Please note

Updated notes to the operating instructions V1.8 of the mp-IM1

For optimum printing results and error-free operation, it is important to observe the following points:

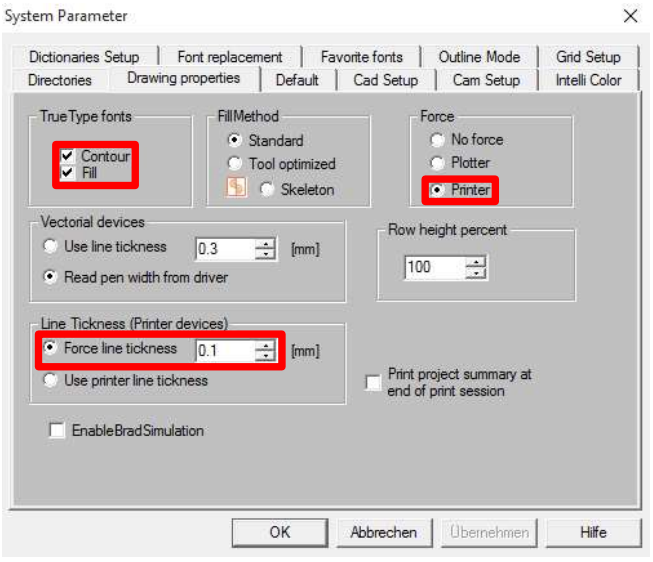
1 Settings in the ACS Gold Studio software

Make the following settings **in addition** to those listed in Chapter 11, "Making Settings in ACS Gold Studio" in the original V1.8 User Manual.

TrueType fonts
- Contour
- Fill

Force
- Printer

Line Thickness (Printer devices)
- Force line thickness 0.1 mm



2 When not using the printer

To ensure optimum printing results and prevent the ink from drying out, remove the ink cartridge from the printer at the end of the working day or after completion of the print jobs, clean the ink cartridge and seal it with the sealing clip.

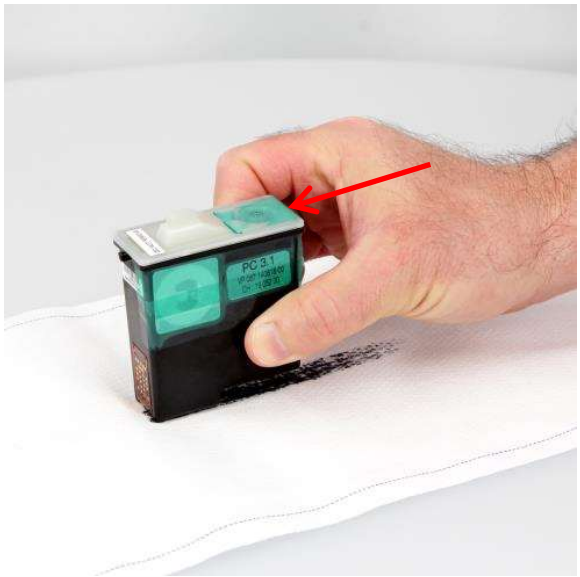
3 Cleaning the ink cartridge

Clean the ink cartridge in the following situations to prevent the printhead nozzles from drying out:

- If the print image has deteriorated
- At the end of the working day or after completion of the print jobs

Clean the lower ink nozzles of the ink cartridge by pulling them **horizontally** over a soft, lint-free cloth lying on a table from back to front (away from the front electrical contacts).

Make sure that the electrical contacts are not touched by you or the cloth. The nozzles are only free when only one line of ink is drawn on the cloth.



4 Storing the ink cartridge

Always seal the removed ink cartridge with the sealing clip to prevent the print head nozzles from drying out.

5 Connecting via network cable

Observe the following notes on chapter 9 "Direct connection via network cable" of the operating instructions V1.8.

The driver installation (described in chapter 8 in the operating instructions V1.8) must be completed to connect the mp-IM1 to the computer via the network.

After the network configuration (described in chapter 9.2 in the operating instructions V1.8) restart the mp-IM1.

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ACS labelling systems

mp-IM1

operating instructions

As of August 2019 – v1.8

8902865312

mp-IM1
operating instructions

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1 Copyright and Trademarks

Windows® is a registered trademark of Microsoft Corporation.
mp-IM1, mp-UniversalMarkingSoftware and ACS Gold Studio are trademarks of Murrplastik Systemtechnik GmbH.

All product names used herein are for identification purposes only and may be trademarks of their respective owners.
Murrplastik disclaims any and all rights in those marks.

2 Important hints

This operating instructions must be read and understood.
It must be kept for further use and passed on together with the device.

If you have any questions or problems, do not hesitate to contact the ACS Helpdesk at acs.helpdesk@murrplastik.de.

To operate the mp-IM1, the **mp-UniversalMarkingSoftware** or **ACS Gold Studio version 2.3.0.95** is required. In addition Windows® 7 with the current service pack or a higher Windows® version.

Before putting the device into service read the safety instructions in chapter 3!

3 Safety instructions

When using the mp-IM1 you must observe the following basic safety precautions to protect against electric shock, injury and fire.

Read and observe all these hints carefully before putting the electrical device into operation.

Keep these safety instructions in a safe place.

Only use the electrical equipment in accordance with the regulations and in accordance with the general safety and accident prevention regulations.

3.1 Intended use

- The mp-IM1 is predominantly an inscription device for polycarbonate (PC) labels based on inkjet technology.
- The possibility of labelling as well as the respective durability and quality of the inscription with the mp-IM1 can only be guaranteed for the labelling material along with the special ink, both approved by Murrplastik.
- Only the approved special ink can be used.
- The labelling must be carried out using the software approved for the mp-IM1 and the approved operating systems.
- The inscription is possible in black only.
- If you have any questions, contact the ACS Helpdesk.
- Murrplastik rejects service and claims if the intended use is violated.

3.2 Not intended use

The possibility of labelling, as well as the durability and quality of the inscription cannot be guaranteed in the following shown cases. There is no guarantee, no warranty and no support.

- Not provided is labelling of non-approved Murrplastik material.
- Not provided is using of ink not approved by Murrplastik.
- Not provided is labelling by means of software or operating systems which are not approved by Murrplastik.
- Not provided is labelling of paper.

3.3 Choosing an installation site

- Operate the device in well ventilated environments only.
- Position the device on a level, stable surface that is larger than the device itself. The device will not operate properly if it is tipped up or tilted.
- Avoid using locations where the printer will be exposed to extreme fluctuations of temperature or humidity. Constant room temperature is recommended. Protect the device from direct sunlight, excessive light and sources of heat.
- Avoid using sites that might be exposed to impacts or vibrations. This also applies to the transport of the device.
- Keep the device away from dusty or humid areas.
- Position the device near to a mains socket, so that no extension cable is required if possible.
- When transporting or storing the printer, it must not be tipped up, stood on one of its sides or turned upside down.
  If you ignore this, ink may leak and/or cause a short circuit.

3.4 Using the device

Do not touch into or onto the printer during printing. Do not touch the ink cartridge. There is a risk of injury!

- Do not move the ink cartridge carriage by hand; if you do, you may damage the device!
- Keep the openings of the housing clear.
- Do not cover the housing openings.
- Do not insert any objects into the housing slots.
- Avoid spilling any liquids onto the device.
- Always use the power cable supplied with this device. If a different power cable is used it can potentially cause fires or electrical shocks.
- Connect all parts of the system to mains sockets that have been properly earthed. No mains socket may be used if items of equipment such as photocopiers or fans are already plugged into it, and these devices are regularly switched on and off.
- Do not connect the printer to switchable or timer-controlled mains sockets.
- Do not connect extension socket boards or extension cables in series.
- Do not use the computer system near areas of potential electromagnetic interference fields, such as may be generated by loudspeakers or cordless telephone base stations.
- Note that the type of electricity source used must match the details on the device's label.
- Do not use any power cable if it is damaged.

- If you use an extension socket board with this device, take care to ensure that the total power consumed by the connected equipment does not exceed the maximum permitted power consumption for the extension socket board.
- Also take care to ensure that the total power consumed by the equipment connected to a wall outlet does not exceed the maximum permitted power consumption for the affected wall outlet.
- Do not attempt to service the device yourself.
  Contact the ACS Helpdesk.
- Isolate the device from mains power and request servicing from a qualified service technician, if any of the following scenarios occur:
  - The power cable or mains plug is damaged
  - Liquids have leaked into the device
  - The device has suffered a fall or its housing is damaged
  - The device is not working properly or its performance is impaired
- If the printer is operated within Germany, please observe the following:
  - The building's electrical installation must be protected using a circuit breaker (10 A or 16 A), so as to ensure an adequate level of protection against short-circuiting and overvoltage.
  - If the mains plug has become damaged, replace the cable set or contact a qualified technician. Possibly installed fuses may only be replaced with fuses of the same size and the same nominal value.
  - If you use a cable to connect the printer to a computer or a different piece of equipment, check to ensure the proper alignment of the plug connectors. Each connector can be plugged only when aligned in a certain way. If you try to plug a connector when it is wrongly aligned, then both pieces of equipment connected by the cable may be damaged.

- Always switch off the device using the power button next to the display. If you press this button, the display goes off. Only when the display is gone off may the mains plug be pulled out or the power supply be disconnected.

3.5 Ink cartridge handling

- Always store the ink cartridge out of the reach of children. The cartridge content is not edible.
- If you get ink on your skin, clean it off using soap and water. If ink should get into your eyes, wash it out immediately with plenty of water.
- Shake the new ink cartridge four to five times **before opening** the package.
- **After opening** the packaging, the ink cartridge must not be shaken, since otherwise ink may leak out.
- Keep the black closure clip that protects the cartridge's contacts and ink channels for future use.
- Use the ink cartridge before the date printed on the packaging.
- Install the ink cartridge immediately after opening the package. If the ink cartridge remains unpacked for an extended period of time before use, normal printing may not be possible. No replacement will be provided for this purpose.
- Store the ink cartridge with the label facing up. Do not store the ink cartridge top down.
- Do not attempt to disassemble or refill the ink cartridge. This may damage the built-in print head and make the cartridge unusable.
- Do not touch the ink outlet or the adjacent area.
- Do not remove or pull the label.
- Avoid contact with ink on textiles.

- If you remove the ink cartridge for later use, protect the contacts and the ink outlet with the black closure clip and store the cartridge in the vicinity of the device. If the cartridge comes into contact with an object, however, ink may leak out and cause staining. It is not recommended to remove a cartridge once it has been inserted, as this may limit the print quality after reinsertion.

Cartridge ink information:

The ink used is a specially developed Murrplastik ink for labelling polycarbonate (PC). This ink does not release any harmful volatile organic compounds (VOCs) into the workplace. Specialised air purification systems are therefore not required.

3.6 Repairing the device

- Do NOT attempt to repair the device yourself. The opening or removal of covers can lead to contact with parts conducting dangerous electrical current and other hazards, as well as voiding product warranties. Contact the manufacturer or a customer service point authorised by the manufacturer.
- If the device has suffered a fall or the housing is damaged, unplug the mains plug and contact the manufacturer or a customer service point authorised by the manufacturer. Otherwise there is a risk of electrical shock.
- If the device becomes unusually hot, starts producing smoke or unusual odours or if you spill liquids onto the equipment by mistake, then you must unplug the device from the mains immediately. Contact the manufacturer or a customer service point authorised by the manufacturer.
- If the device no longer works properly, although it has been used in accordance with the usage instructions, then configure the device's settings only as described in these operating instructions.

- Incorrect changes made to other control elements can damage the device, and often require time-consuming work to be performed by qualified technicians in order to restore the normal operating condition of the device.

In chapter16 you will find detailed instructions about returning defective devices for repair.

3.7 Radio interference

This product complies with Directive EN 55022 (CISPR Publication 22) /Class B. If you connect the equipment to a computer, take care to ensure that you use a USB cable that is not more than two meter long.

Important information

You will need administrator rights for installing the USB printer driver!

A possible network installation must be carried out by the user's responsible administrator. Since this is a specific installation NO support is offered by Murrplastik for this!

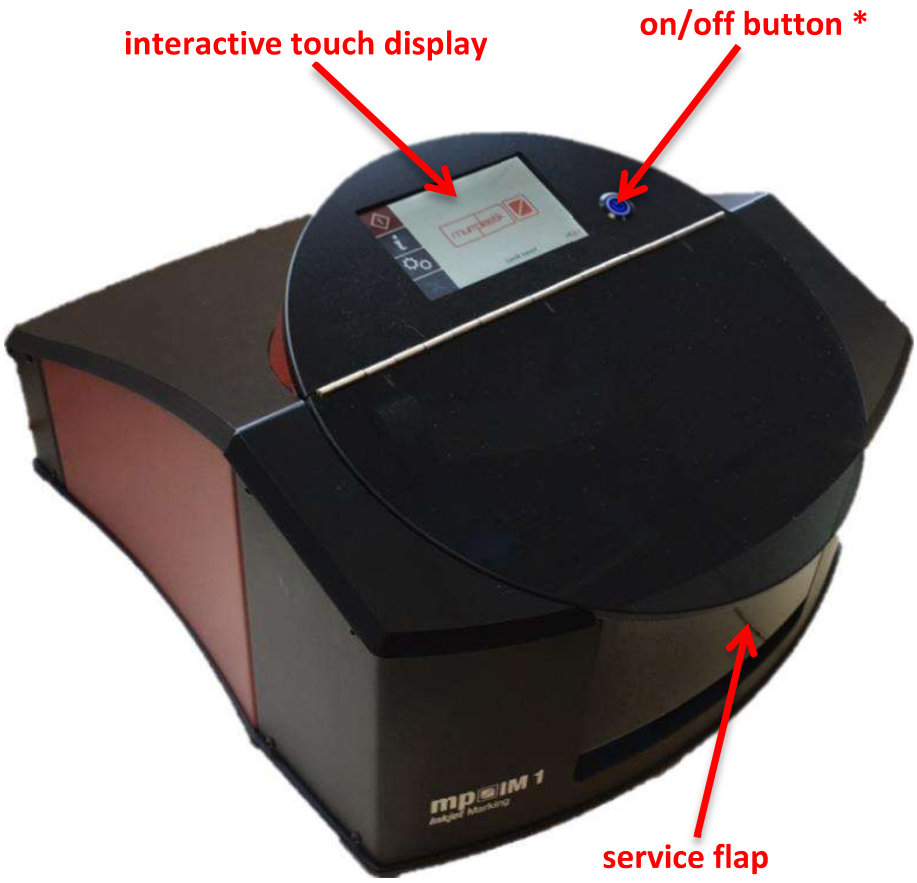
4 Scope of delivery

Check the delivery for completeness after receipt of the labelling device. Please keep the outer packaging so that the device can be transported safely if necessary (e.g. in case of service).

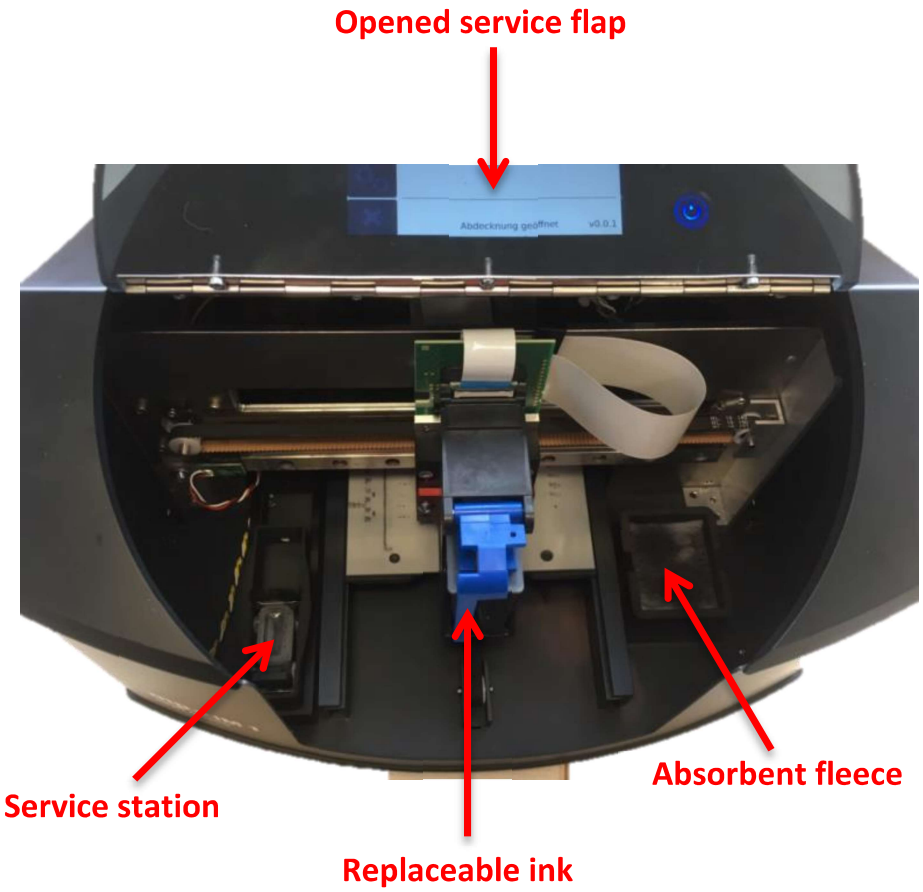
The following components are included in the scope of delivery:

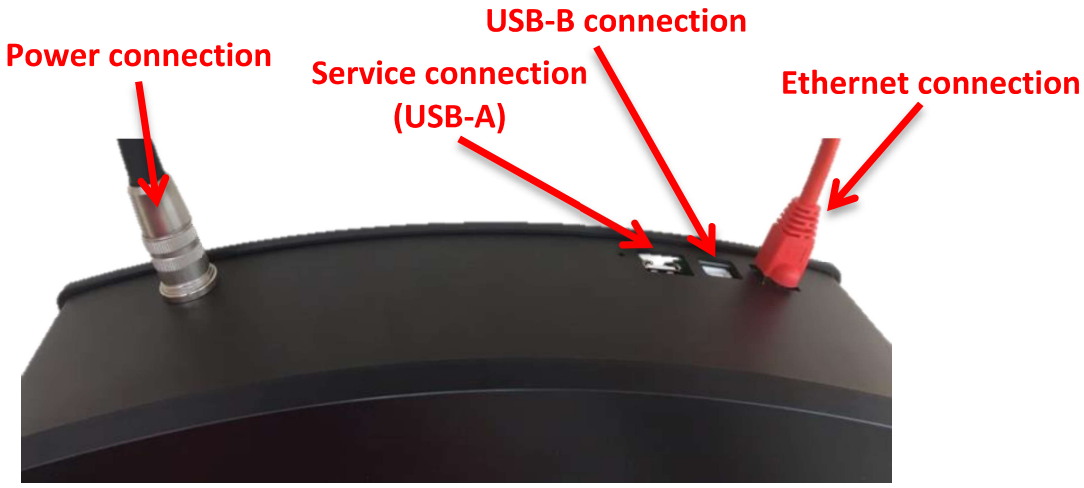
- mp-IM1 printer
- Ink cartridge EK-PC 3.1
- mp-IM1 carrier plate
- Power cable with power supply unit
- USB connecting cable
- Ethernet connecting cable
- Service station (obstructed)
- Absorbent fleece (obstructed)
- Driver CD
- Operating instructions
- Shipping carton

5 Device overview



* Press the on/off button longer than 3 seconds to turn off the device.


Opened service flap
Service station
Replaceable ink
Absorbent fleece


Power connection
USB-B connection
Service connection
(USB-A)
Ethernet connection

6 Interactive touch display

The interactive touch display allows you to operate and control the device. To do this, use the menu guide points on the left edge of the screen.

Home key

Info key

Settings key

Cancel key

Hit **Home** to return to the Home menu. The Home menu is the menu item that is displayed after booting the device.

Hit **Info** to call up information about the network, cartridge and printer.

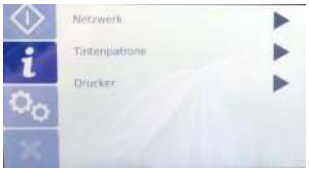
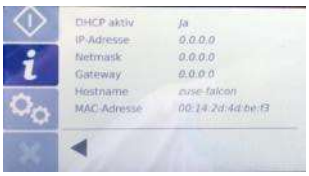
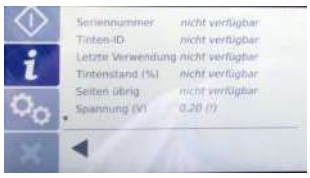
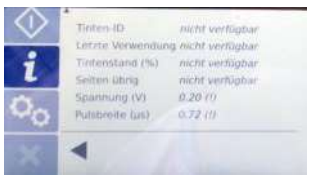
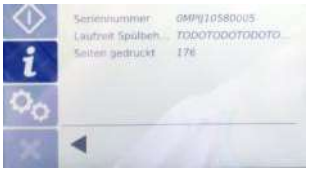
Hit **Settings** to do changes in network, language, print job and tray control.

Hit **Cancel** to abort the current input.

The following table shows the structure of the table in menu items and sub-menu items:

Symbol	***Lead point***	***Subitem 1***	***Subitem 2***
	Home		
	Info	Network	
		Ink Cartridge	
		Printer	
	Settings	Network	DHCP
			IP Address
			Netmask
			Gateway
			Hostname
		Language	
		Print Job	
		Tray Control	Eject Tray
			Insert Tray
			Clean Cartridge
		Calibration	

The following table shows you which options you can perform in the individual menu items.

Menu item	***Figure***	***Description***
Home		The Home screen. In addition, the pending print jobs are displayed here.
Info		Navigation to ‘Network’, ‘Ink cartridge’ and ‘Printer’ possible.
Info →Network		The network settings for the present device are displayed: ☑ Use DHCP ☑ IP address ☑ Netmask ☑ Gateway ☑ Hostname ☑ MAC-address
Info →Ink cartridge	 	The information for the ink cartridge in use is displayed: ☑ Serial Number ☑ Ink ID ☑ Last Usage ☑ Ink level (%) ☑ Sheets left ☑ Voltage (V) ☑ Pulse width (µs)
Info →Printer		Information about the printer is displayed.

Menu item	***Figure***	***Description***
Settings		You get access to the settings of the device.
Settings →Network		You get access to the following network settings: ☒ DHCP ☒ IP address ☒ Netmask ☒ Gateway ☒ Hostname
Settings →Network →DHCP		If you want to activate DHCP, the checkbox must be filled. After that save with the floppy disk symbol.
Settings →Network →IP address		If DHCP is not requested, you can enter a static IP address. After that save with the floppy disk symbol.
Settings →Network →Gateway		You can enter the gateway address here. After that save with the floppy disk symbol.
Settings →Network →Hostname		Select the name of the host. After that save with the floppy disk symbol.

Menu item	*Figure*	*Description*
Settings →Language		Select one of these seven languages and save with the floppy disk icon: German English Spanish French Italian Portuguese Russian
Settings →Print job		You have the option of selecting whether the printed frame should remain in the device for drying. If you want the printed frame to be output immediately, select this checkbox.
Settings →Tray Control		Choose whether you want to eject or to insert the tray. In addition you can clean the cartridge.

7 Initial commissioning of the mp-IM1

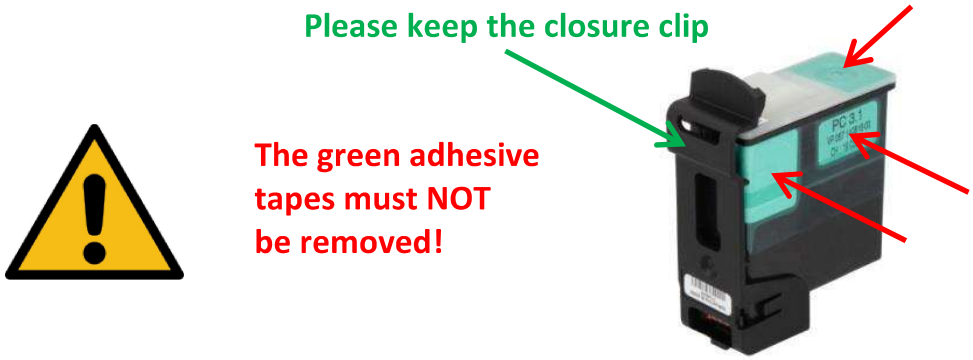
At first read the safety instructions for this printer at the beginning of this manual before using the device.

Take the mp-IM1 out of its packaging and place it on a flat, stable and vibration-free surface.

Make sure that there is enough space for the drawer to extend.

Remove the transport locks of the device. Open the service flap and remove the adhesive tape.

7.1 Important notes on handling the ink cartridge



7.1.1 Cleaning the ink cartridge

Murrplastik Systemtechnik GmbH recommends that the ink cartridge will be cleaned regularly and, if necessary, under the following conditions to prevent the print head nozzles of the ink cartridge from resinifying:

- If the print image has deteriorated
- After not printing more than one day
- After printing twenty mats

To do this, carry out a double cleaning process (Device menu: Settings - Tray Control - ...).

If the machine cleaning process is unsuccessful, clean the ink cartridge as follows:

Clean the lower ink nozzles of the ink cartridge by pulling them horizontally over a soft, lint-free cloth lying on a table from back to front (away from the front electrical contacts). Make sure that the electrical contacts are not touched by you or the cloth. The nozzles are only free when only one line of ink is drawn on the cloth.

7.1.2 Prolonged non-use of the printer

Remove the ink cartridge from the machine and seal it with the black closure clip if you do not expect to print for the next 48 hours.

7.2 Insert the ink cartridge

1. To do so, lift the blue holder.
2. Insert the ink cartridge as shown in the picture.

Be sure to insert the cartridge straight, rectangular to the cartridge carriage, at the front slightly tilted downwards, completely into the receptacle and then push it downwards to prevent the electrical contacts of the ink cartridge and the electrical contacts in the cartridge receptacle from rubbing against each other.

3. After that lock the blue holder again.

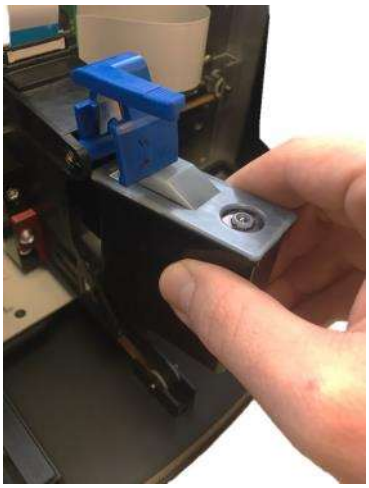


Illustration of the cartridge symbolically

8 Driver installation

Important information for the installation by the administrator!

For the printer, the installation file is available as a self-executable EXE file. The installation supports Windows® 32 bit and 64 bit operating systems from Windows® 7 with the current Service Pack and higher.

If required, you can download the driver installation file from the Murrplastik homepage on the Internet.

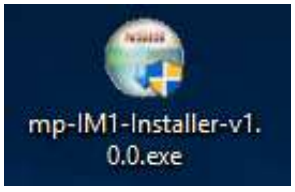
It is not necessary that you connect the mp-IM1 to the PC during driver installation.

Please note

The driver installation is shown as an example under Windows®10 64 bit. For other versions of Windows®, there may be minor variations in the process or designations.

Driver installation

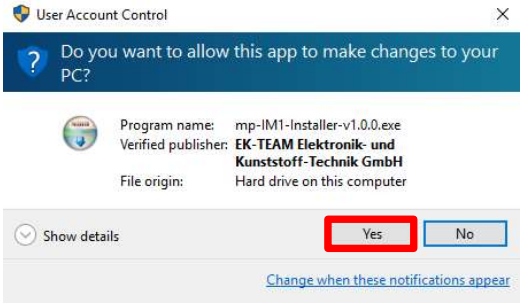
Preferably, copy the driver installation file to the desktop or another preferred Windows® folder.



Note: The file name of the driver installation file shown here may differ from the actual name.

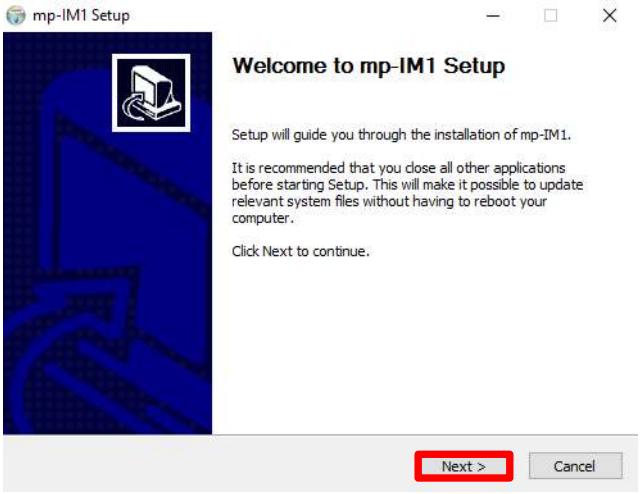
Then start the installation routine by double-clicking the file.

Confirm the Windows® query with **[Yes]**.

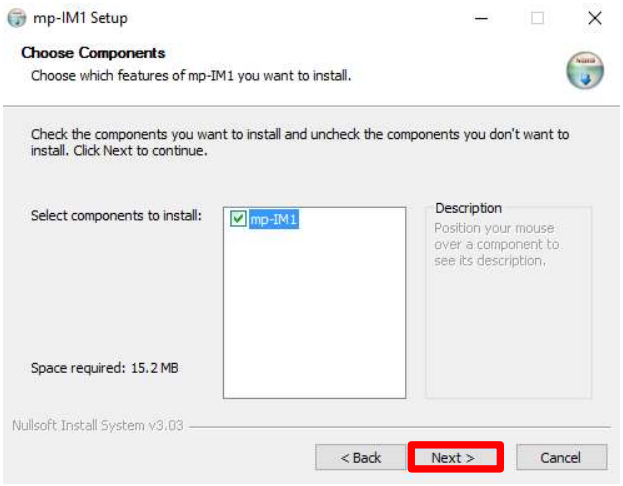


Select the desired language. You can choose between "German" and "English".

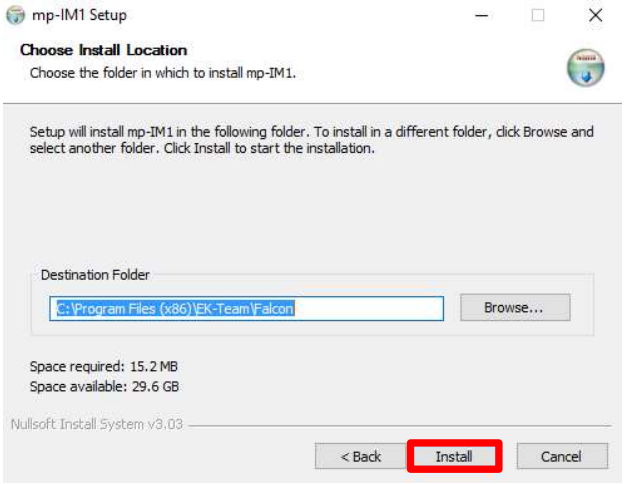
Click on **[Next]**.



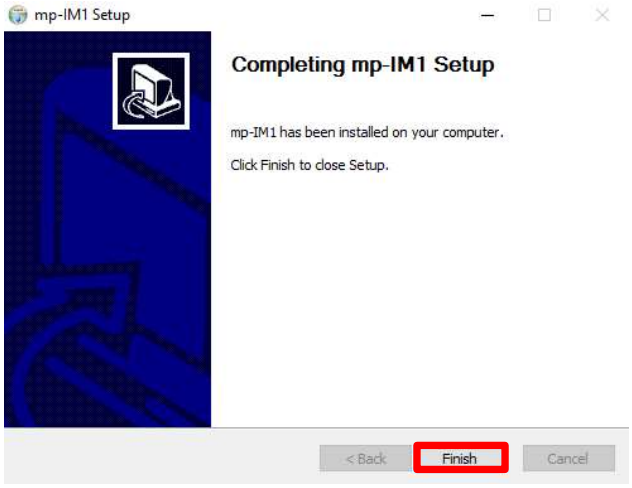
Click again on **[Next]**.



Apply the default path and click on **[Install]**.



Complete the installation by clicking on **[Finish]**.



9 Direct connection via network cable

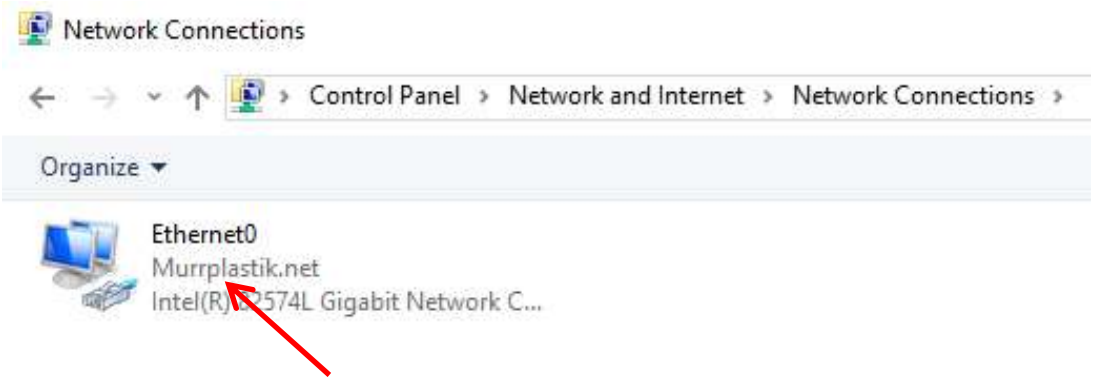
The following example describes the direct connection of a Windows® 10 PC with an mp-IM1. For other Windows® operating systems, the procedure may differ slightly. The listed IP address and subnet mask shown here are examples. Rudimentary network knowledge must be available. The IP address must be provided by the customer's network administrator.

It is also possible to integrate the mp-IM1 into an existing company network. Due to the complexity and potential risks, this setup is the sole responsibility of the customer's network administrator.

9.1 Configuring network settings on the PC

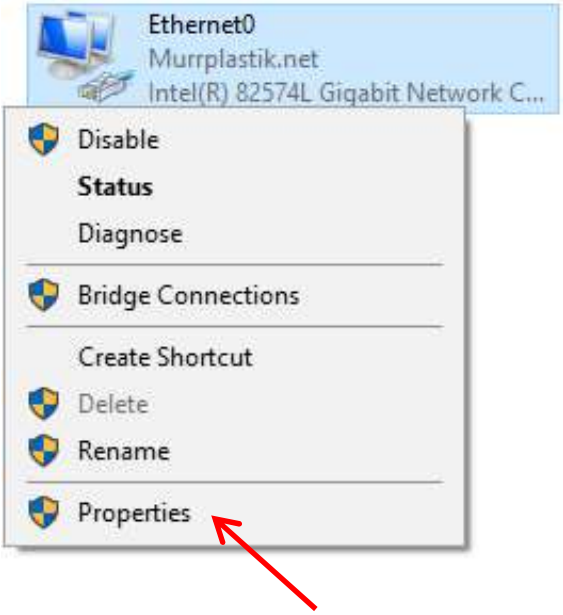
Connect the mp-IM1 to the PC using a network cable.

In Windows®, open Control Panel and go to **[Control Panel] - [Network and Internet] - [Network Connections]**.

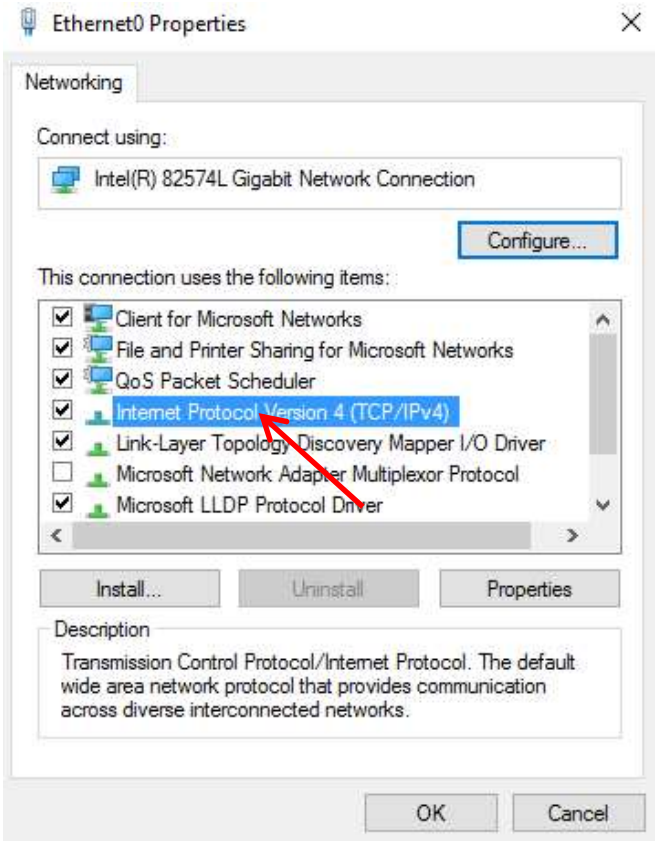


Click on the Ethernet network with the right mouse button.

Select **[Properties]** from the context menu.

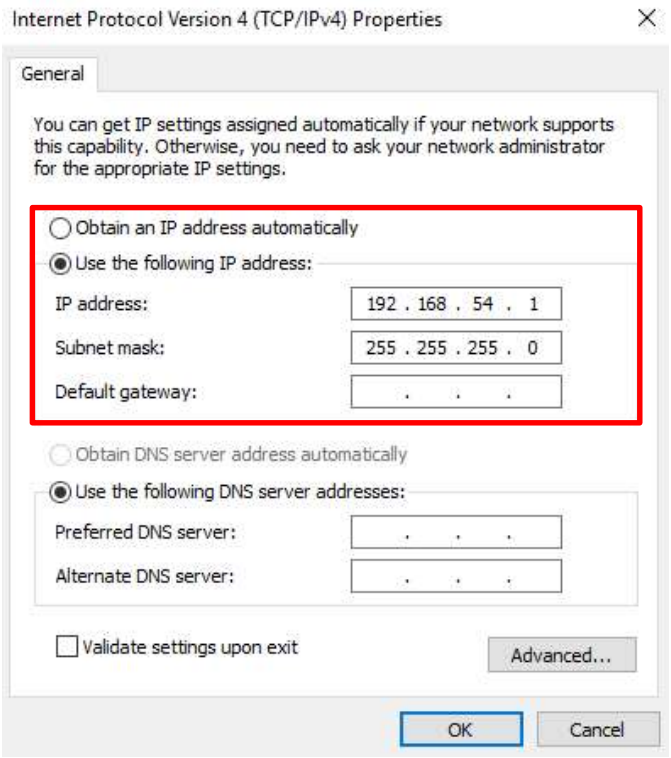


Open the settings for the **Internet Protocol Version 4 (TCP/IPv4)** by double-clicking it.



Enter the IP address and the subnet mask.

Then close the two open windows with **[OK]**.



9.2 Configuring network settings on the mp-IM1

Set the network settings on the mp-IM1 using the touch panel in **[Settings] - [Network]**.

Enter an IP address from the same network area in which the PC is located, e.g. 192.168.54.50.

Enter the same subnet mask as on the PC, e.g. 255.255.255.0.

Restart the mp-IM1.

Add the new printer in Windows® "Devices and Printers" as described in Chapter 8.

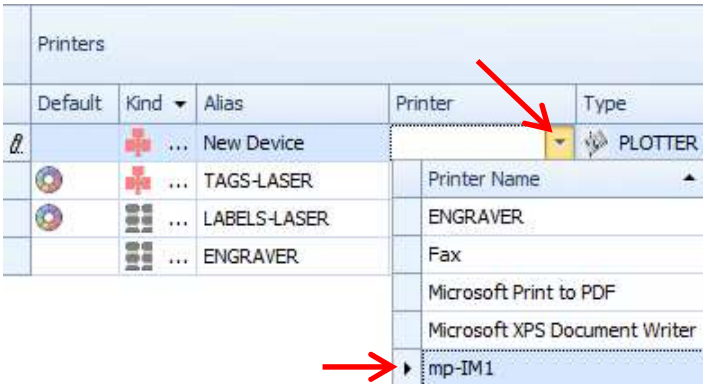
10 Settings in the mp-UniversalMarkingSoftware

In mp-UniversalMarkingSoftware the mp-IM1 is added and the calibration points are entered.
The settings must be made separately for each Windows® user.

To do this, start the software and click on the printer symbol.

Click on **[+]** **"Add a printer"**.

In the fourth column **[Printer]**, select **mp-IM1** from the drop-down menu.



Set the printer as **"Default"**.

Please complete the remaining columns as follows:

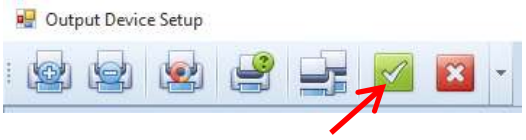
- Kind = ***select the red label symbol***
- Alias = ***you may name this field freely***
- Type = ***Inkjet***
- Orientation = ***0***
- Baseplates-Rows = ***1***
- Baseplates-Columns = ***1***
- Distance-X = ***0***
- Distance-Y = ***0***
- Offset-X = ***18***
- Offset-Y = ***-4.2***

Printers

Default	Kind	Alias	Printer	Type	Orientation
	...	mp-IM1	mp-IM1	INKJET	0

Layout

Baseplates		Distance		Offset	
Rows	Columns	X	Y	X	Y
1	1	0	0	18	-4.2

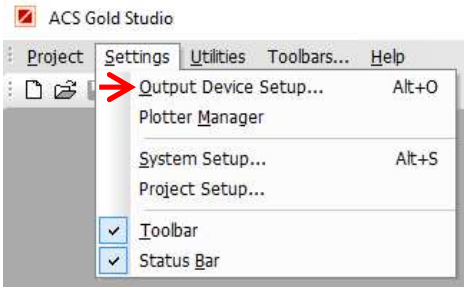


Save the settings finally.

Please note that the offset values may vary slightly depending on the device.

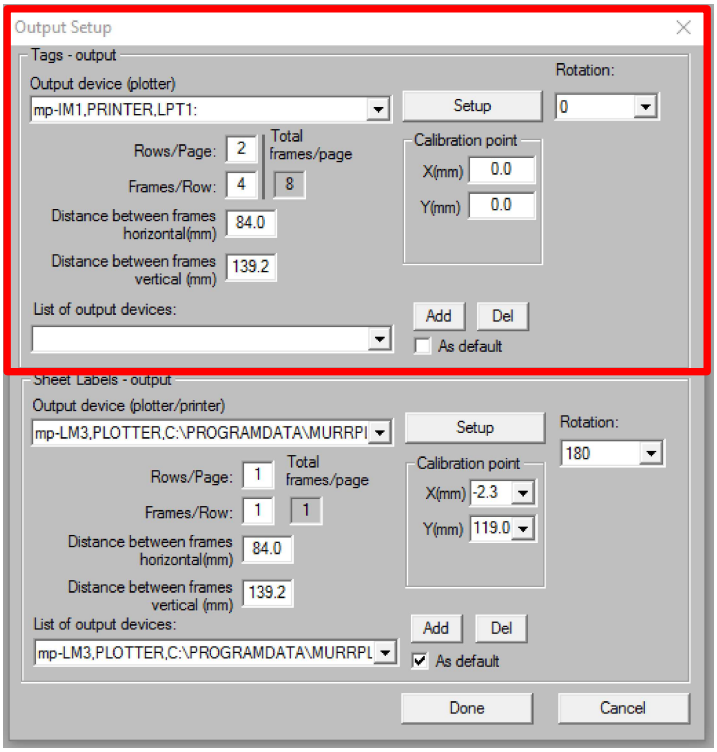
11 Settings in the ACS Gold Studio software

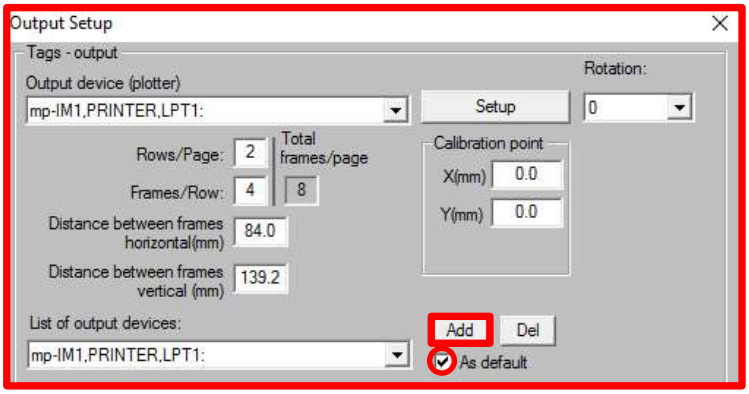
In the ACS Gold Studio software the mp-IM1 is added and the calibration points are entered.
The settings must be made separately for each Windows® user.



Start the ACS software, do not open a project and click **[Settings] - [Output Device Setup]**.

If the mp-IM1 is not preselected already in the upper drop-down menu of the ***Tags output*** section (red frame), open this drop-down menu and choose the corresponding **mp-IM1**.

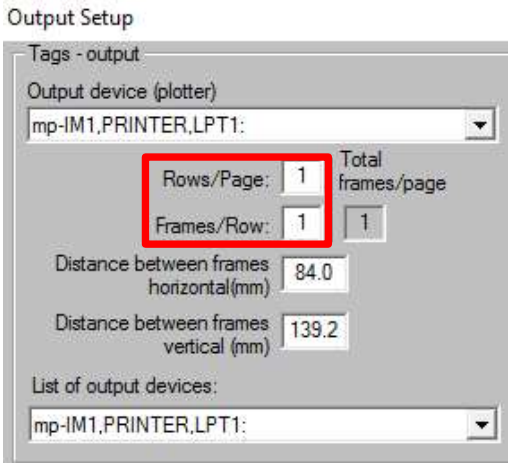


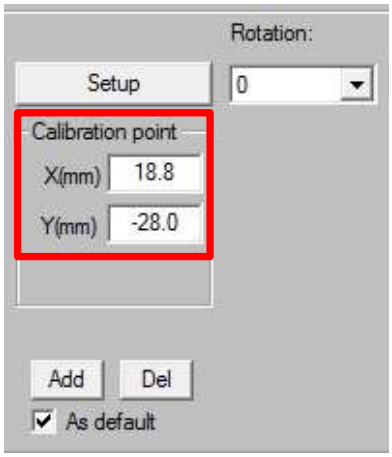


Click **[Add]** to take over the device into the **"List of output devices"**.

Set a hook at **"As default"**.

Change the **"Rows/Page"** and the **"Frames/Row"** value each into **"1"**.





Enter the calibration point values.

X = 18.8
Y = -28.0

Rotation = 0

Please note
These values are default values and can be vary slightly by device.

Check your settings you have done in the "Output Setup" window once again and close it by clicking on **[Done]**.

12 Assembling the carrier plate / printing

Place the carrier plate on the drawer as shown in the following figure.

Then place the base plate on the carrier plate.

13 Cleaning and maintenance

In order to keep the mp-IM1 printer in good condition and functional, it should be cleaned and maintained periodically, if necessary also more times.

13.1 Cleaning the mp-IM1 printer

- Switch off the printer.
- Unplug the power cable.
- Use a dry, soft cloth to remove dust and other foreign bodies.

To remove stubborn dirt, carefully clean the printer using a cloth moistened with water or a neutral detergent. Then dry off the printer thoroughly!

Do not use any aggressive cleaning agents or scourers. These can cause discolouration or deformation of the housing.

Never use compressed air to clean the device or parts of it!

13.2 Replacing the fleece box

Change the fleece box as soon as it is apparently full.

After opening the service flap you will find the fleece box in the lower right corner.

Remove the fleece box and replace it with a new one.

When inserting the fleece box, make sure to press it in deeply enough. Otherwise, there is a risk that the print carriage moves against it and will be damaged.

Dispose of the fleece box at a local waste management site in accordance with the statutory regulations.

13.3 Consumed ink cartridges and fleece boxes

Dispose of empty ink cartridges and full fleece boxes at a local waste management site in accordance with the statutory regulations.

14 Contact

Technical Support

☎ +49 7191 482-2222

💻 acs.helpdesk@murrplastik.de

15 Technical data

Printing method	Inkjet
Print resolution	300 x 300 dpi
Ink	special Murrplastik ink EK-PC 3.1
Print cartridge	1x Murrplastik - Black
Print volume [1)]	approx. 1,000,000 chars / cartridge
Print area	approx. 120 x 120 mm
Print speed	approx. 8 sec / frame
Input voltage	110 – 240 V AC
Frequency	50 – 60 Hz
Power consumption	20 W while printing / 0.3 W power off
Temperature (operation)	10 °C – 30 °C
Humidity (operation)	20 % – 80 % (without condensation)
Device dimensions	W x H x D (31 x 18 x 38) cm / (12.2 x 7 x 15) inch
Installation space	W x D (31 x 18) cm / (12.2 x 7) inch
Weight [2)]	approx. 6 kg / 13.2 lb
Interface	USB 2.0
Network interface	Ethernet
Software	mp-UniversalMarkingSoftware or ACS Gold Studio 2.3.0.95
Operating system	Windows® (versions 7, 8, 8.1, 10)

1) Depending on selected font, font size and print quality. Determined by printing with PDF Creator, font Arial, font size 9, quality normal.

2) Weight including ink cartridge and supplied accessories.

16 Shipping instructions for return

In case of a necessary shipment (for example, maintenance, repair) of the mp-IM1 you must observe the following:

- Always switch off the device by pressing the power button so that the ink cartridge carriage drives into its parking position and will fixed in place.
  Never take the device out of operation by unplugging the power plug only!
- Remove the base plate (GP) from the carrier plate. The base plate will remain with you.
- Remove the ink cartridge from the device. The ink cartridge will remain with you.
- Fix the carrier plate in the device with an adhesive tape.
- Secure the service flap and all movable parts with an adhesive tape.
- Enclose the USB connecting cable, the power cable, and the power supply unit to the shipment.
- If possible, ship the device only in its original carton with appropriate polystyrene moulded parts or in suitable other packaging.
- The device may only be transported lying horizontally. A readable note must be affixed to the carton before shipment.
- Contact the ACS Helpdesk if you have any questions.

For damages and/or soiling caused by non-compliance with the points listed here, we reject any liability or assumption of costs.

Declaration of European Conformity

Murrplastik Systemtechnik GmbH
Dieselstraße 10
71570 Oppenweiler, Germany

herewith declare, that the test of the printer

mp-IM1

were successfully passed according to the
Low Voltage Directive 2014/35 / EU and the EMC Directive 2014/30 / EU.

The printer mp-IM1 meets the following standards in detail:

Equipment safety	*EN 60950-1.2006 + A11: 2009 + A1:2010 + A12:2011*
Information technology equipment – *Radio disturbance characteristics*	
Limit values and measurement methods	*EN 55022 B:2011-12*
Information technology equipment – *Immunity characteristics*	
Limit values of test methods	*EN 55024: 2016-05*
Electrostatic discharge (ESD)	*EN 61000-4-2: 2009-12*
Interference radiation	*EN 61000-4-3: 2011-04*
Burst	*EN 61000-4-4: 2013-04*
Surge	*EN 61000-4-5: 2015-03*
Conducted interference	*EN 61000-4-6: 2014-08*
Testing immunity to magnetic fields with energy-related frequencies	*EN 61000-4-8: 11.2010*
Voltage interruption/voltage drop	*EN 61000-4-8: 11.2010*
Harmonic currents	*EN 61000-3-2: 2015-03*
Voltage changes and fluctuations, flicker	*EN 61000-3-3: 2014-03*

Matthias Holzwarth, M.Sc., M.C.C.
02.01.2019

Notes

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