



iCUBE^X

Printing Innovation AG
Poststrasse 1
CH - 9100 Herisau

Powered by
memjet[®]

iCUBE 1-3 Quick User manual



Revision: 2014-09-25

Installing the Printer

Choose a location

The iCUBE should be placed on a properly levelled worktable or cabinet which is able to handle the printer's weight and minimum 61 cm (24 inch) wide.

Unpacking and Setup

The printer is shipped in a strong cardboard or wooden box. Before opening the box, check that the box is not damaged in any way and was not turned upside down during shipment. If signs of damage are found, contact your reseller and inspect the box together.

If the box is undamaged, carefully cut the tape on the box, open the box. Before taking the printer out of the box, make sure a strong and level work surface is prepared for the printer.

NOTE: The printer is heavy. Never attempt to lift and take it out of the box on your own as it can cause lasting injuries. The printer should always be lifted by two persons.

Place the printer on the desk and inspect that no damages are found on the unit.

Checking the contents

Check the parts list to ensure you have received all required components. If the shipment is complete, proceed to the next chapter.

iCUBE Printer

- 1 set of CMYKK ink cartridges (5 cartridges per set)
- 1 printhead
- 1 main power cable
- USB-A to USB-B Cable



Connecting the iCUBE

Make sure the printer is used with the mains cable suited to the requirements of the electrical system of your country. The internal power supply in the printer is rated 115 to 240VAC, 50/60 Hz.

- Insert the cable into the printer first. The cable connector should sit in the socket securely.
- Insert the cable into the mains socket.



CAUTION

Do not use an outlet that shares the same circuit with large electrical machines or appliances!

Turning Power On/Off

Powering Up:

Turn on the mains switch

Powering Down Printer:



1. Press Main Power button on the top of the printer, and wait until the engine is turned off.
2. And turn off the machine with the mains switch.

OR

1. Open the Toolbox and press 'Shutdown'.

2. Wait for the printer to stop processing and the toolbox write out the printer not responding.
3. Switch off the mains switch.

CAUTION
<p>Whenever powering down the unit NEVER:</p> <p>1.) Never remove the power cable during the shutdown process!</p> <p>2.) Never switch off the printer with the Main Power Button when the engine is still running!</p>

Printer Buttons

Power button /green LED/

When switching on the mains switch the booting starts and the green LED illuminate. The power button is for shutting down the print engine. After the shut-down-process the LED goes out and you can the printer switch off with the mains switch.

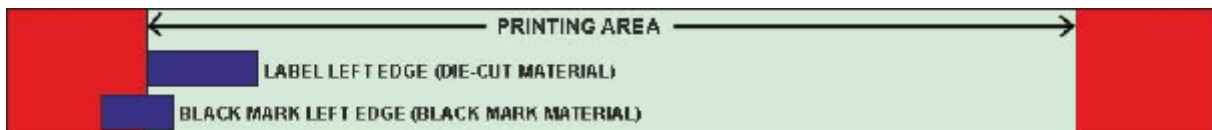
The green LED always should light when the machine is ON.

Cancel button /red LED/

This button can cancel the job while the printing. The LED is only working if the button is pressed or some errors have occurred.

Feed button /yellow LED/

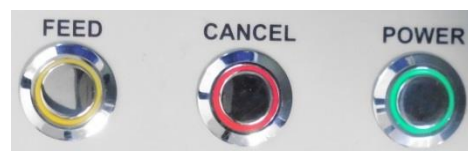
Before printing you should feed the media into the machine. Advice: place the media to the left side of the machine because the print engine has the gap and blackmark sensors also there. The LED is only flashing if the button is pressed or some errors have occurred.



LED table:

Green LED: power status

- LED ON: Engine ON
- LED OFF: Engine OFF



Red LED: cancel job / clear error

- LED OFF: normal operation -> button press will cancel current job
- LED ON: error detected -> button press will start the clear error procedure, further error info can be denoted by the yellow LED's state described below
- LED flashing: doing work (cancelling or clearing error)

Yellow LED: feed / unfeed

- Button press will initiate feed or unfeed process depending on the current paper state of the printer.
- LED flashing: doing work (feeding or unfeeding)
- LED ON + red LED ON: engine in paperpath related error state, denotes paperjam in 95% of the time
- LED flashing + red LED ON: engine in paperpath_end_of_roll error state, so there is no paper in the printer or it is unable to detect it

Setting up the Printer

After the printer has passed inspection, install the printhead, and the ink cartridges, as explained in the following sections.

To set up the printer you need to do the following:

1. Install the ink cartridges
2. Install the printhead
3. Turn on the Printer
4. Load label media
5. Install the printer driver

Installing Ink Cartridges

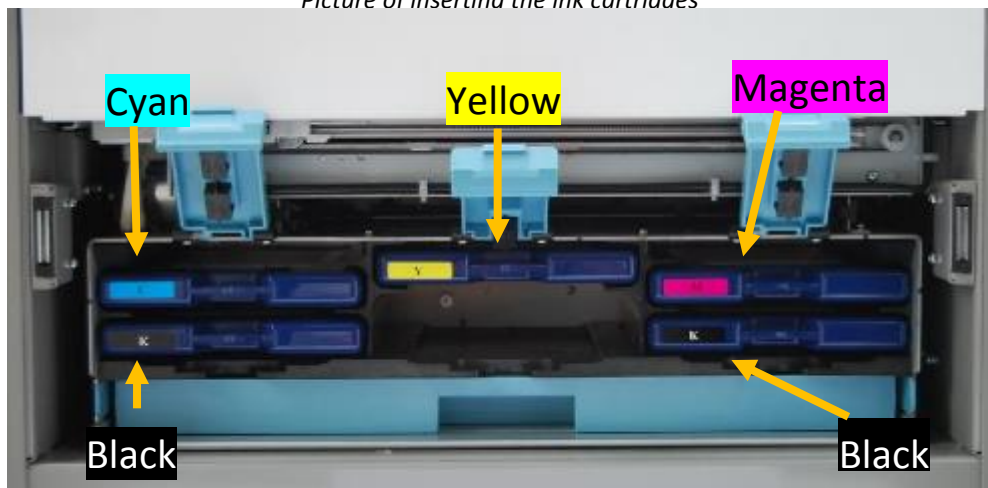
The iCUBE-Series-Printers use a single Printhead Cartridge and five ink tanks (two black, one cyan, magenta and yellow). During installing the ink cartridges the Printer should be turned off.

- Remove the ink tanks from the shipping box.
- Open the ink tank latches in the front of the printer by pushing the bottom of the latch upward. The latch has a marker for signalling the place of the C, M, Y and K tanks. (*The reason why K is used for black: in RGB color mode B is reserved for blue*)
- Locate the place where each tank should go than slowly but firmly push the tank into the tank socket. The pressure in the ink tanks and the septums may prevent the cartridge to fully engage for the first insertion.

To make sure you have a good contact, remove the ink tank and reinsert twice.



Picture of insertina the ink cartridaes



- Cyan (C), inserted in the top left slot.
- Black (K) – two cartridges – inserted in the bottom left and bottom right slots.
- Yellow (Y), inserted in the top middle slot.
- Magenta (M), inserted in the top right slot.

WARNING: The ink in the Ink Tanks may be harmful if swallowed. Keep new and used tanks out of reach from children. Discard empty tanks immediately.

Installing the Printhead

The printhead is the core of the print engine. As sensitive electromechanical equipment it requires careful and special handling to avoid damage and ensure quality printing.

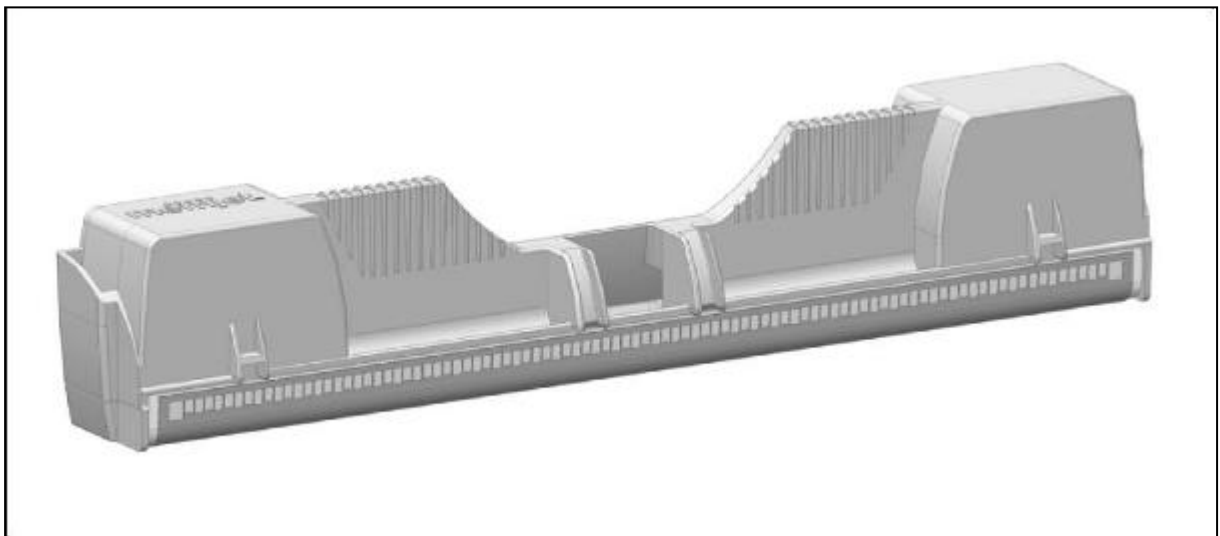
NOTE: The printhead is sensitive to electro-static discharge (ESD). Use ESD protection when handling the printhead.

Priming the Printhead

Before the printhead can be used, it must be primed. Priming helps purge both the liquid and air in the ink lines to allow reliable printing. Priming can also help to remove air bubbles from a previously primed printhead. The priming process is designed to use less than 5 ml of ink.

To prime the printhead manually,

1. Fill the main channels of the printhead.
2. Generate a pressure pulse to push out any bubbles.
3. Clean and dispose of the ink pushed out onto the nozzle plate.
4. Print out color mixed ink.
5. Cap the printhead to prevent dehydration.



CAUTION

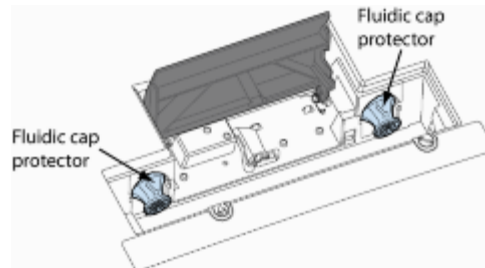
- **DO NOT touch the printhead cartridge ink couplings, nozzle surface or the electrical contacts when installing the printhead cartridge. Hold the printhead cartridge ONLY by the handles.**
- **DO NOT unpack the printhead cartridge until the printer is ready for installation. Once unwrapped, delay in installing the printhead can compromise print quality due to dehydration.**
- **DO NOT place an unwrapped printhead on any surface before installing. Protect the printhead from at all times from dust, fibers, dirt and other contaminants.**

Installing the printhead

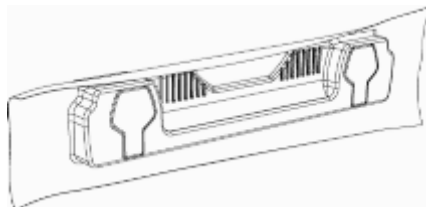
1. Ensure your printer is switched on and the power button is lit and steady.
2. Open the cover of your printer to reveal the printhead latch with a screw driver (**ONLY at first use!**)



3. If the printhead latch is not raised, press the Printhead Eject button for three seconds. This will automatically initiate printhead latch opening. This process may take several seconds.
4. Remove the fluidic cap protectors from the two fluidic couplings.



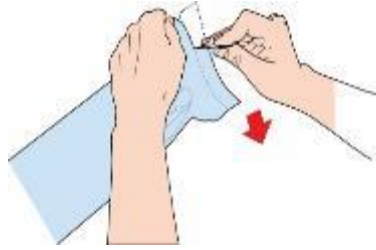
5. Open the end of the printhead package outer box and slide out the foil bag.



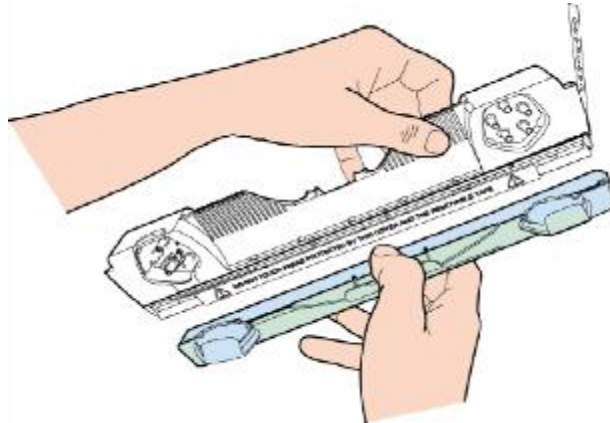
Inspect the integrity of the foil vacuum sealing. The foil bag should be formed tightly to the contours of the printhead cartridge as shown above. If the foil is loose to any degree then the seal has been compromised.

If a poor seal is suspected, **DO NOT USE** the printhead cartridge. Report the issue to your supplier.

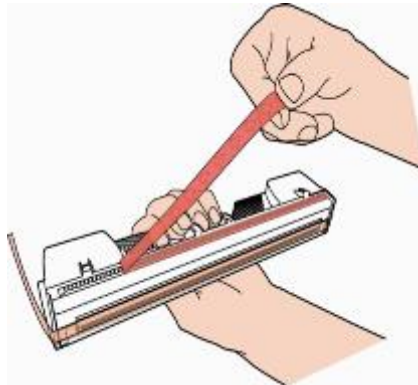
6. Carefully rip the foil packaging open at the notch. Use scissors if your foil bag does not have a notch or you are finding it difficult to tear the bag.



7. Remove the printhead cartridge from the foil bag.
8. Remove the orange protective plastic cover from the printhead cartridge. Holding the printhead cartridge by the handle
 - a. Release the flaps covering the ink ports (1 and 2).
 - b. Release the clip retaining the cover near the center of the printhead cartridge (3).
 - c. Carefully remove the protective cover (4).

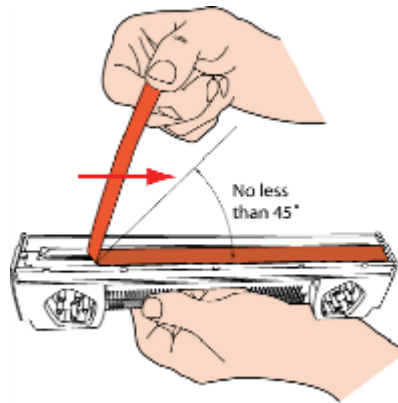


9. Remove the protective strip from the electrical contacts. While holding the printhead cartridge by the handle with one hand, grasp the pull tab with the other hand and, slowly and carefully, peel back the plastic strip covering the electrical contacts.



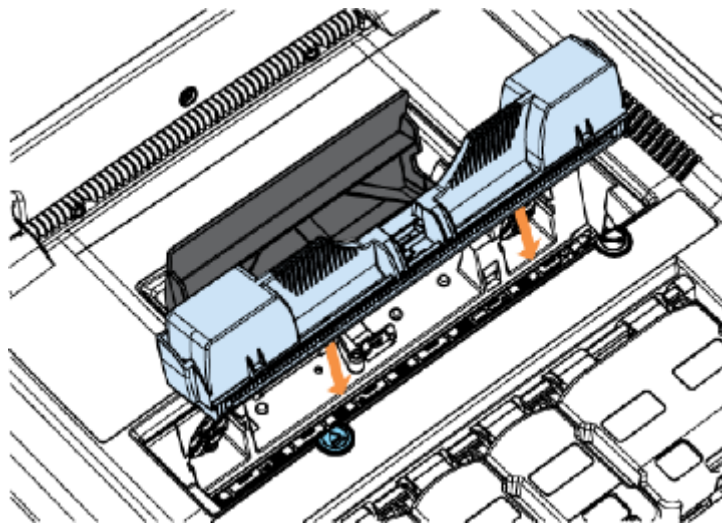
Dispose of the removed strip immediately and do not allow the removed strip to contact the electrical contacts.

10. Remove the protective strip from the printhead nozzles. While holding the printhead cartridge by the handle with one hand, grasp the pull tab with the other hand and slowly and carefully peel back the plastic strip covering the printhead nozzles. Maintain an angle of no less than 45° with the printhead surface when pulling on the strip.

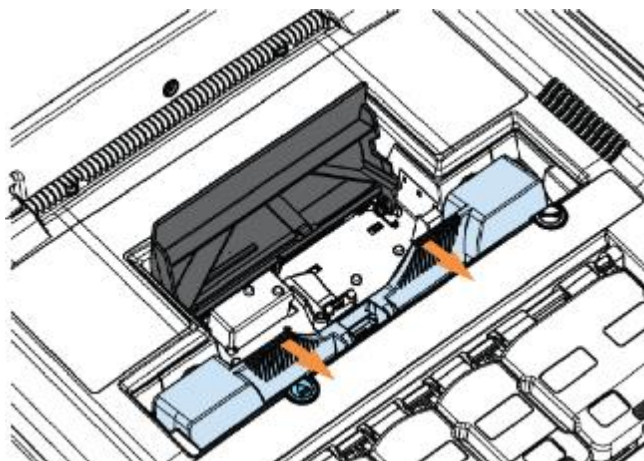


Dispose of the removed strip immediately and do not allow the removed strip to contact the electrical contacts or the printhead nozzles.

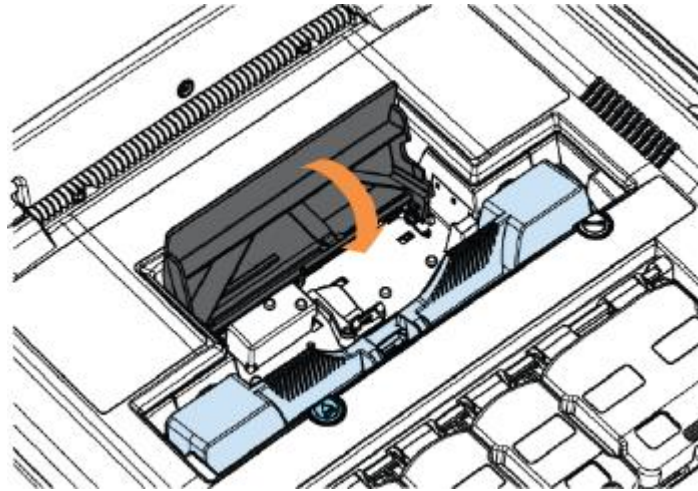
11. Raise the printhead latch fully until it is upright so you can insert the printhead into the printer at an angle.



12. When the printhead cartridge is fully inserted into the printer rotate it to a vertical position as shown.



13. Slowly close the printhead latch. The fluidic couplings should advance and seal to the printhead cartridge.



14. Close the printhead latch. When the printhead latch is closed, the printer will prime, clean and cap the printhead automatically. This operation will generally take a minute or two, and will be obvious from sounds emanating from the printer.

NOTE: The Printer may take up to 12 minutes to set itself up during initial startup. This is normal. The machine will emit a number of chirps, whirrs and other noises as it circulates ink and runs systems.

CAUTION

Do not remove the Printhead while fluid is primed in the system!

Power on the Printer

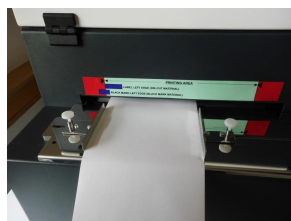
After the print head and the ink tanks are installed, switch on the printer. For that please switch on the mains switch and the POWER-button should lights up: this will power up the print engine and the controllers.

After few seconds, you will hear the ink pump starting to prime the system, then the wiper will wipe the print head and starts its first maintenance. This can take up to 10-15 minutes but it is normal so please wait until the toolbox for the system indicates that it is in the ready state.

Media Handling

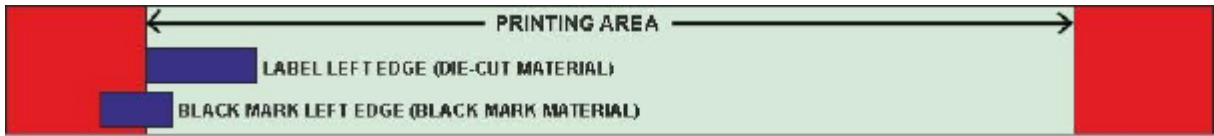
Print Area

Print area can be found on the back of the printer where the operator needs to feed the materials. Any media type must go through the metal paper guide in order to avoid any movement during printing.



Picture of Paper guide

Printing Area is dedicated with the green bar. Left edges of Label (Gap) Sensor and Blackmark (Tickmark) Sensor is shown with the blue marks. During printing the operator has to align the actual material to these blue marks otherwise the sensors won't be able to recognize the media and the printer could run into an error.

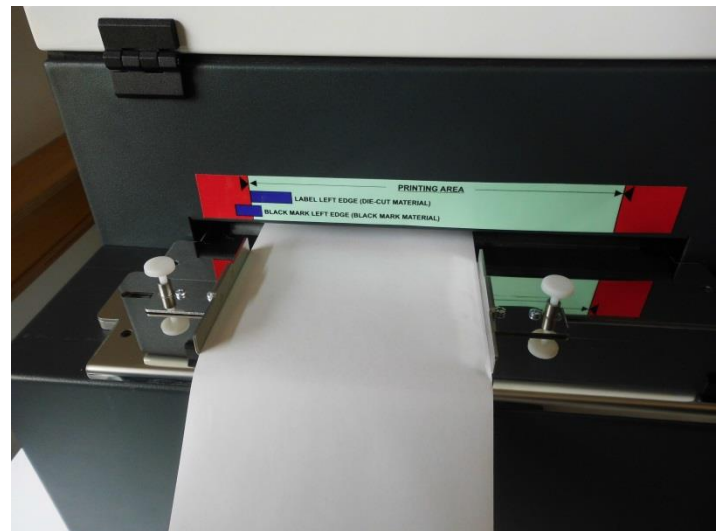


Picture of Printing Area

Load Media

Take the paper from the roll and see across under the unwinder's roller. Don't forget to do this because this will strain the label media during printing.

Drag the paper towards the paper guide.



Feed the paper in the printer till feel you some resistance.



Please use for the first installation only the USB-cable

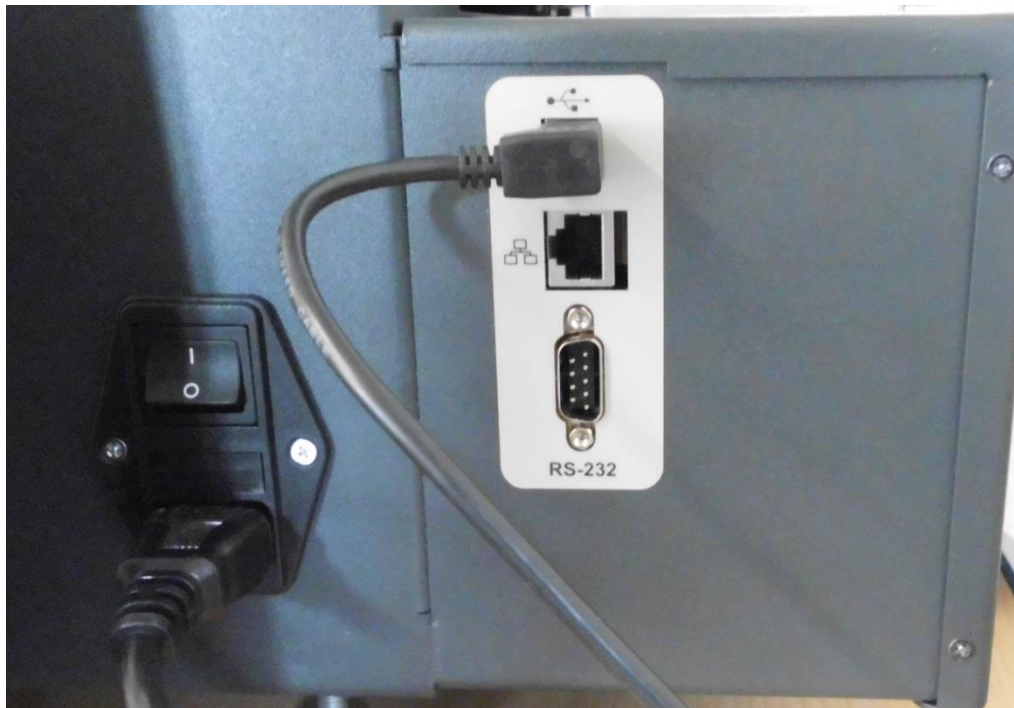
Connect the printer to a computer

Direct connection to a personal computer

The printer is connected to PC directly via USB AB cable and a TCP/IP cable.

For the driver installation is advised to use the **USB AB cable**. If you want to use the printer over Network you need to use the LAN Cable instead.

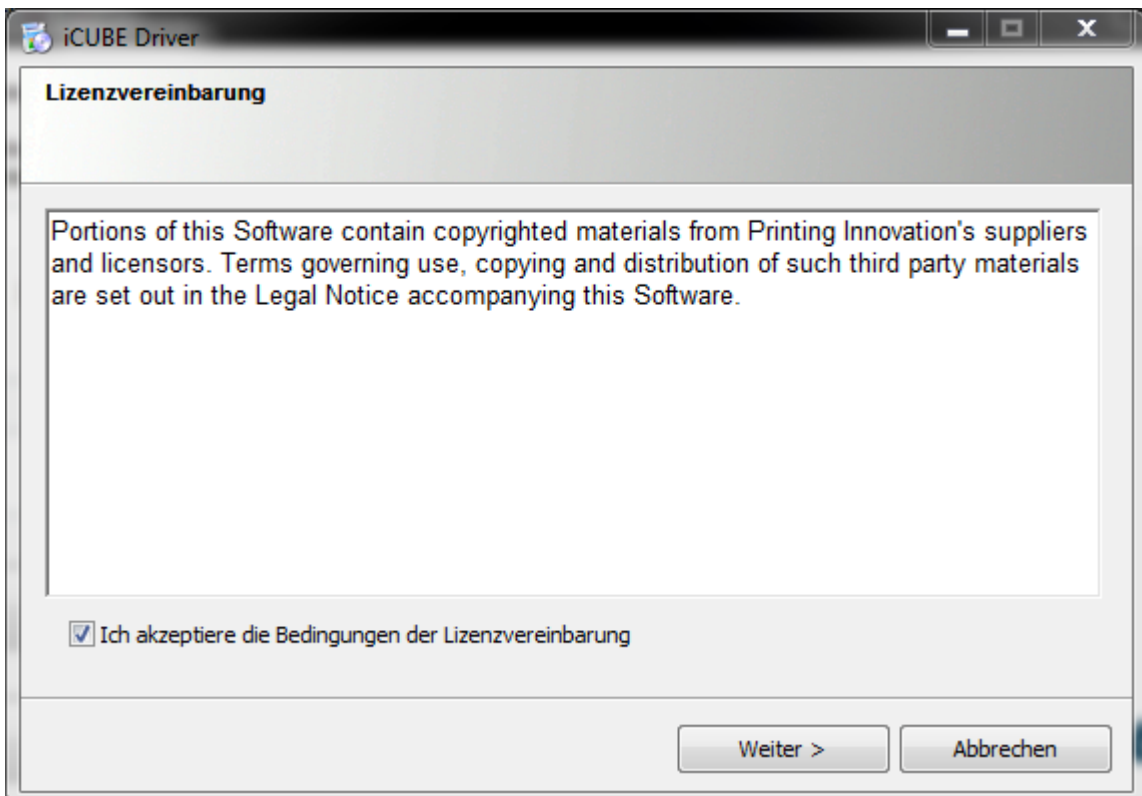
For Network Installation please follow the Instructions of the Network Installation Manual.



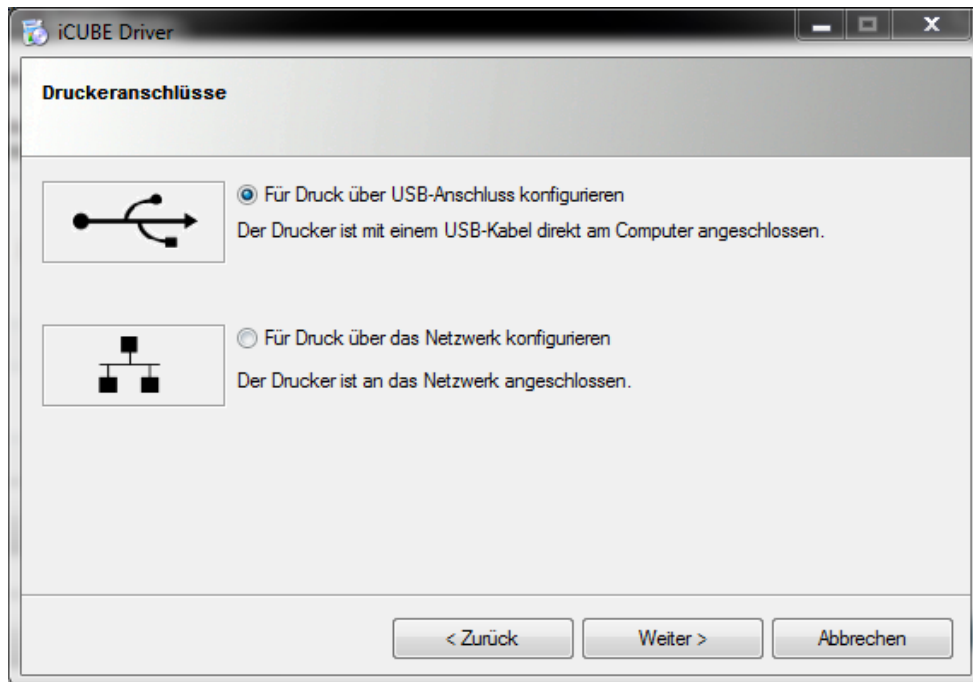
Install the printer driver

On the user's PC or laptop, start Memjet's Windows installer:

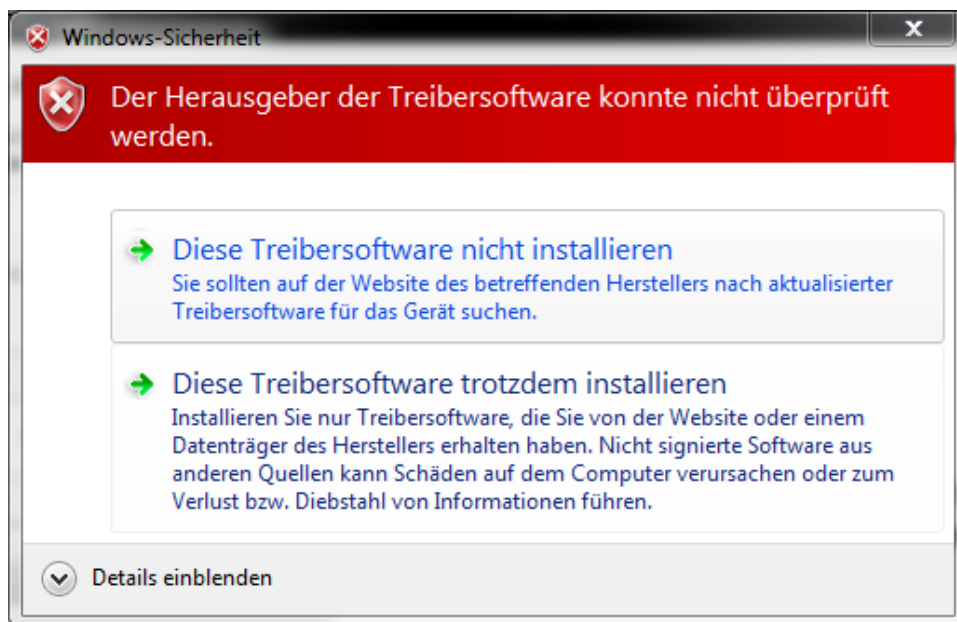
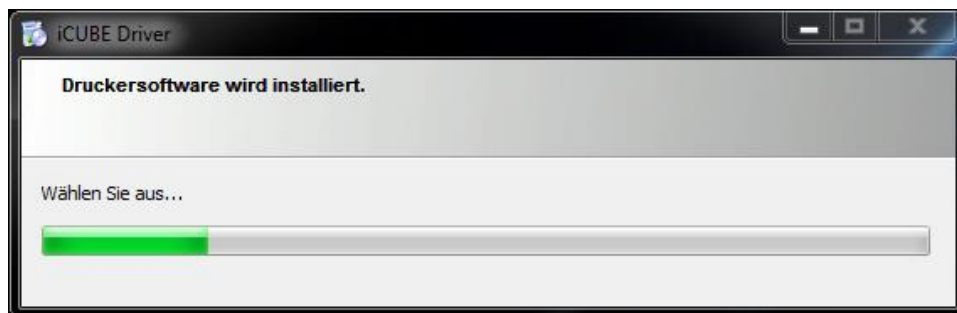
Run *WinSetup.exe*



When asked, select 'USB Printer'.

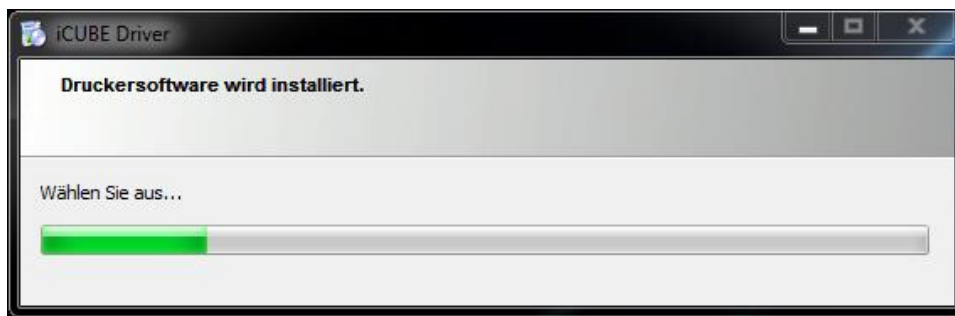


Installation begins:



Click "Install Driver" when the Windows Security Window shows up.

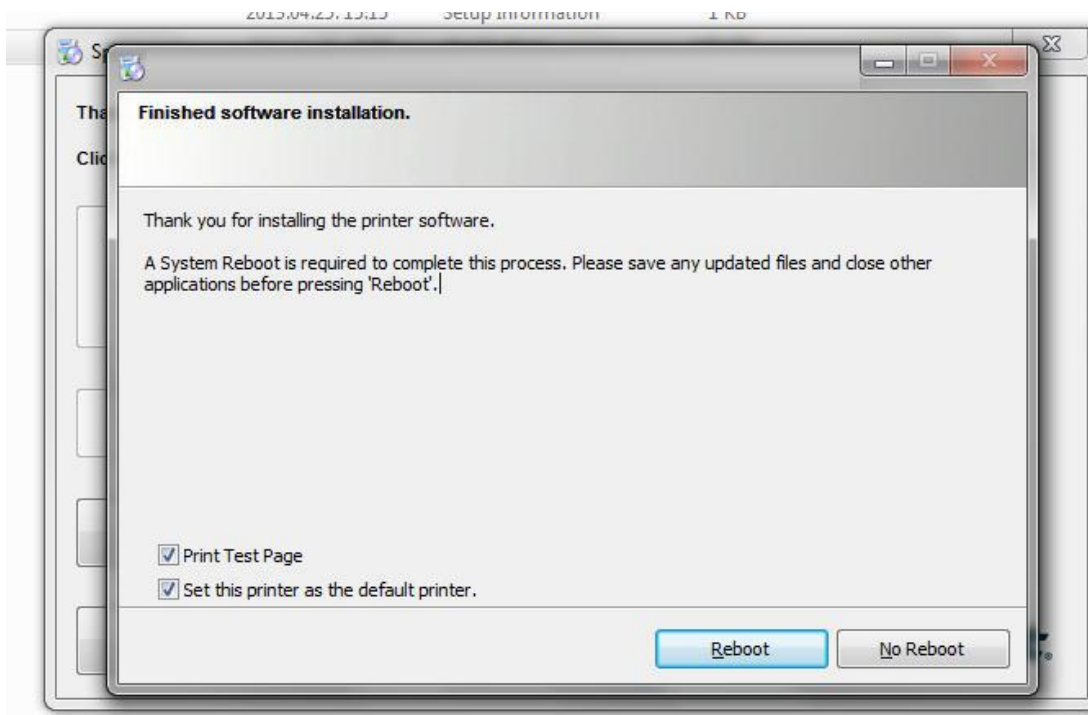
Wait until the progress bar finishes the installation.



When the driver files are copied the Setup shows the Windows below. Connect the Power and USB-Cable and turn the printer on. Wait until the PC detects the printer and the Setup does the final steps.

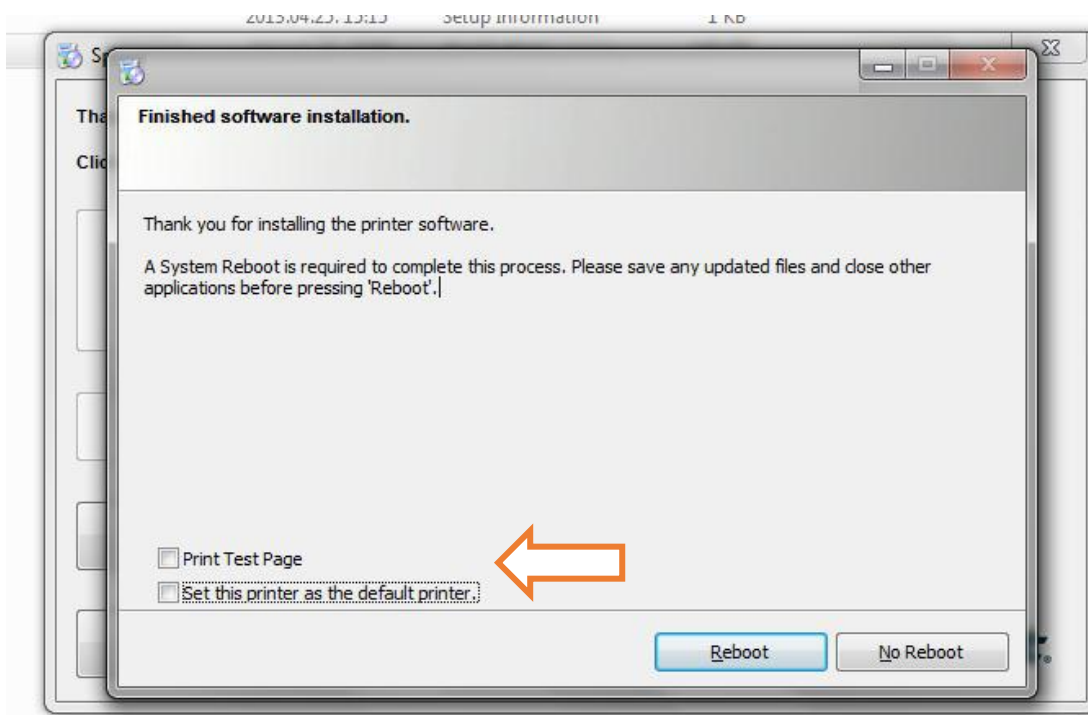


After the Installation you will see the Window below.



Disable "Print Test Page" and "Set this printer as the default printer."

When it's finished you will need to Restart your PC or Laptop to make sure that the installation process made all necessary changes!



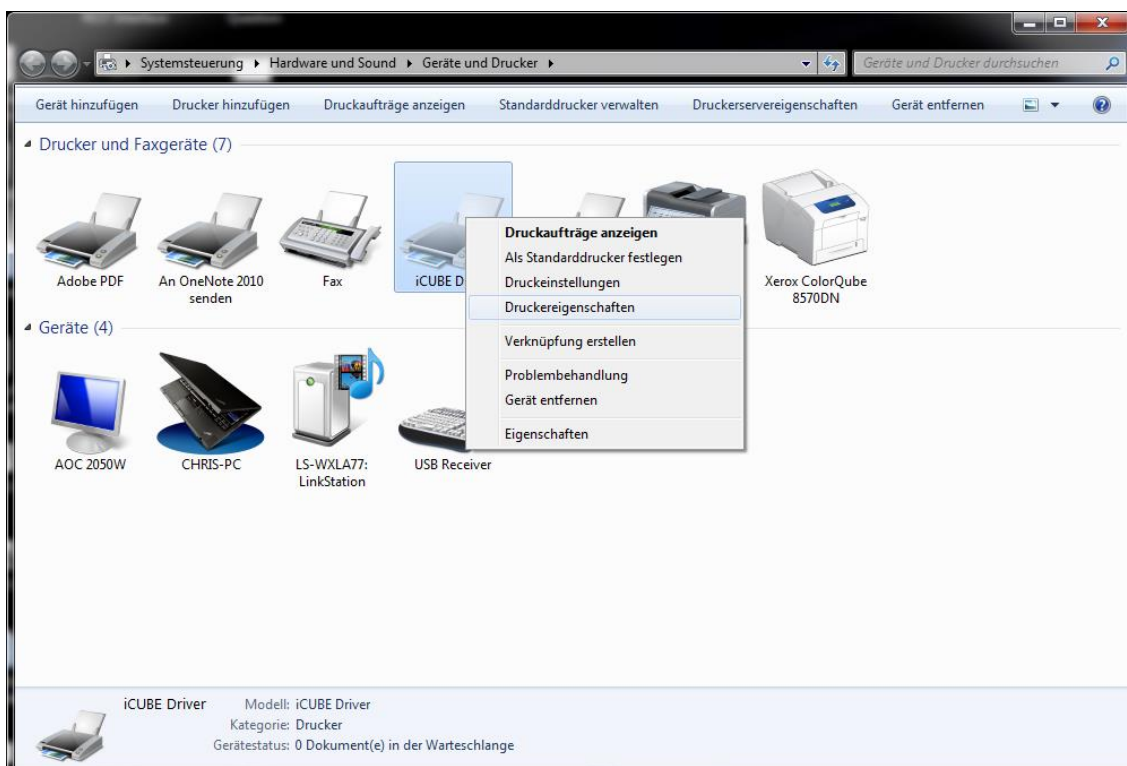
NOTE: When installing the driver on Windows 7, you can skip the Reboot process by clicking on 'Don't reboot'. The system will prompt you whether the software was installed properly or not. Just select 'Yes'.

It is necessary to unselect 'Bidirectional Printing' at printer's property page otherwise the printer will not print any printjobs!

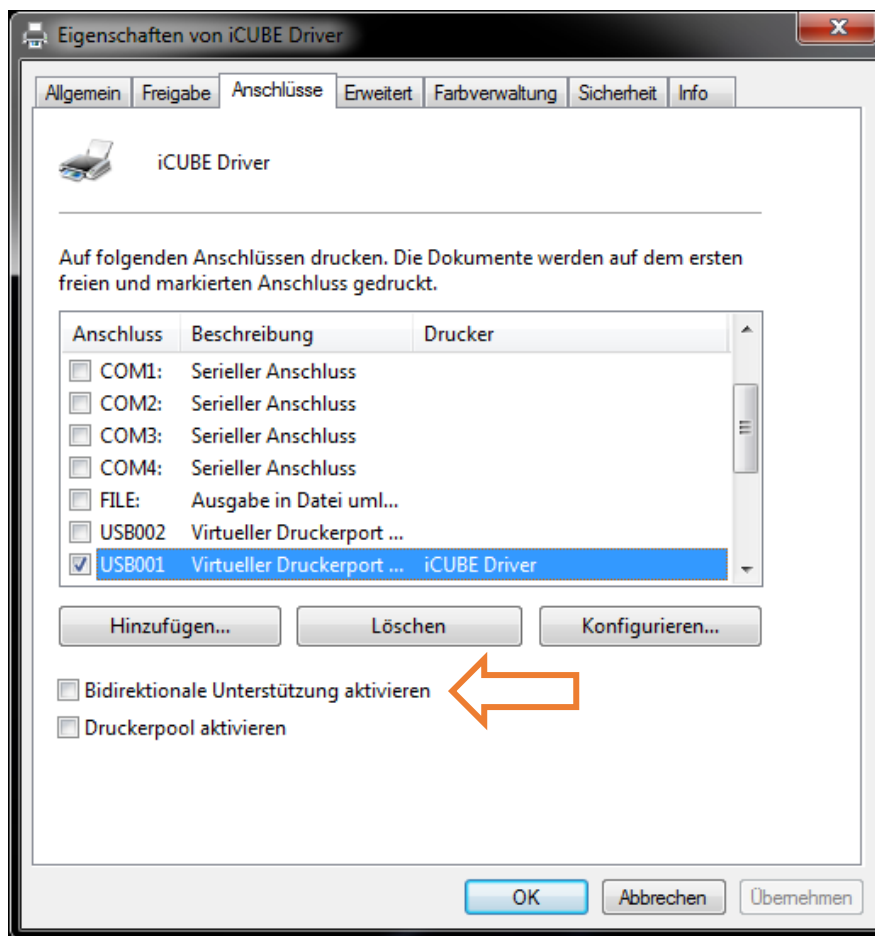
1. Click on "Start" => "Devices and Printers".



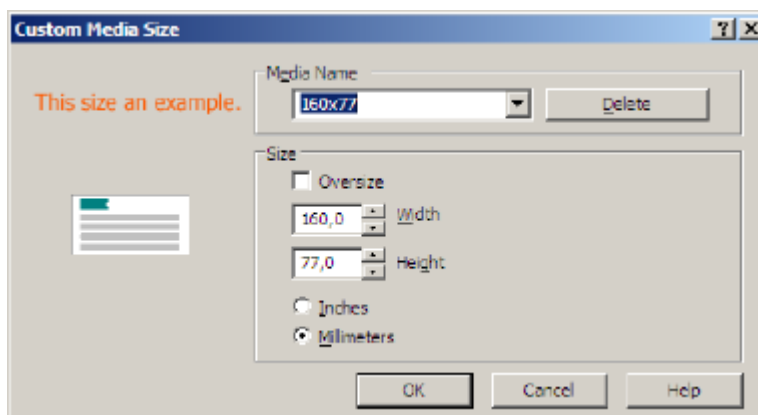
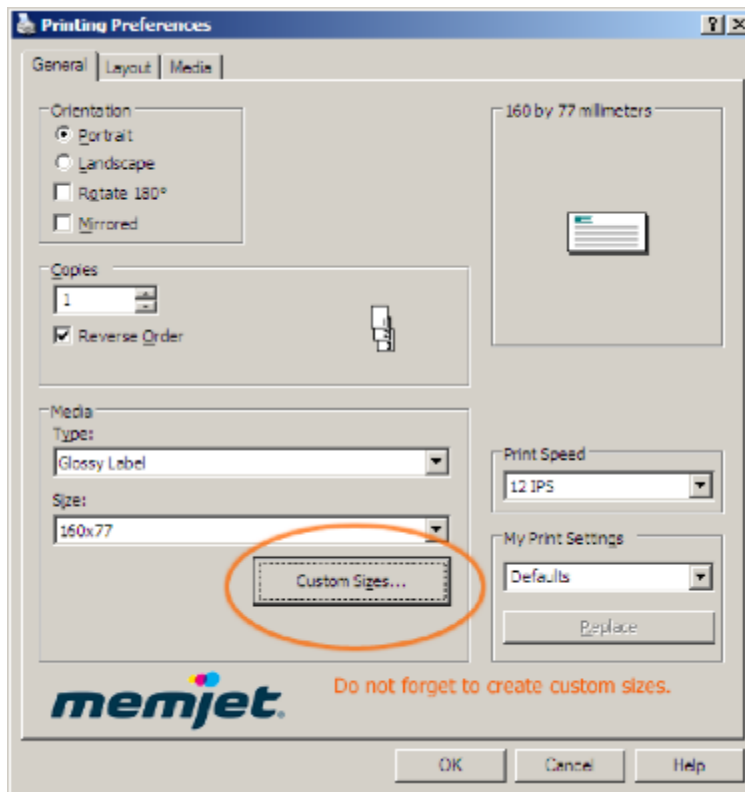
2. Right Click on the iCube Printer, then click on "Printer Properties".



3. Click on the Tab "Ports" and disable "Enable bidirectional support".



4. Do not forget to create custom sizes when printing. See example here:



Now the Installation is finished.