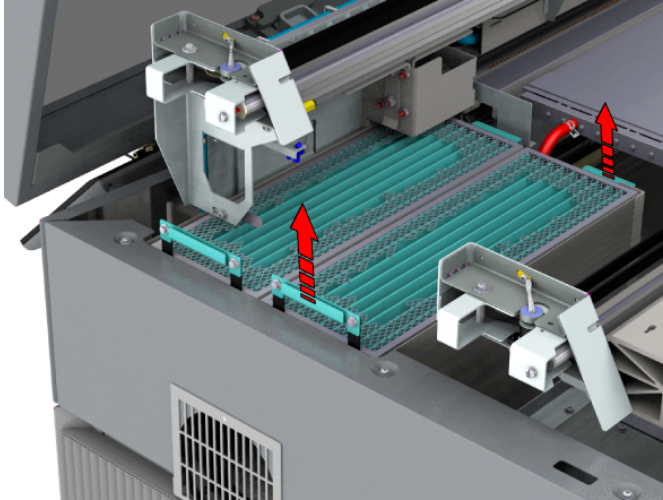
Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Replace the filters].
3. Tap on [Replace] and read the instructions..

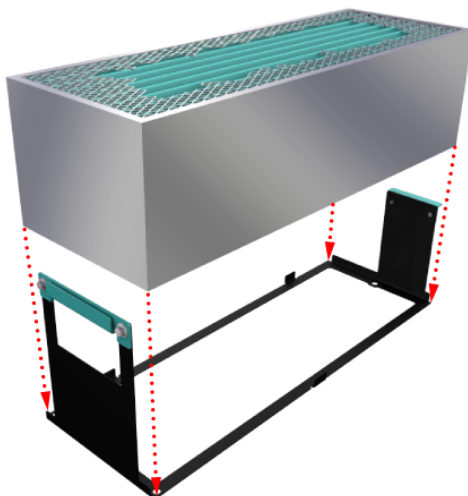


4. Put on the Colorado M-series approved gloves.
5. Open the top cover from the media input side.
6. Locate the filters on the left.
7. Carefully push the curing carriage to the right away from the filters.

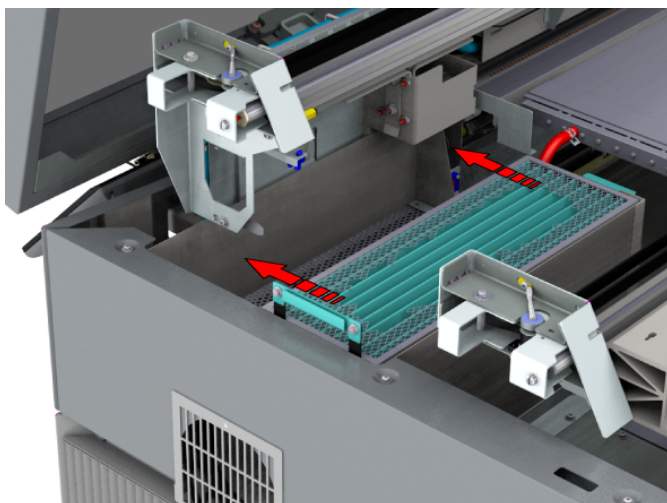
8. Take the front filter box out by the green handles. Place it on a sturdy surface.



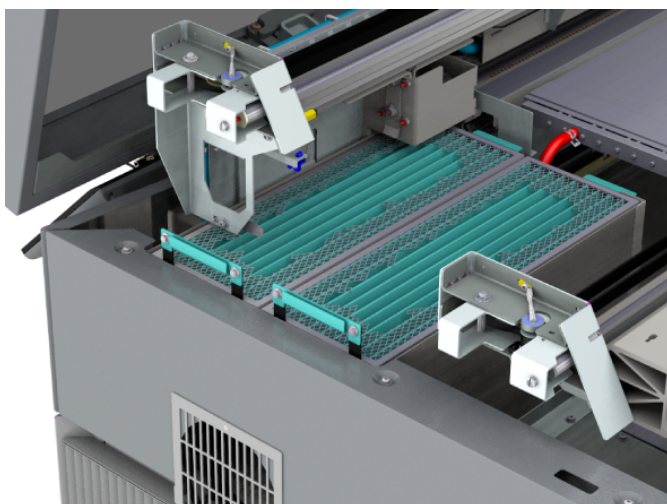
9. Slide the second filter box to the front and take it out by the green handles. Place it on a sturdy surface.
10. Take both old filter boxes out of the frames. Dispose the filter boxes according to your local regulations.
11. Place the new filter boxes in the frames.



12. Pick up the filter box holder by the green handles. Place the box in the filter compartment with the higher handle on the left. Slide it to the back.



13. Pick up the second filter box holder by the green handles. Place the box in the filter compartment with the higher handle on the left.



14. Dispose the gloves as chemical waste according to local regulations.
15. Close the top cover.
16. On the operator panel, tap on [Replaced] to end the maintenance action.

Replace the aerosol filters

Introduction

There are two aerosol filters located on the sides of the printhead carriage. The operator panel gives a warning when you must replace the aerosol filters.

Video:  [Replace the aerosol filters](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Aerosol filters



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials](#) on page 247.

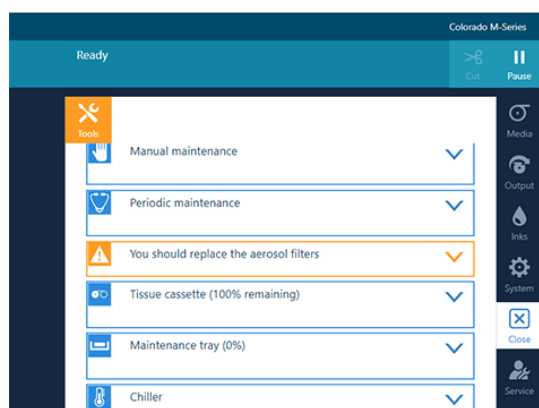


CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

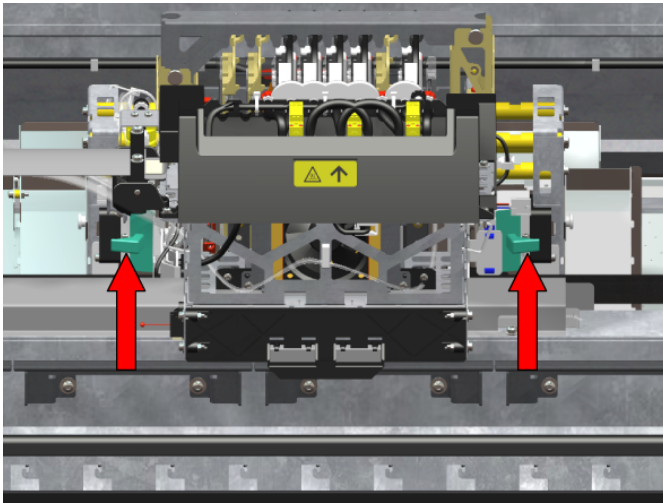
Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Aerosol filters].

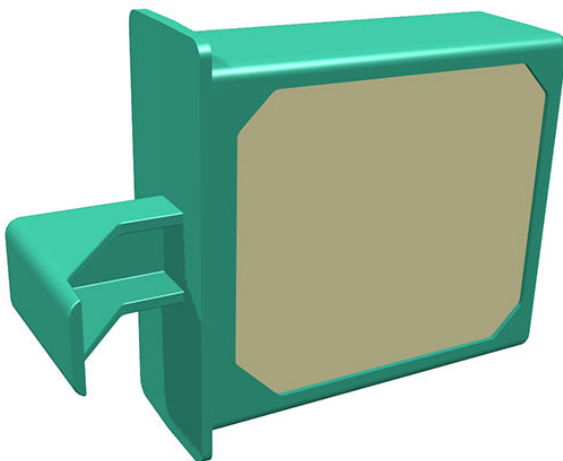


3. Tap on [Replace] and read the instructions.
4. Put on the Colorado M-series approved gloves.
5. Open the top cover of the printer.

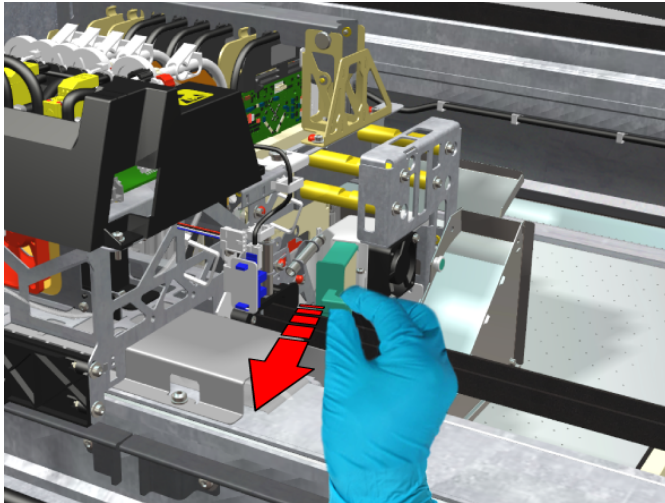
6. Locate the aerosol filters on the sides of the printhead carriage.



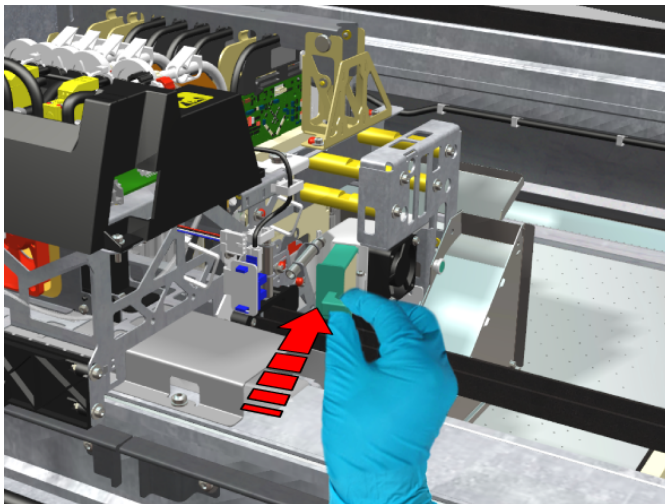
The aerosol filter is attached to a frame. You replace the frame along with the aerosol filter.



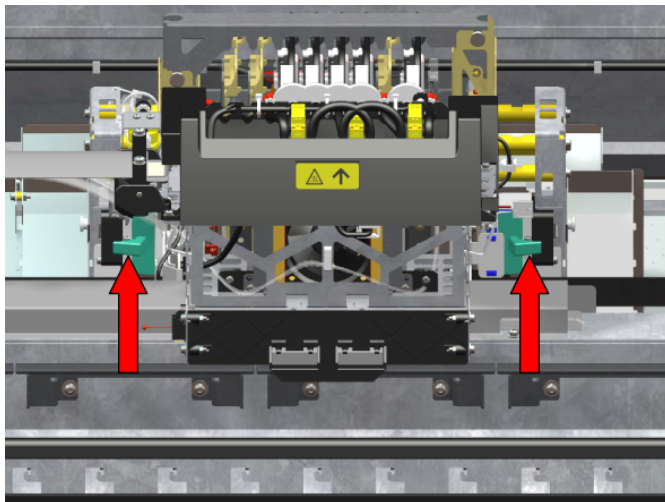
7. Pull the handle of the frame to remove the aerosol filter.
If it is difficult to reach the aerosol filters, you can carefully move the printhead carriage.
Do not touch any other parts while you remove the aerosol filters.



8. Take a new aerosol filter and insert it into the slot. Make sure you feel a subtle click.



The handles of the frames must point outwards.



9. Repeat for the second aerosol filter.
10. Dispose the gloves and used filters as chemical waste according to local regulations.
11. Close the top cover.
12. On the operator panel, tap on [Replaced] to end the maintenance action.

Replace the lubricators

Introduction

You can replace the lubricators without service assistance. The operator panel gives an orange warning when you can replace the lubricators.

Video:  [Replace the lubricators](#).

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Bracket with two lubricators and pins (2x)
- Torx-20 screwdriver
- Lint free cloth (optional)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).

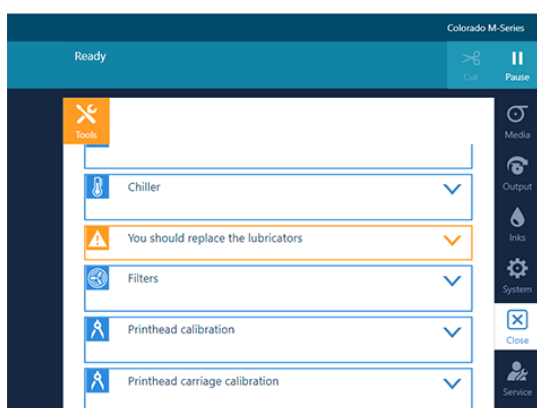


CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [You should replace the lubricators].

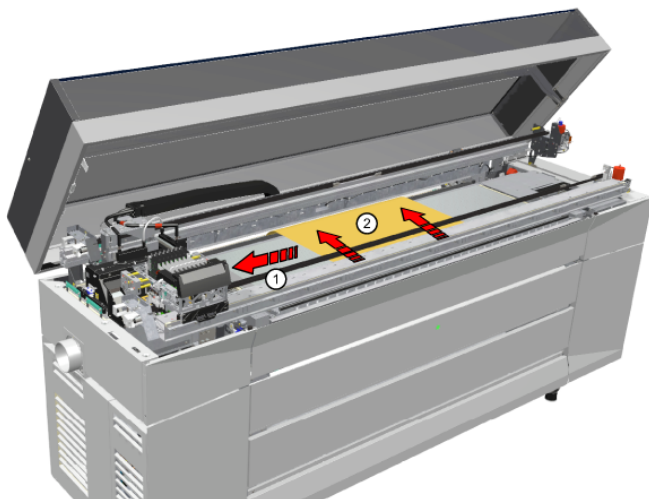


3. Tap on [Replace].
4. Move to the media input side and open the top cover.
5. Put on the Colorado M-series approved gloves.

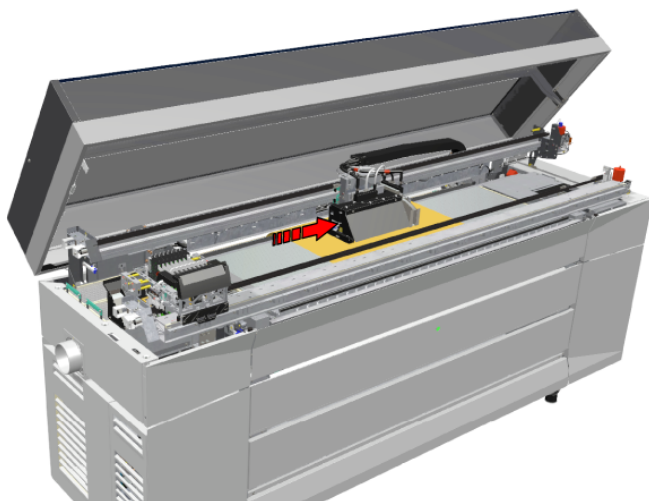
6. Carefully push the printhead carriage to the left in manual maintenance position (1).

**IMPORTANT**

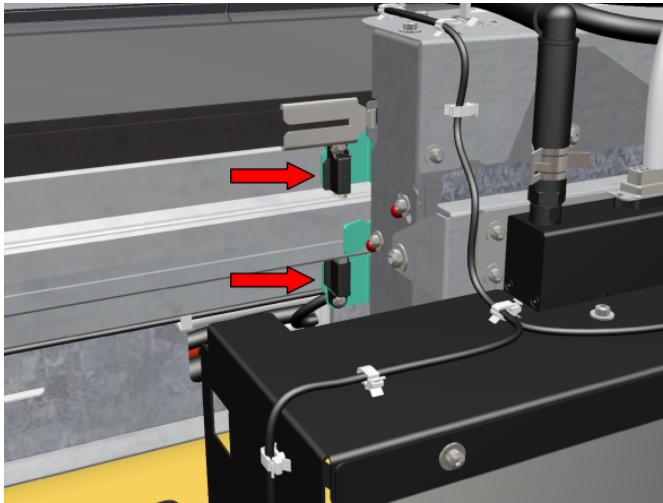
Touch the printhead carriage on the covered area only, otherwise you can damage the printheads.



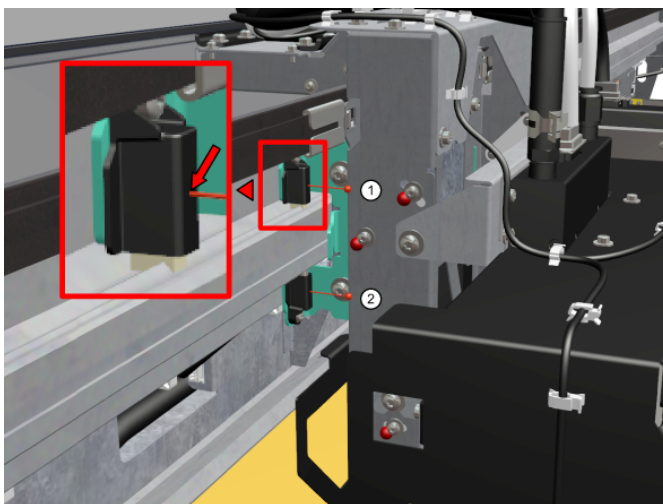
7. Take a piece of paper and place it in the middle of the platen (2).
8. Carefully push the curing carriage to the middle of the platen over the paper. The paper will prevent any loose parts falling into the printer.



9. Locate the lubricators on the left side of the curing carriage.

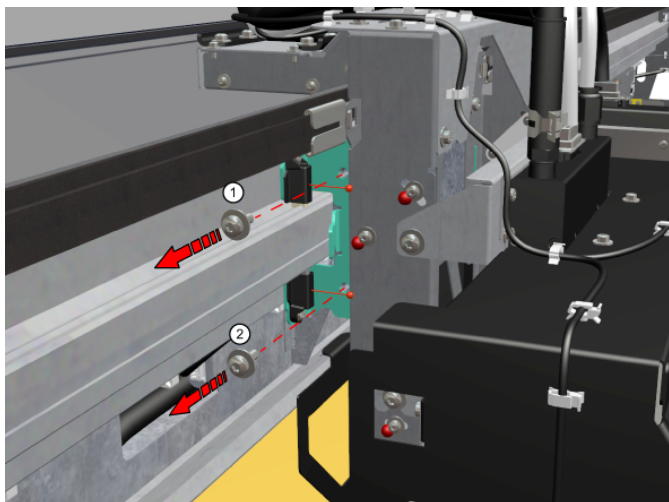


10. Take a pin and place it in the hole of the upper lubricator (1).

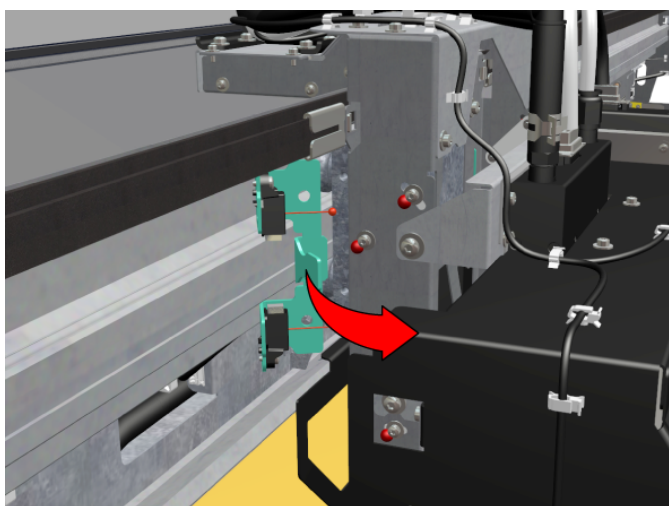


11. Take a second pin and place it in the hole of the lower lubricator (2).

12. Unscrew the two screws (1-2) on the lubricators' bracket with a Torx-20 screwdriver.

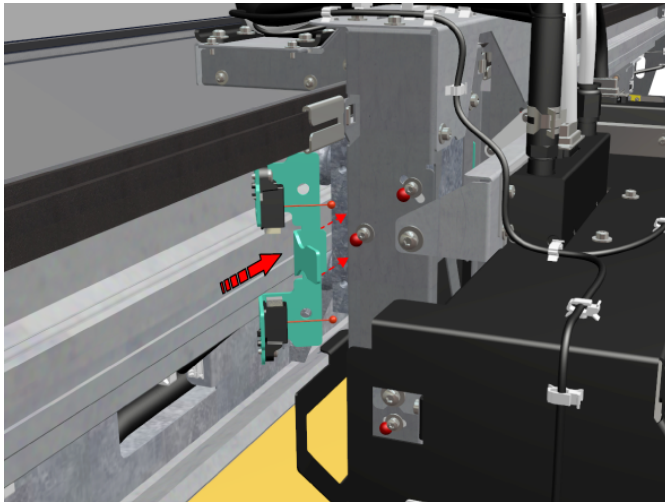


13. Remove the bracket with the lubricators.

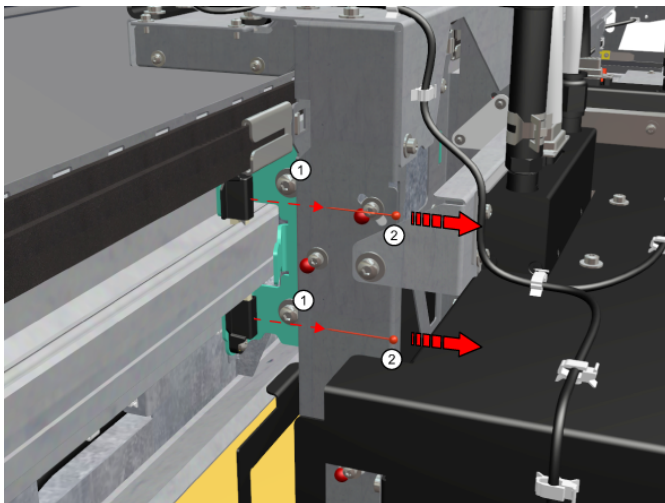


14. Take a new bracket with lubricators and place the two pins in the lubricators' holes.

15. Place the new bracket with the lubricators into position. The bracket should fit into the positioning hole.

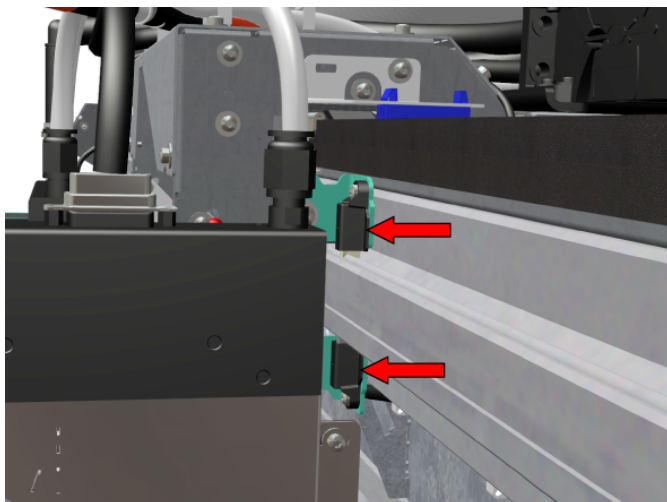


16. Fasten the two screws, hand tight (1).



17. Take the pins out of the lubricators (2).

18. Locate the lubricators on the right side of the curing carriage.

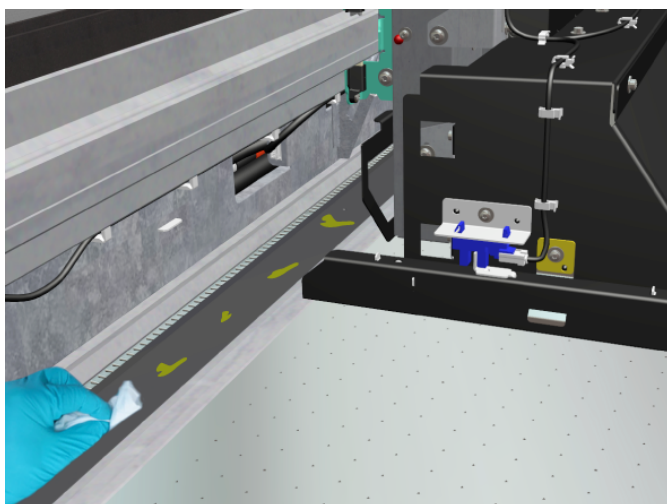


19. Repeat steps 10 to 17.
20. When the lubricators on both sides have been replaced, remove the paper.
21. Dispose the gloves as chemical waste according to local regulations.
22. Close the top cover.
23. On the operator panel tap [Replaced] to confirm you replaced the lubricators and end the action.



NOTE

When you have replaced the lubricators, some oil can drip on the platen and the platen edge. When oil has spilled: open the top cover when the printer is not printing, put on gloves, clean the oil with a lint free cloth and close the top cover again.

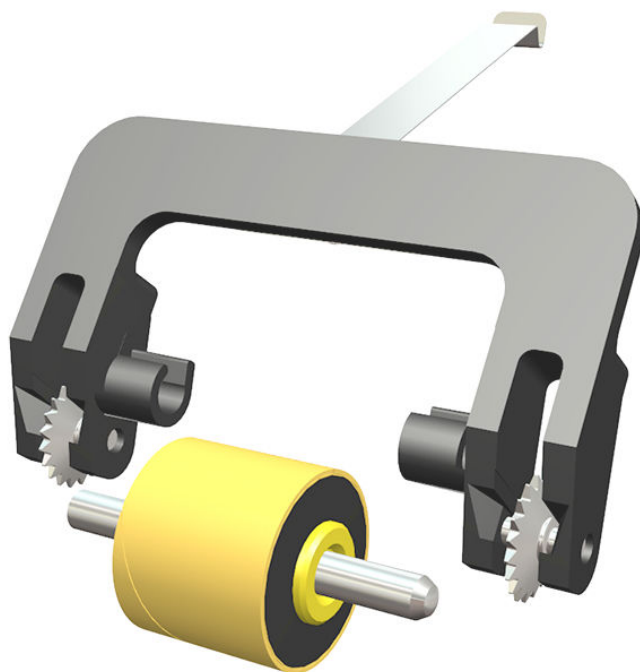


Replace the rollers of the Xtran pinch

Introduction

You can replace the Xtran pinch rollers without service assistance. The total amount of rollers over the full width of the printer is 32.

Video:  [Replace the rollers of the Xtran pinch.](#)



The clamp and the roller with axis

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Xtran pinch rollers, axis and clamps
- Small screwdriver
- Piece of paper (A3)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

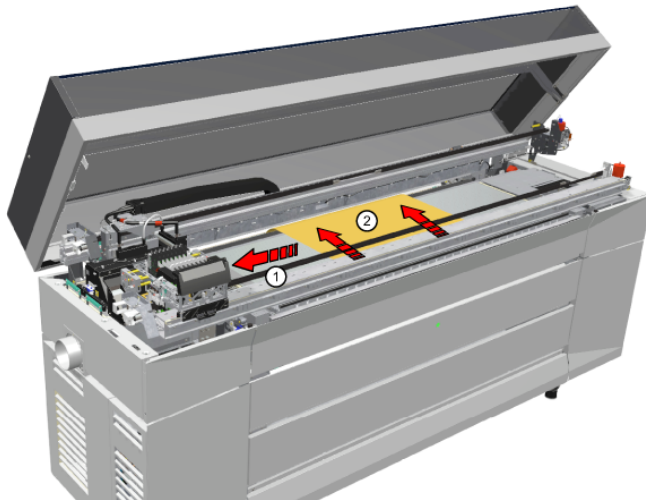
Procedure

1. Move to the media input side and open the top cover.
2. Put on the Colorado M-series approved gloves.
3. Carefully push the printhead carriage to the left in manual maintenance position (1).

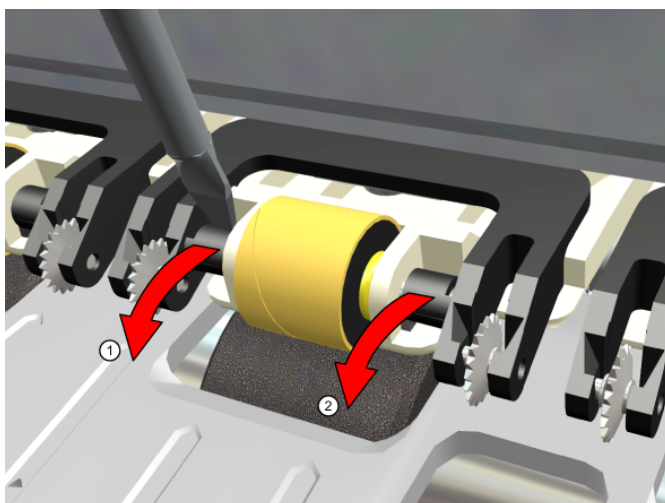


IMPORTANT

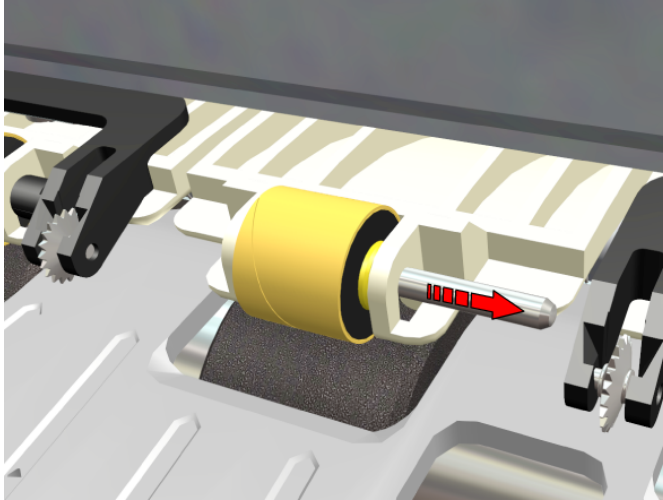
Touch the printhead carriage on the covered area only, otherwise you can damage the printheads.



4. Take a piece of paper and place it under the Xtran roller you want to replace (2).
5. Remove the black clamp from the axis.
Use the small screwdriver to push the black plastic part of the axis on both sides away from the unit.
Only push at the top of the plastic part otherwise you will break the axis holder.



6. Remove the axis from the holder.



7. Remove the roller from the holder.
8. Take the new roller and place it into the holder.
9. Insert the new axis through the holder and the roller.
10. Install the new black clamp onto the axis.
To ease installing the black clamp, lift the roll upwards slightly.
11. Dispose the rollers, axis, clamps and gloves as chemical waste according to local regulations.

Refill the chiller

Introduction

You can refill the chiller without service assistance.

When to do

Refill the chiller when the fluid level is near the bottom of the green zone on the level gauge glass. See [Vacuum the chiller and check the fluid level on page 200](#).

Before you begin

Use Colorado M-series prescribed:

- Demineralized water
- Pouring can
- Screwdriver (Torx-25)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



IMPORTANT

Only refill one liter of demineralized water. When you use more, the liquid can spill and damage the machine.

Procedure

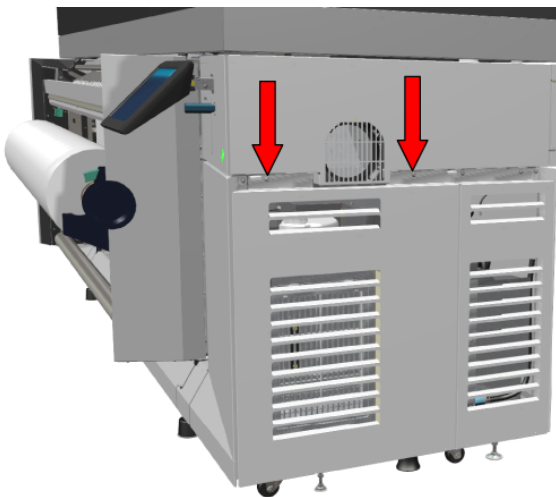
1. On the operator panel, tap on the [System] icon on the right.
2. Tap on [Power management].
3. Tap on [Power off].
The system shuts down.
4. When the system has shut down, switch the power switch to the 'off' position.



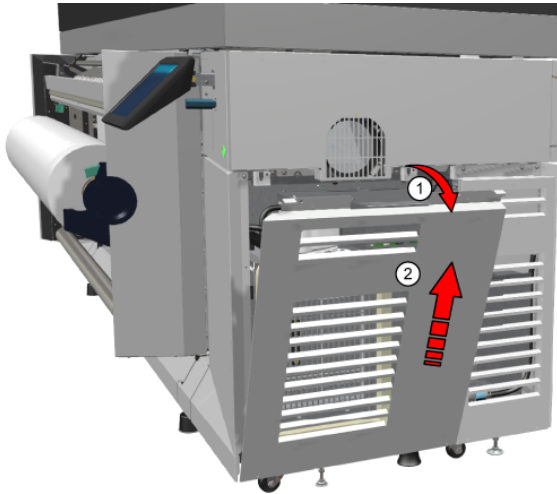
5. Pull out the two power supply plugs from the sockets.



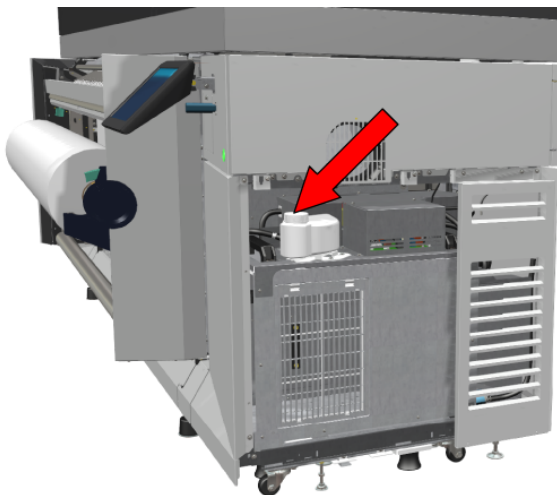
6. Go to the chiller side and locate the cover under the fan.
7. Unscrew the left and right screws on top of the cover with the Torx-25.



8. Lift the cover a little up and towards you (1), then lift it up fully and take it out (2)



9. Locate the lid on top of the chiller.
10. Twist to remove the lid.



11. Pour one liter of demineralized water from the bottle in the pouring can.

**IMPORTANT**

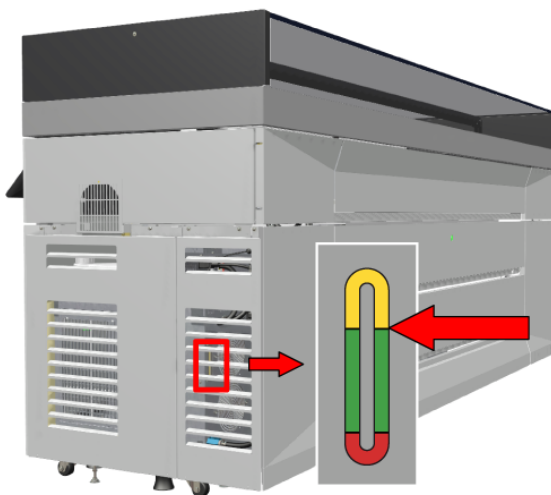
Use demineralized water, do not use any other liquid.

12. Place the pouring can on the chiller and fill the tank with the liquid.



NOTE

Check the level gauge glass to ensure that you do not refill beyond the top of the green zone.



13. Close the lid, twist it on tightly.
14. Place the cover back into position.
15. Fasten the left and right screws on top of the cover.
16. Plug the two power supply plugs back into the sockets.
17. Switch the power switch to the 'on' position.

List of Colorado M-series maintenance materials

Items to order

The items listed below can be requested from your local representative:

Maintenance material	Used for
Prescribed Microflex gloves	Handling Colorado M-series UVgel ink.
Lint free cloth	Cleaning the printer when polluted with ink.
Prescribed Swabs	Cleaning pollution on surfaces such as the outer edge of the matrix plate.
Cleaning liquid (Cleaner MB - methyl benzoate)	Cleaning ink pollution on heated surfaces: the matrix plate only. Used only with swabs.  IMPORTANT This cleaning liquid is not used for any other parts in the printer.
Maintenance tray	Replacing a full maintenance tray.
Tissue cassette	Replacing a tissue cassette.
UVgel ink (CMYK)	Refilling new ink.
Set of foams	Replacing polluted guide plate foams.
Roller assy	Replacing a polluted guide plate roller assy.
Filters	Replacing saturated filters.
Aerosol filters	Replacing aerosol filters.
Bracket with two lubricators and pins	Replacing the lubricators.
Xtran pinch rollers	Replacing the rollers of the Xtran pinch.
Knife	Replacing a blunt embedded knife.
Tension bar	Replacing a tension bar that has been damaged or lost.
Drive gear	Replacing a drive gear that has been damaged on a media shaft.

Items provided once

The items listed below are delivered only once, together with the machine at installation:

Maintenance material	Used for
Screwdriver (Torx-25)	Opening the chiller cover and the knife compartment cover.
Pouring can	Refilling demineralized water in the chiller.

Items to provide yourself

The items listed below you should provide yourself:

Maintenance material	Used for
Cleaning liquid (IPA)	Cleaning ink pollution on non-heated surfaces, such as the platen, maintenance tray, drawer, ink unit, MC scanner, non-heated parts of the maintenance station, etc.  IMPORTANT This cleaning liquid is not used for the matrix plate and heated parts of the maintenance station.
Demineralized water	Refilling the chiller and cleaning the mirrors.
Screwdriver (Torx-6)	Replacing the knife.
Screwdriver (Torx-20)	Replacing a drive gear and a bracket with lubricators.
Knife, pair of scissors	Making a manual cut.
Vacuum cleaner	Vacuuming the chiller.
Compressed air duster	Cleaning the platen.
Wooden picks (2mm)	Cleaning the platen.
Rough lint free cloth	Cleaning the platen.
Scraper	Cleaning the platen.

Chapter 7

Improve quality

General workflow for improving quality

Introduction

Follow the general workflow to solve quality problems and improve the output. The preconditions are that you:

- Have performed maintenance regularly.
Perform automatic and manual maintenance with incidents, and perform periodic maintenance once a month or when the printer requests it. For more information, see [Maintain the print quality on page 176](#).
- Have calibrated the media.
All media types have to be calibrated first. Redo the calibration for every media width. For more information, see [Calibrate the media on page 120](#).
- See a defect in a high pass mode: [High Quality], [Specialty], [Matte Quality], [Matte Specialty], [Backlit] or [Backlit Density].

Do you see or experience...	Solution
a problem only or mainly visible in the 1 st meter?	Perform a media calibration, see Calibrate the media on page 120 .
regular, sharp, light lines?	Perform maintenance including nozzle optimization see Guidelines to maintain the print quality on page 176 .
a gradient within a swath?	Try a slower print mode.
OD banding or lines within the swath boundary?	Clean the platen and the buffer plate, see Clean the platen on page 195 and Clean the buffer plate on page 198 and redo a media calibration.
problems regarding handling or application robustness?	Contact your application specialist or look into the Media Verification Protocol.

Shortcuts into different solution directions

General workflow to solve quality problems

You can stop at any step when the issue is solved.



NOTE

Most important actions are clean the platen and clean the buffer plate.

Procedure

1. [Print a printhead quality check chart on page 252](#) to see if the problem occurs here as well.
2. [Start automatic maintenance on page 180](#)
3. [Start manual maintenance on page 182](#)
4. [Start periodic maintenance on page 184](#).
5. [Change the media settings on page 76](#). Check you used the correct media settings and media category in the RIP (e.g. [Media thickness]).
6. [Calibrate the printhead on page 255](#)
7. [Calibrate the media on page 120](#)

8. [Calibrate the printhead carriage on page 257](#)
9. [Print a printhead quality check chart on page 252](#) again, and [Analyze the printhead quality check chart on page 254](#)

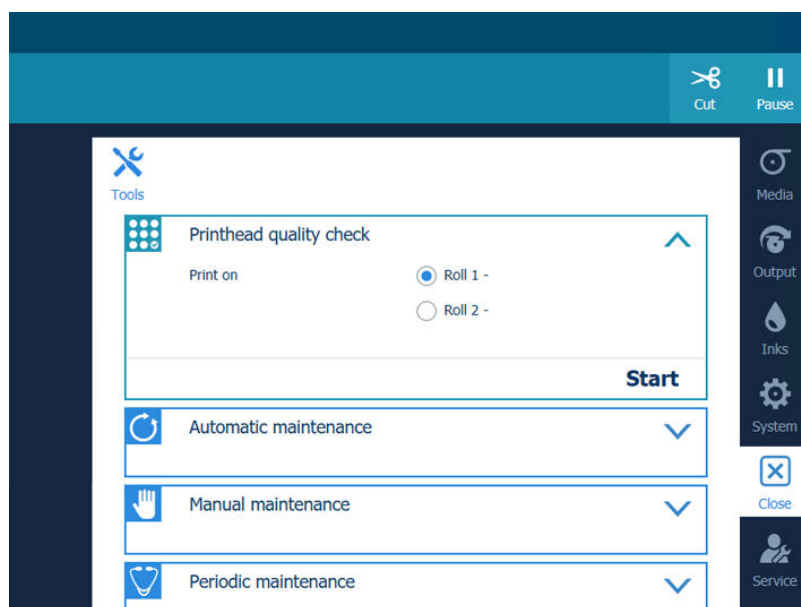
Result

In case the problem remains, use the printhead quality check chart to identify the issue and try to solve that specific quality problem. For more information, see [Solve specific quality problems on page 333](#).

Print a printhead quality check chart

Introduction

Print a printhead quality check chart to check your quality and identify any quality issues. If a problem is visible on the chart, you can change the necessary settings to optimize the quality.



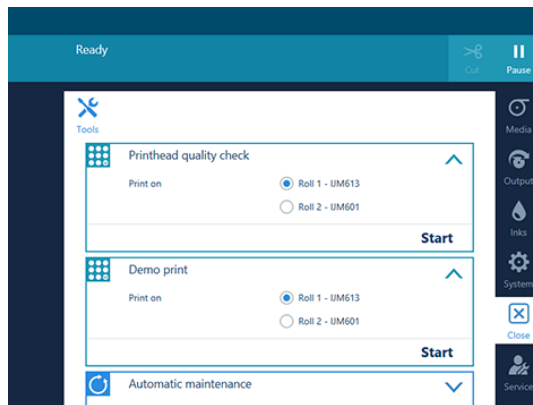
Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Printhead quality check].
3. Select a roll to print the check chart on.
4. Tap on [Start].
The printer prints the check chart.
5. Check the quality of the chart. For more information, see [Analyze the printhead quality check chart on page 254](#).

Print a demo print

Introduction

Print a demo print to see the quality of the output.



Procedure

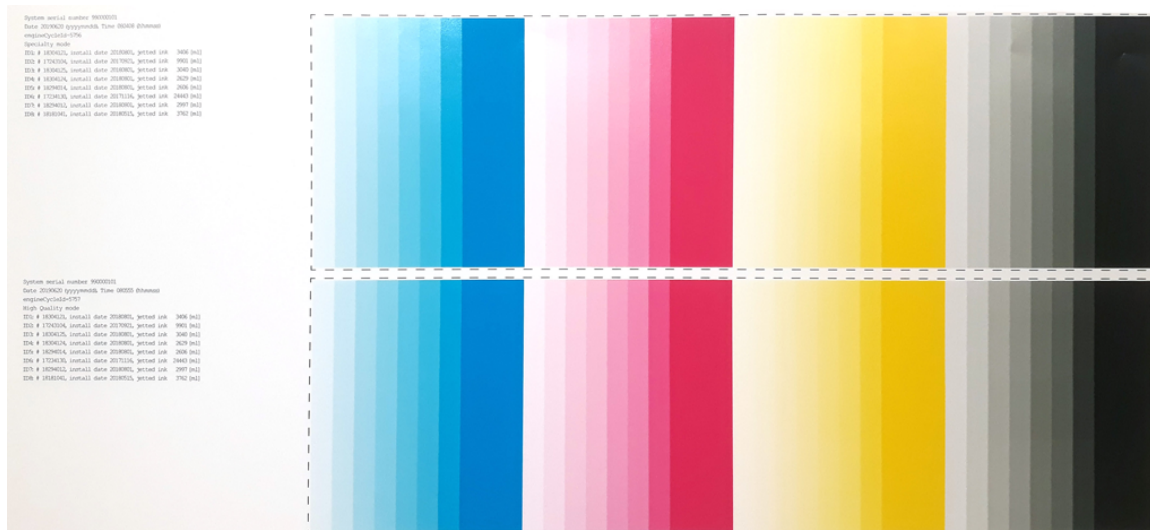
1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Demo print].
3. Select a roll to print the demo print on.
4. Tap on [Start].
The printer prints the demo print.
5. Notice the quality of the demo print.

Analyze the printhead quality check chart

Introduction

When you have printed the printhead quality check chart, analyze the chart to help you solve your quality problem.

Printhead quality check chart



Each area can indicate a quality problem. Use the chart to identify your problem and solve it:
[Solve specific quality problems on page 333.](#)

Calibrate the printhead

Introduction

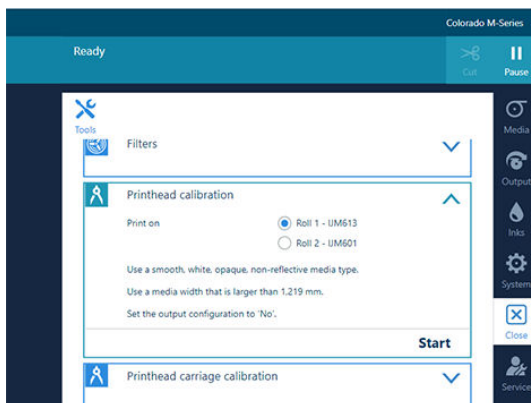
When you are unsure about the density of colors on your printed output, you can optimize the printhead performance. Perform a printhead calibration when you want to optimize colors.

When you enable [Automatic nozzle optimization] the printer will create a test print on which each individual nozzle will print a pattern. Failing nozzles are compensated by other nozzles for all print jobs, which results in an optimum print quality.



NOTE

- You can only perform printhead calibration when you print without winding. For more information, see [Print without winding on page 139](#).
- You have to use a media width that is larger than 1270 mm (50 inch).
- You have to use a media type that can be used for printing without winding.
- You have to use a smooth, white, opaque, non-reflective media for the printhead calibration of one of the following categories:
 - Heavy paper > 200 gsm (54 lb bond)
 - Paper 120-200 gsm (32-54 lb bond)
 - Film
 - Polymeric & cast self-adhesive vinyl
 - Thick film > 200 um (0.0079 inch)



Procedure

1. On the operator panel tap on the [Tools] icon on the right.
2. Tap on [Printhead calibration].
3. Select the roll you want to use for calibration.
4. Tap on [Start].

The printer performs the calibration.



NOTE

The calibration can take quite some time, around 30 minutes. Wait until the printer is finished with the calibration. When the active job disappears and [Start] is no longer greyed out, the calibration is finished.

After you finish

The calibration can be successful or it can fail.

When a message appears that the calibration has failed, perform printhead calibration again.

When the calibration fails again, perform automatic maintenance three times without automatic nozzle optimization. For more information, see [Start automatic maintenance on page 180](#).

Perform printhead calibration again.

When the calibration is still not successful, contact your local Service representative.

Calibrate the printhead carriage

Introduction

When your image is blurred or fuzzy the registration can be off. Calibrate the printhead carriage to align the registration.

Before you begin

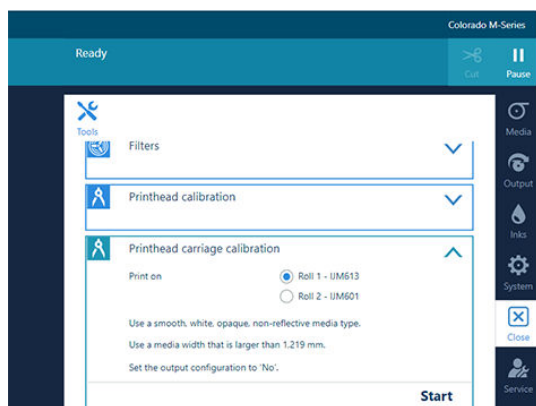
First perform the following actions to try and solve your problem, before you calibrate the printhead carriage:

1. Check if you have filled in the correct [Media thickness] in the RIP's media settings. For more information, see [Change the media settings on page 76](#).
2. Perform media calibration. For more information, see [Calibrate the media on page 120](#).



NOTE

- You can only perform printhead calibration when you print without winding. For more information, see [Print without winding on page 139](#).
- You have to use a media width that is larger than 1270 mm (50 inch).
- You have to use a media type that can be used for printing without winding.
- You have to use a smooth, white, opaque, non-reflective media for the printhead calibration of one of the following categories:
 - Heavy paper > 200 gsm (54 lb bond)
 - Paper 120-200 gsm (32-54 lb bond)
 - Film
 - Polymeric & cast self-adhesive vinyl
 - Thick film > 200 um (0.0079 inch)



Procedure

1. Load the correct media type. For more information, see [Load a media roll \(position 1\) on page 89](#).
2. On the operator panel tap on the [Tools] icon on the right.
3. Tap on [Printhead carriage calibration].
4. Select the roll you want to use for calibration.
5. Tap on [Start].
The printer performs the calibration.



NOTE

The calibration can take quite some time, around 40 minutes. Wait until the printer is finished with the calibration. When the active job disappears and [Start] is no longer greyed out, the calibration is finished.

Chapter 8

Configure the network and security settings

Configure the network

Introduction

At installation, the printer is connected to the network and connectivity settings are made.

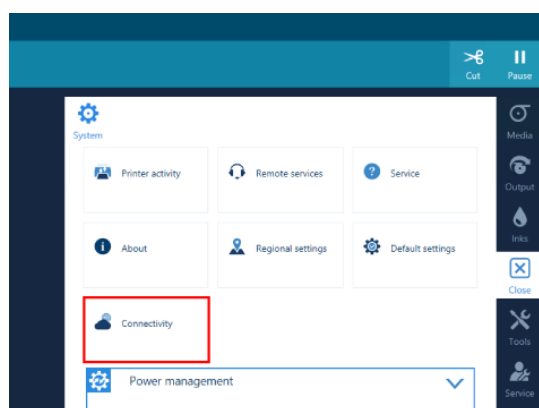
If necessary, you can change the network configuration settings on the user panel.

Network overview

Action	Connection via
The printer receives jobs from the RIP workstation	RAW TCP/IP (port 9100)
The printer connects via the internet with the back office	HTTPS (port 443)
The printer connects to the mail server for password recovery and to inform the administrator of security updates and new software versions.	SMTP (port 25 by default, can be changed)
You can access the settings editor	HTTP (port 80) or HTTPS (port 443 by default, can be changed)
	 NOTE HTTPS requires a valid certificate.

Procedure

1. On the operator panel, tap on the [System] icon on the right.
2. Tap on [Connectivity].

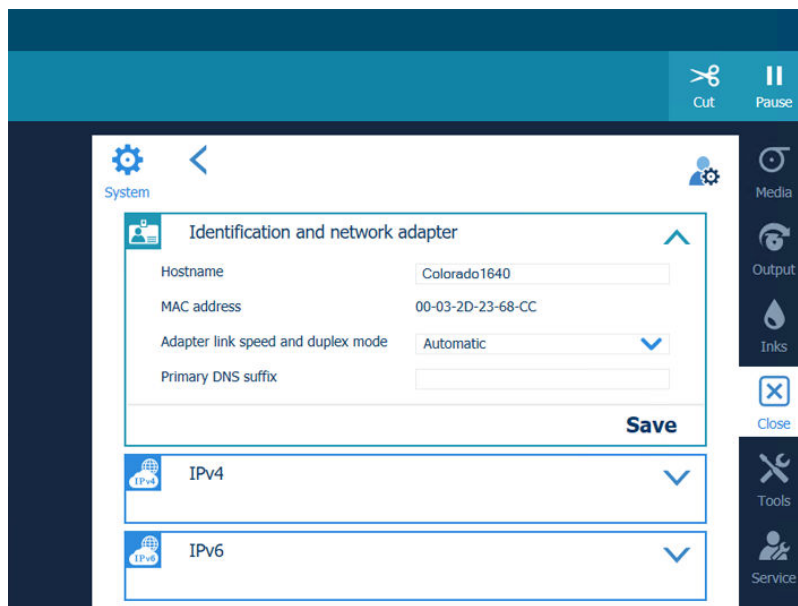


3. Tap on [Identification and network adapter]. You can change the [Hostname], [Adapter link speed and duplex mode] or [Primary DNS suffix].



NOTE

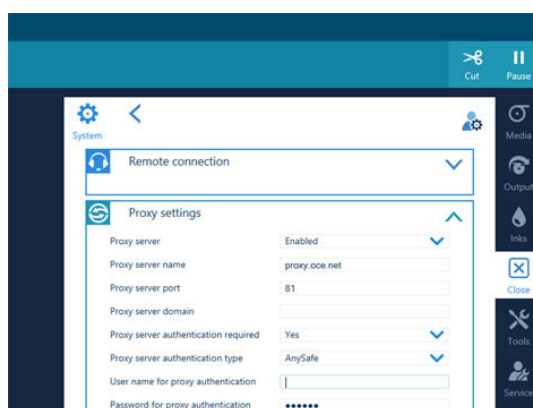
You have to log in as System administrator to change the settings. For more information, see [Log in as a System administrator on page 263](#).



4. Tap on [IPv4] to change the TCPIP v4 parameters.
5. Tap on [IPv6] to change the TCPIP v6 parameters.
6. Tap on Save to save the settings. It is recommended to restart the engine to make sure the settings are activated.
7. Tap on the [Back] arrow.
8. Tap on [Remote services]. One of the settings you can change are the [Proxy settings].

**NOTE**

A proxy may be required to access the internet and make use of Remote services. Ask your IT administrator for the settings, if he does not know them use the default values.



9. Tap on [Save] to save the settings.

Configure remote assistance

Introduction

Enable and configure remote assistance to give the service organization access to your system. The service technician is then able to operate your system and provide assistance remotely. Remote assistance is by default disabled and is limited to 172 hours.

Procedure

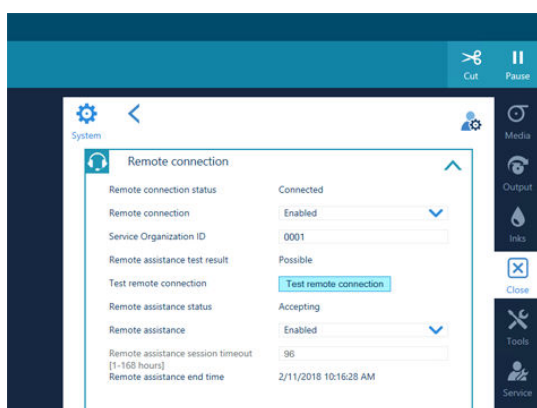
1. On the operator panel, tap on the [System] icon on the right.
2. Tap on [Remote services]→[Remote connection].



NOTE

You have to log in as System administrator to change some settings. For more information, see [Log in as a System administrator on page 263](#).

3. Next to [Remote assistance], tap on the arrow and select [Enabled].



4. Tap on the box next to [Remote assistance session timeout [1-168 hours]] and fill in the time in hours you want the remote assistance session to automatically end.
5. Tap on [Save].
6. Tap on [Remote connection]→[Test remote connection].
7. Next to [Remote assistance test result] you can see whether the connection was successfully established.



NOTE

- When you cannot connect remote assistance, contact your local Service representative.
- Since a remote assistance session is established via a point to point connection, only this specific system and none of the other systems at your site can be reached.
- Disable the remote connection when you want to terminate the connection with the service organization. Then you are always in control.

Log in as a System administrator

Introduction

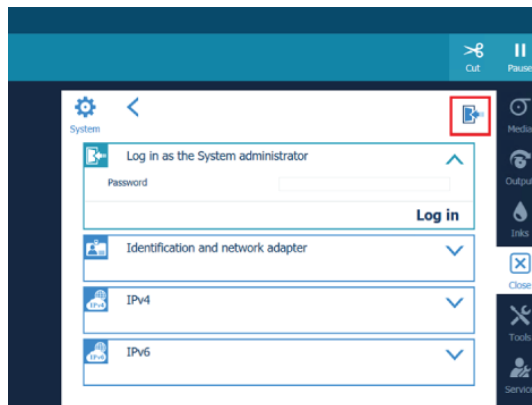
The System administrator settings are password protected. You have to log in as System administrator on the operator panel or in the settings editor to be able to change the system administrator settings.

Before you begin

The default System administrator password is 71617000. It is highly recommended to change it during system installation or immediately after. For more information, see [Change the System administrator password on page 268](#).

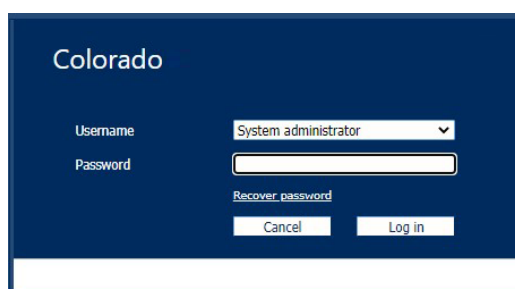
Log in on the operator panel

1. On the operator panel, tap on the [System] icon on the right.
2. Tap on any of the tiles, for example on [Connectivity].
3. Tap on the login icon at the top right of the window.



4. Fill in the password and tap on [Log in].

Log in on the settings editor



1. Open the settings editor.
2. Click on [Visitor] in the top right corner.
3. Click on [Log in], select System administrator as [user name] and fill in the [password].
4. Click on [Log in].

Or,

1. Open the settings editor.

2. Click on a System administrator setting you want to change.
3. Select the System administrator as [user name] and fill in the [password].
4. Click on [Log in].

Open the settings editor

Introduction

Next to the settings on the operator panel, you can create settings for connectivity and security in the settings editor of the printer.



NOTE

You can make some connectivity and security settings on the operator panel, for more information see [Configure the network on page 260](#).

The screenshot shows the 'Colorado' settings editor. The top navigation bar includes 'Preferences', 'Configuration', and 'Support'. The 'System settings' section is active, showing a list of settings categorized into 'Regional settings', 'Energy save modes', and 'Wake-up timers'. Each category has an 'Edit' button.

Setting	Value
Regional settings Edit	
Language	English (US)
Date and time	07 Feb 2018 09:11:12
Time zone	(UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
NTP client	Disabled
NTP server name	time.windows.com
Test NTP server connection	Start the test
System of measurement	Metric
Energy save modes Edit	
Automatic wake-up	Enabled
Automatic shutdown	Enabled
Wake-up timers Edit	
Wake-up Monday	Yes
Wake-up time Monday	07:00
Shutdown Monday	Yes
Shutdown time Monday	22:00

Access the settings editor

Access the settings editor via any web browser, by typing in the printer's:

- IP address, or
- Hostname

Configure time synchronization

Introduction

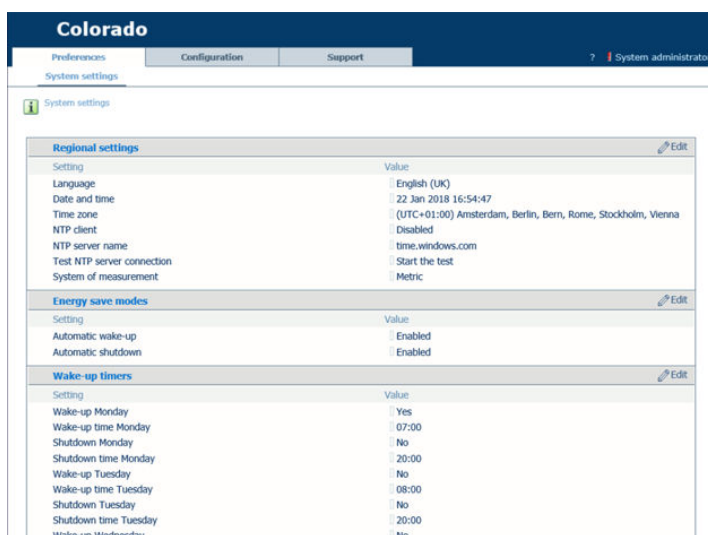
You can enable the time synchronization to connect the Colorado M-series to a certified time server. Then, the printer is set automatically on the correct date and time.

Before you begin

Ask your IT administrator for the name of the NTP server the printer has to connect to for time synchronization. The default value is [time.windows.com].

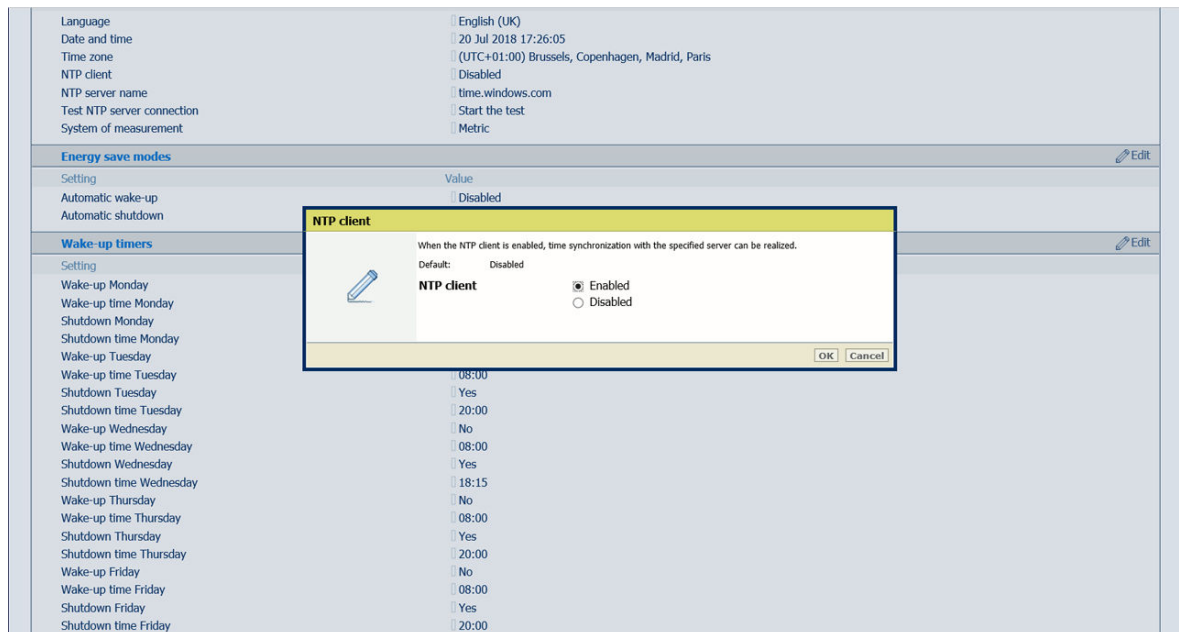
Procedure

1. Open the settings editor.
2. Click on [Preferences].

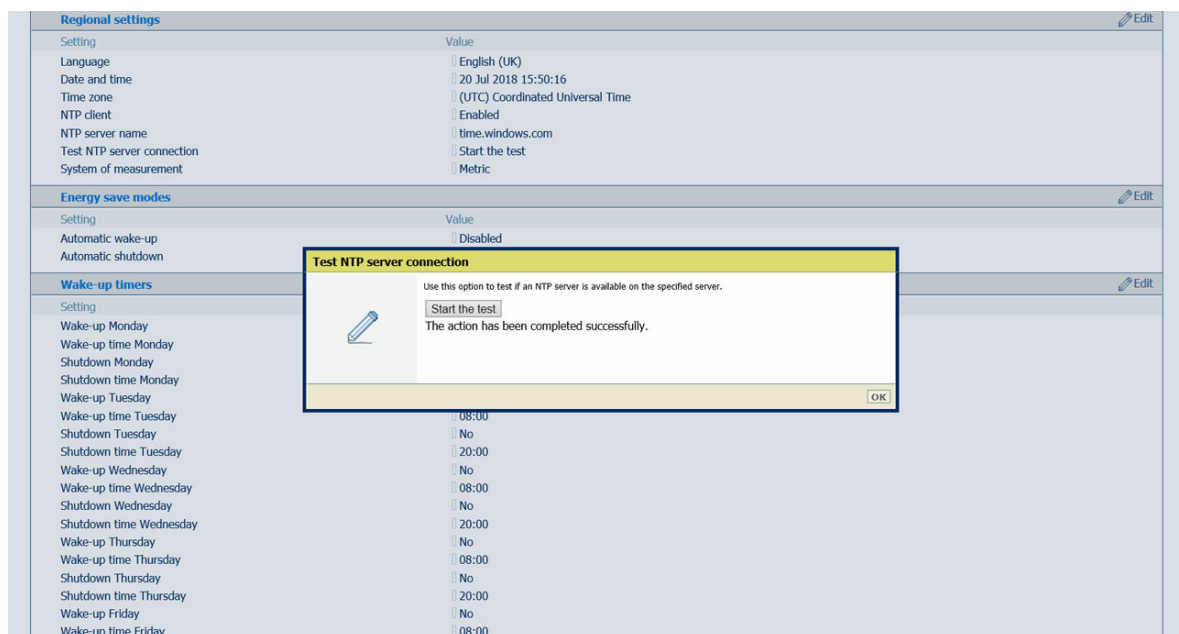


3. Click on the value next to [NTP client]. A window opens.

4. Select [Enabled] and click on [OK].



5. Click on the value next to [NTP server name]. A window opens.
6. Fill in a valid IP address or domain name and click on [OK].
If you do not know the server name, ask your IT administrator.
7. Click on [Start the test] next to [Test NTP server connection]. A windows opens.
8. Click on [Start the test].



9. Check that the result of the test is successful and click on [OK].
When the result is not successful, make sure the server name is correct. If you cannot solve the problem, ask your IT administrator.

Change the System administrator password

Introduction

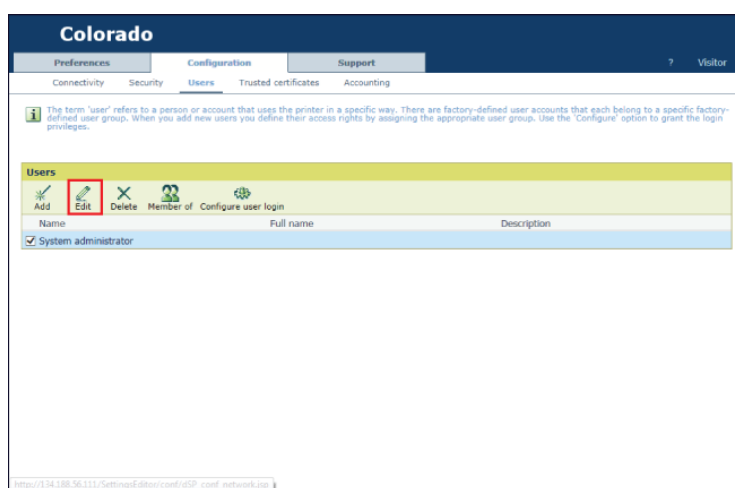
For security reasons it is advised to change the System administrator password during installation or immediately after. Next to that, you should change the password periodically.

Before you begin

Log in as System administrator in the settings editor.

Change the password

1. Open the settings editor.
2. Click on [Configuration] → [Users].
3. Check the box in front of [System administrator] and click on the [Edit] icon above.



4. In the window, fill in [Password] and [Confirm password] with your new password.
5. Click [Ok] to save the password.

Reset the System administrator account

It is also possible to reset the System administrator account and go back to the default values. Click on [Configuration] → [Security] → [Restore factory-defined account values] and click on [Ok]. A password prompt will pop up. It is possible to send a recover email. The mail server must be configured to be able to do this.

Configure a mail server for password recovery and notifications

Introduction

When you have forgotten your System administrator password you can recover it, but only when you have configured an email server first.

The email address is also used to send a notification email when security updates and system updates are available.

When to do

Make sure you configure the mail server as soon as possible, otherwise you cannot recover your password or send security updates.

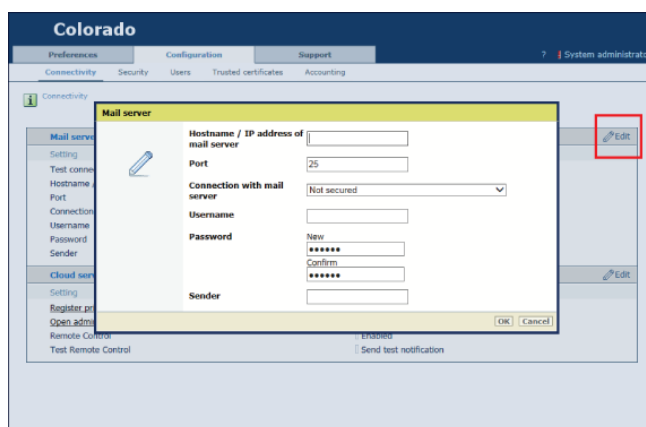
Before you begin

Make sure you collect the following information before you begin. If you do not have the information, ask your IT administrator.

- Hostname of the mail server
- The port used for the mail server
- Type of mail server connection: secured or not
- In case of a secured connection: the username and password
- The email address you want to use to receive the password recovery link
- If necessary, change the mail server port number (default 25)

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Connectivity].
3. Click on [Edit] in the [Mail server] header. A window opens.



4. Under [Hostname / IP address of mail server] fill in the hostname or IP address of the mail server.
5. Under [Port] you can change the port, generally TCP 25 for SMTP protocol.
6. Under [Connection with mail server] select the type of connection. If you do not know the type of connection, ask your IT administrator.



NOTE

It is strongly advised to secure the communication between the controller and the mail server, in order to avoid anyone to intercept the password recovery email.

7. In case of a secure connection, fill in the username under [Username].
If you do not know the username, ask your IT administrator.
8. In case of a secure connection, fill in the password under [Password].
If you do not know the password, ask your IT administrator.
9. Under [Sender] fill in the name that will be used in the "From" box in your email application.



NOTE

This is not your email address.

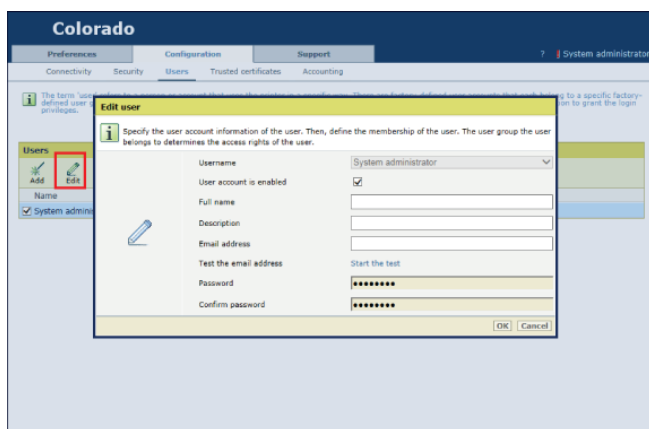
10. Click on [Ok].
11. Click on [Connection test].



NOTE

The result has to be [Ok] before you can continue to the email address configuration. When the result is not [Ok], check the error to troubleshoot. For more information, see [Troubleshoot the mail server configuration on page 272](#).

12. Click on [Configuration] → [Users] to configure the email address.
13. Check the box in front of [System administrator] and click on the [Edit] icon above. A window opens.



14. Fill in the [Email address] you want to use for password recovery.
15. Click on [Start the test].
16. Check that [Result of email test] shows [Test successful].



NOTE

When the result is not successful, check the error to troubleshoot. If you cannot solve the problem, ask your IT administrator.

17. Open the email in your email application and check if you have received a test email.
The email is sent by 'noreply@<colorado_hostname>' or by the name filled in under [Sender].

Result

When you have received the test email, you have configured the email server correctly and you can recover your System administrator password when necessary.

Troubleshoot the mail server configuration

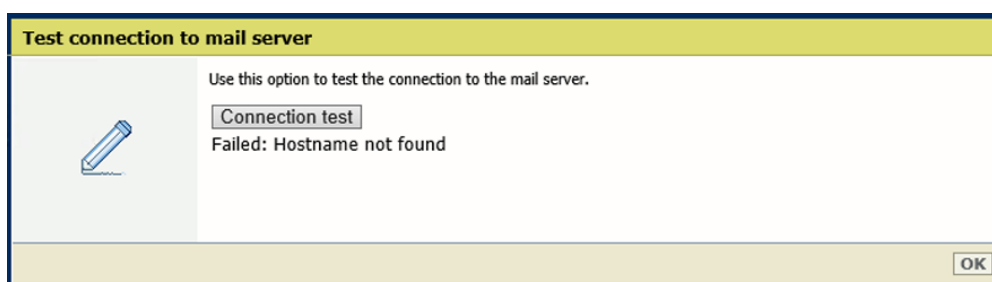
Introduction

Follow the procedure below to troubleshoot any mail server configuration problems.

When to do

When in the settings editor, under [Configuration] → [Connectivity], you click on [Connection test] and the result is not [Ok].

Troubleshoot error messages



Error	Troubleshoot
[Hostname not found]	Hostname or IP address is incorrect. Check the hostname and IP address and fill it in correctly. If you are not sure ask your IT administrator.
[Transfer aborted]	1. Check if the connection with the mail server is secure or not. Check the type of connection and fill it in correctly. 2. The trusted certificates of the mail server are not imported in the controller. Import the certificates. For more information, see Import a trusted certificate on page 276.

After you finish

If you cannot solve the problem ask you IT administrator for help.

Recover the System administrator password

Introduction

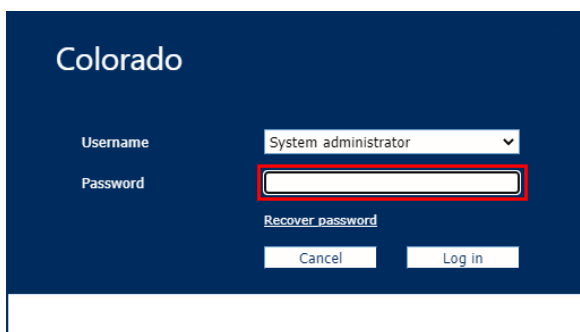
When you have forgotten your System administrator password you can recover it. You can only recover your System administrator password via the settings editor.

Before you begin

You have to configure an email server first, so an email with a special link for password recovery can be sent to you. For more information, see [Configure a mail server for password recovery and notifications on page 269](#).

Procedure

1. Open the settings editor.
2. Click on [Visitor] in the top right corner.
3. Click on [Log in] and select the [user name].
4. Click on [Recover password].

The screenshot shows a login window titled "Colorado" with a dark blue background. It contains two input fields: "Username" with a dropdown menu showing "System administrator" and "Password" with a text box. Below the password field is a link labeled "Recover password" and two buttons: "Cancel" and "Log in". A red rectangle highlights the password field and the "Recover password" link.

5. Click on [Ok] to let the system send an email to you with the recovery link.
6. Open your email and click on the link.
A new recovery window opens.
7. Fill in the new password, confirm the new password and click on [Ok].
The new password is configured and can be used to log in.

Security in the system

Introduction

The Colorado M-series is equipped with a Windows 10 IoT Enterprise LTSC operating system with the following security features:

- OS patches are released by Canon Production Printing via the ORS (On Remote Service) environment. In case ORS is connected Security updates are published to the engine automatically.
Automatic download and installation of OS patches can be configured by the System Administrator in the settings editor.
- OS patches released by Canon Production Printing via <https://downloads.cpp.canon>.
- Several settings protected by the System administrator password on the operator panel and settings editor.
- A secured System administrator password recovery process, in case of loss.
- IPv6
- Data encryption (HTTPS) on the network for administration.

Ports and Protocols

The Colorado M-series uses the following ports and protocols:

Incoming connections	Used for
TCP port 9100	TCP RAW printing, between the RIP and the printer.
TCP port 80	HTTP for settings editor. HTTP for communicating with the RIP to sync media types or monitor the printer status.
TCP port 443	HTTPS for secure settings editor.  NOTE You can change the default value 443.

Outgoing connections	Used for
TCP port 443	HTTPS for connection to On Remote Service, to retrieve updates of the Technical Service Manual (TSM) on the printer.
TCP port 25	SMTP protocol to connect to the customer's mail server when the system administrator password is recovered.  NOTE You can change the default value 25.
UDP port 123	NTP protocol for time synchronization with a time server.

Certificates overview

Introduction

There are two kinds of certificates:

- Trusted certificates
- Identity certificates

Trusted certificates

Trusted certificates allow the controller to recognize Root and intermediate certificates that may be sent by :

- The mail server, with secure communication via HTTPS, when configuring or using it for System administrator password recovery.
- The proxy server, during communication with the back office, when Remote Service communication is enabled.

Identity certificates

Identity certificates are required to allow a browser to establish a HTTPS connection with the controller for access to the settings editor.

Actions

You can:

- Import trusted certificates used by your company. Ask the IT administrator. For more information, see [Import a trusted certificate on page 276](#)
- Enable the use of a HTTPS protocol, by requesting and uploading a certificate. For more information, see [Enable the use of HTTPS on page 277](#)

Import a trusted certificate

Introduction

Your company can use trusted certificates to secure communication with a mail server or a proxy server. When this is the case, you must import the certificates in the settings editor to make sure the controller recognizes them.

Before you begin

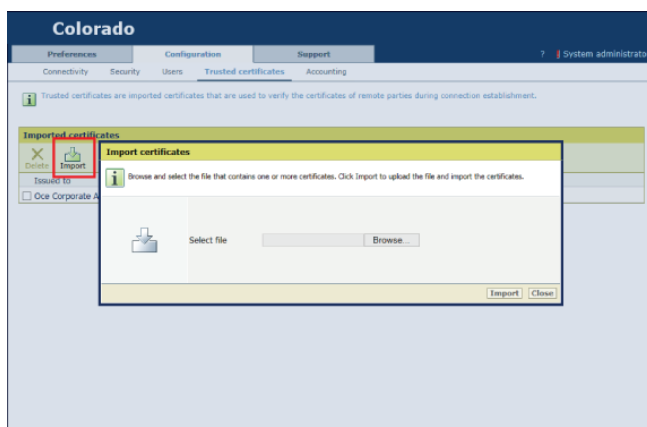
Ask your IT administrator, if there are:

- Intermediate and root certificates used to access the mail sever, e.g. in case of a secure connection via SSL/TLS.
- Intermediate and root certificates used to access any proxy for Internet access.

In case any of these certificates are used make sure you get them from your IT administrator.

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Trusted certificates].
3. Click on the [Import] icon.



4. Click on [Browse...] and select the certificate file.
5. Click on [Import].

Enable the use of HTTPS

Introduction

You can enable the use of HTTPS to establish a secure communication between a browser and the controller for the settings editor access.



NOTE

Make sure before you start the procedure you receive the required specific information about the settings and key exchange technologies from your IT department.

To enable the use of HTTPS you have to install a valid identity certificate on the controller. In order to do this you have to:

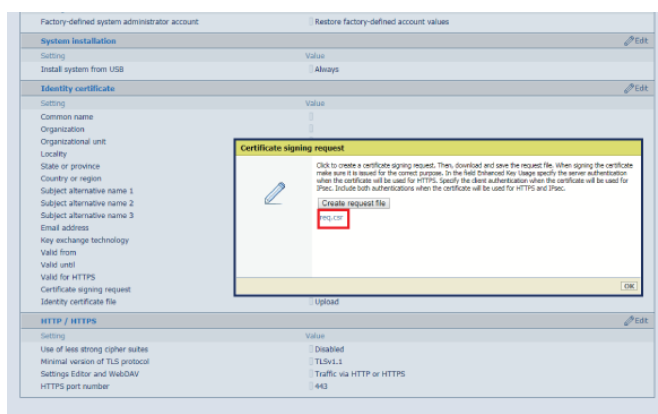
1. Make a certificate request on the controller
2. Receive a valid certificate from the certificate request
3. Upload the valid certificate on the controller

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Security].
3. Click on [Edit] in the [Identity certificate] header.

4. Fill in the information for the certificate request:
 1. Fill in the fully qualified domain name of the printer under [Common name].
 2. It is advised to fill in the alternative names (e.g. hostname or IP address) to guarantee access to the printer from any browser.
5. Click on [Ok].
A new window opens.
6. Click on [Create request file].
A line with [req.csr] appears under the button.

- Click on [req.csr] to download the file and save it.



- Create a backup to save the private key generated during the certificate request. For more information, see [Make a backup on page 287](#).
- Use the certificate request file to get a valid certificate.



NOTE

Get a valid certificate from a Certification Authority (e.g. Thawte, Symantec, Comodo etc.) or ask your IT administrator to get one from your company.

- Click on [Configuration] → [Security].
- Click on [Upload].
A new window opens.
- Click on [Browse...] and select the valid certificate file.
- Click on [Upload].
A new window opens.
- Click on [Ok] to restart the system.
A 'failed' or 'success' window appears.
- Restart the printer. For more information, see [Restart the printer on page 317](#).
It is advised to make a new backup, which includes the complete valid certificate with the private key.

Result

You can now use a browser and access the settings editor via HTTPS: <https://<hostname>>. Where hostname is the common name or one of the three alternative names filled in.

You can find the protocol (HTTPS only/ HTTP or HTTPS) used for access to the settings editor under [Configuration] → [Security]. Note that WebDAV is not used for the Colorado M-series.

Troubleshoot the use of HTTPS

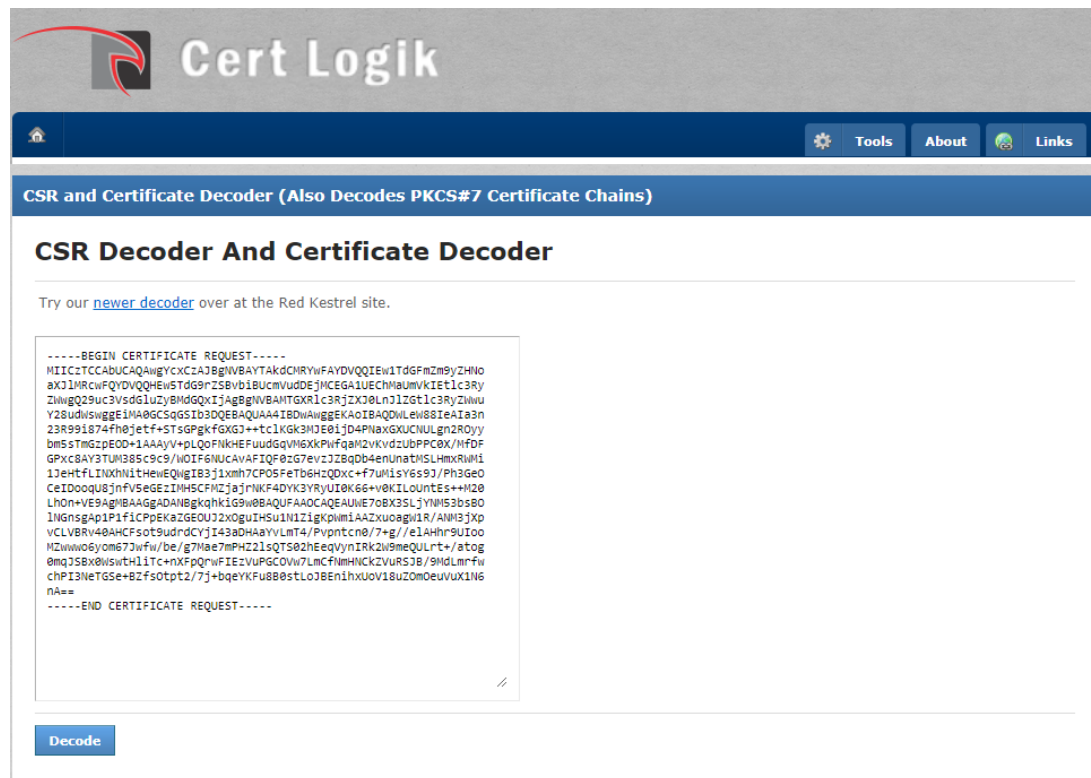
Introduction

When enabling the use of HTTPS fails, it can be caused by a PKCS7 certificate which is not supported by the printer. When you want to solve this problem:

1. First check if the valid certificate you are using is a PKCS7 certificate.
2. If so, follow the workaround to troubleshoot the problem and enable the use of HTTPS.

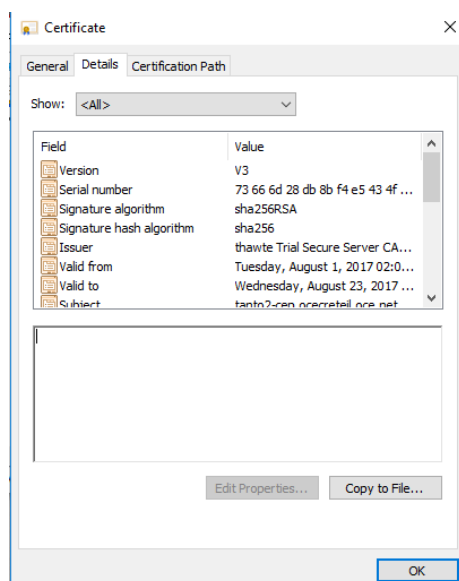
Procedure

1. Open <https://certlogik.com/decoder/>
2. Copy the text of the valid certificate. You got the valid certificate when you tried to enable the use of HTTPS before, for more information see [Enable the use of HTTPS on page 277](#).
3. Paste the text in the decoder field.



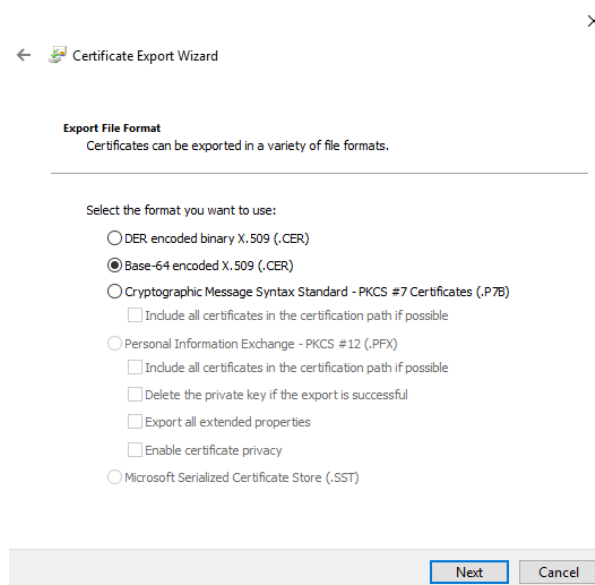
4. Click on [Decode].
5. Check in the [Check] field if it is a valid PKCS7 certificate.
6. In case of a valid PKCS7 certificate, select the certificate on your computer and rename the extension to '.p7b'.
7. Doubleclick on the certificate. The 'certmgr' application opens.
8. Doubleclick on your certificate. A new window opens.

9. Click on [Details] → [Copy to file] → [OK]. A wizard opens.

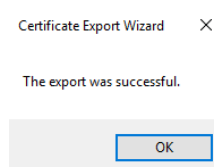


10. Click on [Next].

11. Select [Base-64 encoded X.509 (.CER)] and click on [Next].



12. Click on [Finish] and check that the export is successful.



13. Continue the new valid certificate installation at step 12 of [Enable the use of HTTPS on page 277](#).

Change the HTTPS security settings

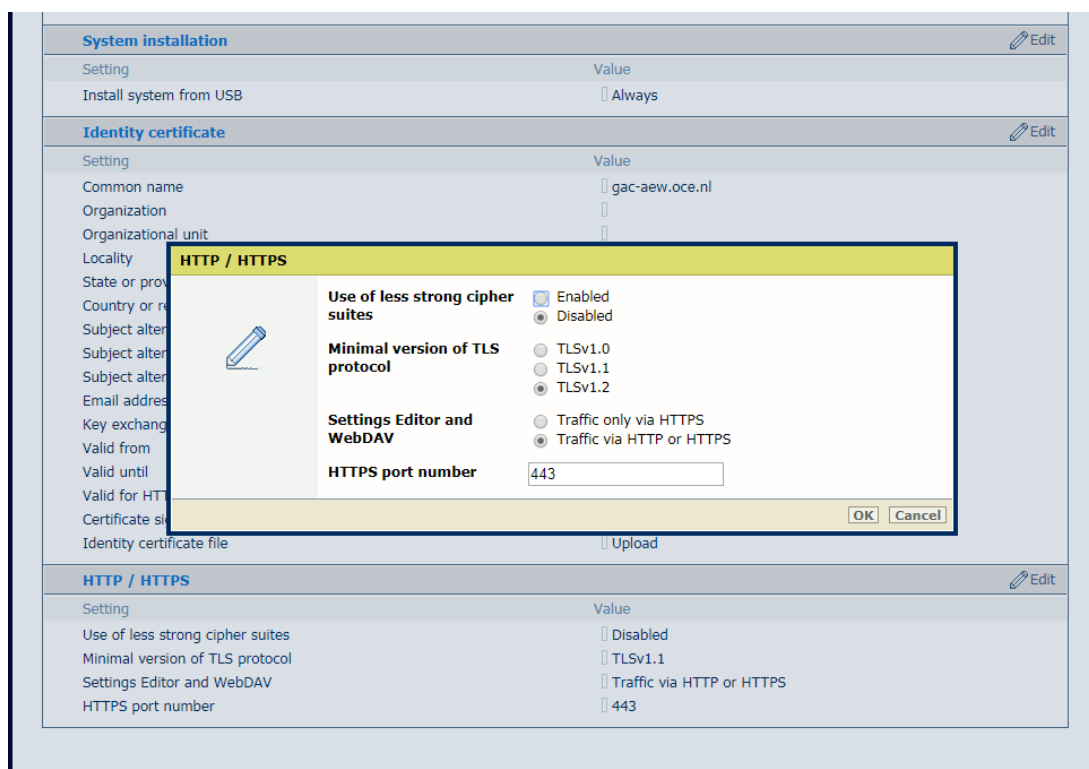
Introduction

You can change the default HTTPS security settings to best fit your configuration.

Illustration

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Security].
3. Click on [Edit] in the [HTTP/HTTPS] header.



4. The [Use of less strong cipher suites] setting is by default disabled to secure data communication, which is suitable for recent browsers. If you want to use older browsers or HTTPS clients, you can change the setting to [Enabled].
5. The [Minimal version of TLS protocol] setting is by default set to [TLSv1.2]. [TLSv1.2] is a stronger protocol and [TLSv1.0] is weaker. You can change the setting to the minimum security protocol that fits your security requirements. It is also possible to use a lower protocol to allow communication with older browsers or HTTPS clients.
6. Click on [OK] to save the settings.

Configure PRISMAsync Remote Control

Introduction

When you want to use the PRISMAsync Remote Control app to monitor the Colorado M-series the System administrator has to configure the right settings first.

Before you begin

Make sure:

- You have System administrator rights.
- The proxy settings are configured correctly.
- The remote connection is enabled and tested.

For more information, see [Configure the network on page 260](#)

- You have created a Microsoft or Google email account that you can use as an administrator account for PRISMAsync cloud services. It is advised to use a dedicated administration account for all printers and applications using PRISMAsync cloud services.

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Connectivity].

The screenshot shows the PRISMAsync configuration interface. The top navigation bar includes 'Preferences', 'Configuration', and 'Support'. The 'Configuration' tab is active, and the 'Connectivity' sub-tab is selected. The interface displays two main sections: 'Mail server' and 'Cloud service', each with an 'Edit' button. The 'Mail server' section contains settings for testing the connection, hostname, port (set to 25), connection security (set to Not secured), username, password (masked with ****), and sender. The 'Cloud service' section contains settings for registering a printer, opening the administration portal, and enabling PRISMAsync Remote Control (currently set to Disabled) with a 'Send test notification' option.

Setting	Value
Mail server Edit	
Test connection to mail server	☐ Connection test
Hostname / IP address of mail server	
Port	25
Connection with mail server	☐ Not secured
Username	
Password	****
Sender	
Cloud service Edit	
Register printer for cloud service	☐
Open cloud service administration portal	☐
PRISMAsync Remote Control	☐ Disabled
Test PRISMAsync Remote Control	☐ Send test notification

3. Click on the value next to [PRISMAsync Remote Control]. A window opens.
4. Select [Enabled] and click on [Ok].
5. Click on [Register printer for cloud service]. A new page opens.
6. Log in with your Microsoft or Google administrator account. A new page opens.
7. Fill in the printer name you want to connect to and click on [Add]. Here you can also remove printers.

8. Under [Add a new cloud service user] fill in the email addresses of the users of the PRISMAsync Remote Control app and click on [Add]. Here you can also remove users.

**NOTE**

Via settings editor, [Configuration] → [Connectivity] → [Open administration website] you can always log in with your administrator account and add or remove printers and users.

9. Once the printer is added and the requested users are added, you can click on [Log out].

After you finish

Test if PRISMAsync Remote Control is working well: [Test PRISMAsync Remote Control on page 284](#).

Test PRISMAsync Remote Control

Introduction

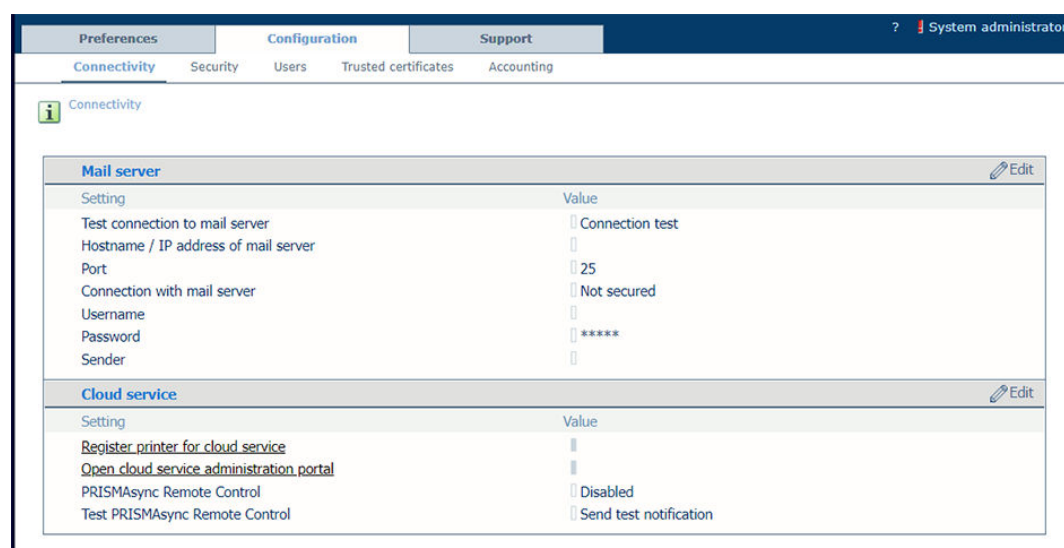
When you have configured PRISMAsync Remote Control, you can test the connection between PRISMAsync Remote Control and the cloud services.

Before you begin

Make sure you have configured PRISMAsync Remote Control. For more information, see [Configure PRISMAsync Remote Control on page 282](#).

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Connectivity].



3. First, test the connection between the printer and the cloud services:
4. Next to [Test Remote Control], click on [Send test notification]. A window opens.
5. Click on [Send test notification].
The result must be successful. In case of error:
 - Make sure that in the settings editor, [Configuration] → [Connectivity] → [Remote Control] is enabled.
 - Make sure that on the operator panel, [System] → [Remote services] → [Remote connection] is enabled.
 - Make sure that on the operator panel, [System] → [Remote services] → [Proxy settings] the proxy settings are correct.
 - Make sure that on the operator panel, [System] → [Remote services] → [Remote connection] → [Test remote connection] the status is connected.
6. Second, test the connection between the cloud services and your mobile device:
7. Click on [Register printer for cloud services]. A new page opens.
8. Log in with your Microsoft or Google administrator account. A new page opens.
9. Click on [Send test notification].

10. Check on your mobile device if you have received a notification.

When you did not receive a notification:

- Make sure that notifications are allowed in the app PRISMAsync Remote Control.
- Make sure the app PRISMAsync Remote Control is not open on the foreground (active in the background is no problem).
- Make sure the account used for the PRISMAsync Remote Control app is a registered user. For more information, see [Manage users for PRISMAsync Remote Control on page 286](#).

Manage users for PRISMAsync Remote Control

Introduction

When you have configured PRISMAsync Remote Control you can manage the users via the cloud services administration website.

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Connectivity].

The screenshot shows the 'Configuration' tab with the 'Connectivity' sub-tab selected. The 'Mail server' section has an 'Edit' button and a table of settings:

Setting	Value
Test connection to mail server	☐ Connection test
Hostname / IP address of mail server	
Port	25
Connection with mail server	☐ Not secured
Username	
Password	*****
Sender	

The 'Cloud service' section also has an 'Edit' button and a table of settings:

Setting	Value
Register printer for cloud service	
Open cloud service administration portal	
PRISMAsync Remote Control	☐ Disabled
Test PRISMAsync Remote Control	☐ Send test notification

3. Click on [Open administration website]. A new page opens.
4. Log in with your Microsoft or Google administrator account. The page of the PRISMAsync cloud services administration portal opens.
5. To add users: under [Add users for PRISMAsync cloud services] fill in the email addresses of the users of the PRISMAsync Remote Control app and click on [Add].



NOTE

For Google accounts, dots in email addresses are ignored (e.g. John.Doe@gmail.com is the same as JohnDoe@gmail.com). Therefore, the Google email addresses are stored without dots in the cloud services administration site.

6. To remove users: under [Users of PRISMAsync Remote Control] click on the name of the user, and click on [Remove].
7. Once you are ready, you can click on [Log out].

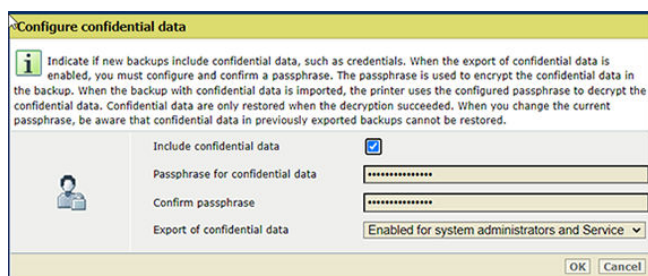
Make a backup

Introduction

It is advised to make a backup with confidential data and export it to a file to save on another location than the controller. The confidential data consists of: the System administrator password, identity certificates (including private key), trusted certificates.

Procedure

1. Open the settings editor.
2. Click on [Support] → [Backups].
3. Click on the [Configure confidential data] icon.
A window opens.
4. Check the box to include the confidential data in the backup.
When this box is checked, a passphrase must be filled in.



5. Click on [Ok]
6. Click on the [Create] icon.
A window opens.
7. Fill in the description and click on [Ok].
8. Check the box in front of the created file.
9. Click on the [Export] icon.
A window opens.
10. Click on [Ok] and save the file on another location than the controller.

Restore a backup

Introduction

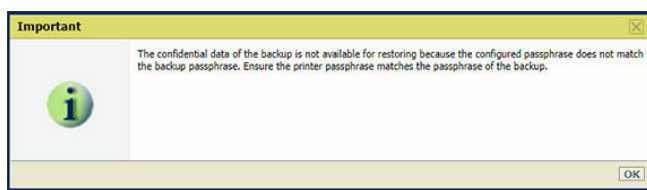
When you have made a backup you can restore it.

Before you begin

You need to have a backup created before. It is highly recommended to have exported a backup. For more information, see [Make a backup on page 287](#).

Procedure

1. Open the settings editor.
2. Click on [Support] → [Backups].
3. In case of an external backup, exported during a backup operation, click on [Import]. Browse to the external backup and confirm the import operation.
When imported with a confidential data passphrase and this passphrase does not match the passphrase of the backup, the screen displays a warning that the confidential data is not available for restoring.



4. Check the box in front of the backup file.
5. Click on [Restore user configuration].
6. Click on [Ok] to restore the configuration.

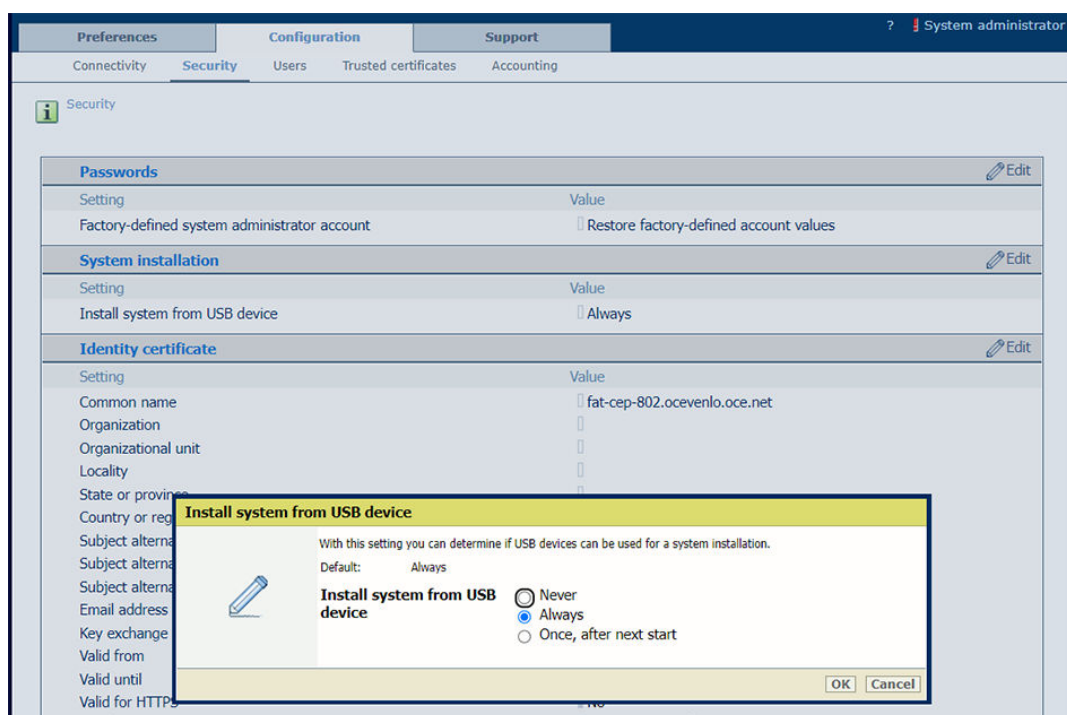
Enable system installation from USB

Introduction

Installation from a USB key is used by the Service technician for system installation or reinstallation. For security reasons related to USB, it is possible to disable installation from USB.

Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Security].
3. Click on the value next to [Install system from USB].
A window opens.



4. Select [Always], [Never], or [Once, after next start] according to the customer security policy, and click on [Ok].

Chapter 9

Troubleshooting and support

Tips and tricks

Introduction

In order to use the Colorado M-series in the best way possible it is advised to follow the below listed tips and tricks.

Subject	Tip
Follow step by step actions explained	Always follow the instruction given on the operator panel step by step in the specified order. For example: in case of error handling, operating the winder or performing maintenance actions.
Green light indicators	You can safely perform actions on the drawer or the ink unit, when the green light indicators on the drawer and near the ink bottles are on.
Handle with care	You do not have to use excessive force on any of the handles or levers of the Colorado M-series. You can easily push or pull the levers and handles to perform actions on the printer.
Automatic advance correction	Set [Automatic advance correction] to [normal] for printing modes [High Quality], [Specialty], [Matte High Quality], [Matte Specialty], [Backlit] or [Backlit Density]. The printer then automatically reads and optimizes the media step accuracy. When you set [Automatic advance correction] to [enhanced], it may improve the media step accuracy more but it also prints black markers on the increased side margin of the media. For textured media, you can set [Automatic advance correction] to [enhanced]. For more information, see Change the media settings on page 76.
Media step control	When you want to control the media steps and optimize the print quality you can: • Perform manual or periodic maintenance with [Automatic nozzle optimization]. The printer automatically optimizes the nozzles to improve media step accuracy. • Print roll to roll (wind your media). • Start with a white space ± 50 cm (19.7 inch), before you make your first print on a roll. • Print in [High quality] print mode.
Media not rolled up evenly	Make sure media is always rolled up evenly on the core. Do not load media in the drawer that is not rolled up evenly (telescoping). For more information, see Load a media roll (position 1) on page 89.
Straight leading edge media	The leading edge of the media roll loaded in the drawer must be cut straight. Otherwise it is possible the printer does not detect the leading edge or can print on the platen. For more information, see Load a media roll (position 1) on page 89.

Subject	Tip
Tape leading edge straight	In case of winding, the leading edge of the media must be aligned and taped straight on the take-up roll core for best winding and printing quality. Tape first the center and then the sides. For more information, see Print with or without winding on page 125 .
Position media guides	When you wind without a tension bar, position the media guides against the media for best winding quality. For more information, see Print and wind without a tension bar on page 126 .
Print is not rolled up	When you have taped your print to the take-up roll but the roll winder has not wound up your print, move the media towards the printer to start the winder. Move the part of the print that is hanging just above the ground in front of the lower sensor towards the sensor. The printer then sees the media and will start winding automatically.
New media type	Always calibrate a new media type in order to optimize the print quality. Calibrate media of the same type with different media sizes for each size. For more information, see Calibrate the media on page 120 .
Printing on a larger media width	When you run out of media while printing you will get a media request message. When you want to finish your jobs you can also continue printing on a larger width media roll. Load the larger width media roll and select it, the printer will then continue printing on the larger media width.  NOTE Note that you will always have to load the larger width media roll, even if it has already been loaded in the printer. In that case, the printer will only recognize the larger width and start printing on it when it is reloaded.
Media calibration	Perform media calibration from the empty leading edge of the media roll. So start calibration after you made a cut or when you start with a new roll. Do not perform media calibration when there is already a print on the roll. For more information, see Calibrate the media on page 120 .
Moist sensitive media	Take note that moist sensitive media will deform when lying on the print platen for some time.
Uncured ink pollution	Be aware of uncured ink on media or the printer. Do not remove uncured prints via the winder or drawer, but only via the top cover. Follow the referred procedure carefully. For more information, see Clean pollution on the printer on page 354 .

General support

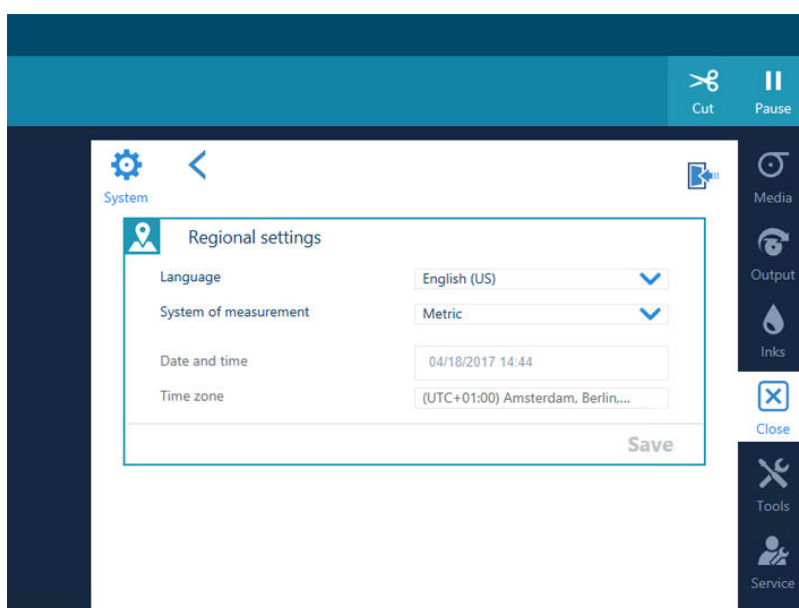
Change the regional settings

Introduction

You can change the language, system of measurement, date and time, or time zone under the regional settings on the operator panel.

Procedure

1. On the operator panel, tap on the [System] icon on the right.
2. Tap on [Regional settings].



3. Change the language, system of measurement, date and time, or the time zone.



NOTE

You have to log in as System administrator to change some of the settings. For more information, see [Log in as a System administrator on page 263](#).

When time synchronization is enabled and the date and time of the printer is still out-of-date, make sure the setting is configured correctly. For more information, see [Configure time synchronization on page 266](#).

4. Tap on [Save] to save the settings.

Set the energy save modes

Introduction

You can enable the energy save modes, automatic wake-up mode and automatic shutdown mode, via the settings editor. Set timers for each day of the week to wake up or turn off (standby mode) the printer.



NOTE

- When the printer is turned off the printer is in standby mode: power to the system is never cut.
- Before the printer can be turned off automatically (standby mode), the printer first has to enter low power mode. The printer will enter low power mode automatically after 30 minutes of inactivity. So when the printer was still active before the shutdown time, the printer will first take 30 minutes to enter low power mode before it will automatically shut down (standby mode).

The screenshot shows the 'Colorado' system settings interface. The 'System settings' tab is active, and the 'Energy save modes' section is expanded. The 'Automatic wake-up' and 'Automatic shutdown' settings are both set to 'Enabled'. The 'Wake-up timers' section is also expanded, showing settings for Monday and Tuesday. For Monday, the wake-up time is 07:00 and the shutdown time is 20:00. For Tuesday, the wake-up time is 08:00 and the shutdown time is 20:00. The 'Wake-up Wednesday' setting is currently set to 'No'.

Setting	Value
Language	English (UK)
Date and time	22 Jan 2018 16:54:47
Time zone	(UTC+01:00) Amsterdam, Berlin, Bern, Rome, Stockholm, Vienna
NTP client	Disabled
NTP server name	time.windows.com
Test NTP server connection	Start the test
System of measurement	Metric

Setting	Value
Automatic wake-up	Enabled
Automatic shutdown	Enabled

Setting	Value
Wake-up Monday	Yes
Wake-up time Monday	07:00
Shutdown Monday	No
Shutdown time Monday	20:00
Wake-up Tuesday	No
Wake-up time Tuesday	08:00
Shutdown Tuesday	No
Shutdown time Tuesday	20:00
Wake-up Wednesday	No

Procedure

1. Open the settings editor.
2. Click on [Preferences] → [System settings].
3. Go to the [Energy save modes] header and click on [Edit]. Log in as a System administrator. A window opens.
4. Select [Enabled] for [Automatic wake-up] and [Automatic shutdown].
5. Click on [Ok].
6. Go to the [Wake-up timers] header and click on [Edit]. A window with timers for each day of the week opens.
7. Fill out if you want the printer to wake-up and shutdown for each day of the week. If yes, also fill in the times for wake-up and shutdown.
8. Click on [Ok].

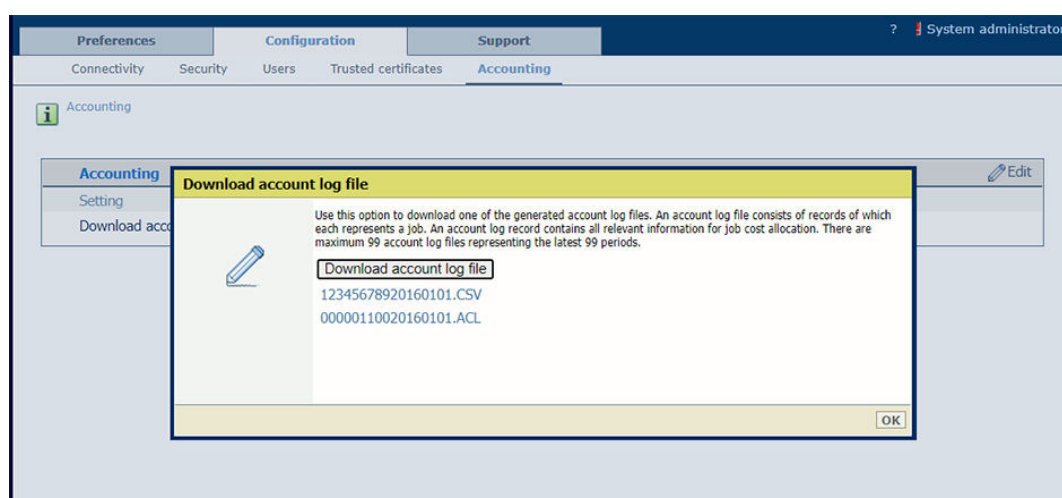
Download an account log file

Introduction

For every job that is finished a record is added to the account log file. You can download the file via the settings editor to check the properties and counters of your job.

On account log files

- A job is considered finished when it is completed successfully, it is canceled or deleted.
- There is one active account log file (.ACL). The active account log file starts at 00:00 hours and is active for one day, then the file becomes inactive.
- There can be multiple inactive account log files (.CSV). The inactive account log files are completed files. There can be up to 99 inactive account log files. When there are more the oldest files are deleted.



Procedure

1. Open the settings editor.
2. Click on [Configuration] → [Accounting].
3. Click on [Download account log file]. Log in as a System administrator. A window opens with one or more log files listed.
4. Click on the preferred file. The file is downloaded automatically. Click on any of the other files to download more.
5. You can read the file as follows:

Field	Description
documentid	The job ID that is specified by the RIP. The ID stays the same when a job is printed multiple times
jobid	Unique job ID that is generated by the controller each time a new job is created.
	 NOTE In case of controller reinstallation, software error, or power failure it cannot be guaranteed that the ID is unique.

Field	Description
jobtype	The value AP (Automatic Print Jobs) is used for all jobs from the RIP, so the value is always AP.
jobname	The name of the job specified in the RIP.
printmode	The name of the print mode that was used in the job.
startdate	<yyyy><mm><dd> The date the printer starts printing the job.
starttime	<hh>:<min>:<ss> The time the printer starts printing the job.
activetime	<num>:<min>:<ss> The total time the job is active and printing. This time includes autonomous maintenance actions. Note that the time needed for warming up before the printer is ready and the time spend waiting for the operator, e.g. to solve an error, is not included. Time in hours, minutes, seconds, where hours can exceed 24.
idletime	<num>:<min>:<ss> The total time an active job is waiting for operator interaction, e.g. solving an error or loading media. Time in hours, minutes, seconds, where hours can exceed 24.
readydate	<yyyy><mm><dd> The date a job is completed successfully, canceled or deleted.
readytime	<hh>:<min>:<ss> The time a job is completed successfully, canceled or deleted.
accountid	This field is always empty.
noffinished-sets	<num> The number of times the bitmap, as received by the RIP, has been printed.  NOTE This number can be lower than 'copiesrequested' as the user can cancel or delete a job.
result	'Done', 'Abrt', 'Stop', 'Deleted'. The state in which the job was completed. • 'Done': when the job was completed successfully. • 'Abrt': when the job was started, but aborted by the operator or controller due to an error. • 'Stop': when the job was started, but stopped or paused by the operator. • 'Deleted': when the job was deleted before it was printed.
reception-date	<yyyy><mm><dd> The date the printer controller completely received the job from the RIP.
reception-time	<hh>:<min>:<ss> The time the printer controller completely received the job from the RIP.
operator-note	Note information specified in the RIP.
copies requested	<num> The number of copies requested by the RIP.
mediatypeid	The media type ID specified in the RIP that is used to communicate to the printer which media it has to use.
mediatype	The name of the media type that is displayed on the operator panel.
mediawidth	<num> in 0.1 mm (0.004 inch). The width of the media on which the job is printed.

Field	Description
media lengthused	<num> in 0.1 mm (0.004 inch). The length of the media that is used for the job. Media that is used for calibrations or maintenance actions is not included.
printedarea	<num> in 1 mm ² (0.004 inch ²). Area of the media that is covered by images. This includes white pixels, and excludes any empty space surrounding the images.  NOTE When the RIP nests images, the empty space is considered part of the image and included in the 'printedarea'.
inkcolorcyan	<num> in 1 ul. The total amount of cyan ink used.
inkcolor magenta	<num> in 1 ul. The total amount of magenta ink used.
inkcolor yellow	<num> in 1 ul. The total amount of yellow ink used.
inkcolor black	<num> in 1 ul. The total amount of black ink used.

Configure, download, and install software updates from On Remote Service

Introduction

When you configured the download and installation of operating system updates from On Remote Service, the print server behaves as follows:

- Once a day the printer searches for new operating system or PRISMAsync updates at midnight.



NOTE

If the system is offline or shut down at midnight, the updates will be checked for again the next day.

When the operating system updates are discovered by the printer, it is not possible to make a selection of the found updates. All found updates are downloaded or installed depending on the configuration. During the download or installation, the printer remains operational. To finalize the installation, you must restart the system.

Before you begin

Ensure that [Remote connection] is enabled on the printer:

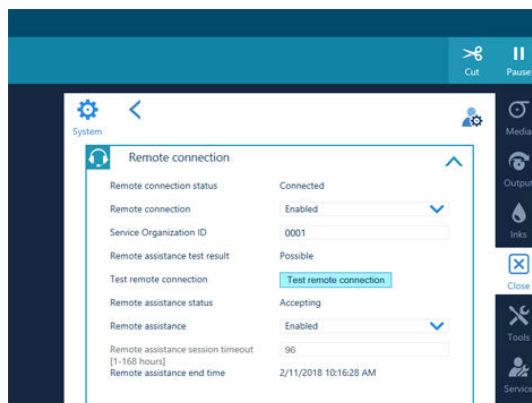
1. On the operator panel, tap on the [System] icon on the right.



NOTE

You must be logged in as a system administrator. See [Log in as a System administrator on page 263](#).

2. Tap on [Remote services]→[Remote connection]



3. Make sure:
 - [Remote connection] is enabled.
 - [Remote connection status] is connected.

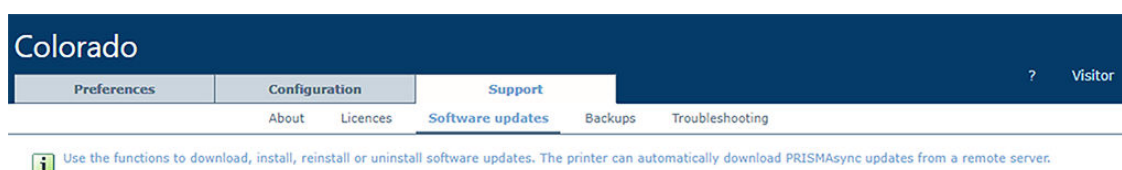


NOTE

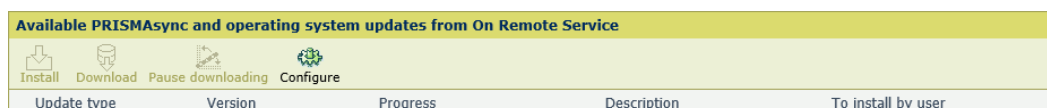
A proxy may be required to access the internet and make use of Remote services. When required, make sure the proxy settings are configured correctly. For more information, see [Configure the network on page 260](#).

Configure the download and installation of software updates from ORS

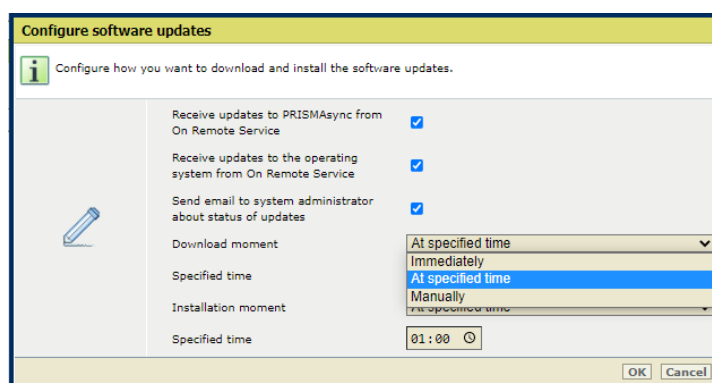
1. Open the Settings Editor and go to: [Support]→[Software updates].



2. Go to [Available PRISMAsync and operating system updates from On Remote Service].
3. Click [Configure].



4. By default, the checkboxes to receive software updates are checked. You can uncheck a checkbox if you do not want to receive software updates from On Remote Service.

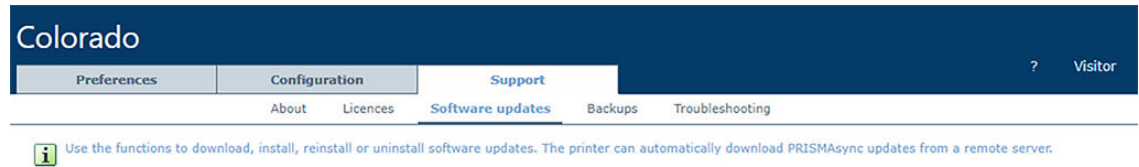


5. Use the [Download moment] setting to select the download moment.
 - [Immediately]: The printer downloads the software updates when they are available.
 - [At specified time]: The printer downloads the software updates at the time you specify.
 - [Manually]: You initiate the download of software updates manually.
6. Use the [Installation moment] to select the installation time.
 - [Immediately]: The printer installs the software after they are downloaded. The printer remains operational. To finalize the installation, you must restart the system.
 - [At specified time]: The printer installs the software updates at the time you specify. The printer remains operational. To finalize the installation, you must restart the system.
 - [Manually]: You install software updates manually after they are downloaded. The printer remains operational. To finalize the installation, you must restart the system.
7. Select [Send email to system administrator about status of updates] to receive status information about the download and installation process. System administrators who have a configured email address receive these emails.
 You receive an email when the following status has been reached:
 - When you select [Manually] in the [Download moment] setting, you receive an email when software updates are available for download.
 - When you select [Manually] in the [Installation moment] setting, you receive an email when software updates are available for installation and when you must restart the system to finalize the installation.
 - You receive an email when software updates are being installed.
 - You receive an email when software updates have been installed.

- You receive an email when an error occurs during downloading or installation of the software updates.

Download the software update from ORS manually

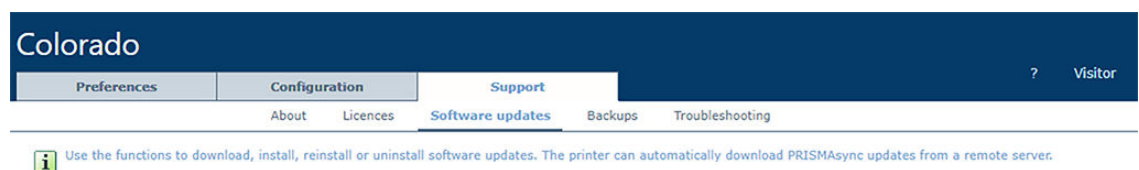
1. Open the Settings Editor and go to: [Support]→[Software updates].



2. Go to [Available PRISMAsync and operating system updates from On Remote Service].
3. Select the available software update. Click [Download].
View the progress of the download in the [Progress] column.
4. It is possible to pause the download process.
Click [Pause downloading] to pause the download process. Click [Resume downloading] to resume the download process.
5. The download is finished when the progress indicator states [-] and the [Install] button is available.

Install the software update from ORS manually

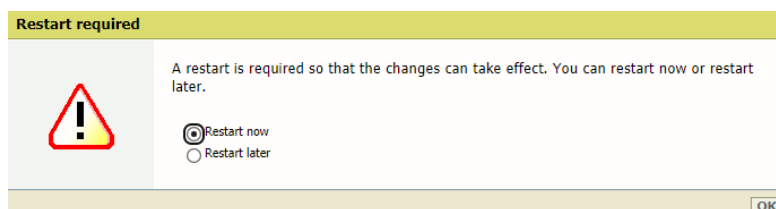
1. Open the Settings Editor and go to: [Support]→[Software updates].



2. Go to [Available PRISMAsync and operating system updates from On Remote Service].
3. Select the downloaded software update. Click [Install].
4. To finalize the installation, you must restart the system.

Reboot the system

In all cases, the printer requests a restart after installation. You can restart immediately, or later. Select the restart moment and click on [OK].



After you restart the system, the software update is removed from the list in [Available PRISMAsync and operating system updates from On Remote Service].

The installed software update can be seen in one of the following lists:

- [Installed PRISMAsync updates], if the software update is a printer software update.

- [Operating system updates], if the software update is an operating system update.

Configure, upload and install operating system updates from a file

Introduction

This topic describes how to configure, upload and install operating system updates from a file via the Settings Editor.

The downloaded operating system update package is cumulative. This means that the package includes all preceding patches.



NOTE

This procedure applies only to operating system updates that are manually uploaded in the Settings Editor.

Approach

The operating system updates can be downloaded via: <https://downloads.cpp.canon/>.

The operating system updates consist of multiple files. This is called an update package. All files must be installed.

The file names start with MSU followed by a 5-digit number. The files must be installed in ascending order based on this number.



IMPORTANT

From software version **Mark 8.1.3**, updates can be installed simultaneously in any order. If your system has a lower Mark version, you must install the files in the correct order. You can check the software version in the Settings Editor via [Support]→[About]→[Version of software].

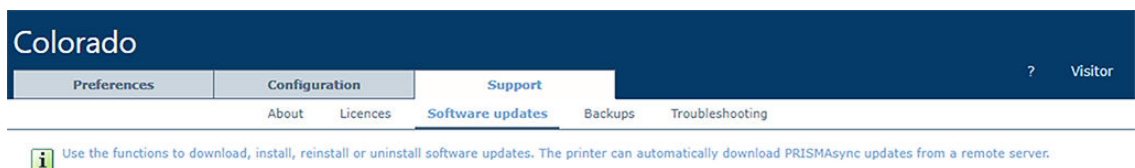
During the installation of the operating system updates the printer remains operational. To finalize the installation, you must restart the system.

Before you begin

- You must be logged in as a system administrator.
- Download the operating system update package for the [Version of printer software] of your printer via <https://downloads.cpp.canon/>.

Configuration of operating system updates from a file via the Settings Editor

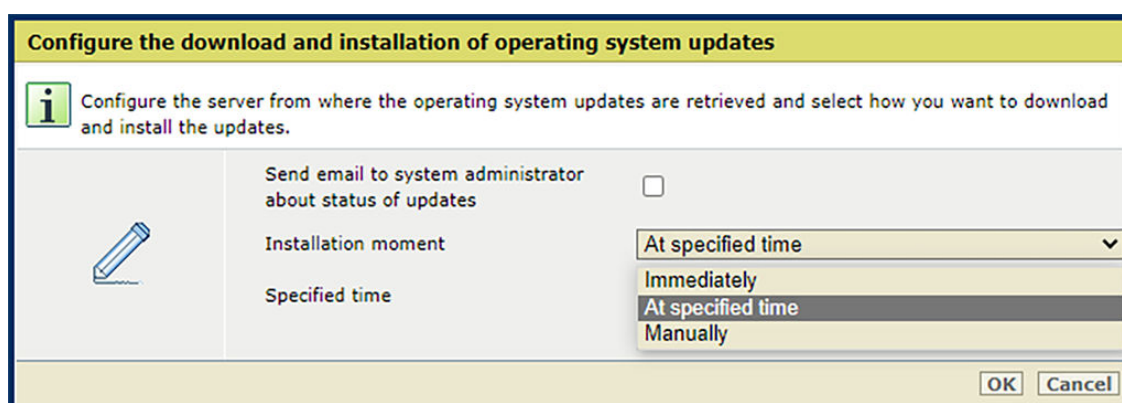
1. Open the Settings Editor and go to: [Support]→[Software updates].



2. Go to [Operating system updates].
3. Click [Configure].



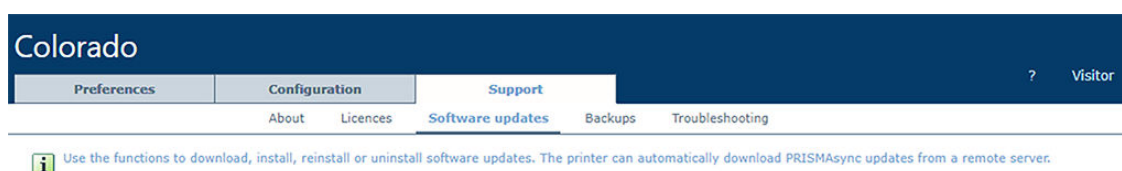
4. Use the [Installation moment] to select the installation time.



- [Immediately]: The printer installs the operating system updates once they are present on the system. The printer remains operational. To finalize the installation, you must restart the system.
 - [At specified time]: The printer installs the operating system updates at the time you specify. The printer remains operational. To finalize the installation, you must restart the system.
 - [Manually]: You install operating system updates manually once they are present on the system. The printer remains operational. To finalize the installation, you must restart the system.
5. Select [Send email to system administrator about status of updates] to receive status information about the installation process. System administrators who have a configured email address receive these emails.
- You receive an email when the following status has been reached:
- When you select [Manually] in the [Installation moment] setting, you receive an email when operating system updates are available for installation and when you must restart the system to finalize the installation.
 - You receive an email when operating system updates are being installed.
 - You receive an email when operating system updates have been installed.
 - You receive an email when an error occurs during downloading or installation of the software updates.
6. Click [OK].

Upload and install an operating system update from a file via the Settings Editor

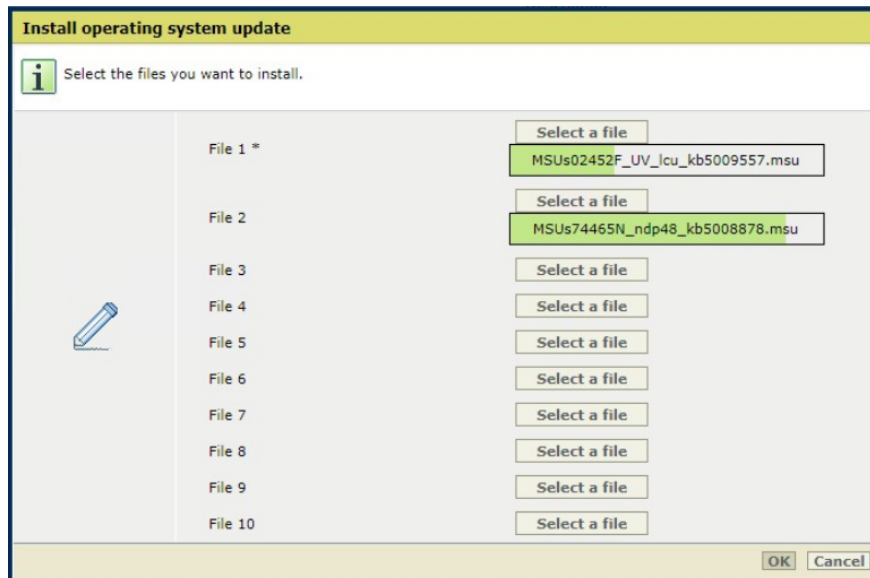
1. Open the Settings Editor and go to: [Support]→[Software updates].



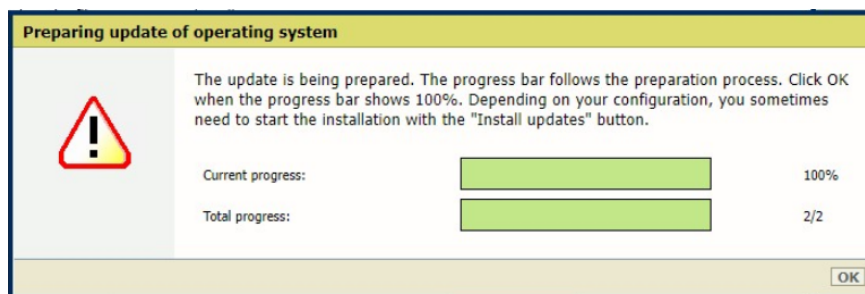
2. Go to [Operating system updates].
3. Check if the update is already installed: compare the "kb" number from the update with the "kb" number of installed updates. If the update is already installed, do not install it again.
4. Click [Install from file].



5. Click [Select a file] to navigate to the operating system updates that needs to be installed.



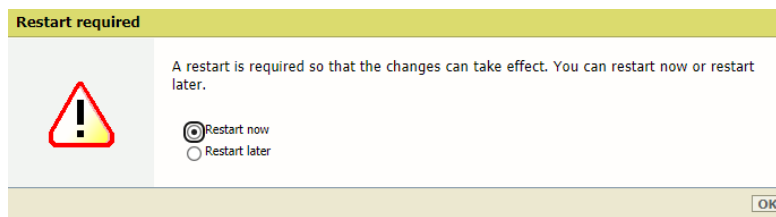
6. Click [OK] to upload the selected file to the printer.
The duration of the upload and validation process depends on the size of the update. Do not restart your system during this process.
7. When the update is uploaded, click [OK] to start the preparation.



8. Click [OK] when the progress bar shows 100%. Depending on your configuration, the system automatically starts the installation or you need to start the installation with the [Install updates] button.



9. To finalize the installation, you must restart the system.
Select the restart moment and click on [OK].



After you restart the system, the software update is removed from the list in [Available PRISMAsync and operating system updates from On Remote Service].

The installed software update can be seen in one of the following lists:

- [Installed PRISMAsync updates], if the software update is a printer software update.
- [Operating system updates], if the software update is an operating system update.

Install a license via ORS

Introduction

It is possible to receive a license through On Remote Service (ORS). Instead of making the license request, you send a request to the back-office via e-mail and upload the license manually.

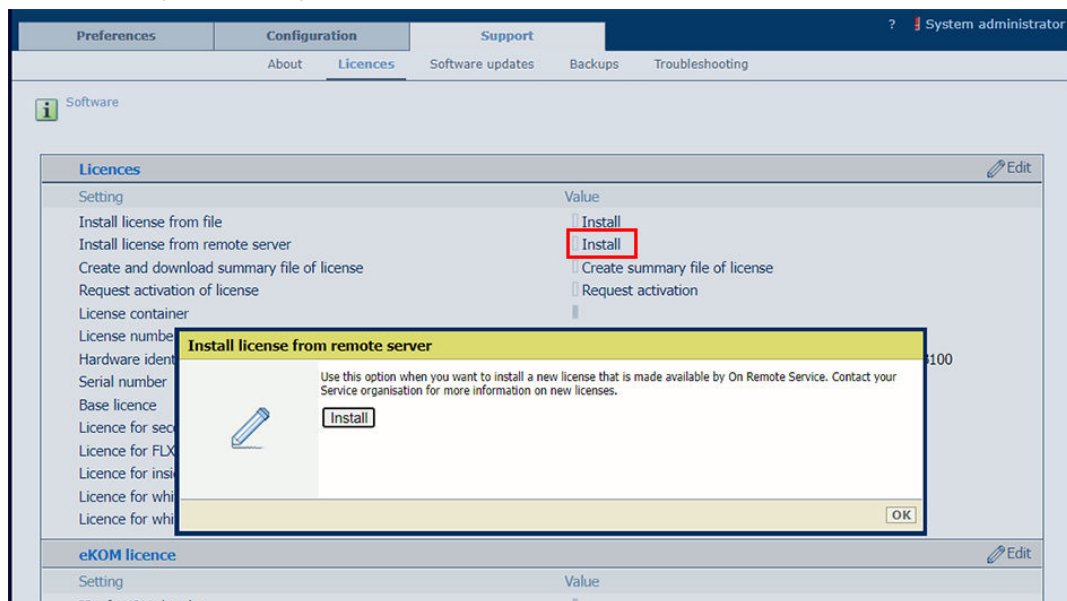
Once there is an agreement regarding the license(s) requested, a product license number is registered in the ILMS database. The updated licenses are transferred automatically via ORS to the engine. The administrator of the engine only needs to install and activate the updated licenses.

Install the license

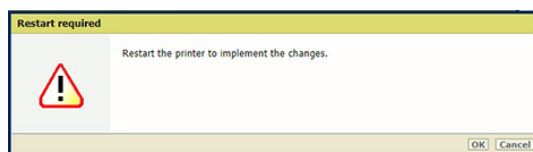
Procedure

1. Wait approximately 5 minutes after receiving the license request. The transfer of the updated license will take some time.
2. In the Settings Editor go to [Support]→[Licenses]→[Licenses].
3. Click on [Install] next to [Install license from remote server].

The following window opens:



4. Click [Install].
5. The Restart required window displays. Click [OK].

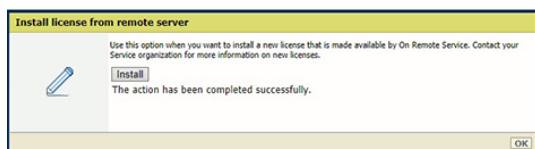




NOTE

The system will not restart automatically after you click [OK].

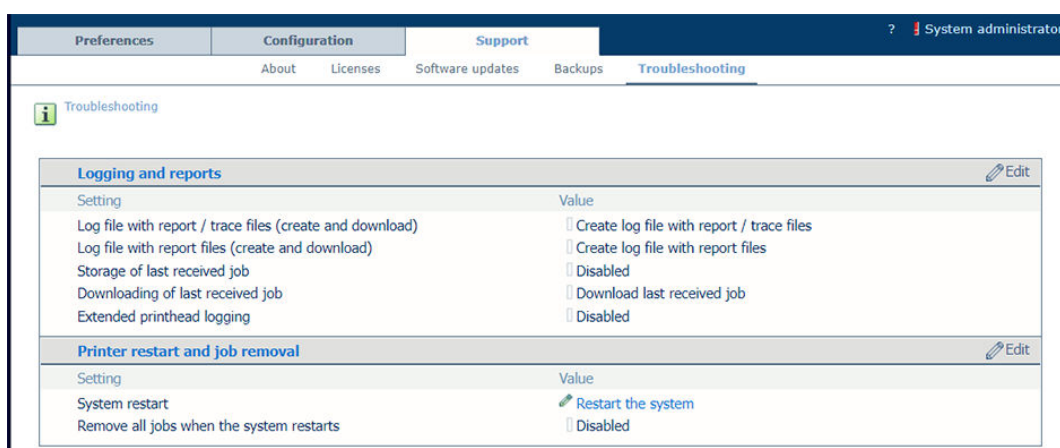
- The install window confirms successful installation of the license. Click [OK].



NOTE

When the error 'An unknown error has occurred' appears, the license may not be available yet on the system.

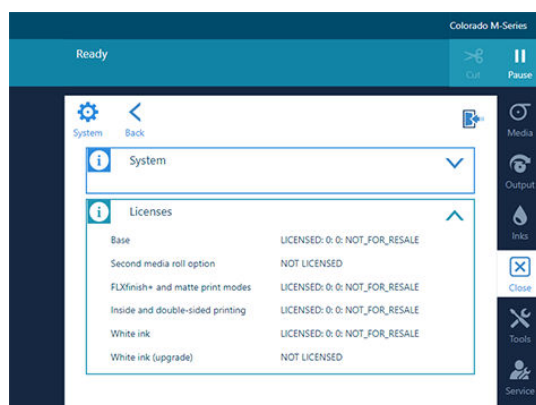
- Restart the printer via [Support]→[Troubleshooting]→[Printer restart and job removal]→[System restart].



Result

You can check the status of the license(s):

- On the operator panel, tap [System]→[About]→[Licenses].



- In the settings editor, click on [Support]→[Licenses]→[Licenses].

Preferences

Configuration

Support

?

Visitor

About

Licences

Software updates

Backups

Troubleshooting

Software

Licences

Setting

Value

Install license from file

Install

Install license from remote server

Install

Create and download summary file of license

Create summary file of license

Request activation of license

Request activation

License container

License number

Hardware identifier

B93D-09D6-09BB-7956-D5F8-55F3-4C51-BE6A-24CE-B100

Serial number

1100

Base licence

LICENSED - S/N:0 - NOT_FOR_RESALE

License for second media roll option

LICENSED - S/N:0 - NOT_FOR_RESALE

License for FLXfinish+ and matte print modes

LICENSED - S/N:0 - NOT_FOR_RESALE

License for inside and double-sided printing

LICENSED - S/N:0 - NOT_FOR_RESALE

License for white ink

LICENSED - S/N:0 - NOT_FOR_RESALE

License for white ink (upgrade)

NOT LICENSED

eKOM licence

Setting

Value

ID of eKOM device

Install a license received via e-mail

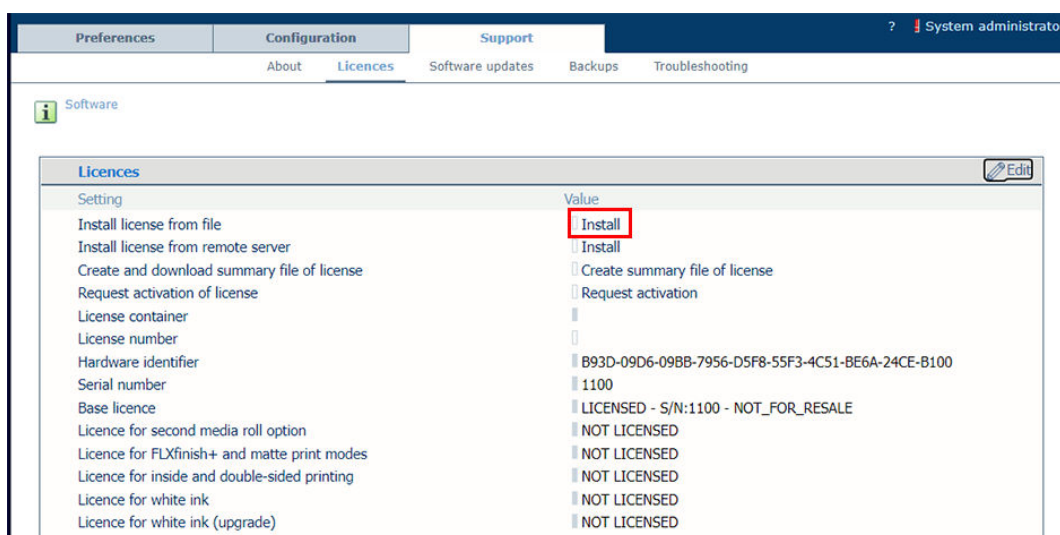
Introduction

This procedure describes how to install the license file once received via e-mail.

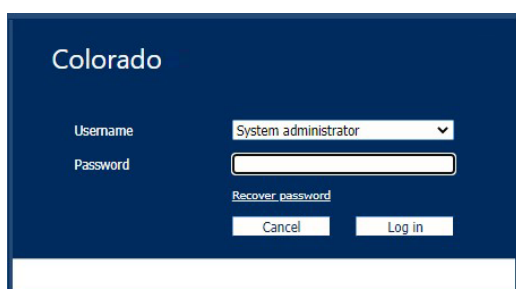
How to install a license

Procedure

1. Save the received zipped license file on the workstation.
2. Open the Settings Editor.
3. Go to [Support]→[Licenses]→[Licenses].
4. Click [Install] next to [Install license from file].

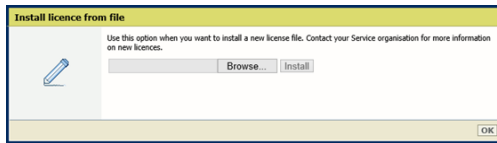


5. The System Administrator login window opens:

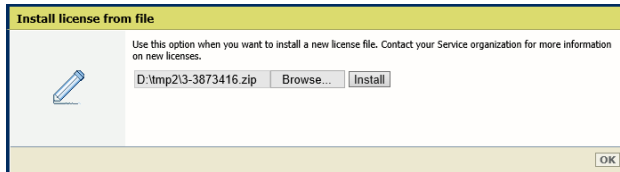


Enter the System Administrator password and click [Log in].

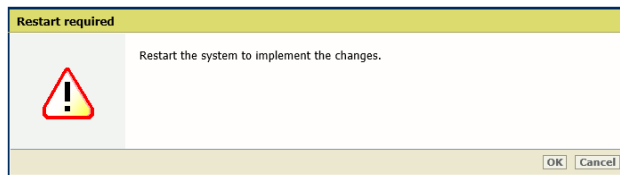
6. The Install license from file window opens:



7. Browse to the workstation directory where you saved the new zipped license file.
8. Select the license file and click [Open]. The following window opens:



9. Click [Install]. The Restart required window opens:



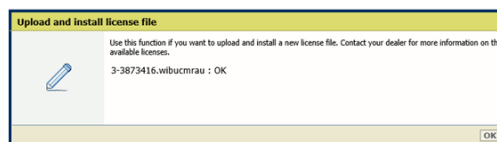
10. Click [OK].



NOTE

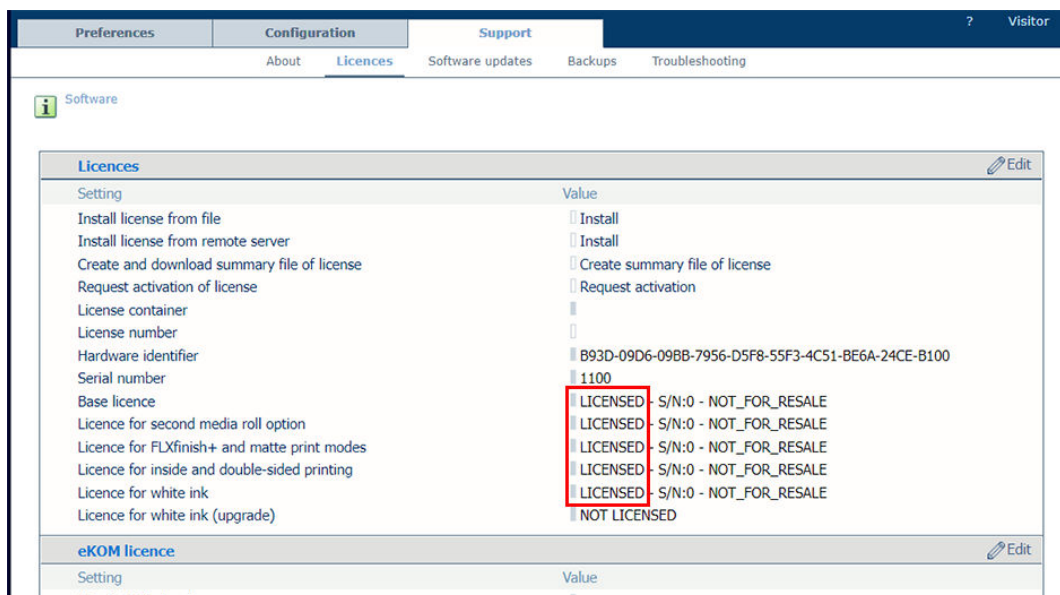
The system will not restart automatically after you click [OK].

The following window opens:



11. Click [OK].
12. In the Settings editor go to [Support]→[Licenses].

13. Check that the required options are licensed as expected. At this moment the licenses are present, but not yet activated. For example:

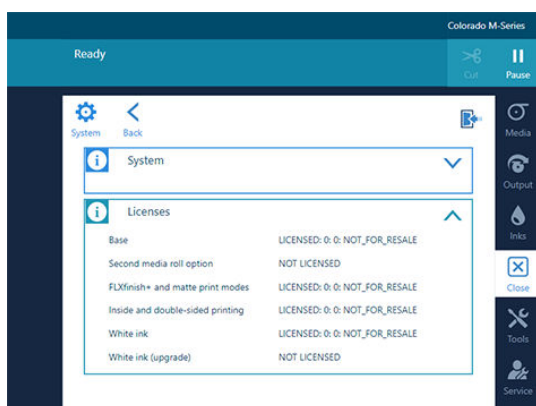


14. To activate the licenses, restart the printer via [Support]→[Troubleshooting]→[Printer restart and job removal]→[Restart the system].

Result

You can check the status of the license(s):

- On the operator panel, tap [System]→[About]→[Licenses].



- In the settings editor, click on [Support]→[Licenses]→[Licenses].

Preferences Configuration Support ? Visitor

About Licences Software updates Backups Troubleshooting

Software

Licences [Edit](#)

Setting	Value
Install license from file	☐ Install
Install license from remote server	☐ Install
Create and download summary file of license	☐ Create summary file of license
Request activation of license	☐ Request activation
License container	
License number	
Hardware identifier	B93D-09D6-09BB-7956-D5F8-55F3-4C51-BE6A-24CE-B100
Serial number	1100
Base licence	LICENSED - S/N:0 - NOT_FOR_RESALE
Licence for second media roll option	LICENSED - S/N:0 - NOT_FOR_RESALE
Licence for FLXfinish+ and matte print modes	LICENSED - S/N:0 - NOT_FOR_RESALE
Licence for inside and double-sided printing	LICENSED - S/N:0 - NOT_FOR_RESALE
Licence for white ink	LICENSED - S/N:0 - NOT_FOR_RESALE
Licence for white ink (upgrade)	NOT LICENSED

eKOM licence [Edit](#)

Setting	Value
ID of eKOM device	

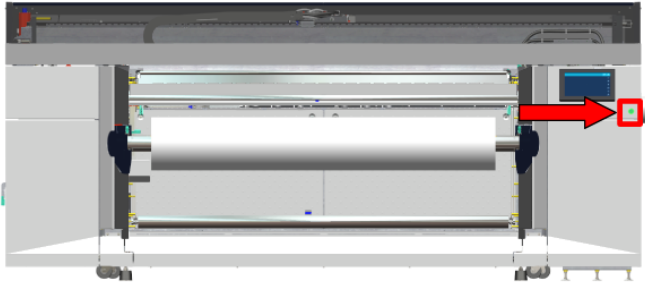
Move the printer

You should not move the printer. When you want to move the printer, contact your local service representative.

Turn the printer on and off

Introduction

The printing system is powered on by the service technician at installation. You can turn the printer on or off via the button on the media output side.



Procedure

1. Move to the media output side and locate the on/off button under the operator panel.
2. Push the button
The printer is switched on or off. The system is kept in standby mode, so power to the system is never cut.



NOTE

Before you turn off the printer make sure:

- The printer is not busy.
- There is no media on the platen.
- The printer is in a state where maintenance is possible.

General troubleshooting

Stop the printer

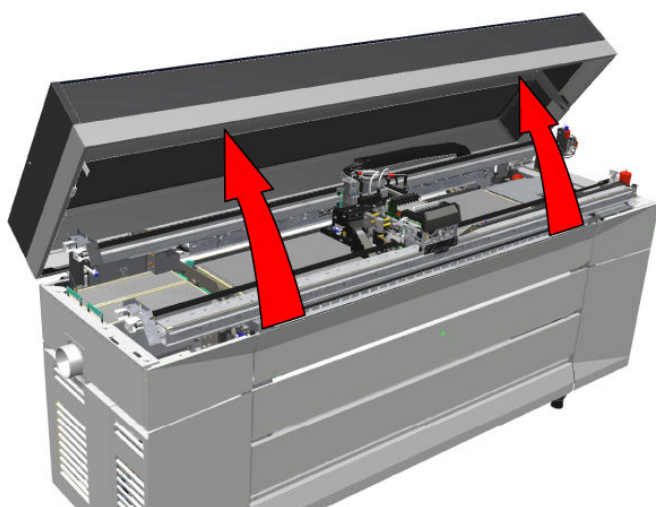
Introduction

In case of problems or a dangerous situation you can stop the printer immediately.



IMPORTANT

Opening the top cover during operations, can result in uncured ink. Only perform this action when absolutely necessary.



Procedure

1. Move to the media input side.
2. Open the top cover.
Power is cut to the engine, the printer immediately stops all operations.

After you finish

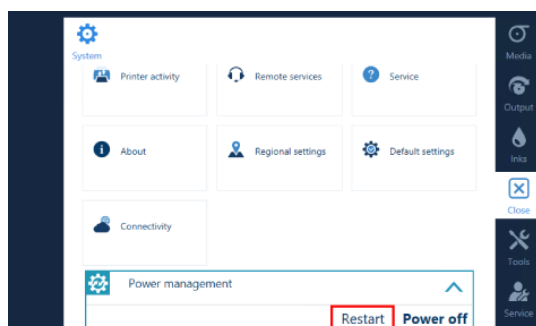
Opening the top cover can cause a paper crash and result in uncured ink. You can solve the situation yourself. For more information, see [Remove media from the paper path on page 325](#).

Restart the printer

Introduction

You can restart the printer via the operator panel.

You might be asked to restart the system to activate settings, or in case of a software issue it might help to restart the system.



Procedure

1. On the operator panel, tap the [System] icon on the right.
2. Tap on [Power management].
3. Tap on [Restart].
4. The printer will start up automatically.

Remove all jobs

Introduction

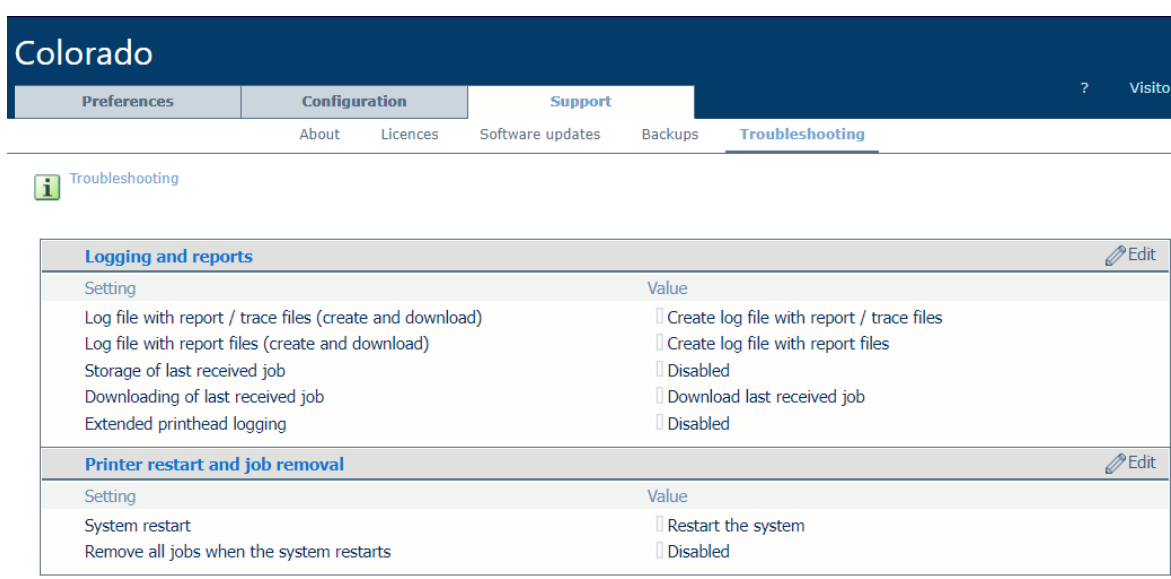
You can delete all jobs from the queue via the settings editor.

When to do

When you cannot delete a job in the queue or you want to clear all jobs at once in the system, follow the procedure below. The printer removes all jobs at the next restart of the printer.

Procedure

1. Open the settings editor.
2. Click on [Support]→[Troubleshooting] .



3. Click on the value next to [Remove all jobs when the system restarts].
4. Select [Enabled].
5. Click on [Ok].
6. Restart the printer. For more information see [Restart the printer on page 317](#).

After you finish

When the problem is not solved, contact your IT administrator.

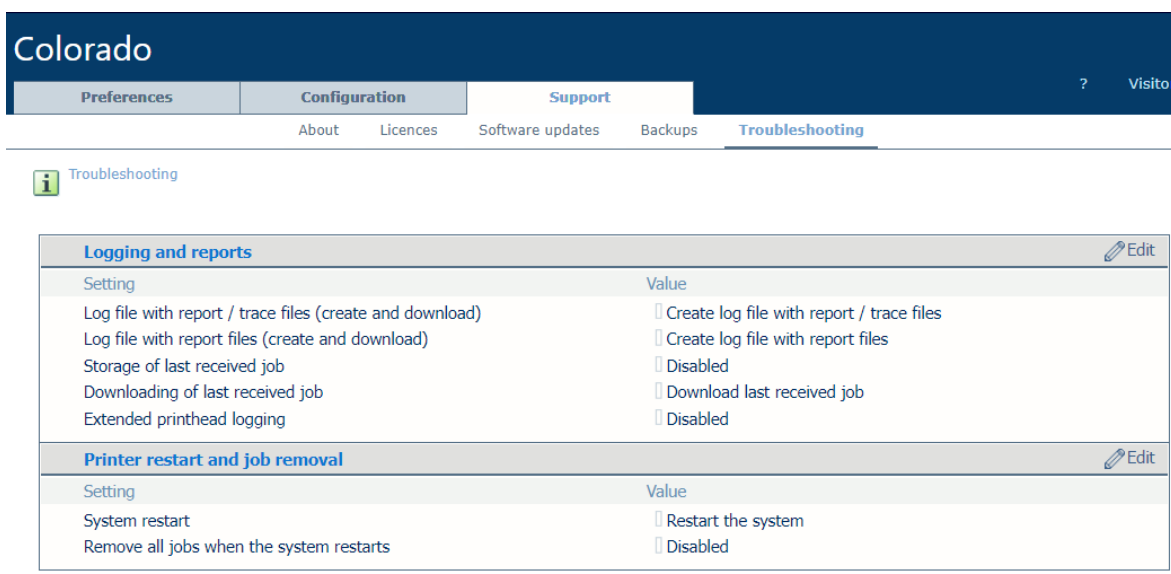
Download data log files

Introduction

When your local Service representative requests it, you can download the data log files of your printer via the settings editor.

Procedure

1. Open the settings editor.
2. Click on [Support]→[Troubleshooting].



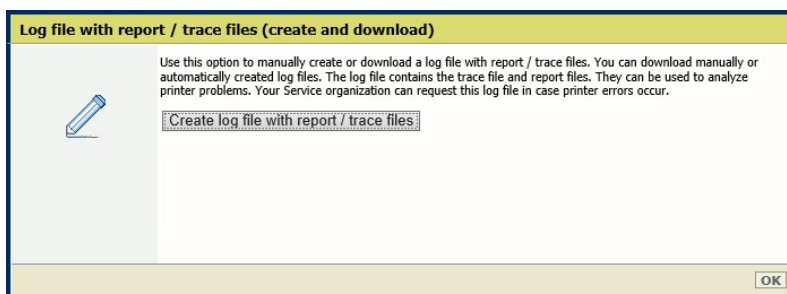
3. Click on [Create log file with report / trace files]. A window opens.



NOTE

You have to log in as System administrator to change some settings. For more information, see [Log in as a System administrator on page 263](#).

4. Click on the [Create or download log file with report / trace files] button. A ZIP file is created.



NOTE

The creation of the ZIP file can take quite some time, up to 30 minutes. You can click on [Ok] to close the window and click again on [Create or download log file with report / trace files] to check at any moment if the ZIP file is available.

5. The new file is added at the top of the list of files.
6. Click on the file to download.
7. Send the set of files to your local Service representative.

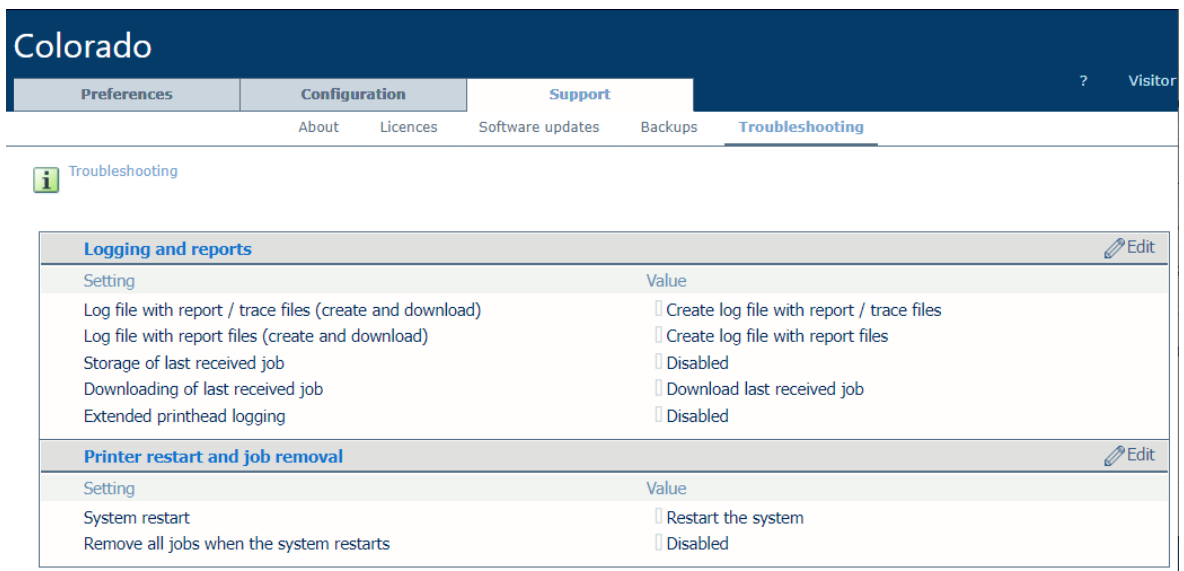
Download the last received job file

Introduction

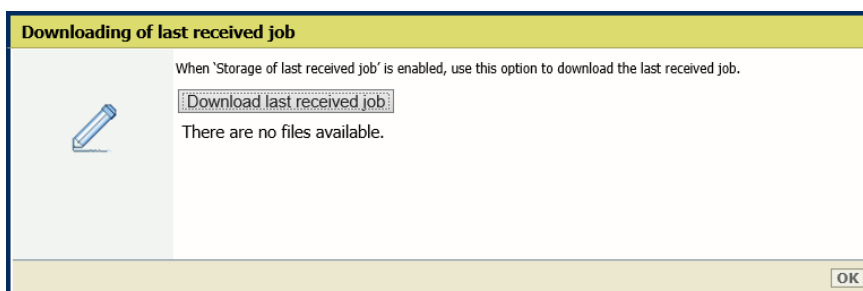
When you have problems with a print job and your local Service representative requests it, you can download the print file of this job via the settings editor.

Procedure

1. Open the settings editor.
2. Click on [Support]→[Troubleshooting].



3. Click on the value next to [Storage of last received job]. A window opens.
4. Select [Enabled] and click on [Ok].
5. Submit again your job from the RIP.
6. Click on the value next to [Download last received job]. A window opens.



7. Click on the [Download last received job] button.
A file is created from the last job that was completely received from the RIP.
8. Click on the file named 'Saved_Last_Job.print' to download it. Save the file.
9. After you downloaded the file, make sure to disable again the setting [Storage of last received job].

10. Send the file to your local Service representative.

Enable extended printhead logging

Introduction

When your local Service representative requests it, you can enable extended printhead logging.

When you enable this setting, the server stores additional information about the printheads. This setting will automatically be disabled after 30 days.

Procedure

1. Open the settings editor.
2. Click on [Support]→[Troubleshooting].

The screenshot shows the Colorado printer settings interface. The top navigation bar includes 'Preferences', 'Configuration', 'Support', and a user profile 'Visitor'. The 'Support' tab is active, and the 'Troubleshooting' sub-tab is selected. Below the navigation bar, there is a 'Troubleshooting' section with an information icon. The 'Logging and reports' section is expanded, showing a table of settings and their values. The 'Printer restart and job removal' section is also visible below it.

Logging and reports		Edit
Setting	Value	
Log file with report / trace files (create and download)	☐ Create log file with report / trace files	
Log file with report files (create and download)	☐ Create log file with report files	
Storage of last received job	☐ Disabled	
Downloading of last received job	☐ Download last received job	
Extended printhead logging	☐ Disabled	

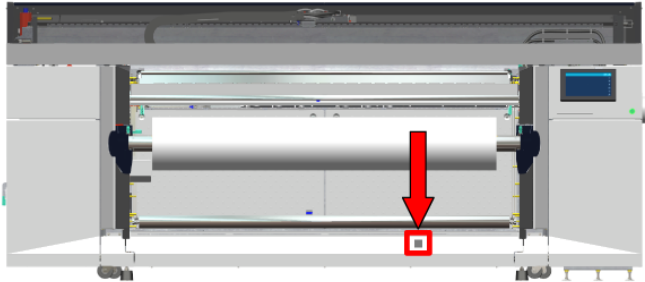
Printer restart and job removal		Edit
Setting	Value	
System restart	☐ Restart the system	
Remove all jobs when the system restarts	☐ Disabled	

3. Click on the value next to [Extended printhead logging]. A window opens.
4. Select [Enabled] and click on [Ok].

Turn the printer on after a power cut

Introduction

When power has been cut to the machine, you have to power the machine on. The machine has to be on to keep the printer in optimal condition.



Procedure

1. Move to the media output side.
2. Access the power switch through the opening in the cover.
3. Switch the power switch to the 'off' position.
4. Wait 1 minute.
5. Switch the power switch to the 'on' position.

Remove media from the paper path

Introduction

In case of a media jam or a carriage crash you can remove the media from the paper path.

Before you begin

- Wear the Colorado M-series prescribed Microflex gloves for handling ink.
- Use a knife that is sharp enough to cut the media.



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

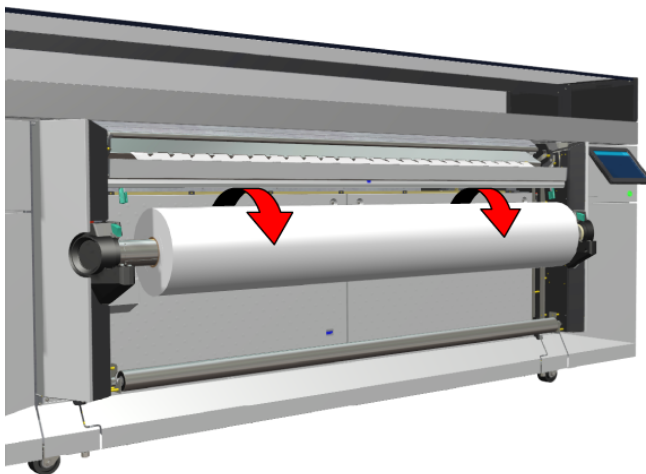


IMPORTANT

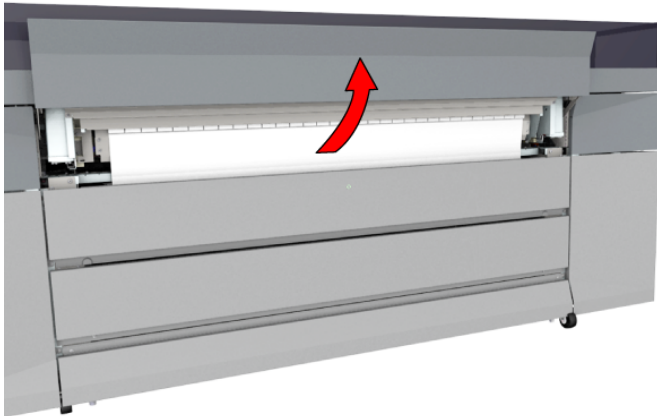
Watch out with uncured ink. Strictly follow the steps below, to make sure you do not pull media with uncured ink through the system.

Procedure

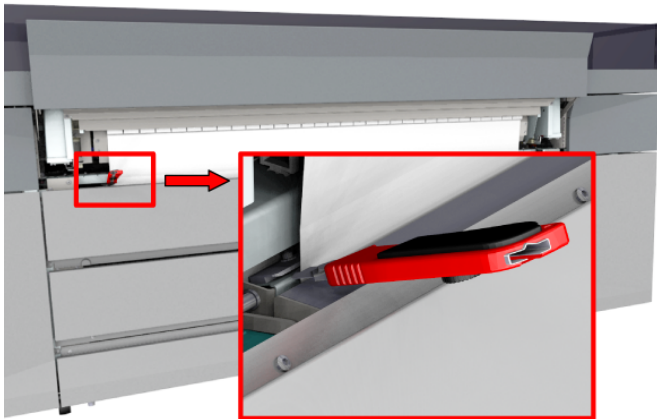
1. Locate the winder on the media output side of the printer. If present, take the tension bar out. You can lift the tension bar up by manually winding the take-up media roll.



2. Go to the media input side and open the media cover.

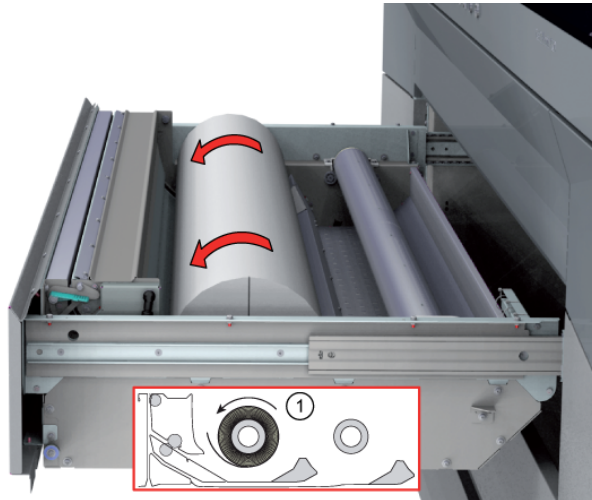


3. Take the knife and cut the media in the cutting guide.



4. Close the media cover.
5. Pull firmly to open the media drawer.

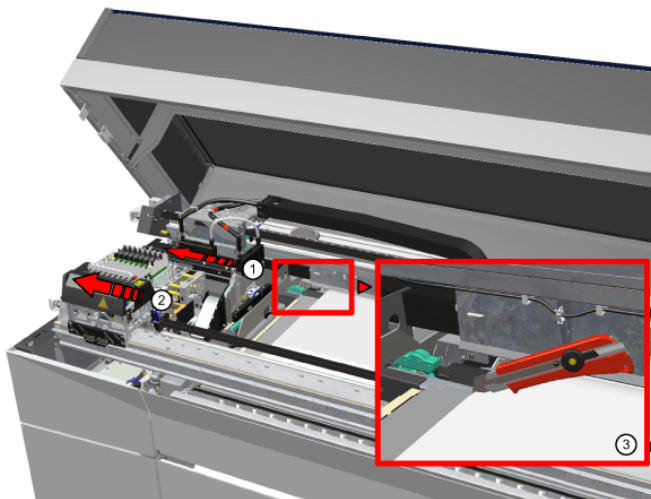
6. Use both hands to turn the media roll backwards (1) and remove the media from the metal paper guide. If present, do this for both media rolls.



7. Close the media drawer.
8. Put on the Colorado M-series approved gloves.
9. Open the top cover.
10. Carefully push the curing carriage to the left over the filters (1).
11. Carefully push the printhead carriage to the left in manual maintenance position (2).

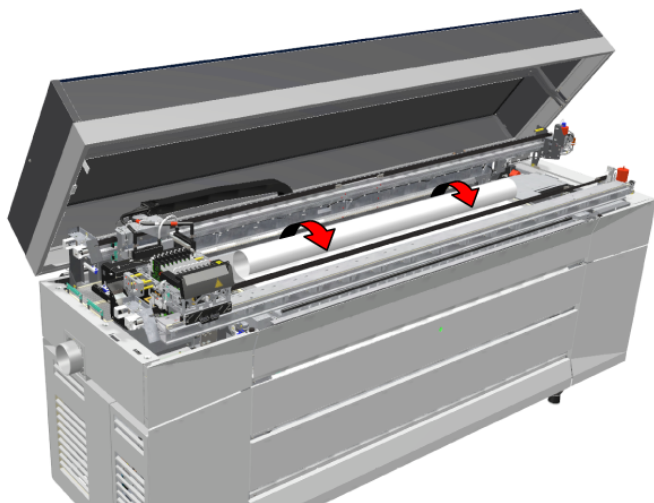
**IMPORTANT**

Touch the printhead carriage on the covered area only, otherwise you can damage the printheads.

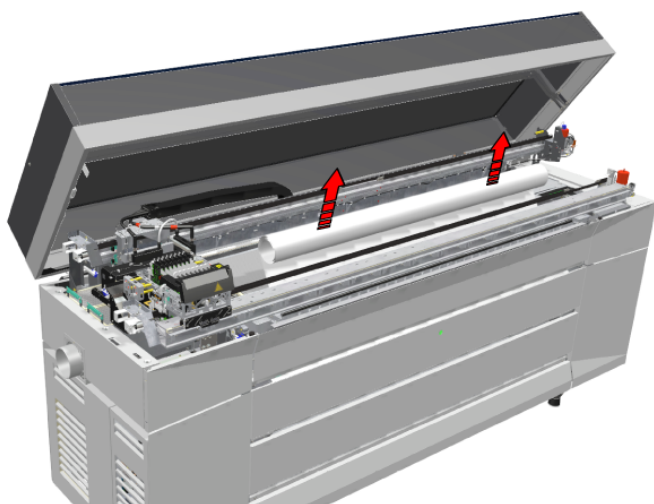


12. Take the knife and cut the media in the cutting guide (3). It is also possible to use the knife of the machine.

13. Fold the media towards you, from output side to input side, until the transport pinch.



14. Hold the folded media and pull the media from the transport pinch.



15. Dispose the media as chemical waste according to the local regulations.
16. When the platen is polluted with ink, clean it. For more information, see [Clean the platen on page 195](#).
17. Dispose the gloves as chemical waste.
18. Close the top cover.
19. On the media output side, manually wind the media on the take-up media roll and tape it.
20. Start automatic maintenance on the operator panel. For more information, see [Start automatic maintenance on page 180](#).

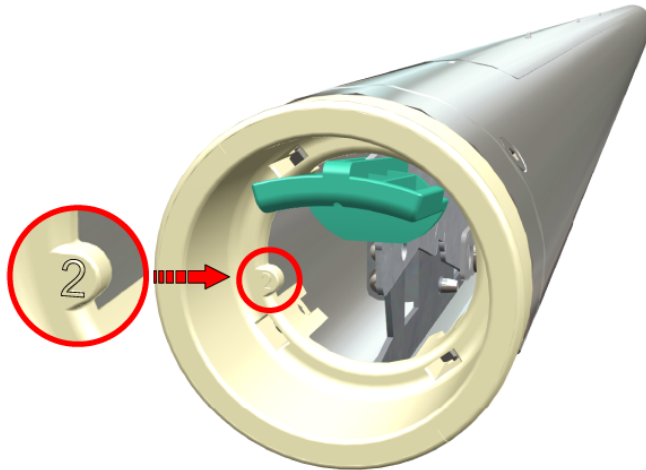
Replace a drive gear on a media shaft

Introduction

You can replace a drive gear on a media shaft without service assistance.

Video: [▶ Replace a drive gear on a media shaft.](#)

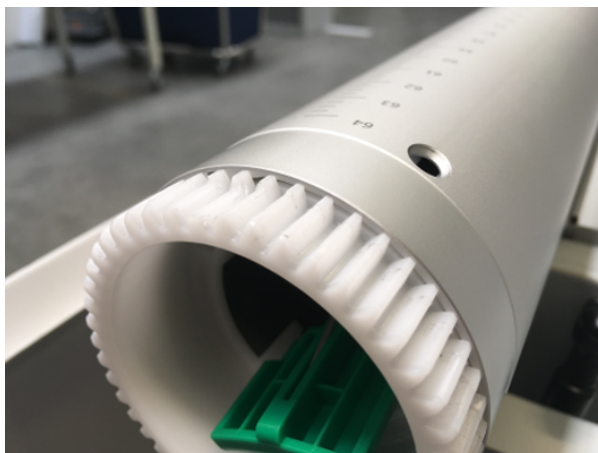
For inside winding, you need the new take-up media shaft. The gear inside the new take-up media shaft is marked with the number 2.



When to do

When the teeth of a drive gear are damaged, you can replace one or both drive gears of your media shaft. The procedure below can be used either on the feed media shaft or the take-up media shaft.

When the metal shaft itself is damaged, you have to replace the complete media shaft. You can request a new part from your local representative.



Before you begin

Use Colorado M-series prescribed:

- Screwdriver (Torx-20)
- Drive gear



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).

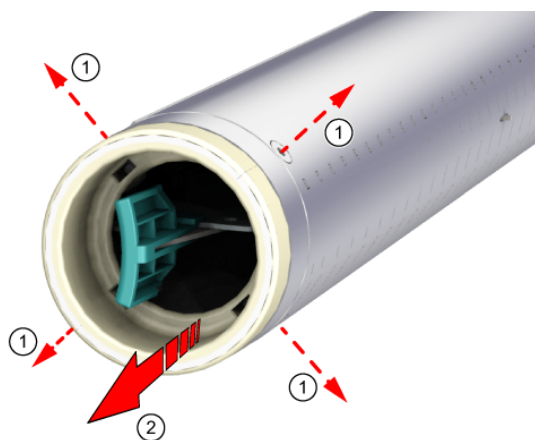


CAUTION

- **Watch your fingers when you handle the media roll.**
- **Lifting heavy media, 25 kg (55 lb) or more, has to be done by two people or with the help of external lifting tools.**

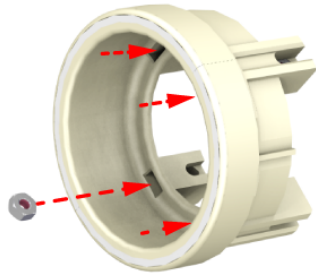
Procedure

1. Move to the media input side or the media output side of the printer.
2. When a media roll is loaded on the media shaft, first unload the media roll.
For more information, see [Cut and unload media on page 153](#).
3. Take out the media shaft.
4. Locate the damaged drive gear at the end of the media shaft.
5. Unscrew the four screws of the drive gear (1) with the Torx-20.

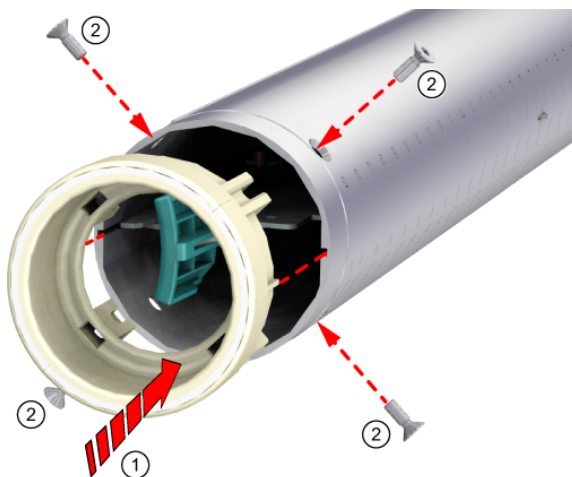


6. Remove the drive gear (2) carefully to not lose any of the hex nuts inside the media shaft.
7. Take out the four hex nuts from the slots.

8. Take a new drive gear and insert the four hex nuts in the slots.



9. Place the new drive gear into position on the media shaft (1). Make sure you align the drive gear with the markers inside the shaft.



10. Fasten the four screws (2), hand tight.
11. When you want to replace the second drive gear of the media shaft, repeat steps 4 to 10.
12. The media shaft is now ready for use.
You can load either a media roll or a take-up roll core. Then, place the media shaft back in the media drawer or on the roll winder.
For more information, see [Load a media roll \(position 1\) on page 89](#) or [Load a take-up roll core onto the roll winder on page 122](#).

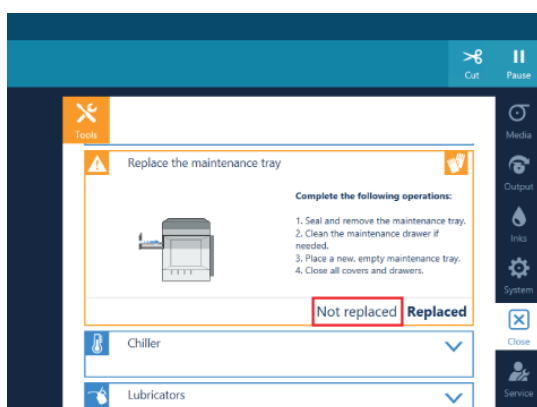
Cancel the replacement of a maintenance tray

Introduction

When you open the maintenance drawer the operator panel displays a message that you have to replace the maintenance tray. When you did this by accident, and you do not have to replace the maintenance tray you can cancel the replacement.

Procedure

1. The operator panel displays a message you must start the maintenance tray replacement procedure. Tap on [OK].
The [Tools] icon turns red.
2. Tap on the [Tools] icon.
3. Go to [Maintenance tray].
4. Tap on [Replace].
A new window opens.
5. Tap on [Not replaced].



The replacement procedure is canceled, the counters will not be reset.

Solve specific quality problems

Before you try to solve specific quality problems, make sure you have already checked and tried the general workflow for maintaining and improving quality.

For more information, see [General workflow for improving quality on page 250](#).

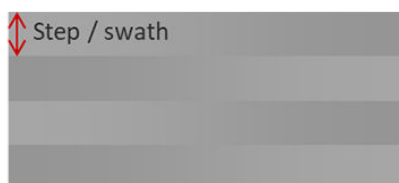


NOTE

Note that only advanced users or application specialists should edit media profiles or tune the media settings to solve specific quality problems. When in doubt contact your local support organization.

Zebra banding

Introduction



There is a difference between zebra banding in gloss versus matte print modes:

Matte print modes which show zebra bands may show slight gloss differences if you look under an angle over the swaths.

Gloss print modes might additionally show slight color differences over the swaths. For both: the effects will be reduced when a slower (more passes) print mode will be used.

Problem description	Action
Zebra banding in all print modes.	• Use the default print surface temperature. See Select a print mode on page 84. • Perform carriage and media calibration. See Calibrate the printhead carriage on page 257 and Calibrate the media on page 120. • Use a print mode with more passes. • Set [Print direction] to monodirectional.
Zebra banding in Glossy modes.	• Try a different media type (faster spreading) or a slower print mode. See Change the media settings on page 76.

After you finish

When the problem is not solved, contact your application specialist or local Service representative.

Gradient banding

Introduction

Problem description		Action
Gradient/variation within the swath.		Try a slower print mode. See Select a print mode on page 84 .
	In high coverage areas in gloss print modes.	See wrinkle in topic Wrinkles on page 340 .

Solve gradient banding on your print. Banding is a disturbance in the gloss of the print in the media step direction, repeated every swath. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.

After you finish

When the problem is not solved, contact your application specialist or local Service representative.

Lines at swath boundary

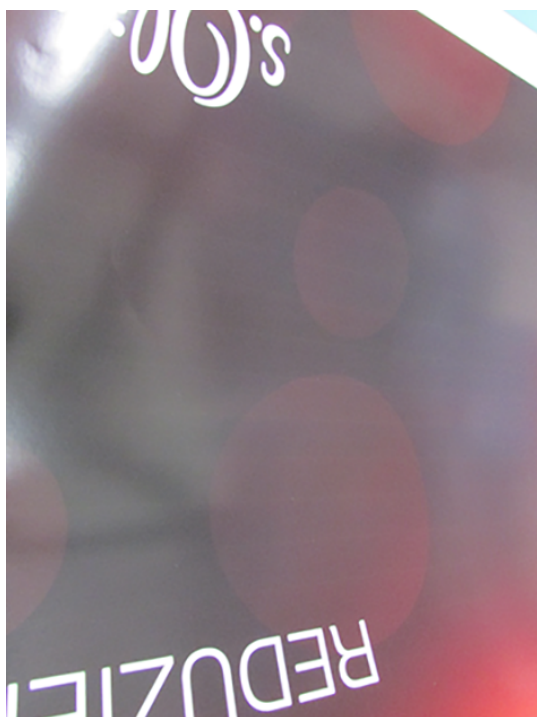
Introduction

Swath boundary. Two adjoining swaths/passes of the printhead must be positioned without overlap (dark lines), or gap (white lines).



Problem description		Cause	Action
OD lines occur at the swath boundary. OD of the lines usually varies over the print (from left to right or from line to line).	Usually worse during 1 st meter.		Perform a media calibration.
Very sharp line(s), no OD variation over print and only for a single mono-color (and its corresponding mixed colors).		This is caused by a nozzle failure at swath boundary and not due to paper step.	Run automatic maintenance + nozzle optimization. See Start automatic maintenance on page 180 .
For some (fast) print mode and print medium combinations, gloss/OD swath boundary lines will always be present.	Independent from paper step errors, though paper step optimization may reduce visibility.	Roll core gear is damaged or worn out. Order new and replace.	Manual optimization of the paper step correction may reduce visibility, see Change the media settings on page 76 . Switch to a slower print mode see Select a print mode on page 84 .

Follow the procedure below. You can stop at any time in the procedure when the problem is solved.



Lines at swath boundary



Procedure

1. Clean the platen and buffer plate, see [Clean the platen on page 195](#) and [Clean the buffer plate on page 198](#).

2. Check if the media quality is ok. If not, try a different media.
Check if the [Media thickness] setting in the RIP is correct.
3. Perform a media calibration. [Calibrate the media on page 120](#). A media calibration will minimize the darker or lighter lines in 1st meter (40") of the print caused by the media step.
4. Make sure that the [Automatic advance correction] setting in the RIP is enabled. Use enhanced markers. [Change the media settings on page 76](#).
5. Check the vacuum settings, see [Change the media settings on page 76](#).
6. Perform manual or periodic maintenance with [Automatic nozzle optimization].
7. Select a higher quality print mode. [Select a print mode on page 84](#).

After you finish

When the problem is not solved, contact your application specialist or local Service representative.

Lines within swaths

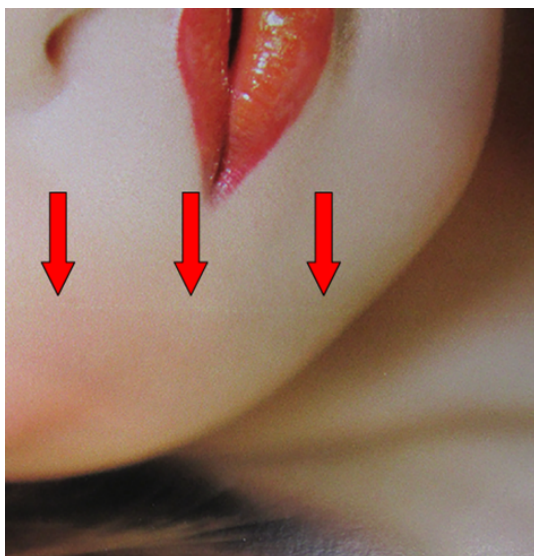
Introduction

Problem description		Cause	Action
Sharp OD/gloss lines for a single mono-color and its corresponding mixed colors.	A single light line (does not repeat in next swath).	Detected too late for compensation in that swath.	Cannot be solved (a slower print mode will reduce the problem).
	A light line that repeats in multiple swaths, high quality mode or better.	Probably undetected nozzle failure or side shooter.	Run automatic maintenance + nozzle optimization. See Start automatic maintenance on page 180 .
Dark/light/gloss lines (single mono-color/not at swath boundary)		Probably compensated nozzle failure, but still (somewhat) visible.	Run automatic maintenance + nozzle optimization (to recover the nozzle). See Start automatic maintenance on page 180 .
			Use a print mode with more passes.
Many lines or a thin band, doesn't go away after manual maintenance			Run printhead test chart. See Analyze the printhead quality check chart on page 254 . If lines are visible over multiple printhead colors, verify if the printer is correctly cleaned (fibers).

Follow the procedure below. You can stop at any time in the procedure when the problem is solved.

Procedure

1. Perform automatic maintenance with nozzle optimization and manual maintenance. See [Start automatic maintenance on page 180](#) and [Start manual maintenance on page 182](#).



Lines due to nozzle failure

2. Perform media calibration. [Calibrate the media on page 120](#).
3. Check if the [Media thickness] setting in the RIP is correct. [Change the media settings on page 76](#).
4. Select a higher quality print mode. [Select a print mode on page 84](#).

After you finish

When the problem is not solved, contact your application specialist or local Service representative.

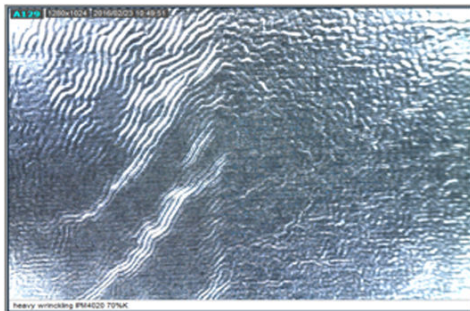
Wrinkles

Introduction

Gradient banding within swath for glossy print modes. Only for high coverage mixed colors.

Solve wrinkles on your print. Wrinkles show as rough repeating patterns especially in black. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.

Wrinkles



Procedure

1. Increase the [Optimized color profiling] value to +1 in the RIP. See [Change the media settings on page 76](#).
2. Adjust the profile: reduce ink limit in color profile (mainly black) (media verification profile).
3. Select a slower print mode.

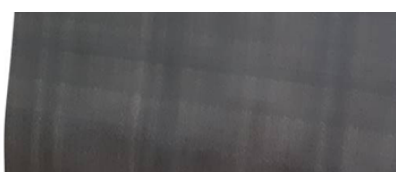
After you finish

When the problem is not solved, contact your application specialist or local Service representative.

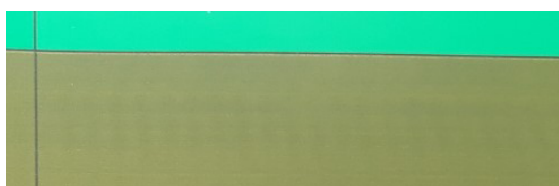
Vertical banding

Introduction

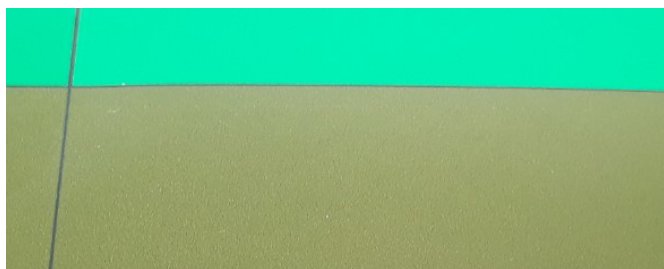
Problem description		Cause	Action
Sharp lines or bands.	Matching the roller positions.	Some media are very sensitive to mechanical deformation.	Try a different medium.
More gradual variation, some periodicity		Selected print mode is too fast.	Select a slower print mode see Select a print mode on page 84 . If you are printing in a high speed gloss (1 and 2 pass) print mode, select a slower print mode. In all print modes, you can select a monodirectional option. See Change the media settings on page 76 .
		Mechanical problem.	Check the carriage guidance, bearings or lubricators.



Sharp lines or bands



Gradual variation vertical banding



No gradual variation vertical banding

Micro-uniformity/graininess

Introduction

Solve micro-uniformity, for example graininess, mottle and small repeating structures on your print. Visibility non-uniform distributed ink drops on your print. The reason for this can be incorrect alignment or coalescence. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.

Do you see or experience...	Solution
a poor grain in the 1 st swath?	Perform manual maintenance.
many, tiny, gloss and OD spots?	Problem is media related. Try another media. Switch to a slower print mode, see Select a print mode on page 84 .

Shortcuts into different solution directions

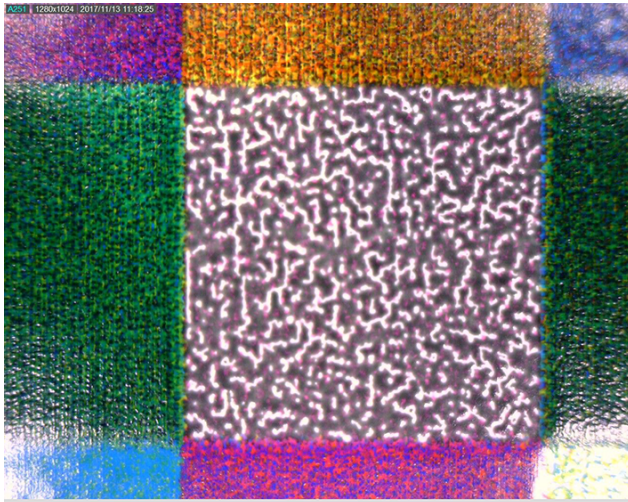
Graininess



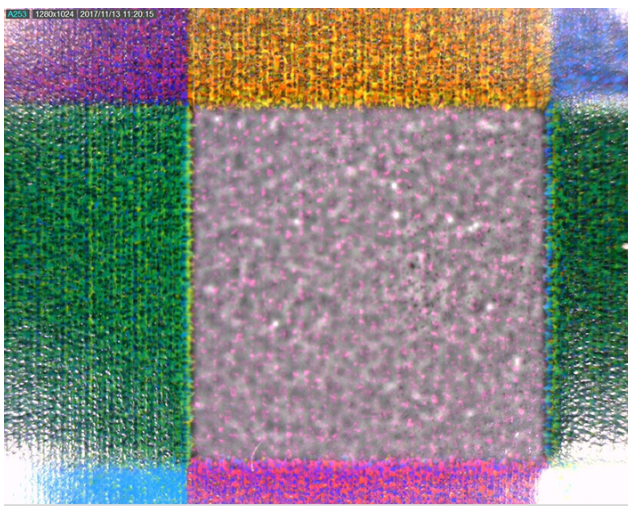
Procedure

1. Check if the media settings in the RIP related to the media used are correct, e.g. [Media thickness]. [Change the media settings on page 76](#).
2. Change the Media step correction. [Change the media settings on page 76](#).
3. Perform printhead calibration. [Calibrate the printhead on page 255](#).
4. Perform printhead carriage calibration. [Calibrate the printhead carriage on page 257](#).

5. When you see coalescence in the print, decrease the [Print surface temperature]. [Change the media settings on page 76.](#)



With coalescence results in graininess



Without coalescence no graininess visible

6. Select a higher quality print mode. [Change the media settings on page 76](#) or [Select a print mode on page 84.](#)

After you finish

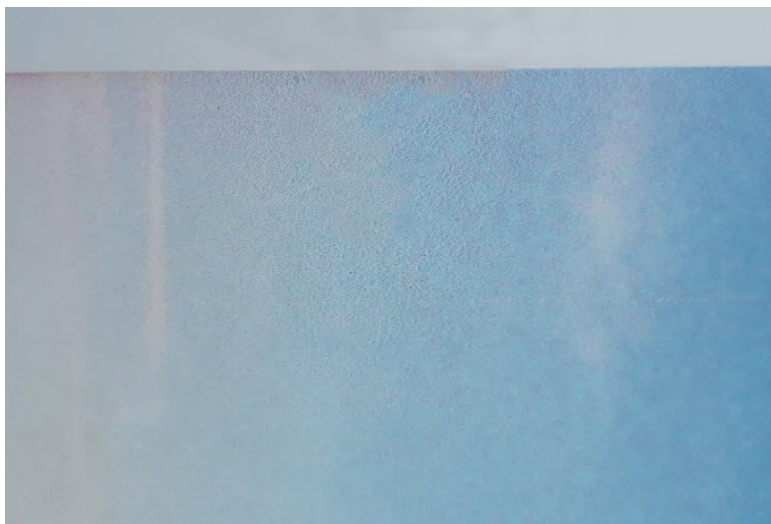
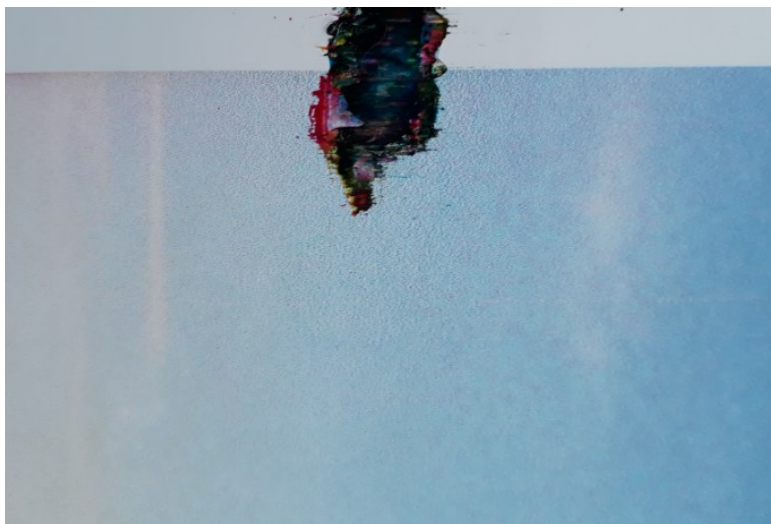
When the problem is not solved, contact your application specialist or local Service representative.

Media touches

Introduction

Prevent media touches from happening. When the media touches the printhead or printhead carriage, the print gets pollutes or smudged. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.

Media touches



Procedure

1. Check if the media type you loaded is also the media type you selected on the operator panel. Make sure the two are correct.
2. Check if the [Media thickness] setting in the RIP is correct. The media thickness determines the carriage height. This value represents the total thickness of the media, e.g. for self-adhesive vinyl, PVC including the liner. For more information, see [Change the media settings on page 76](#).

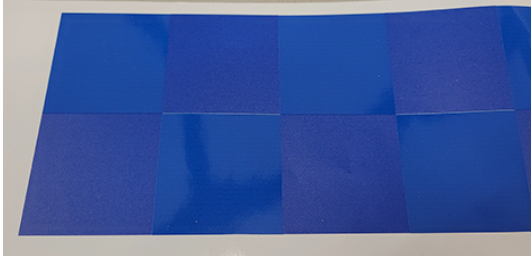
3. Make sure the media is not damaged or curled.
4. Make sure the media and the printer are not stored in a humid place. Check that the humidity is not too high.
5. Make sure the correct winding option is selected in the RIP. You can print and wind with a tension bar or a locked tension bar. [Print and wind with a tension bar on page 129](#), [Print and wind with a locked tension bar on page 134](#).
6. Set the [Print gap] setting in the RIP. If the print gap is set to [Medium] switch to [High].
7. Check if it is a media handling issue. For more information see, [Solve specific media transport problems on page 348](#).
8. Try a different media type.

After you finish

When the problem is not solved, contact your application specialist or local Service representative.

Misalignment between gloss and matte in FLXfinish+ mode

Introduction



The misalignment is visible as white lines between the gloss and matte parts of the print.

Problem description		Cause	Action
Misalignment between gloss and matte in FLXfinish+ mode	More likely to be visible in the 1 st meter of a print.	Media step not accurate	Perform a media calibration.

Procedure

1. Perform a media calibration. [Calibrate the media on page 120](#). A media calibration will minimize misalignment between matte and gloss in 1st meter (40") of the print, caused by the media step.
2. Make sure that the [Automatic advance correction] setting in the RIP is enabled. Use enhanced markers. [Change the media settings on page 76](#).
3. After printing for about 0.5-0.7 m with [Automatic advance correction] enabled, the automatic advance correction will have optimized the media step. Any misalignment between matte and gloss in FLXfinish+ mode will then also disappear.

After you finish

When the problem is not solved, contact your application specialist or local Service representative.

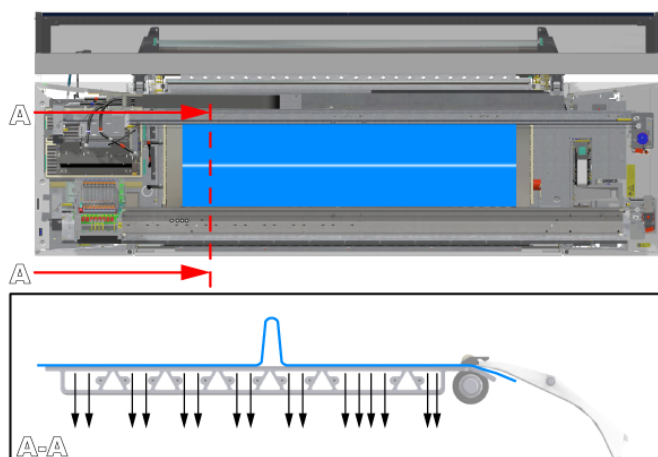
Solve specific media transport problems

Next to specific quality problems resulting in artefacts, you can also see media touches or a lower print quality caused by media transport problems. Problems in media transport can usually be observed through the top cover when you watch the media being transported over the platen. Identify the problem and solve it step by step.

Bulging media

Introduction

Solve media touches or print quality artefacts caused by the bulging of media. When media experiences too much resistance when moving over the printer platen, the media can start to bulge. A tapping sound from the media on the printer platen at every step can indicate the problem. Many times you can also see the media moving like a caterpillar across the printer platen. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.



Procedure

1. Make sure the printer platen is clean. [Clean the platen on page 195.](#)
2. Decrease the [Vacuum power] settings in the RIP. First, decrease the vacuum power with steps of 10% until a minimum value of 10% for zones D and E. If this is not sufficient decrease the vacuum power with steps of 10% until a minimum value of 30% for zones B and C. Do not decrease the vacuum power of zone A.
For each step you decrease and have changed the setting: reload the media before you continue printing. Observe the media movement on the platen first, before you decrease the vacuum power again. [Change the media settings on page 76.](#)



NOTE

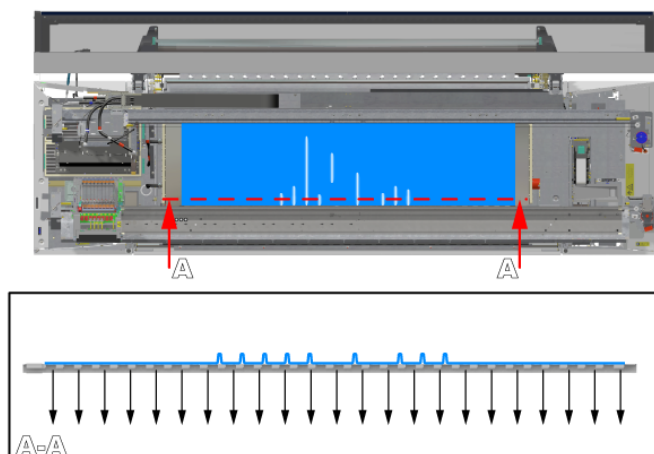
When you decrease the [Vacuum power] too much, media can come loose from the printer platen resulting in media touches as well.

3. Perform media calibration. [Calibrate the media on page 120.](#)
4. When the problem remains, use a different media.

Wrinkling media

Introduction

Solve media touches or print quality artefacts caused by the wrinkling of media in the transport direction. When you are using a flexible media such as textile or canvas which is not fed in the printer correctly or you are using a media type that is humid-sensitive, the media can start to wrinkle on the platen in the transport direction. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.



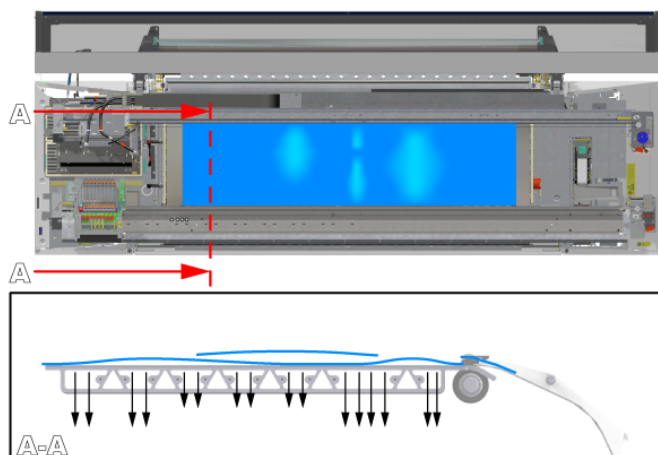
Procedure

1. When you see the wrinkling of media in the first meters of the print (incident based, after period of inactivity):
 1. The wrinkling is caused by humidity or moisture. Enable the [Moist sensitivity] setting in the RIP. [Change the media settings on page 76.](#)
2. When you see the wrinkling of media in the first meters of the print (structurally):
 1. Set the [Print gap] setting in the RIP to [High]. [Change the media settings on page 76.](#)
 2. Increase the [Vacuum power] settings in the RIP. Increase with steps of 10%. For each step you increase and have changed the setting: reload the media before you continue printing. Observe the media movement on the platen first, before you increase the vacuum power again. [Change the media settings on page 76.](#)
 3. When you have set the [Vacuum power] setting correctly, set the [Print gap] setting in the RIP back to [Medium]. [Change the media settings on page 76.](#)
 4. Perform media calibration. [Calibrate the media on page 120.](#)
3. When you see the wrinkling of media after 1 to 3 meters:
 1. Load the media roll on position 1. [Load a media roll \(position 1\) on page 89.](#)
 2. Feed the media manually.
 3. Manually cut the leading edge of the media.
4. Use a different media type.

Waves in media

Introduction

Solve media touches or print quality artefacts caused by waves in the media. When media is flexible and or of a relatively narrow media width (<1000mm) the vacuum suction can be too low and the media will start to move over the platen in a wave motion. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.



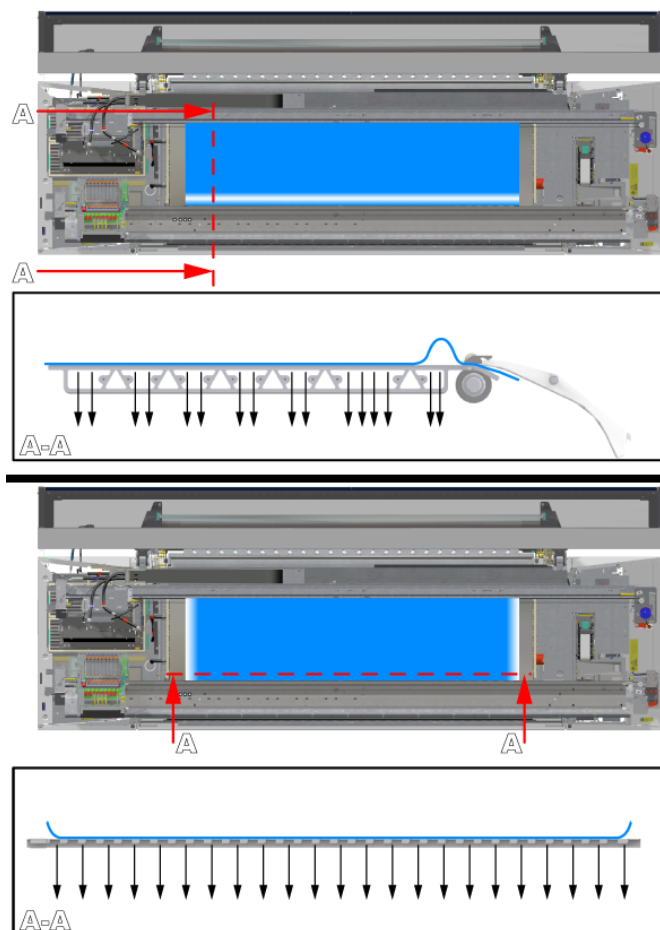
Procedure

1. Increase the [Vacuum power] settings in the RIP. Increase with steps of 10%. For each step you increase and have changed the setting: reload the media before you continue printing. Observe the media movement on the platen first, before you increase the vacuum power again. [Change the media settings on page 76.](#)
2. Perform media calibration. [Calibrate the media on page 120.](#)
3. Use a different media type.

Curling media

Introduction

Solve media touches or print quality artefacts caused by the curling of media. When you are using a stiff media at the leading edge of the roll, the media can get a leading edge curl. When you are using a multi-layer based media with high ink coverage at the side edge or a media stored in high humidity, the media can get a side-edge curl. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.



Procedure

1. Increase the [Vacuum power] settings in the RIP. Increase with steps of 10%. For each step you increase and have changed the setting: reload the media before you continue printing. Observe the media movement on the platen first, before you increase the vacuum power again. [Change the media settings on page 76.](#)
2. Perform media calibration. [Calibrate the media on page 120.](#)
3. Set the [Print gap] setting in the RIP to [High]. [Change the media settings on page 76.](#)
4. Use a different media type.

Drifting media

Introduction

Solve printing over the side edges of the media caused by the drifting of media. When media is not rolled up evenly on the core or the media is not fed in the printer correctly, the media will drift on the platen. When the media drifts, the printer can print over the side edges of the media and on the printer platen. Follow the procedure below. You can stop at any time in the procedure when the problem is solved.

Procedure

1. Make sure the printer platen is clean. [Clean the platen on page 195](#).
2. Load the media roll again and make sure the media has a straight cut leading edge feeding into the machine. [Load a media roll \(position 1\) on page 89](#).

Slipping media during calibration

Introduction

When you are calibrating a smoother or flexible media, the media can start to slip on the platen resulting in an inaccurate calibration. Misalignment observed on the calibration prints can indicate the problem. Follow the procedure below to improve media transportation during the calibration process. You can stop at any time in the procedure when the problem is solved.

Procedure

1. Remove the media from the paper path. [Remove media from the paper path on page 325.](#)
2. Make sure the printer platen is clean. [Clean the platen on page 195.](#)
3. Decrease the [Vacuum power] settings in the RIP:
 1. First, define an additional leading strip of 40 cm. Then, decrease the vacuum power with steps of 10% until a minimum value of 30% for zones D and E.
 2. If this is not sufficient decrease the vacuum power with steps of 10% until a minimum value of 30% for zones B and C.
Do not decrease the vacuum power of zone A.



NOTE

When you decrease the [Vacuum power] too much, media can come loose from the printer platen resulting in media touches as well.

4. Reload and perform media calibration. [Calibrate the media on page 120.](#)
5. Observe the calibration prints before you decrease the vacuum power again. [Change the media settings on page 76.](#)
For each step you decrease and have changed the setting; reload and calibrate the media again.
6. When the problem remains, use tight winding for this media. [Print and wind with a tension bar on page 129.](#)

Clean pollution on the printer

Guidelines for cleaning uncured ink

Introduction

When the system is polluted with uncured ink you have to clean it. In order to work safe, follow the described guidelines.

Various parts in the printer can get polluted. Check all these parts when the system has been polluted by uncured ink.

Cleaning materials

When you have to clean uncured ink, use the Colorado M-series prescribed maintenance materials. Order the materials via your local representative:

- Microflex gloves for handling ink
- Lint free cloths
- Swabs
- Cleaning liquid (IPA)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.



IMPORTANT

This cleaning liquid (IPA) is not used for cleaning the maintenance drawer and heated parts of the maintenance station.

Procedure

When you clean, follow the procedure:

Step	Action
1	Make sure the printer is not printing and there is no media on the platen.
2	Put on the gloves.
3	Clean the part with the lint free cloths or swabs. Use as many as necessary.
4	If necessary, dampen the cloth or swab with the prescribed cleaning liquid and clean it again.
5	If necessary, wipe with a dry cloth and let the liquid evaporate.
6	Dispose the gloves and other maintenance materials as chemical waste according to local regulations.

For part specific descriptions, see [Clean the media cover on page 355](#), [Clean the platen on page 195](#), [Clean the guide plate and replace the foams and roller assy on page 357](#).

Clean the media cover

Introduction

When the printer is polluting your media with for example uncured ink or glue, check the media cover. In case of pollution, you can clean the media cover.

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths
- Cleaning liquid (IPA)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).

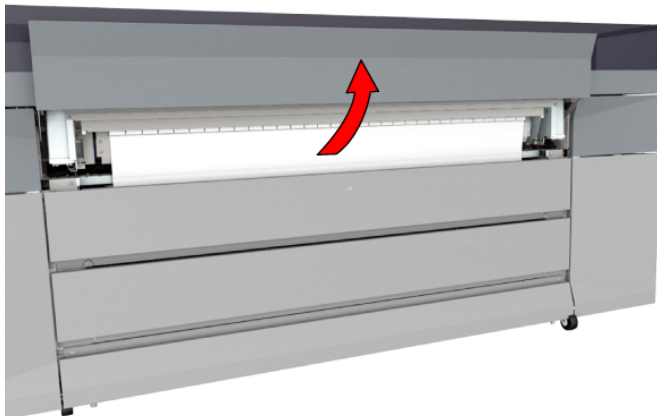


CAUTION

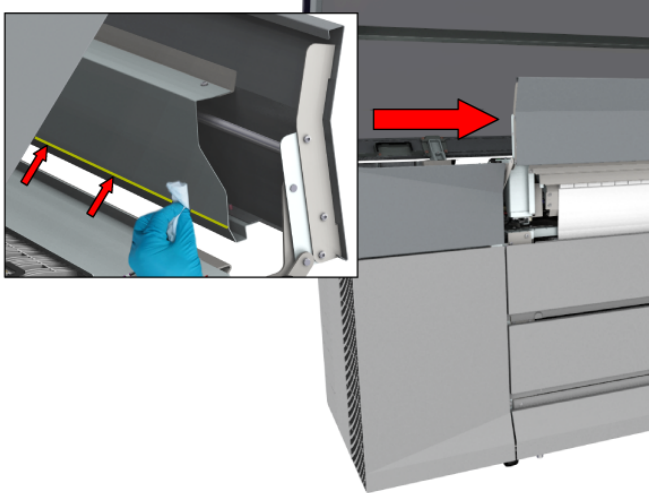
Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

Procedure

1. Put on the Colorado M-series approved gloves.
2. Go to the media input side and open the media cover.



3. Inspect if the media cover is polluted on the inside.



4. Take a lint free cloth and clean the media cover.
5. Dampen the cloth with the cleaning liquid to remove any remaining ink.



IMPORTANT

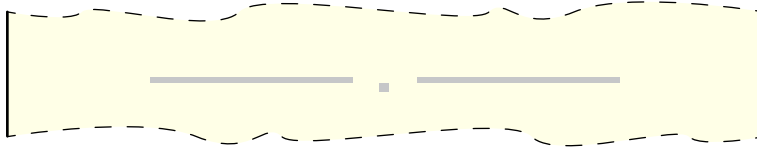
Use the prescribed cleaning liquid. Do not use any other cleaners.

6. Dispose the gloves, cloths and pin as chemical waste according to local regulations.
7. Close the media cover.

Clean the guide plate and replace the foams and roller assy

Introduction

When you see your print is polluted with a clear ink stamp coming from the guide plate, you must clean the guide plate and replace the foams and roller assy.



Video:  [Replace the winder foams and the roller assy.](#)

Before you begin

Use Colorado M-series prescribed:

- Microflex gloves for handling ink
- Lint free cloths and swabs
- Cleaning liquid (IPA)



NOTE

For information on the prescribed maintenance materials, see [List of Colorado M-series maintenance materials on page 247](#).



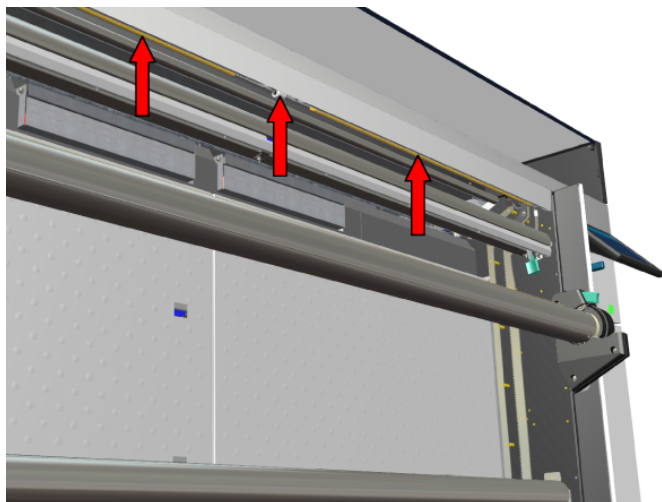
CAUTION

Wear the prescribed gloves when contact with ink or maintenance materials is possible. Gloves should always overlap sleeves. Follow the Safety Data Sheets (SDS) guidelines carefully in order to ensure maximum safety.

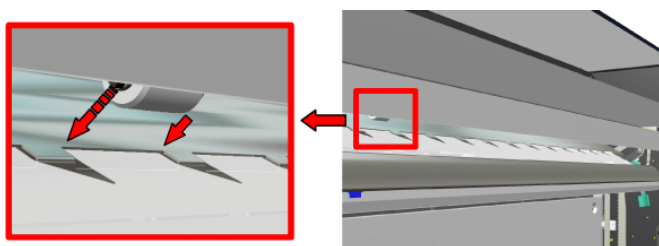
Procedure

1. Make sure the printer is not printing and the guide plate is in open position.
2. Remove the media before you replace the foams and roller assy. For more information, see [Remove media from the paper path on page 325](#)
3. Put on the Colorado M-series approved gloves.

4. Go to the media output side and locate the guide plate with the roller assy and foams.

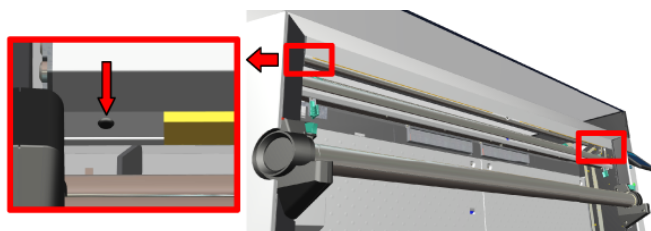


5. Locate the roller assy under the guide plate.



6. Pull to take out the roller.

7. Locate the foam left of the roller assy. A pin is placed at the left end of the foam.



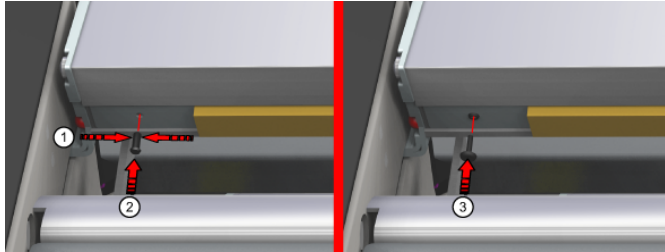
8. Pull the pin and plug out with your fingers.
9. Locate the foam right of the roller assy. A pin is placed at the right end of the foam.
10. Pull the pin and plug out with your fingers.
11. Slide both foams towards the middle to remove them.
12. Dispose the roller assy, foams, pins and plugs as chemical waste according to local regulations.
13. Take a lint free cloth and clean any residue ink left on the guide plate.
If necessary, dampen the cloth with the cleaning liquid to remove any remaining ink.



IMPORTANT

Use the prescribed cleaning liquid. Do not use any other cleaners.

14. Dispose the gloves and cloth as chemical waste according to local regulations.
15. Take the new foams and slide them in place.
16. On the left end, push in a new plug and push in a new pin.

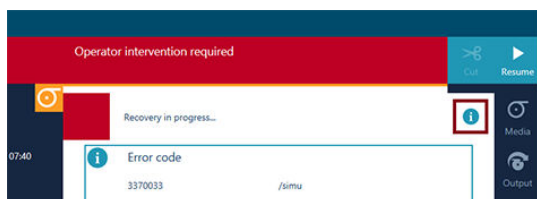


17. On the right end, push in a new plug and push in a new pin.
18. Push and click a new roller assy in place.

Error codes overview

Introduction

When an error occurs you will see an information icon on the operator panel. Click on the icon to find information on the error.



NOTE

When a job requires a license or a hardware kit such as FLXfinish+ and that license or kit is missing, the job will not appear on the operator panel. The controller will not give an error code.

In the table below you find the most common error codes.

Number	Error code	Message	Action
1	5713	Cannot read markers for media step control	- Clean the MC scanner, see Clean the MC scanner on page 192. - Use the advanced black markers. - Clean the media or use different media.
2	1701 1702 1705 5709	Carriage crash	- Clean the platen and the buffer plate, see Clean the platen on page 195 and Clean the buffer plate on page 198. - Clean the ruler, see Clean the ruler on page 208. - Check the fan settings. - Use uncurled or undamaged media. - Use the correct winding mode. - Use recommended media and profiles from Canon media guide website. - Make sure media is not damaged or curled. - Make sure the media can be transported well.
3	1760 1761 5760 5761	Carriage position error during home	- Check if the carriages can move freely (i.e. is not blocked). - Check if the platen is clean. For more information see Clean the platen on page 195.

Num ber	Error code	Message	Action
4	6539	Temperature deviation error	- Check the air inlet and outlet for obstructions. - Vacuum the chiller, see Vacuum the chiller and check the fluid level on page 200. - Check the environmental temperature.
5	6540	Temperature at set point timeout	
6	6548	High temperature	
7	6544	Chiller alarm	Refill the chiller, see Refill the chiller on page 243 .
8	15725 1270108	Too late at XMS_MEDIA_SE (15B11)	- Make sure the media is not damaged or curled. - Make sure the media can be transported well and is not too flexible, slippery or sticky. - Use a media that is reflective enough.
9	15729	Too late free at XMS_MEDIA_SE (15B11)	- Make sure the media is not damaged or curled. - Make sure the media can be transported well and is not too flexible, slippery or sticky. - Use a media that is reflective enough.
10	25701	Wrong media width detected	Media width does not match the measured width, please change the media width.
11	7703	Maintenance tray not detected	- Place maintenance tray in correct position. - Check maintenance chapter, see Maintain the printer on page 210.
12	7778	Tissue cassette not detected	Make sure the tissue cassette is inserted correctly. See Replace the tissue cassette on page 219 .
13	21752	Ink aging PH detected	Automatic maintenance cannot be performed while the system is in error. To prevent damage to the printhead heating is switched off. Try to prevent the printer being in an error state for too long (e.g. overnight). When the error situation is resolved the printheads will automatically warm up again.
14	16731 16733	Knife position error	- Make sure you use a cuttable media - If the knife is damaged, replace knife, see Replace the knife on page 223. - Check if there are no obstructions in knife path.

Num ber	Error code	Message	Action
15	24704	Open during run	Do not open the media drawer when the led is off.

Chapter 10

Regulation Notices

Grounding (Finland; FI, Norway; NO, Sweden; SE and Denmark; DK)

- FI: Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.
- NO: Apparatet må tilkoples jordet stikkontakt.
- SE: Apparatens skall anslutas till jordat uttag.
- DK: Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.

Translation: The machine must be connected to a grounded power outlet.

Radio Interference suppression (all countries except USA)

- Warning (CISPR22): This equipment is compliant with Class A. In a residential environment this equipment may cause radio interference.
- Warning (CISPR32/EN55032): This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.
- Warning (CISPR11/EN55011): Operation of this equipment in a residential environment could cause radio interference.

Flicker (EEA including Switzerland)

- This equipment may only be connected to mains connections with an impedance at 50 Hz of $Z_{sys} = 0.305 \text{ Ohm}$ or less. In case it is observed that this equipment causes 'light flicker' to the environment, contact the supply authority in order to verify if the mains network has lower impedance than the one specified above.

FCC (USA)

- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the User Documentation, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- Uses of shielded cables are required to comply with Class A limits in Subpart B of Part 15 of the FCC Rules.
- This equipment contains a certified modular transmitter. The transmitter's FCC ID label is located near the power rating label. The modular transmitter is located in the ink supply unit and can only be accessed by a service technician.

ICES/NMB; Interference-causing equipment (Canada)

- CAN ICES-3 (A)/NMB-3(A)

Conformity declaration for Radio Equipment Directive; RED (EEA including Switzerland)

- Hereby Canon Production Printing declares that the printer is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU (RED). The product is CE-marked to show conformance with applicable legal requirements.

Conformity declaration for Radio Law (Japan)

- This end device contains a radio device which is already approved by MIC **AC-17014** for Radio Law

Conformity declaration for Radio devices (USA and Canada)

- This equipment contains a certified modular transmitter. The modular transmitter is located in the **ink supply unit** and can only be accessed by a service technician.



- The transmitter's FCC ID is **2AGNM**, the IC ID is **22117**.

Conformity declaration for Federal Telecommunications Law (Mexico)

This end device contains an RFID module which is already approved by IFETEL (RCPOCOC16-1941) for Federal Telecommunications Law.

Conformity declaration for Telecommunications (Hong Kong)

This end device contains an RFID module which is already approved by ISM (HKCA1035, issue 7) for the Communications Authority. Certificate No.: HK0011801838.

Conformity declaration for Telecommunications (Malaysia)

This end device contains an RFID module which is already approved by MCMC MTSFB (TC T007:2014) for Communications and Multimedia Act. Approval No.: RCCV/24A/0418/S(18-1613).

Conformity declaration for Telecommunications (Singapore)

This end device contains an RFID module which is registered with the Info-communications Media Development Authority under regulation 20(6) of the Telecommunications (Dealers) Regulations (Cap 323, Rg 6) (the "Dealers Regulations") and approved for sale in Singapore. Telecommunications (Amendment) Act 2011 (No. 19 of 2011).

Complies with IDA Standards DB00671

Conformity declaration for Telecommunication (Indonesia)

This end device contains an RFID module which is certified by the ministry of communications and information technology, directorate general of resources and equipment for post and information technology, the republic of Indonesia. Telecommunication Law No.36 of 1999.

**58657/SDPPI/2018
7895**

VCCI (Japan)

- **Class A ITE (CISPR22)**

Class A ITE (CISPR22)

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

VCCI-A



Translation: This is a Class A product based on the standard of the VCCI Council. If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

EAC (Eurasian Economic Union; EEU)



The following information about this product can be found on the rear side of the machine:

Model number
Mains specifications
Manufacturer
Country of origin
Production date <YYYY-MM-DD>
EAC marking

Laser Safety (All countries)

- **Laser safety**

This is a digital machine which operates using a laser. There is no possibility of danger from the laser provided the machine is operated according to the instructions in this User Documentation. Since radiation emitted by the laser is completely confined within protective housing, the laser beam cannot escape from the machine during any phase of user operation. This machine is certified as a Class 1 laser product according to IEC60825-1 2014; the machine does not produce hazardous laser radiation.



- **CDRH regulations**

This machine is certified as a Class 1 Laser product under Radiation Performance Standard according to the Food, Drug and Cosmetic Act of 1990. Compliance is mandatory for Laser products marketed in the United States and is reported to the Centre for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration of the U.S. Department of Health and Human Services (DHHS). This means that the device does not produce hazardous laser radiation. The related label indicates compliance with the CDRH regulations and must be attached to laser products marketed in the United States.

CAUTION

Use of controls, adjustments or performance of procedures other than those specified in this User Documentation may result in hazardous radiation exposure. This is a semiconductor laser. The maximum power of the laser diode is **0.78 mW**.

Lamps (All countries)

- This product may contain lamps that are only intended for use in combination with and for this specific product (and related equipment) and such lamps are not intended for use in other applications.

Battery labeling (EEA including Switzerland)

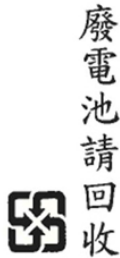
- This product contains a battery. Please do not remove the battery. If the battery needs replacement, this should be done only by skilled service technicians who are aware of the removal instructions provided by Canon Production Printing.
- This product contains a battery or batteries. It (They) is (are) located in (a) printed circuit board(s) that is (are) essential for the continuous error-free functioning of the product. The battery or batteries should be removed only by skilled service technicians who are aware of the removal instructions provided by Canon Production Printing.



Location	Battery capacity [mAh]	Contains
Internal controller	200	Lithium

-
- Caution: Canon Production Printing does not accept any liability for any damage or consequences, if the batteries are removed by persons other than Canon Production Printing service personnel.

Battery labeling (Taiwan)



Translation: Waste batteries, please recycle.

Battery labeling (United Kingdom; England, Scotland and Wales)

- This product contains a battery. Please do not remove the battery. If the battery needs replacement, this should be done only by skilled service technicians who are aware of the removal instructions provided by Canon Production Printing.
- This symbol indicates that the batteries and accumulators used in this product are to be disposed of separately from your household waste in accordance with the UK Waste Batteries and Accumulators Regulations.



If a chemical symbol is printed beneath the symbol shown above, in accordance with the Regulation, this indicates that a heavy metal (Hg = Mercury, Cd = Cadmium, Pb = Lead) is present in this battery or accumulator at a concentration above an applicable threshold specified in the Regulation. Batteries and accumulators must not be disposed of as unsorted municipal waste. Users of batteries and accumulators must use the available collection framework for the return, recycling and treatment of batteries and accumulators. If your Canon Production Printing product contains non-removable batteries, the entire product is already covered by the UK Waste Electrical and Electronic Equipment Regulations and should be handed over to an authorized collection site for WEEE. The collection site will then take the appropriate measures for the recycling and treatment of the product, including the batteries. Customer participation in the collection and recycling of batteries and accumulators is important to minimize any potential effects of batteries and accumulators on the environment and human health due to substances used in batteries and accumulators. In the UK, there are separate collection and recycling schemes for batteries and accumulators. To find out more about recycling schemes for batteries and accumulators available in your area, please contact your local city office, waste authority or waste disposal facility. For more information regarding the return and recycling of waste batteries and accumulators, please visit: <http://www.canon-europe.com/sustainability/approach>

End of Life: Eurasian Economic Union (EEU)

Russia and Belarus	
Утилизация продукции	Данную продукцию следует утилизировать должным образом, в соответствии с действующим национальным и местным законодательством.
Kazakhstan	
Өнімді қадеге жарату	Бұл өнім Сіздің ұлттық және жергілікті заңнамаларыңызға сәйкес қадеге жаратылуы тиіс.
Armenia	
Ապրանքի չնչնացում	Այս ապրանքը պետք է չնչնացվի պատշաճ և ավելի անվտանգ ջերմազգայի և տեղական օրենսդրությանը :
Kyrgyzstan	
Таштандыны иштетүү	Бул өнүм сиздин улуттук жана жергиликтүү мыйзамдарына ылайык тиешелүү түрдө кылуу керек.

Translation: Recycling of product; This product should be disposed of appropriately, according to your national and local legislation.

End of Life; WEEE (EEA including Switzerland)

This symbol indicates that this product is not to be disposed of with your household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service. For more information regarding return and recycling of WEEE products, please visit: <http://www.canon-europe.com/sustainability>. Reference: Directive 2012/19/EU.



End of Life; WEEE (United Kingdom)

This symbol indicates that this product is not to be disposed of with your household waste, according to the UK Waste Electrical and Electronic Equipment Regulations. This product should be handed over to a designated collection point, e.g., on an authorized one-for-one basis when

you buy a new similar product or to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, approved WEEE scheme or your household waste disposal service. For more information regarding return and recycling of WEEE products, please visit: <http://www.canon-europe.com/sustainability>.



For products containing chillers (All countries)

This product contains a chiller to keep the temperature of functional parts within specified limits. This chiller contains a Fluorinated Greenhouse Gas; F-GHG **R134a**). The cooling system in the chiller contains **0.48** kg of this substance, corresponding to **700** kg CO₂ equivalent. The fluorinated greenhouse gas is contained in hermetically sealed equipment.

End of Life; WEEE (India)

This product is not to be disposed of with your household waste, according to the E-Waste (Management) Rules, 2016. This product should be handed over to a designated collection point, e.g., to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information regarding return and recycling of WEEE products, please visit <https://in.canon/en/consumer/web/e-waste> or write to us at cipl.ewaste@canon.co.in. Also, this product complies with the "E-Waste (Management) Rules, 2016" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 % by weight and 0.01 % by weight for Cadmium, except for the exemptions set in Schedule II of the Rule.



End of Life; Handling of disposal of parts (Japan)

廃棄物の取り扱いについて

使用済みの消耗品と消耗部品は、法令・条例に従って、産業廃棄物としてお客様が処理処分をお願い致します。

Translation: Handling of disposals. Used consumables and expendables must be discarded by the customer as industrial waste in accordance with the laws as well the regulations of local government.

RoHS (Vietnam)

Products sold in Vietnam market comply with following Circular and Decision - "Circular No. 30/1011/TT-BCT dated August 10, 2011 of the Ministry of Industry and Trade stipulating temporarily the permissible content limitation of some toxic chemicals in the electronic, electrical products" - Decision No.4693/QD-BCT correcting Circular 30/2011/TT-BCT.

For the statement on Canon Marketing Vietnam website, please see the last paragraph on the web page of the following URL: <http://www.canon.com.vn/personal/web/company/about/>.

REACH compliance (EEA including Switzerland)

- REACH regulation (EC No 1907/2006) article 33 requires information to be communicated to customers/end users about the presence of SVHC substances included in the REACH candidate list when such substances are above the threshold of 0.1% in articles. If such information has to be communicated it can be found on <https://www.canon-europe.com/sustainability/approach/>.
Under normal conditions of use, there will be no exposure and no special measures are required for safe use.

Computers (All countries)

- Regulation EU 617/2013 calls for the environmentally sound design of computers. This information can be found at the support site of your product:
<https://downloads.cpp.canon/>

Acoustic noise emission (All countries)

- Sound pressure (LpA = **66 dB(A)**) is used to characterize the sound level that will be experienced at operator position and is defined as the dynamic variation of the static pressure of air measured in force per unit area. Sound pressure is normally represented in decibels [dB]. Typical values are a sound pressure level of 0 dB, which is the average threshold of human hearing, and 60 to 70 dB for normal conversation, 110 dB at an extremely loud music concert, and 150 dB for the noise of a jet engine at close range.

Recycled paper (All countries)

The use of recycled paper also benefits the environment. The Colorado M-series is designed to use recycled paper, including chlorine free paper, which complies with the requirements of EN12281:2002.

Glanzgrad bei Peripheriegeräten (Germany)

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert werden.

Translation: The equipment is not intended for use within the direct visual field of a workplace equipped with a monitor screen. In order to avoid annoying reflections at the workplace (monitor screen), this product must not be placed within the direct visual field of monitor screens.

Operating environment (All countries)

- The environmental requirements for correct operation of the machine are as follows:
 - Operating temperature (T): **18 °C (64.4 °F) to 30 °C (86 °F)**
 - Recommended operating temperature (T): 20 °C (68 °F) to 27 °C (80.6 °F)
 - Relative Humidity (RH): **20% to 80%** (non condensing)
 - Recommended Relative Humidity (RH): 30% to 60% (non condensing)
 - Operating altitude: below **2000 m**

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