



Operating Instructions

M1630 Jet

M1630 Jet eco

Inkjet Printer for Wire Processing

komax

KOMAX AG

The Komax M1630 Jet and M1630 Jet eco are product configurations of the Domino Ax350i. The M1630 Jet and M1630 Jet eco have unique wire marking features and are exclusively distributed by Komax.

Store printed safety instructions near the printer so they are easily accessible.

This document is the “Original Instructions”.

For sales and service please contact your local Komax partner or:

Komax AG

Industriestr. 6

6036 Dierikon / LU

Switzerland

Tel: +41 (0)41 455 0 455

Fax: +41 (0)41 450 4 266

Mail: info.din@komaxgroup.com

Web: <http://www.komaxgroup.com>

CE Conformity

This product is in the category of *Information Technology Equipment* and therefore not subject to the *Machinery Directive 2006/42/EC*. The EU declaration of conformity is available on [page 2](#) of this document.

Copyright

All rights reserved. No part of this publication may be reproduced, stored on a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of Domino Printing Sciences plc.

Domino Printing Sciences plc. and Komax AG have a policy of continuous product improvement, the companies therefore reserve the right to modify the specification contained in this document without notice.

© Domino Printing Sciences plc. 2021.

Amendment Record

Issue	Date
Issue 1	April 2018
Issue 2	January 2019
Issue 3	October 2021

This product is in the category of information technology equipment. Therefore it is not subject to the CE machinery directive.

CONTENTS OF EU DECLARATION OF CONFORMITY

1 EU DECLARATION OF CONFORMITY

2 Manufacturer

Domino UK Limited, Trafalgar Way, Bar Hill, Cambridge, CB23 8TU, United Kingdom

3 Trademark

DOMINO

4 Authorized Representative

Domino Laser GmbH, Fangdieckstrasse 75a, 22547 Hamburg, Germany

5 Product Description

5.1 Industrial ink jet printer including accessories

6 Model/Type Number(s)

6.1 Ax150i, Ax350i, Ax550i

7 We herewith declare under our sole responsibility that the above-mentioned products meet the provisions of the following EU Directives and harmonized standards:

8 EU Directives

8.1 2014/53/EU : Radio Equipment Directive

8.2 2011/65/EU : RoHS Directive, as amended

9 Applied harmonized European standards

EN 62368-1:2014+A11:2017

EN 301 489-1 V2.2.0

EN 301 489-3 V2.1.1

EN 55035:2017+A11:2020

EN 61000-6-2:2005

EN 300 330 V2.1.1

10 Further applied harmonized standards

N/A

11 This declaration is valid from the products starting with serial number

11.1 Made in UK, Ax150i from AX0000034747, Ax350 from AX0000034747 and AX0800000519, Ax550i from AX0000034747

11.2 Made in China, Ax150i from AX3105008815, Ax350i from Ax3305008790, Ax550i from AX3505007461

1 EU DECLARATION OF CONFORMITY

2 Manufacturer

Domino UK Limited, Trafalgar Way, Bar Hill, Cambridge CB23 8TU, United Kingdom

3 Trademark

DOMINO

4 Authorized Representative

Domino Laser GmbH, Fangdieckstrasse 75a, 22547 Hamburg, Germany

5 Product Description

5.1 Industrial ink jet printer including accessories

6 Model/Type Number(s)

6.1 Ax150i, Ax350i, Ax550i

7 We herewith declare under our sole responsibility that the above-mentioned products meet the provisions of the following EU Directives and harmonized standards:

8 EU Directives

8.1 2014/53/EU : Radio Equipment Directive

8.2 2011/65/EU : RoHS Directive, as amended

9 Applied harmonized European standards

EN 62368-1:2014+A11:2017

EN 301 489-1 V2.2.0

EN 301 489-3 V2.1.1

EN 55035:2017+A11:2020

EN 61000-6-2:2005

EN 300 330 V2.1.1

10 Further applied harmonized standards

N/A

11 This declaration is valid from the product starting with serial number

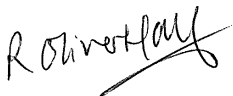
11.1 Made in UK, Ax150i from AX0000034747, Ax350i from AX0000034747 and AX0800000519, Ax550i from AX0000034747

11.2 Made in China, Ax150i from AX3105008815, Ax350i from AX3305008790, Ax550i from AX3505007461

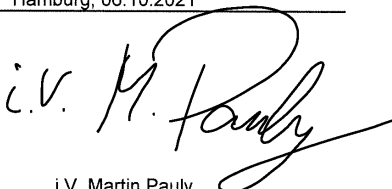
12 Place, Date and legal Signature:

12.1 Cambridge, 06.10.2021

12.2 Hamburg, 06.10.2021





Richard Oliver-Hall
Group Development Director,
Domino UK Limited.
On behalf of the Manufacturer



i.v. Martin Pauly
Director R&D – Laser,
Domino Laser GmbH.
On behalf of the Authorised Representative

THIS PAGE INTENTIONALLY LEFT BLANK

KOMAX M1630 JET OPERATING INSTRUCTIONS

WARNING: Industrial Equipment. Risk of Injury	
 	Always read the safety precautions in the Product Manual before operating this equipment.
	This document is intended as a daily guide to be used alongside the Product Manual. It is not a substitute for the Product Manual.

Intended Use of Printer

The M1630 Jet and M1630 Jet eco are industrial ink jet printers designed for coding and marking onto a variety of substrates and products. For specific details, please contact your local support office.

Safety may be impaired if the product is used in a manner not specified by the manufacturer.

Target Audience

This document covers basic safety information and operation, it is aimed at any operator of this equipment. Domino recommends that all operators receive product training before operating the equipment.

For instruction and operation, refer to the Product Manual, which can be found at: <https://direct.komaxgroup.com/>

CONTENTS

	Page
CONTENTS OF EU DECLARATION OF CONFORMITY	2
KOMAX M1630 JET OPERATING INSTRUCTIONS	5
Intended Use of Printer	5
WARNINGS, CAUTIONS AND NOTE DEFINITIONS	8
Symbols	8
INKS AND FLUIDS	9
Basic Requirements	9
Exposure to Chemicals	10
Storage	10
Fire Risk	10
Spillages	11
Ventilation	11
Flammable Vapour and Electro-Static Discharge	12
Maintenance	12
OPERATION	13
How to Switch On	13
How to Switch Off	13
How to Start/Stop the Ink Jet	13
USER INTERFACE MODES	14
Komax Mode	14
Stand-alone Mode	14
TOPWIN INTERFACES PACK (KRPG/POPP)	15
Select Machine	15
SECURITY	16
Log In	16
Log Out	16
CREATE AND PRINT A LABEL	17
How to Create a New Label	17
How to Save/Save As	17
How to Find a Label	17
How to Edit the Label's Elements	17
How to Edit the Label's Layout	17
How to Edit the Label's Settings	17
How to Print a label	17
How to Use the Label Creator	18
MAINTENANCE	19
How to Change Cartridges	19
How to Change the ITM	22
How to Clear a Blocked Nozzle	26
How to Clean the Print Head	27
How to Prepare for a Long Shut-down	30

INSTALLATION 31

 Cabinet Location 32

 Cabinet Mounting 32

 Electrical Supply 32

 TouchScreen Mounting 33

PREPARING THE PRINTER 34

 How to Prepare the i-Pulse RS Print Head (M1630 Jet Only) 34

 How to Prepare the i-Pulse Print Head (M1630 Jet eco Only) 35

 How to Install the ITM 36


 How to Install the Ink and Make-up Cartridges 36


 How to Prime the Ink System 37

SPECIFICATION 38

BATTERY END OF LIFE STATEMENT 40

WARNINGS, CAUTIONS AND NOTE DEFINITIONS

WARNING: A hazard which may cause death or injury.	
	

CAUTION: A hazard which may cause damage to equipment or environment	
	

Note: Contains important information.

Symbols



Wear eye protection.



Wear protective gloves.



Disconnect power before doing maintenance or repair.



Connect a ground terminal from the product to ground.



Read the manual before doing this procedure.



Heavy load. Two person lift.



Hazard of fire by igniting flammable material.




Hazard of coming into contact with electricity.



Obey precautions for handling electrostatic sensitive devices.

INKS AND FLUIDS

WARNING: Hazardous Chemicals. Risk of skin or eye damage.	
	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

A risk assessment is necessary. Safe working practices vary according to the environment. There is a Safety Data Sheet (SDS) for each ink, make-up and wash. The SDS describes precautions and gives advice on personal protective equipment. Each SDS can be found on the Domino website. Warnings are also displayed on fluid containers.

If the printer is supplied with an empty wash bottle, it is the customer’s responsibility to put a label on the bottle to identify the liquid that the bottle is filled with.

Basic Requirements

When used correctly, printing inks do not cause problems. However, everybody using them must be familiar with the required safety standards and be aware of the precautions that must be taken. Below is a list of basic requirements:

- Provide training for people using ink, make-up and wash.
- Maintain proper standards of industrial practice relating to cleanliness and tidiness.
- Store and handle ink, make-up and wash containers carefully.
- Collect and safely dispose of used cleaning materials. (rags, paper wipes, etc.) Used cleaning materials are a fire hazard.
- Do not smoke or allow naked flames in the vicinity of ink, make-up or solvents.
- Install the printer in a well ventilated environment. Many inks and make-ups contain materials which vaporise easily and can be inhaled.

Exposure to Chemicals

After exposure to ink, make-up or wash, wash off all possible traces as soon as possible.

Obey the precautions listed below:

- **Avoid contact with the eyes.** Wear suitable eye protection if there is any risk of splashing or misting.
- **Avoid contact with the mouth.** Avoid eating, drinking or smoking, or any personal habits or actions which may transfer ink or make-up to the mouth.
- **Avoid contact with the skin.** Most gloves only offer limited and short term exposure protection. Change gloves frequently and after any splashing.

If ink, make-up or wash gets into the eyes:

- Flood the affected eye for 15 minutes with sterile eyewash solution (or clean water if eyewash solution is not available).
- Do not allow the water to run into an unaffected eye.
- Seek medical aid immediately.

Storage

Store all fluids safely. Refer to and obey local regulations.

Store printing ink and make-up:



- In well ventilated buildings.
- In areas set aside for the purpose.
- In areas chosen for safety in case of fire.




Fire Risk


Dangerous fumes may be created from a fire involving printing inks.

- Store ink, make-up and wash where they can be reached quickly by the fire fighters.
- Store ink, make-up and wash in a fire resistant store.
- Do not use water for an electrical fire.
- Do not use metal scrapers to remove an accumulation of dried ink, as they can produce sparks.

Spillages

WARNING: Flammable material. Risk of fire and personal injury.	
 	Clean up all ink spillages immediately. Do not allow the ink to dry or allow any build-up of dried ink spills. Some dried inks are highly flammable.

WARNING: Electric shock hazard. Risk of personal injury.	
  	Switch off power to the printer while cleaning up spillages inside the printer.



CAUTION: Hazardous Chemical. Risk to the environment.	
	Do not let spillages or residue from cleaning enter drains or sewage systems.
	Do not treat ink, make-up and associated fluids as ordinary waste.
	Dispose of ink, make-up and items contaminated with ink or make-up using approved methods that obey local regulations.
	Clean up ink and make-up spillages as soon as possible.





Ventilation

Solvent based printing inks and their vapours are flammable.

- Provide an extraction system to remove fumes and vapours from the production line and from anywhere else that the printer may be operated.
- The minimum ventilation requirement is to exchange the complete air volume of the room 10 times per hour.
- The recommended ventilation requirement is to exchange the complete air volume of the room 20 times per hour.

Flammable Vapour and Electro-Static Discharge



WARNING: Flammable vapour. Risk of fire and personal injury.	
 	Install and operate the printer in a well ventilated environment. Do not install or operate the printer in closed or sealed rooms or cabinets. Insufficient ventilation may cause an accumulation of flammable vapour.

WARNING: Electrostatic discharge hazard. Risk of fire and personal injury.	
   	Connect the equipment to ground, to make sure electrostatic charges are conducted to ground. Electrostatic sparks can ignite flammable vapour. Obey anti-static precautions when handling ink and make-up.

The printer puts an electrical charge on each drop of ink used for printing. Normally these electrical charges are conducted to ground. Ground the equipment correctly to make sure electrical charges are conducted to ground.


Maintenance

During maintenance, ink drops may be collected in a container. Use a container made of conducting material that is securely connected to ground. The electrical charges on the ink drops will then be conducted to ground.

CAUTION: Electrostatic discharge hazard. Risk of damage to printer.	
 	Obey electrostatic precautions when doing maintenance work: <ul style="list-style-type: none">• Switch off the printer.• Wear a wristband connected to ground.• Do not wear clothing which can build up electrostatic charges.• Use ESD protective bags to transport PCBs.• Only place PCBs on a mat made from conductive material which is connected to ground.


OPERATION


How to Switch On

 Standby Button	<p>Press and hold the Standby button for two seconds:</p> <ul style="list-style-type: none">• The Printer will switch ON.• The GREEN light on the standby button will turn ON.• The RED light on the standby button will turn OFF.• The UI can be used to create labels, etc.
--------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------


How to Switch Off

Note: For a shut-down longer than 14 days, see [“How to Prepare for a Long Shut-down” on page 30](#).

CAUTION: Do not disconnect power if wake-up mode is enabled. Risk of ink degradation.	
	Wake-up mode keeps the ink agitated during long periods of idle time. This feature will be disabled if power is disconnected from the printer.

 Standby Button	<p>Press and hold the Standby button for two seconds:</p> <ul style="list-style-type: none">• The Display will switch OFF.• The Printer will switch OFF.• The GREEN light on the standby button will turn OFF.• The RED light on the standby button will turn ON.
--------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

How to Start/Stop the Ink Jet

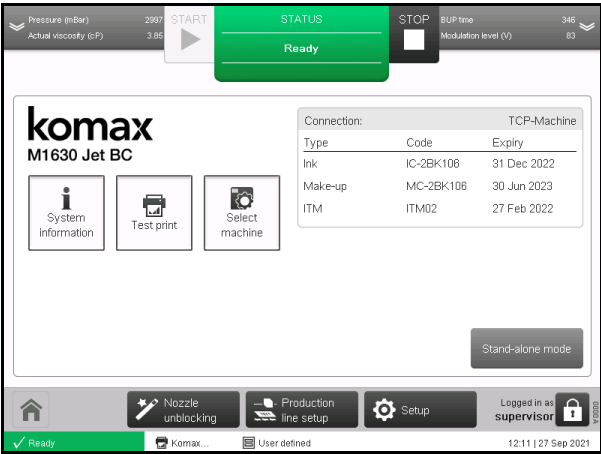
 Start/Stop Button	<p>This (start/stop) button is used to turn the ink jet on and off.</p> <p>Press and hold the Start/Stop button for two seconds:</p> <ul style="list-style-type: none">• If the ink jet is not running, it will start.• If the ink jet is running, it will stop.
-------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

USER INTERFACE MODES

Select *Komax mode* or *Stand-alone mode* on the bottom right corner of the user interface to change between the two available user interface modes.

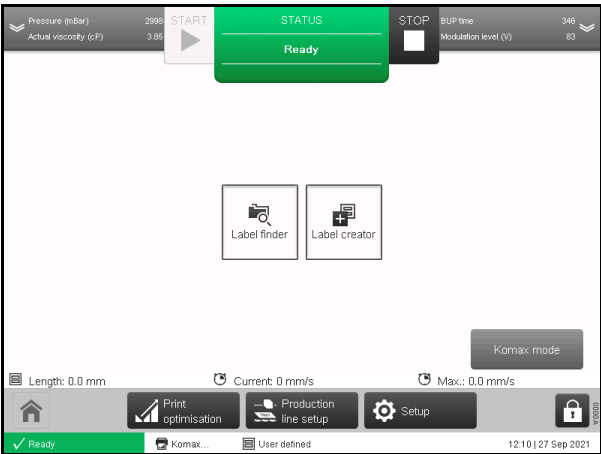
Komax Mode

Optimised for printer integration with Komax wire processing machines. Printing data is sent from the wire processing machine to the M1630 Jet via RS232 or TCP/IP communication.



Stand-alone Mode

For use when the printer is not integrated with a Komax wire processing machine.



TOPWIN INTERFACES PACK (KRPC/POPP)

Note: Only available in Komax Mode.

The KIMI communication protocol is normally used for communication with Komax wire processing machines.

Some Komax machines instead use either the KRPC or the POPP protocol. These protocols are available on the printer if the TopWin Interfaces Pack is installed.

Select Machine

The select machine setting enables the user to select the model of the wire processing machine that the printer is integrated with from a list. This ensures the printer uses the correct settings for the machine it is integrated with.

Note: The select machine setting is only available if the TopWin Interfaces Pack is installed.

To select the machine that the printer is integrated with:

- (1) Select *Home > Select machine*.
- (2) Select the model of the machine that the printer is integrated with.
- (3) The communication protocol is selected automatically depending on the machine.
- (4) If the communication protocol used by the machine is POPP, make sure that the *Automatic Mirroring* setting is correct. When *Automatic Mirroring* is enabled, the printed label will continuously alternate between mirrored and standard orientation until the setting is disabled.
- (5) To change the *Automatic mirroring* setting, select *Home > Setup > Printer network > Protocol settings*.
- (6) Select the *Protocol setting* drop down list and choose the POPP communication protocol.
- (7) Tick the *Automatic mirroring* tick box to enable this feature.

SECURITY

When the printer starts up or re-boots, the operator level user will always automatically log into the printer.

The log in procedures are only required when changing between the operator level user and the supervisor level user.

Log In

To log in:

- (1) Select the Padlock icon in the bottom right corner of the user interface.
- (2) Select *Log in*.
- (3) Enter the password for the required user group. The default password for each user group is defined in the table below:

Note: Passwords are case sensitive.

User Group	Password	Explanation
operator	KO	Operator access to the settings required for normal printer operation.
supervisor	KS	Supervisor access to all printer settings.

Log Out

To log out:

- (1) Select the *Padlock* icon in the bottom right corner of the user interface.
- (2) Select *Log out*.

CREATE AND PRINT A LABEL

Note: Stand-alone mode only.

How to Create a New Label

- (1) Select *Home > Label creator > Blank*.
- (2) Select *Label name* and enter a name.
- (3) Define the label's *Layout settings*.
- (4) Select *Create Label*.
- (5) Add label elements (Text, Barcode and Graphics).


How to Save/Save As

- (1) Select the **Save**  or **Save as**  icon.


How to Find a Label

- (1) *Home screen > Label Finder*.
- (2) Navigate to the label, choose *Print* , *Edit*  or *Preview*  icon.


How to Edit the Label's Elements

- (1) *Home screen > Label Finder*.
- (2) Open the label store, find the label and select *the Edit*  icon.
- (3) Select an element to edit.
- (4) Use the settings in the side menu to edit the element.


How to Edit the Label's Layout

- (1) *Home screen > Label Finder*.
- (2) Open the label store, find the label and select *the Edit*  icon.
- (3) Select *Label > Edit*.
- (4) Use the settings in the side menu to edit the label layout.

How to Edit the Label's Settings

- (1) *Home screen > Label Finder*.
- (2) Open the label store, find the label and select *the Edit*  icon.
- (3) Select *Label > Settings*.
- (1) Use the settings in the side menu to edit the label settings.

How to Print a label

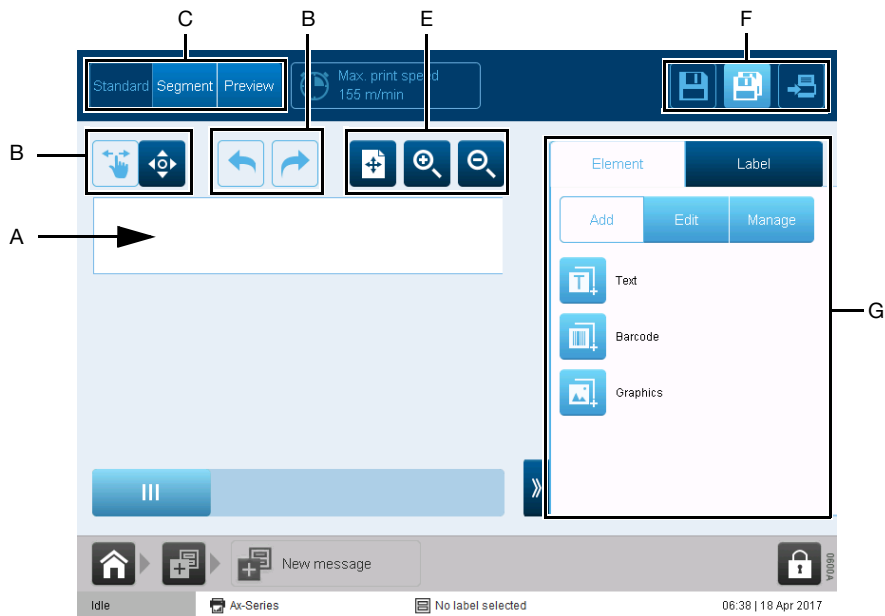
- (1) *Home screen > Label Finder*.
- (2) Open the label store, find the label and select *the Print*  icon.
- (3) Enter data if prompted.

How to Use the Label Creator

Note: Stand-alone mode only.

Used for label creation and label editing.



- (1) Select *Home > Label creator > Blank*.
- (2) Enter a label name when prompted and select *Create Label*.






#	Name	Description
A	Label Canvas	A space where the label is designed.
B	Element Moving Options	Choose how to move elements around the label canvas.
C	Label View Options	Choose how to view the label.
D	Undo/Redo	Undo or redo an action.
E	Label Zoom Options	Increase or decrease magnification.
F	Save and Print Options	Save, Save as, or Print the label.
G	Side Menu	Add/edit label elements and change label settings.

MAINTENANCE

How to Change Cartridges


Message on UI		Alert Status	Action
"Add Ink Cartridge"		Amber	Fit a new Ink Cartridge
"Ink Level Below Minimum"		Amber	
"Change Ink Cartridge - Empty"		Red	
"Add Make-up Cartridge"		Amber	Fit a new Make-up Cartridge
"Make-up Level Below Minimum"		Amber	
"Change Make-up Cartridge - Cartridge Empty"		Red	

WARNING:
Hazardous chemicals. Risk of personal injury.

Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.


CAUTION:
Hazardous Chemical. Risk to the environment.



Obey local waste disposal regulations to dispose of used cartridges and waste materials.

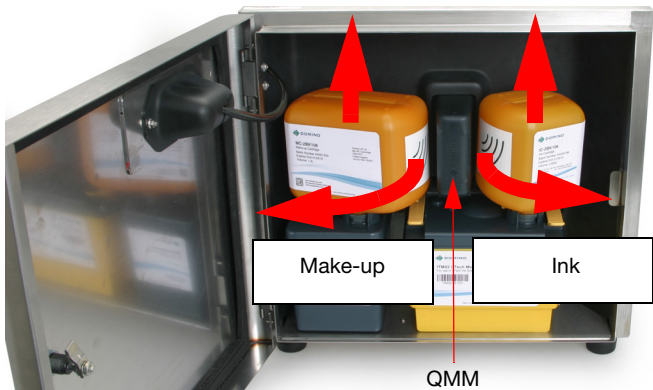
CAUTION:

Do not replace a cartridge until prompted. Risk of ink leak.



Risk of ink level overfilling if a cartridge is replaced when it is not needed. This will cause ink to leak out of the printer cabinet. Only replace a cartridge when instructed by the user interface.

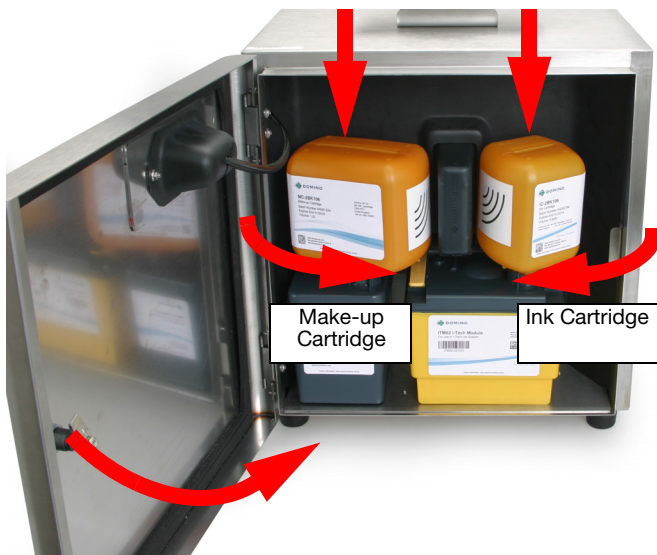
- Notes:
- (1) Change the cartridges promptly to avoid poor printing.
 - (2) Shake heavy duty ink cartridges for at least 2 minutes before fitting.
- (1) Remove the Empty Cartridge



- (2) Hold the new Cartridge near the Quality Management Module (QMM):

Light on QMM	Meaning	Action
Yellow	Not Found	Try another Cartridge
Flashing Yellow	Reading	Wait
Green	Good	Use this Cartridge
Red	Not Good	Try another Cartridge



- (3) Use a 6mm hex key to break and remove the sealing tab.



- (4) Check for leaks.
- (5) Shut the door.




How to Change the ITM

WARNING: **Pressurised system. Risk of personal injury.**




Shut down the printer.
Disconnect the power.
If you do not, ink can spray out and onto the user.

WARNING: **Hazardous chemicals. Risk of personal injury.**




Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

CAUTION: *Hazardous Chemical. Risk to the environment.*



Obey local waste disposal regulations to dispose of used ITM and waste materials.

CAUTION: *Dirt and debris. Risk to the printer*




Obey good cleanliness procedures at all times.
Do not let dirt or debris enter any part of the printer.

- Notes: (1) Replacement ITMs are delivered empty (without ink). It is recommended to keep at least 2 ink cartridges on site for ITM replacement.
- (2) Paper towels (or similar) and wash are required for this procedure.

Message on UI	Alert Status	Action
The ITM life is soon to expire. Ensure a replacement ITM is available	Amber	Order a new ITM if needed
Intelligent Ink System is in depletion mode to prepare for ITM change	Amber	Ensure a new ITM is available
Change ITM - Expired	Red	Printing Stops


Before the ITM is due for replacement, the ink system will automatically reduce quantity of ink to a minimum level. It is normal to replace the ink cartridge when replacing the ITM.

- (1) Switch off (hold the standby button  for 2 seconds) and wait for the printer to shut down.
- (2) Disconnect the power lead and open the door.
- (3) Remove the ink Cartridge (if fitted) (see previous pages).
- (4) Remove the ITM.



- (5) Push retaining clips up then pull the ITM towards you, away from the Ink Block.

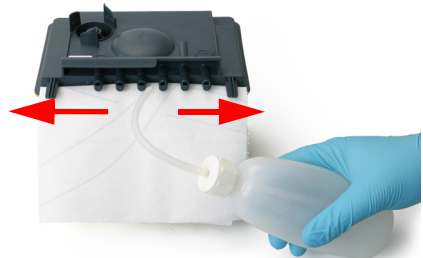
Note: If the ITM does not move with moderate pressure, push the ITM away from you (which will break any seal caused by dry ink) and try again.

CAUTION: <i>Hazardous Chemical. Risk of spillage</i>	
	The manifold pipes will contain residual ink, take care to avoid spillage.

- (6) Remove the sealing strip from the new ITM and lubricate the manifold pipes with wash.

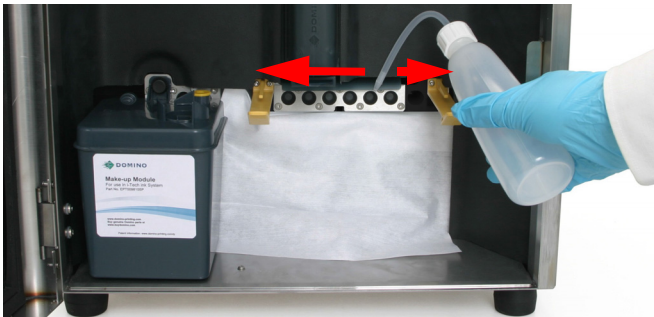


Remove ITM Sealing Strip



Lubricate with Wash

- (7) Fit sealing strip onto the old ITM.
(8) Place paper towel or similar below the ink block and use wash to clean any dried residual ink from the ink block valve face.




- (9) Insert the new ITM.



(10) Ensure the ITM retaining clips are engaged.





- (11) Re-connect power lead and switch on. (Press  for 2 seconds)
- (12) Check the ITM QMM status light.






QMM Light Colour	Meaning	Action
Yellow	Not Found	Try another.
Flashing Yellow	Reading	Wait.....
Green	Good	Use this.
Red	Not Good	Use valid Cartridge

- (13) If OK, replace ink and make-up Cartridges, see [page 19](#).
- (14) Check for leaks.
- (15) Close the door.
- (16) Obey local waste disposal regulations to dispose of contaminated paper towels and the old ITM.

How to Clear a Blocked Nozzle

WARNING: Hazardous chemicals. Risk of personal injury.	
 	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.




CAUTION: Risk of poor print performance	
	Do not run the nozzle unblocking wizard more than 2 times. Each time the wizard is run, the printer adds make-up to the ink. If the wizard is run too many times, it may cause the viscosity of the ink to thin. If the nozzle is not clear after 2 attempts, contact your local support office.



CAUTION: Risk of ink system contamination.	
 	Do not attempt to remove the nozzle assembly (unless trained to do so). Removing the nozzle assembly can cause contamination to enter the ink system. The nozzle assembly is also tuned to the print head and will require re-tuning if removed.



- (1) Select *Nozzle unblocking* on the home screen.
- (2) Select *Start Nozzle unblocking*.
- (3) Follow the on screen instructions.

How to Clean the Print Head
i-Pulse Print Head (M1630 Jet eco Only)




WARNING: Hazardous chemicals. Risk of personal injury.	
  	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

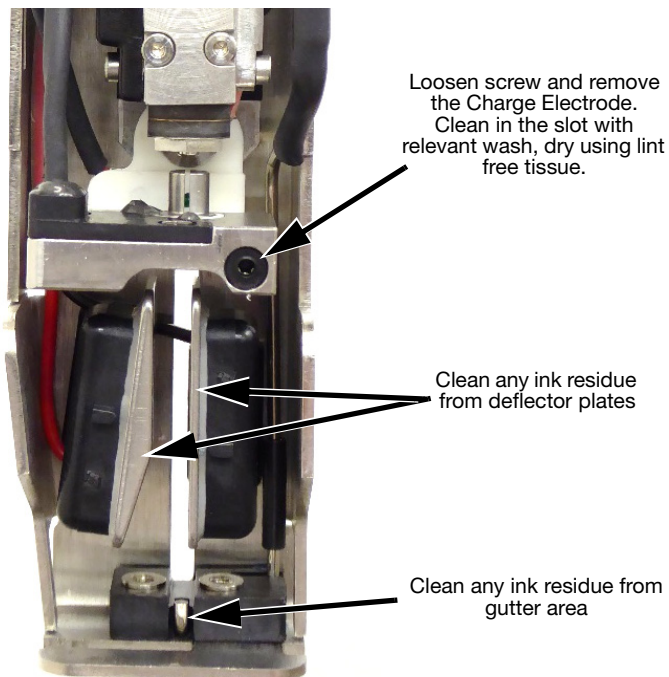
CAUTION: Switch off printer. Risk of diluting ink.	
 	Switch off the printer before starting this procedure. If the printer is on when this procedure is done, wash will enter the gutter and may dilute the ink.

CAUTION: Switch off printer. Risk of EHT (Electrical High Tension) trip.	
 	Switch off the printer before starting this procedure. If the printer is on when this procedure is done, there is a risk of causing an EHT trip by making an electrical short between the deflector plates.

Note: Required tools: T6 Torx Driver, correct wash fluid

To clean the i-Pulse print head:




- (1) Press and hold the standby button  for 2 seconds and wait for the printer to shut down.
- (2) Disconnect the power lead from the rear of the printer.
- (3) Press in the two holster retaining clips on the sides of the print head. Remove the holster.
- (4) Gently squeeze in the sides of the internal cover to release the clips. Pull gently downwards to lift the lower part away from the print head.
- (5) Obey the annotated instructions in the next illustration. If required, use a beaker to collect waste fluid.



- (6) Replace the charge electrode.
- (7) Replace the print head holster.


i-Pulse RS Print Head (M1630 Jet Only)

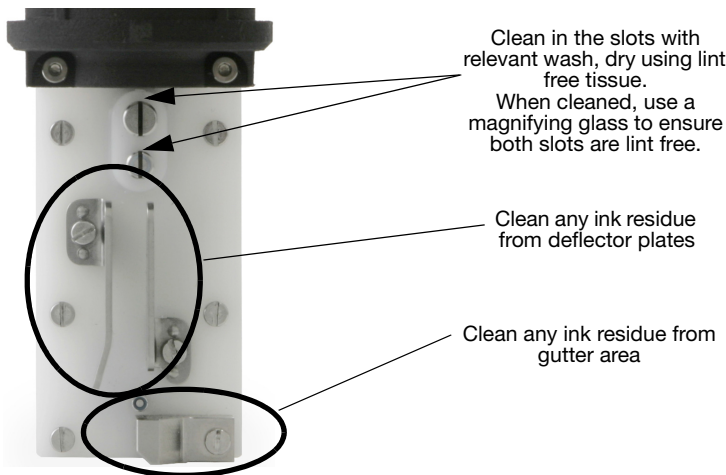


WARNING: Hazardous chemicals. Risk of personal injury.	
  	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

The i-Pulse RS print head requires regular cleaning when using heavily pigmented ink. Check the print head before every shift and clean as necessary.

To clean the i-Pulse RS print head:

- (1) Press and hold the standby button  for 2 seconds and wait for the printer to shut down.
- (2) Disconnect the power lead from the rear of the printer.
- (3) Remove the print head cover.
- (4) Obey the annotated instructions in the next illustration. If required, use a beaker to collect waste fluid.







- (5) Replace the print head cover.

How to Prepare for a Long Shut-down

The recommended procedure to prepare the printer for a long shut down depends on the length of time that the printer will be shut down and the environment the printer will be stored in.


Less Than 14 Days

WARNING: Hazardous chemicals. Risk of skin or eye damage.	
  	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

CAUTION: <i>Risk of ink degradation.</i>	
	Do not disconnect power if wake-up mode is enabled. Wake-up mode keeps the ink agitated during long periods of idle time. This feature will be disabled if power is disconnected from the printer.

Note: To check if wake-up mode is enabled, select Home > Setup > Advanced > Hardware. Observe the “Wake-up mode” tick box.



If the printer is to be shut down for up to 14 days and stored in an environment that will **not** degrade the ink, follow the procedure described below:



- (1) Clean the print head by doing the correct print head cleaning procedure:
 - i-Pulse see, [page 27](#).
 - i-Pulse RS see, [page 29](#).
- (2) Press and hold the standby button  for 2 seconds.
- (3) Flush the gutter with the correct wash during the gutter clearing cycle to ensure the gutter is completely clean.
- (4) Remove any factory air supply.



Longer Than 14 Days





If the printer is to be shut down for longer than 14 days, or stored in an environment that **could** degrade the ink, the ink must be flushed out of the printer to protect the ink system. Contact your local support office for more information.

INSTALLATION

WARNING: Risk of personal injury.	
 	Only a trained person may install the printer. For full installation instructions, refer to the product manual.

WARNING: Heavy weight. Risk of personal injury.	
 	Carry out a risk assessment of the lift before moving the printer. Dry weight of the printer is between 16kg (35.3lb) and 23kg (50.7lb).

WARNING: Flammable vapour. Risk of fire and personal injury.	
 	Install and operate the printer in a well ventilated environment. Do not install or operate the printer in closed or sealed rooms or cabinets. Insufficient ventilation may cause an accumulation of flammable vapour.

WARNING: Electric shock hazard. Risk of personal injury.	
   	Electrical Supply Present: Refer to the product specification label.
	Connect the printer cabinet to ground.
	Indoor use only.

The installation technician (or distributor) should make sure that the printer, and the production line it is installed on are connected to ground.

- Securely ground all metallic items within 12 inches (300 mm) of the print head.
- Check the ground connection using an Ohm Meter, DVM or other suitable device.
- Use additional static dissipating devices, such as anti-static brushes, as recommended.

The customer must be aware of the importance of this grounding since it is not Komax's responsibility to maintain the customer's equipment.

- Check the grounding periodically.
- Check the grounding whenever a printer is relocated.
- Make sure that antistatic precautions are obeyed.

Cabinet Location

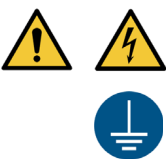


Position the printer:

- With enough clearance to open the doors and give access to the cabinet’s front and rear.
- On a level surface.
- Where it is electrically isolated from other equipment.
- Where the temperature remains within the range +5°C to +45°C (42°F to 112°F).
- Where the relative humidity remains within 10% to 90% (non-condensing).
- Such that the vents on the underneath of the cabinet are not obstructed.

Cabinet Mounting

For stability and to minimise vibration, the printer should be mounted on a printer stand (P/N EPT036922). If a printer stand is not used, then secure the printer base using M6 mounting bolts. Use spacers to ensure the mounting bushes are flush with the mounting surface.

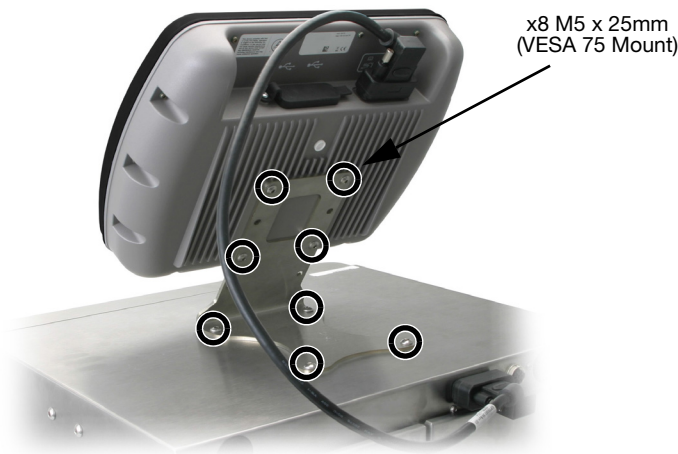
Electrical Supply

WARNING: Electric shock hazard. Risk of personal injury.	
	Connect the printer cabinet to ground.
	Electrical Supply Present: Refer to the product specification label.
	Do not replace the power supply cable with a cable that is rated less than 230 VAC. Contact Komax to replace the cable if a new cable is needed.
	<div>Tighten both screws on the power supply plug to prevent moisture entering the power supply socket.</div> <div></div>

Connect the printer to a power outlet which is accessible and close to the equipment so that power can be quickly disconnected. If a fused power connector is used, fit it with a 5A fuse. If a fused power connector is not used, a circuit breaker or fuse rated at 5A is required.



The supply must be free from electrical noise.

TouchScreen Mounting



PREPARING THE PRINTER

How to Prepare the i-Pulse RS Print Head (M1630 Jet Only)

WARNING: Risk of personal injury.	
 	Only a trained person may install the printer. For full installation instructions, refer to the product manual.



Do this procedure when preparing the printer for the first time.

- (1) Twist and remove the print head cover.



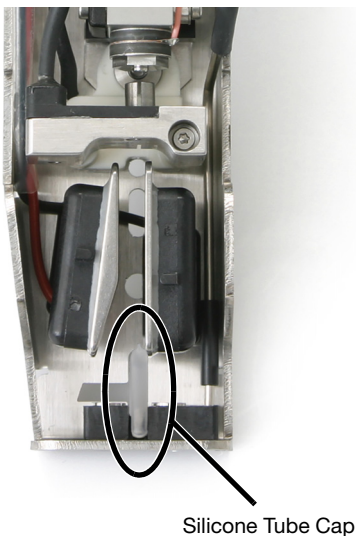
- (2) Check the print head is clean and dry.
- (3) Replace the print head cover.
- (4) Fit the print head into a wash station, or place a beaker made of a conducting material and connected to earth (ground) underneath the print head.

How to Prepare the i-Pulse Print Head (M1630 Jet eco Only)

WARNING: Risk of personal injury.	
 	Only a trained person may install the printer. For full installation instructions, refer to the product manual.




Do this procedure when preparing the printer for the first time.


- (1) Remove the print head cover.
- (2) Remove the silicone tube cap over the gutter. Check the print head is clean and dry.



- (3) Replace the print head cover.
- (4) Fit the print head into a wash station, or place a beaker made of a conducting material and connected to earth (ground) underneath the print head.

How to Install the ITM

WARNING: Hazardous chemicals. Risk of skin or eye damage.	
  	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

CAUTION: Hazardous Chemical. Risk to the environment.	
	Obey local waste disposal regulations to dispose of used ITM and paper towels.

Note: Paper towels (or similar) and wash are required for this procedure.




Do this procedure:

- **When installing the ITM for the first time.**
- **After a long shut down if the ITM was removed.**


To install the ITM:

- (1) Open the printer ink cabinet.
- (2) Follow the instructions for changing an ITM from [page 24, step \(6\)](#) onwards.




How to Install the Ink and Make-up Cartridges




WARNING: Hazardous chemicals. Risk of personal injury.	
  	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

Note: Tools required: 6mm Hex Key.

- (1) If the printer is not already on, press and hold the standby button  for 2 seconds to switch the printer on.
- (2) Follow the procedure for changing the cartridges from [page 20, step \(2\)](#) onwards.

How to Prime the Ink System

WARNING: Hazardous chemicals. Risk of personal injury.	
  	Wear protective equipment such as gloves and glasses when near the printer. Physical contact with printer ink or make-up can cause skin or eye damage.

WARNING: Electrostatic discharge hazard. Risk of fire and personal injury.	
  	Connect the equipment to ground, to conduct electrostatic charges to ground. Place print head in a wash station or position over a beaker connected to ground that is made of a conducting material. Electric sparks can ignite flammable vapour.

The ink system must be primed before the printer can be used for the first time.
Before starting this procedure, ensure that the ink and make-up levels are at least half full. This will be indicated by yellow or green make-up and ink level icons on the information bar on the TouchScreen.

To run the ink priming wizard:

- (1) Fit the print head into a wash station, or place a beaker underneath the print head. Make sure the beaker is made of a conducting material and is connected to ground.
- (2) On the TouchScreen, select *Home > Setup > Wizards > Ink priming*.
- (3) Select *Start*.
- (4) Obey the on screen instructions.
- (5) Check the ink jet alignment, refer to the product manual for instructions.

Note: For all printer settings and further installation information, refer to the Product Manual which can be found at: <https://direct.komaxgroup.com/>.

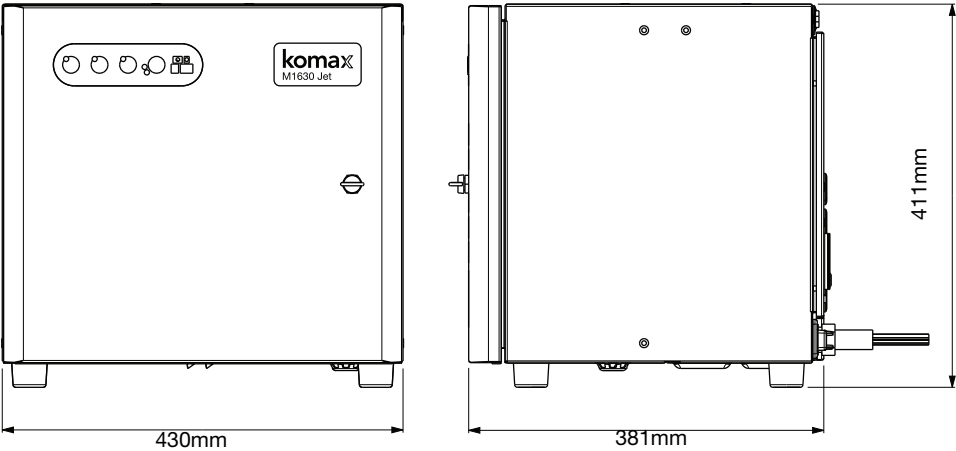
SPECIFICATION

Temperature Range (Working):	+5° to +45°C (42°F to 112°F)	
Temperature Range (Storage):	-20° to +60°C (-4°F to +140°F) (machine dry - storage, wet dependent upon fluids)	
Humidity:	Printer cabinet:	0 - 90% RH (non-condensing)
	TouchScreens:	10 - 90% RH (non-condensing)
Pollution Degree of Intended Environment:	Degree 2	
Maximum Altitude of Operation:	< 2000m	
Intended Environment:	Indoors only	
Printer Electrical Supply:	100-240V 50-60Hz (nominal), 4A, single phase Auto ranging	
Overvoltage Category:	CAT II	
Power Consumption:	40 Watt (idle) 80 Watt (printing)	
RF Frequency (QMM):	13.56MHz	
RF Power (QMM):	62μW	
Acoustic Noise Level:	Not more than 70 dBA	
TouchScreen 10" Electrical Supply:	24 VDC, 15W, 500mA over non standard DVI Mains voltage deviation: -10% to +6% <i>Note: The power supply contains “reinforced” insulation.</i>	
TouchScreen 7" Electrical Supply:	24 VDC, 12W, 500mA over non standard DVI Mains voltage deviation: -10% to +6% <i>Note: The power supply contains “reinforced” insulation.</i>	

IP Rating:	Printer Cabinet	Overall - IP55 (electronics enclosure designed to IP66)
	TouchScreen 10"	IP65 Usable in wet locations (resistant to water jets).
	TouchScreen 7"	IP55 Usable in wet locations (resistant to water jets).


Size and Weight


Weight (dry) with print head and 3m conduit:	23.8kg (52.5lb)*
TouchScreen 10"	2.5Kg (5.5lbs)
TouchScreen 7"	0.75Kg (1.65lbs)



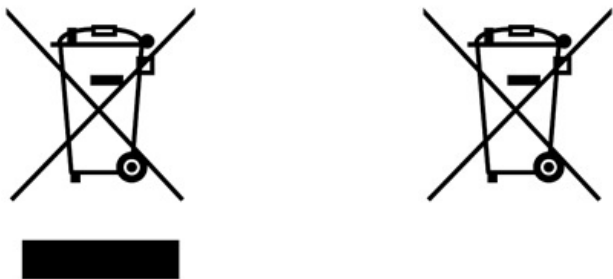
M1630 Jet/M1630 Jet eco Cabinet

BATTERY END OF LIFE STATEMENT

WARNING: Flammable Material. Risk of Fire or Explosion.	
	Do not dispose the battery in a fire, hot oven, by mechanically crushing or cutting. Obey local waste regulations when disposing of batteries.
	Do not store or leave the battery in high or low extremes of temperature.
	Do not store or leave the battery in a location that is subject to low air pressure at high altitude.

CAUTION: Hazardous Material. Risk of damage to equipment and environment.	
	The battery is not to be replaced by the customer. If the battery needs replacement, contact your local support office. Obey local waste regulations when disposing of the battery.

Recycling information in accordance with the WEEE and Battery Directives



Product mark

Battery mark

European Union only

The product/battery is marked with one of the above recycling symbols. It indicates that at the end of life the product/battery, you should dispose of it separately at an appropriate collection point and not place it in the normal domestic waste stream.

