iJet2L

BREVA USER MANUAL

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Our products are sold with the understanding that the buyer will test them in actual use and determine for him or herself their adaptability to his/her intended uses.

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Safety and Environment

Please read and understand this manual before using the iJet2L Breva for the first time. This manual describes all of the main functions of the printer.

Precautions

Before using the iJet2L Breva, please note the following precautions:
- Read all instructions carefully before operating the printer and prior to performing any procedure.
- Do not place the unit on an unstable surface or stand.
- Do not place anything on top of the unit.
- Keep the top clear of obstructions.
- Always use the printer in a well-ventilated area. Do not block the slots and opening on the unit, which are provided for ventilation.
- Only use the power source indicated on the rating label.
- Use only the power cord that comes with the unit.
- Do not place anything on the power cord.

The following symbols are used in this document to highlight warnings, potential hazards, or best practice procedures, and have the following meanings:

Important – what you need to know to get the best from your printer.

Warning – potential risk of damage to printer and/or surroundings.

Danger – potential risk of personal injury, including electrical shock, burns etc.

Risk to personal safety

Do not disassemble any part of your printer. Electrical shock hazard. There are no user-repairable parts inside your printer. Disassembly of any part of your printer will void all warranties.

Keep your printer well away from all heat sources and flammable substances. Fire hazard.

Switch your printer off immediately and unplug the power cord from the wall socket if:

• you see smoke rising from your printer

• you notice an acrid smell coming from your printer

• you see any sparks being emitted from your printer.

Contact your supplier as soon as possible.

Risk of damage to printer or surroundings

Install your printer on a flat, level surface

Your printer must remain level at all times. Tilting the printer may cause undue leakage of ink and may damage your printer.

Keep liquids and heavy objects away from your printer

The outer shell is plastic. Heavy objects may warp it, damaging your printer. Liquids may discolor or damage the skin and, if they penetrate it, may damage your printer beyond repair.

Use only the supplied power supply and cord

Use of any other power supplies or cords may damage your printer and void your warranty.

Use only authorized consumables

Use of any cartridge other than those authorized IJet2L will damage your printer and void your warranty. Use of unauthorized inks or ink tanks may damage your printer and will void your warranty.

Avoid large temperature variations

Install your printer in a protected location away from direct sunlight, open windows or any other places subject to temperature extremes. If you are moving the printer, allow sufficient time after installation for the temperature and humidity of the internals of your printer to arrive at equilibrium with the surroundings.

Avoid shaking or bumping the printer

Your printer is a complex piece of equipment. Heavy shaking or bumping may damage it.

Warnings

Place the printer on a stable, vibration-free surface
Before connecting the power cable, check the compatibility between the mains voltage and that of the power supply indicated on the label on the bottom of the power supply.
Never handle the power cord with wet hands
Make sure the power cord is fully inserted into the wall outlet
During the disconnection of the power cable, hold it by its end without pulling it.
Pulling on the cord may cause it to break
The socket must be installed near the equipment and be easily accessible.
Breva is configured to use only the inks distributed by iJet2L. Operation with cartridges that do not have the iJet2L label is not guaranteed.
For optimal system performance, in anticipation of long periods of inactivity (e.g. holidays
summer or Christmas), it is recommended to remove the cartridges and close them with a special head protector and store them in a cool and dry place.

Breva is built according to the technical safety standards recognized today. The Breva must be used according to the provisions of this user manual. Any type of modification on one's own, which is outside the maintenance operations indicated in this manual, is prohibited. Any other type of intervention not mentioned in this user manual must be carried out by iJet2L qualified personnel

In case of transfer of the printer it is necessary to proceed as follows:
- Turn off the printer
- disconnect the printer from the power supply and the USB cable from the PC
- reuse the original packaging for the transfer, specially designed to avoid damage during transport.

Some inks may contain irritating substances for the skin, eyes and respiratory tract. If the fluid comes into direct contact with the skin, follow the instructions on the cartridge shell.

Printer warranty

For the terms and conditions of the warranty and the respective limitations of liability, refer to the warranty statement supplied with the printer.

Environmental impact

iJET2L is committed to reducing the environmental impact of all its products by making improvements in energy efficiency.

DIRECTIVE *2002/96 / EC ON THE COLLECTION, TREATMENT, RECOVERY AND DISPOSAL OF ELECTRICAL AND ELECTRONIC DEVICES AND OF THEIR COMPONENTS*

1. FOR THE COUNTRIES OF THE EUROPEAN UNION (EU)
The disposal of electrical and electronic devices as municipal solid waste is strictly prohibited: collection must take place separately. The abandonment of these devices in places that are not properly equipped and unauthorized could have harmful effects on health and the environment. Violators will be subject to the penalties and measures provided for by the law in this regard.

FOR THE CORRECT DISPOSAL OF OUR DEVICES:
a) Contact the local authorities to receive the practical information and instructions necessary for the correct disposal of waste, for example: location and times of waste collection centers, etc.
b) In case of purchase of a new device of our production, return any used device similar to that purchased to our supplier so that he can arrange for its disposal.

The symbol on the device (a garbage can with a cross on it) indicates that:
- When to be disposed of, the device must be taken to specially equipped waste collection centers and managed separately from municipal waste;
- iJET2L guarantees the activation of the treatment, collection, recovery and disposal procedures, in accordance with the provisions of Directive 2002/96 / EC (and subsequent amendments).

2. FOR ALL OTHER COUNTRIES (NON EU)
The treatment, collection, recovery and disposal of electrical and electronic devices will take place in accordance with the laws in force in the country of origin.

Technical Support and Registration

Contact Information

For repair or technical assistance, locate iJet2L Technical Support by going to:
www.ijet2l.com/support

Repair and Return

If for any reason you need to return the iJet2L Breva printer for repair, please contact iJet2L Technical Support for repair and replacement information.

Document Conventions

When using this document, it is important that you understand the conventions used throughout the manual.
- All user actions are indicated by **Bold** text.
- References to menus, dialog boxes, button and screens are indicated by *Italics* text.

Introduction

Thank you for purchasing the iJet2L Breva.
Breva is the most compact and simple printer available based on HP technology.
Thanks to the integrated printhead, with every change of cartridge you will benefit to a new printhead.
It can use a variety of inks: water, solvent and UV based.
With its portfolio of inks, Breva can print on a variety of substrates like cardboard, plastics, metals and glass.

Features and Functions

-   Lightweight
-   Single Color Output
-   Easy swap of cartridges
-   Stand alone

Compatible Applications

The iJet2L Breva is compatible with any Microsoft Windows software and with iJet2L Tornado App.

System Specifications

- Weight: 9 kg |20 lb
- Dimensions: 474 x 522 x 260 mm | 18.7" x 20.6" x 10.2"
- Operating Temperature: 18 - 32°C | 68 - 86°F
- Relative Humidity: 50% to 70%
- Voltage: 110-240V, 50/60 Hz, 90W
- Print Resolution: 300 x 600 dpi, 600 x 600 dpi
- Data Interface: USB - WiFi
- Minimum System Requirements: Celeron® computer or better, 4MB RAM, 5GB free hard drive space, USB 2.0 port

Setup

Unpacking and Setting up the Printer

Introduction

Carefully unpack and inspect the printer (interior and exterior) for possible damage during shipping.

⚠️ Note: Be sure to remove any transportation protection from around the print head and inside the top cover.

To unpack your new printer:

1. Ensure the printer box is upright and on a level surface.
2. Carefully extract all the contents of the box and check the contents against those shown in the Shipping Checklist.

⚠️ If there is any variation between what has been delivered and what is described in the Shipping Checklist contact your supplier before proceeding.

3. Check for any physical damage to the packaging or any of its contents prior to installation.

⚠️ DO NOT use any damaged components – bring them to the attention of your supplier.

Unpacking Procedure

1. Open the carton and remove the printer with its protection foam

2. Gently start removing the foam
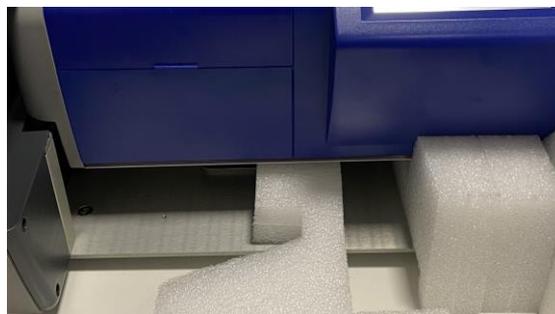
3. Open the Cartridge Door
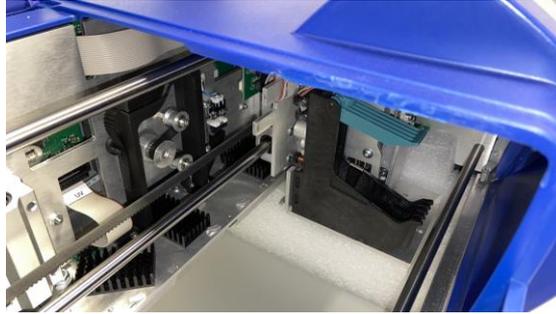
4. Gently lift the printing head and slide it to the left
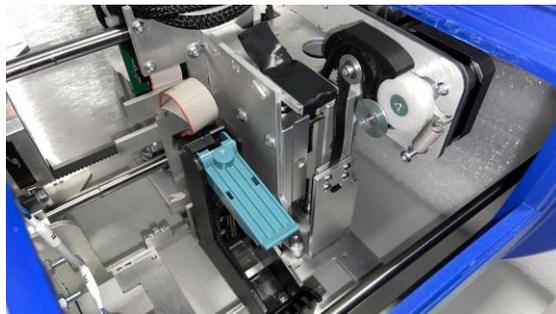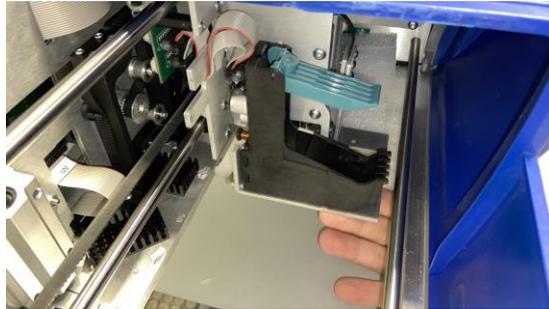
5. Remove the black tape as indicated
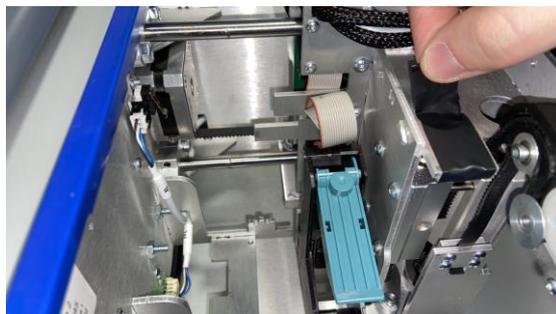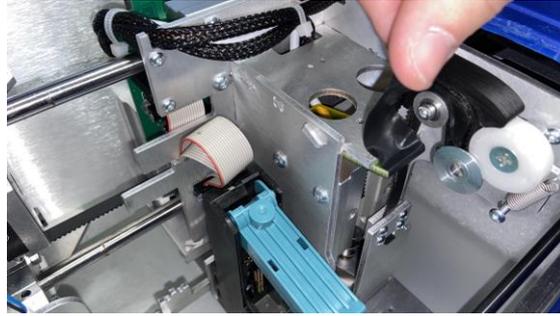
6. Place the printing head on the cleaning support

7. Remove the other parts of foam
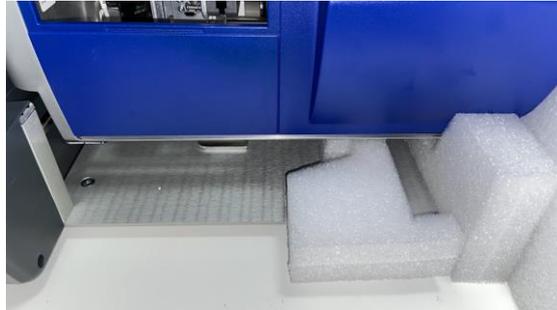
8. Breva with removed foam parts

9. Gently move the print head to the right side to facilitate insert of Service station

10. Move print head to the left on top of service station

Power ON

1. Connect the power cable into the BREVA socket

2. Wait while it starting
3. Once started, BREVA display should look like

Connecting USB Cable

1. Connect the USB cable between the BREVA USB-B port and PC

2. Open Cartridge door

Insert Ink Cartridge

1. Press the setting button on BREVA display

2. Press Change Ink button

3. Lift Green Latch

4. Remove Cartridge Cover

5. Insert Ink Cartridge

6. Close Green latch
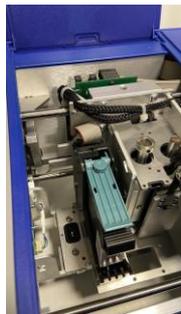
7. Press Change Ink Cartridge on Breva display

Print Test

1. Place the Styrofoam 35mm plate

2. Press the Settings Icon and the Stored Prints

3. Choose Test_75_h36

4. Press Print icon and check result
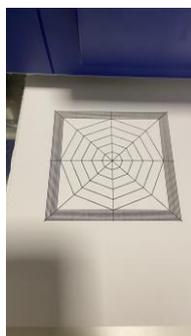
What's in the Box

- ijet2L Breva Printer
- Power Adapter
- Power Cord
- Service Station
- 2m USB Cable (If other USB cable is used, it must be 2m (6') or less.)
- Test Ink Cartridge
- Support for Quick Printing Test Alignment, thickness 35mm (1.37")
- USB Flash Drive containing: User Manual, Printer Driver, Print Templates

Note: Please keep the original packaging, including the box, in case the printer must be returned.

Breva Components

Photos BREVA

1	Display
2	Power Input Port
3	HDMI Port
4	USB Port
5	USB Printer Port
6	Cartridge Hatch
7	Cartridge Latch
8	Cartridge Stall
9	Service Station
10	…

Display:	5" display for on board tasks
Power Input Port	Port to insert power supply cable
HDMI Port	Service only
USB Port	To connect USB thumbdrive for updates and WiFi dongle
USB Printer Port	To connect USB cable to connect to PC
Cartridge Latch	To load or replace ink cartridge
Service Station	To perform cleaning and splitting cycles

Positioning and connection

Place the printer on a flat surface, leaving 15 cm free in front and behind the turrets.
A PC with at least one USB port is required.
Connect the power supply to the 220v socket. (110v for US market)
Connect the USB cable between PC and BREVA.

Switching on for the First Time

Breva does not have a switch.
To turn it on:
- Plug the power cord into the power input power on the back left side of the printer
- Plug the other end of the power cord into an AC power outlet
- Breva will switch on automatically
    The process can take a few minutes.
When the Breva starts the Ready / Ready message is displayed and the axes are reset.

To switch off the Breva use the "Power" icon on the display and choose "Switch off completely" or disconnect the power cable from the socket.

Install Ink Cartridge

From the printer display, press the "Settings" icon and then choose "Change cartridge".
The print head will move to the cartridge change position.
Lift the green lever
Remove the cartridge from the head protector and insert it into its housing.
Close the green lever
Press the ok button on the display. The printer will return to the park position.

- Breva Display: Press Settings
- Breva Display: Press Change Ink Cartridge
- Movement: Printer will move toward user and prepare for Change Cartridge Operation
- Movement: The cartridge carrier will align itself change cartridge position.
- Operation: Lift Latch
- Operation: Remove the new cartridge from its packaging. Be sure to remove CartClip
- Operation: Place Ink Cartridge into the Cartridge Stall
- Operation: push cartridge downward until it snaps in place
- Operation: Close Latch
- Breva Display: Press Done

Breva Control Center

Introduction

The Breva Control Center is used to interact with the printer for the following functions:
- Print Quality Settings
- Print Heights Adjustment
- Ink Levels
- Maintenance
- Direct Printing
- Queue Management

It automatically installs with your printer driver and can be accessed as a program on your Windows start menu.

Installation of Driver and Breva Control Center

First installation of Breva Control Center on PC

Requirements:
- PC with Windows 10, connected to the internet and with at least one USB port available.
- USB Cable (provided in the box)
- Installation Files

Insert the USB Pen drive into the PC.
Click on Windows Explorer and navigate to Setup Driver folder.

- Installation of FTDI Driver
Double click on file: FTDI CDM21228_Setup.exe
Follow the installation procedure as shown on the screen.
Click Done to complete the installation

- Installation of Breva Control Center
Double click on file: Breva Setup 3.0.0.1.exe
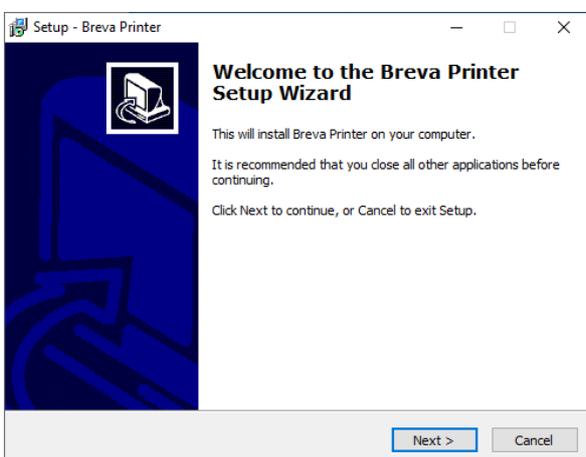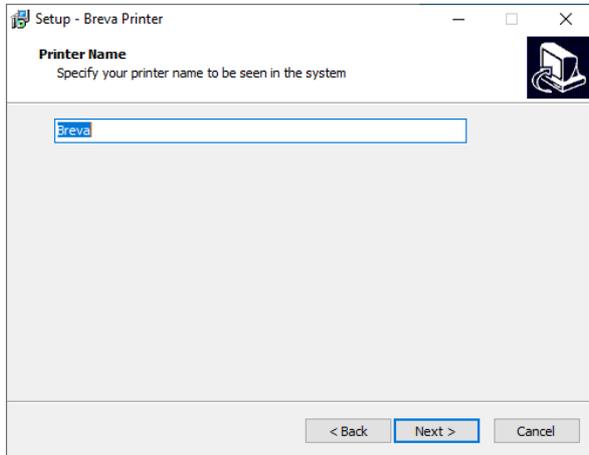
This is the name given to the printer.
Press Next to proceed.
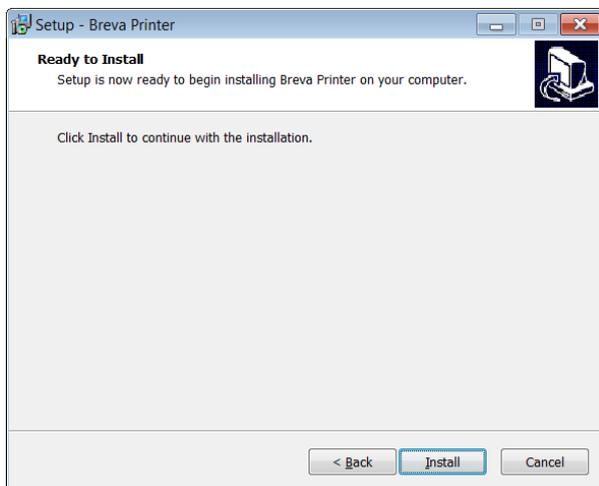
Press Install to continue with the installation.
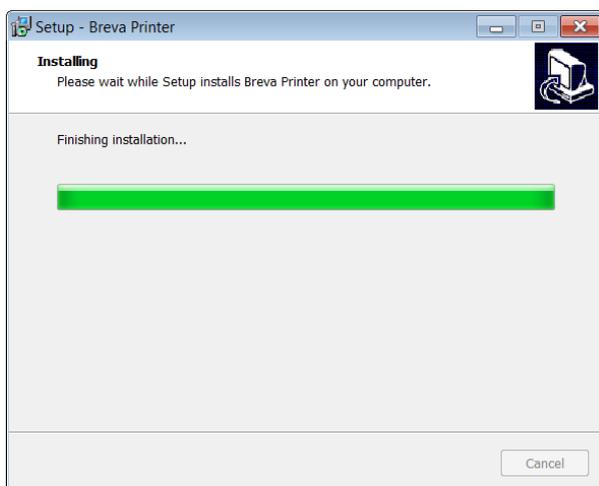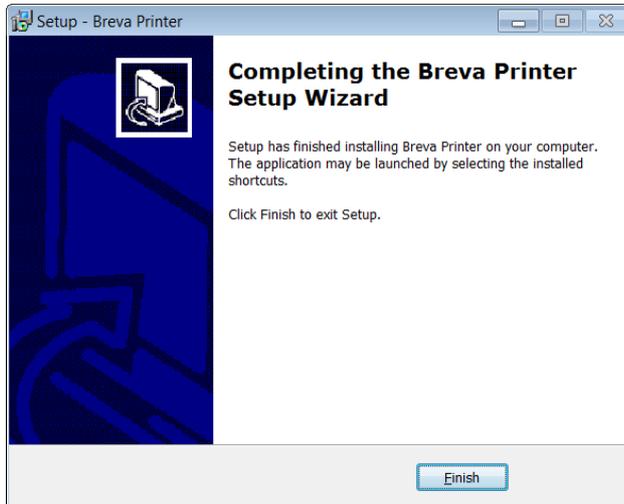
Once the installation is complete, press Finish.

The Breva Control Center is loaded between programs, in the "Breva printer" folder, while the Breva printer is between devices and printers.

Set the size of the print page

The maximum dimensions of the Breva print are 15x17 cm. If the page sent to print exceeds these dimensions, there are no problems because everything that exceeds is not printed. However, the transfer time of the file to the printer depends on its size, so it is advisable to set the correct size.

Press the Windows Start Icon – "Settings"
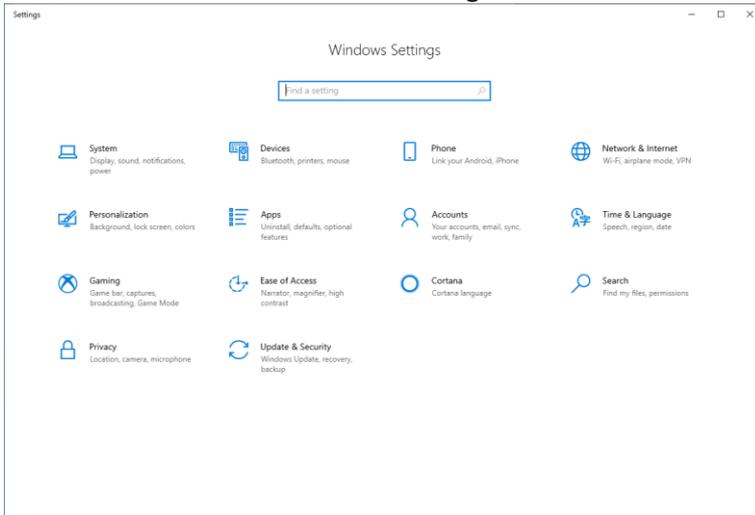
Choose the "Devices" Menu and select "Printers"
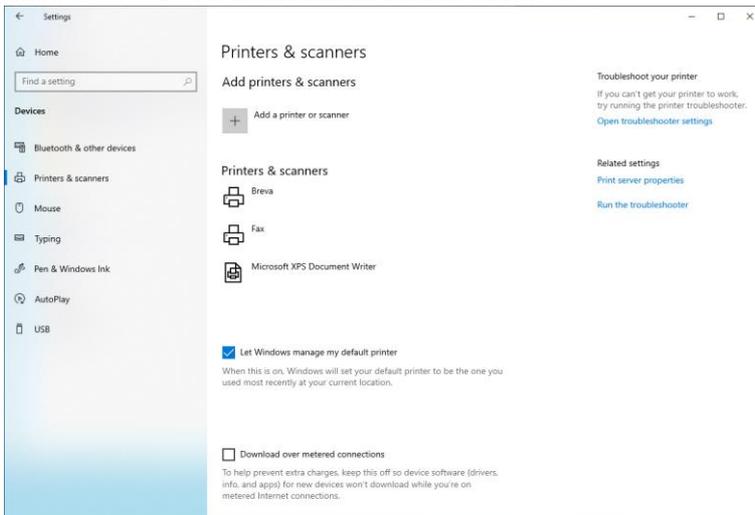
Choose "Breva"
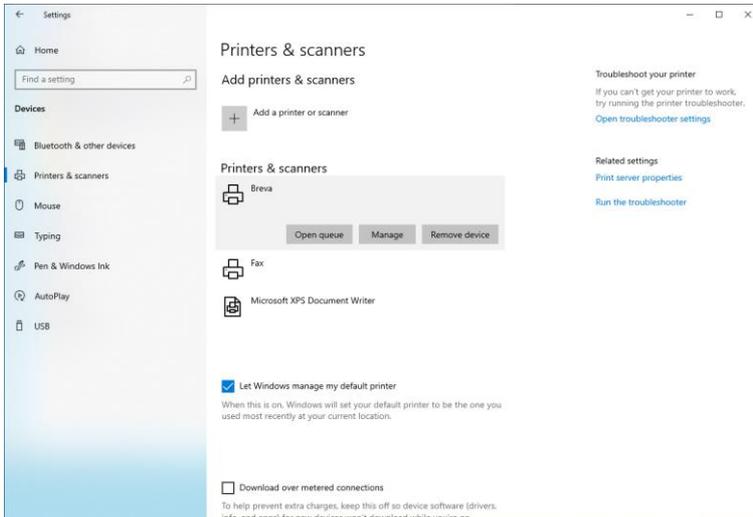
Press "Manage"

Choose "Printer Properties"
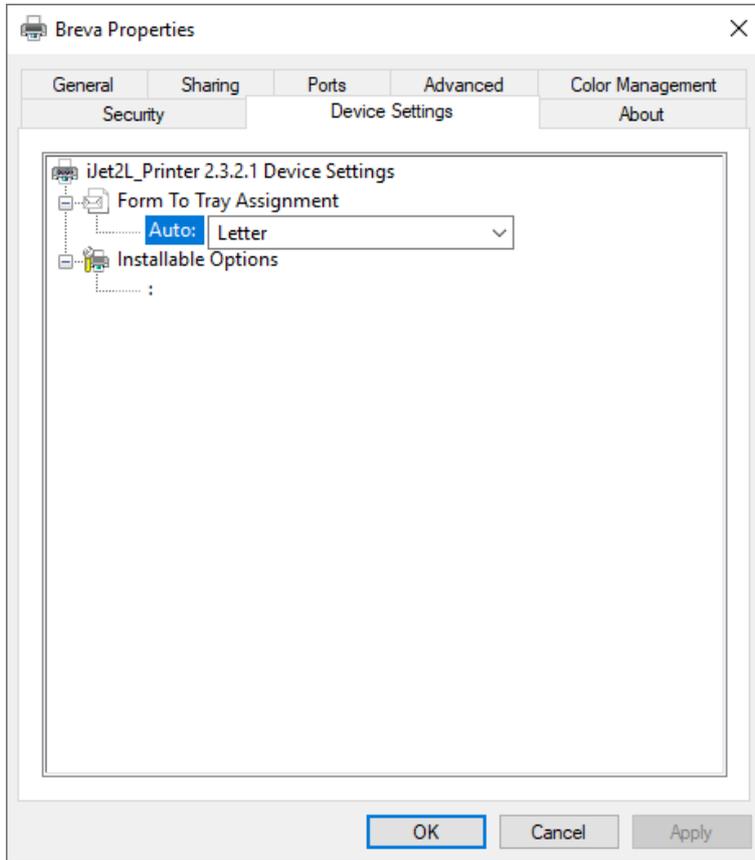
On the tab "Device Settings" choose "Breva_15x17_cm
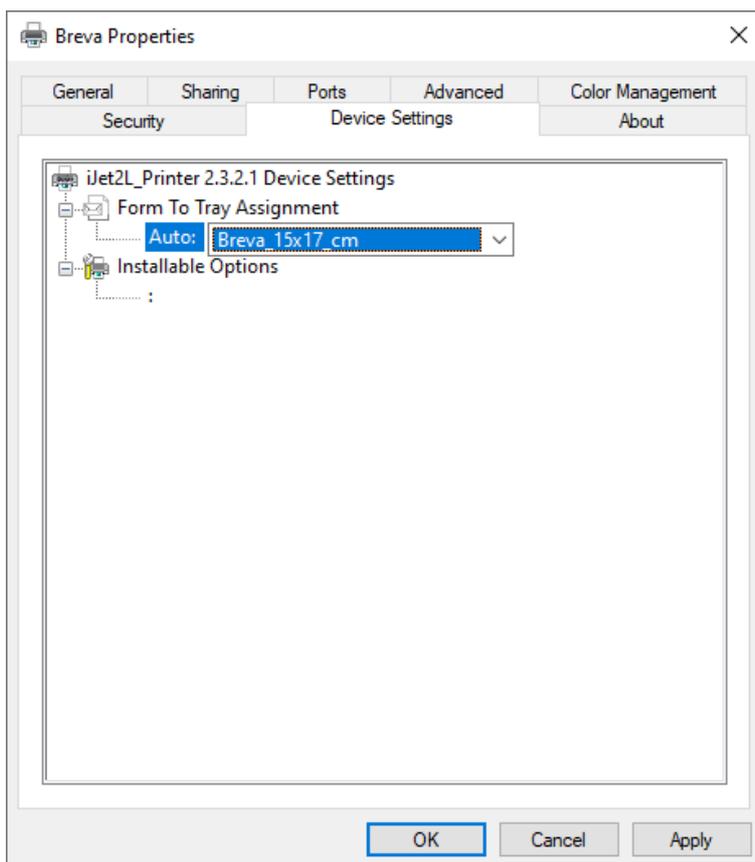
Installation where there is already a previous version

If there is already a previous version of the driver, you do not need to install the FTDI driver for communication, but you need to uninstall the Breva driver by following these steps:

1. Select "Breva Printer" in the list of programs in the Windows Start menu.
2. Select the "Uninstall" function in the menu and follow the instructions on the screen.

Then proceed with the installation of the new driver by executing the "Breva Setup 1.2.exe" file and following the instructions on the screen.

Settings and functions of the driver

The driver starts when a print is launched on the BREVA.
You can also start it by selecting "Configure Breva Printer" in the Windows program list.
Once started, the driver icon is placed in the toolbar. To display the configuration window, simply press the right mouse button on the icon and select "Configuration".

Breva Control Center – General Menu
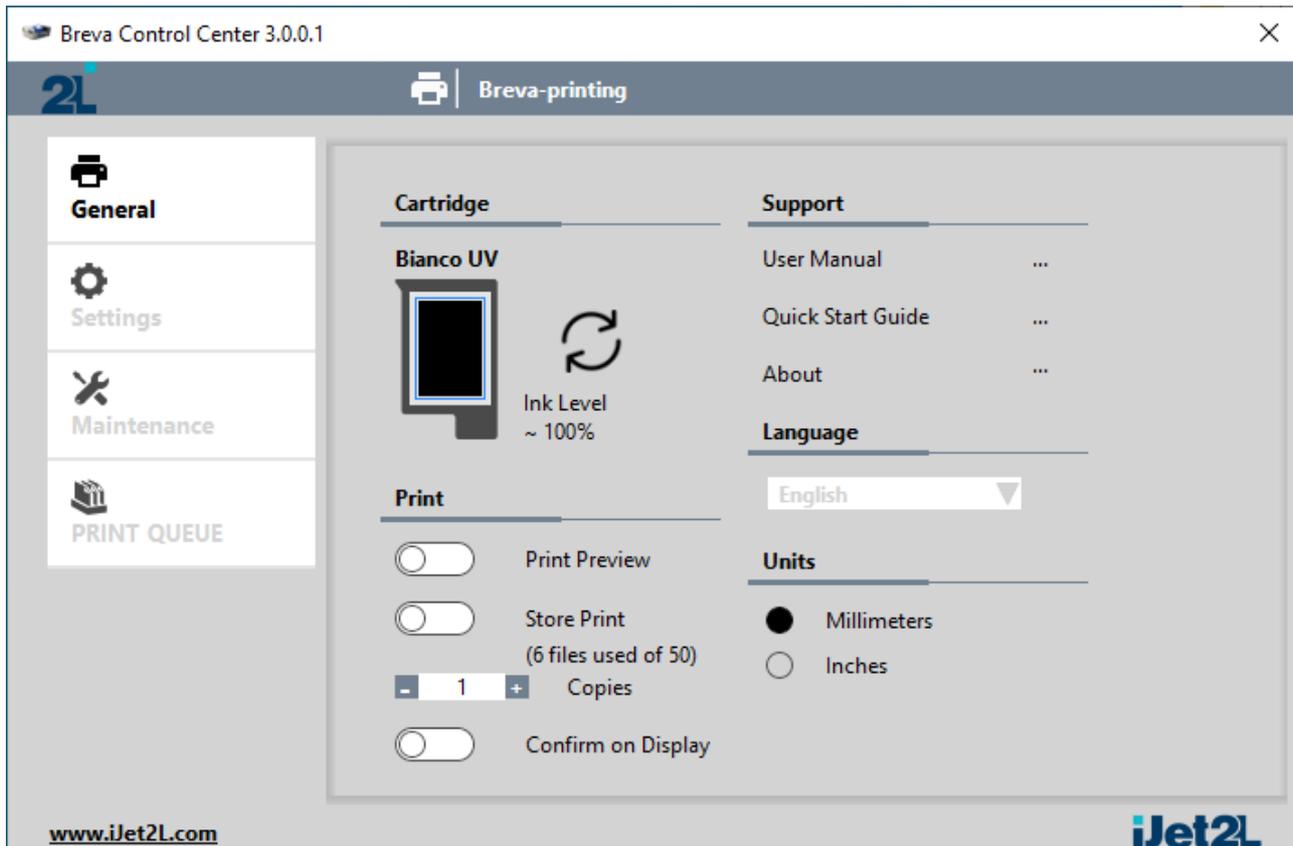
Cartridge
-     The icon indicates the presence of ink cartridge and its name
Print
-     Print Preview: before sending the image to the printer, the image processing window opens which allows you to act on the setting and print quality parameters
-     Store Print: is a particular function that allows you to store a print, including the parameters relating to the settings within the Breva in order to be called up from the menu on the display. The maximum number of printouts that can be stored is 50 and it indicates how many positions are still available.
-     N. of copies: One to 99
-     Confirm on Display: number of repetitions of the same print. We recommend that you associate the "Confirm on Display" function to allow time to change the object.
Units
-     Choose between metric and US
Language
-     Toggle between installed languages
Support
-     Enable User Manual, QSG and About details

Breva Control Center – Settings Menu – Print Tab
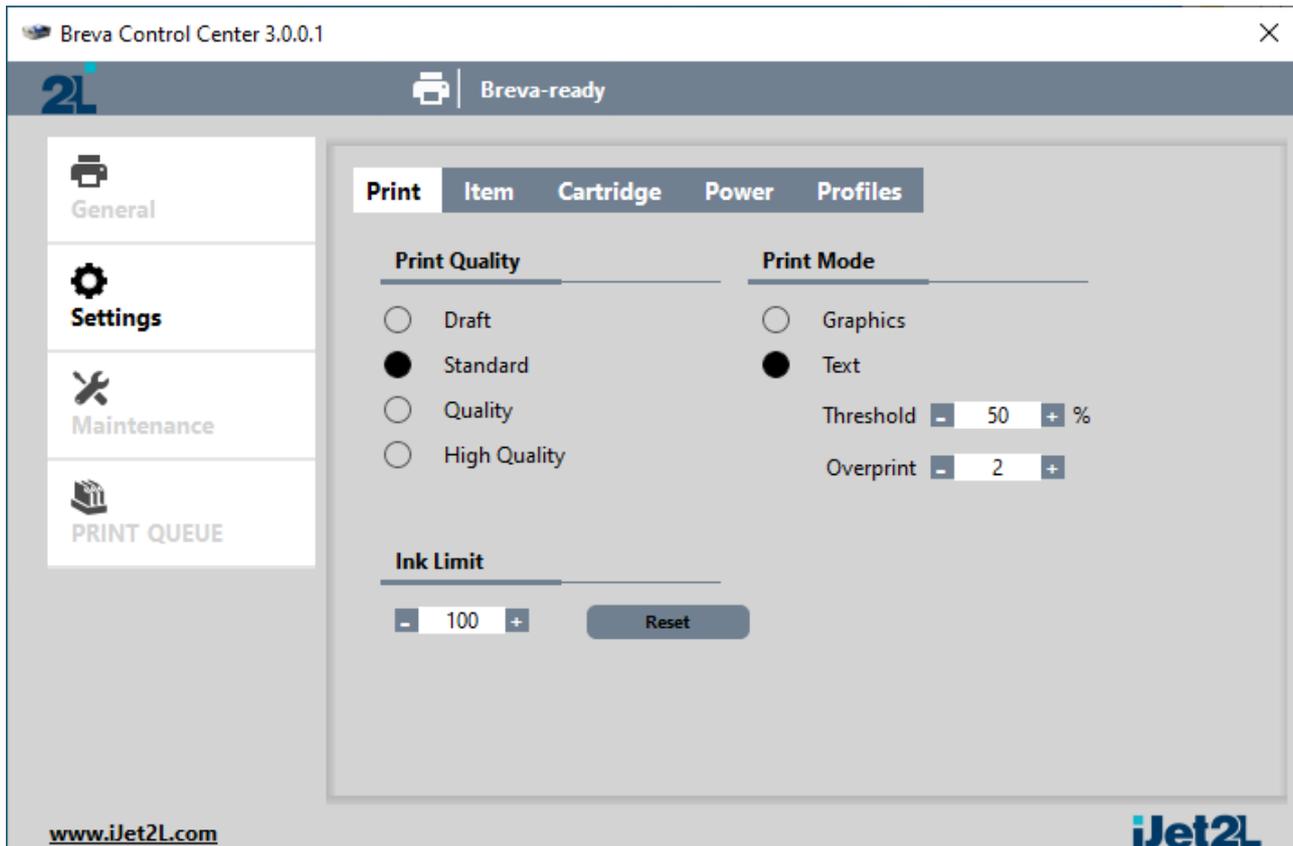
Print Quality
- Draft = Draft (300x600 dpi),
- Standard = Normal (300 x 600 dpi - Double pass) that is, the head advances in Y by half a head at a time and allows a better print quality even if the head has some dirty or clogged nozzles.
- Quality (600x600 dpi)
- High Quality (600x600 dpi - Double pass) that is, the head advances in Y by half a head at a time and allows a better print quality even if the head has some dirty or clogged nozzles.

Ink Limit
- Ability to reduce number of drops. It is used to vary the quantity of ink and avoid printing smudges

Print Mode
- Graphics: mode to be used when printing grayscale or color images.
- Text: suitable for monochrome images. It is possible to set the Threshold value to define, in the case of a grayscale or color image, the minimum color / level to convert to black

Overprint
- Allows to repeat the same print several times in the same point.
  This function is useful if you use a low coverage ink such as white. The printer performs the first print and restarts with the following ones without the need for operator intervention.
  Useful with White, UV White or UV Clear inks

Breva Control Center – Settings Menu – Item Tab
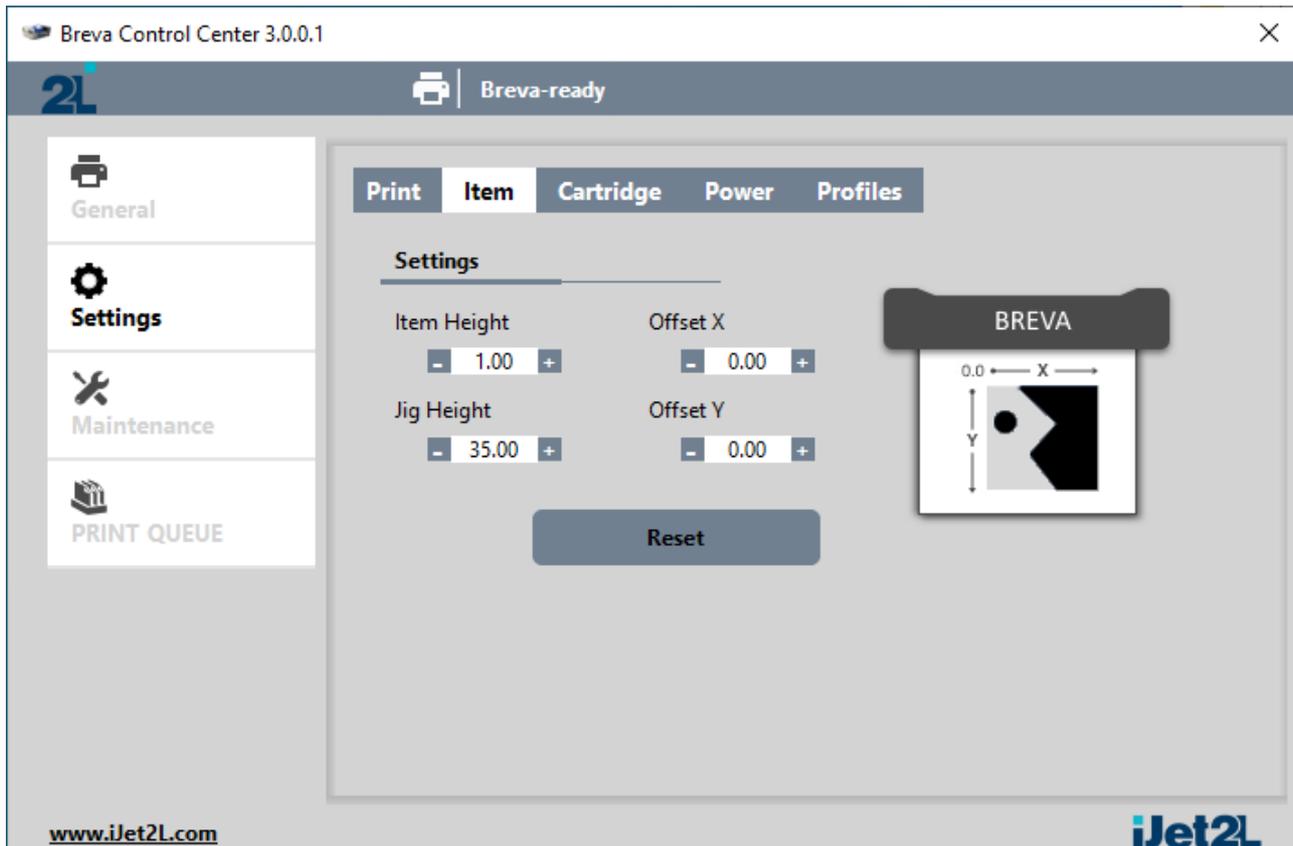
Settings
- Item Height: correspond to the height of the object on which you want to print.
- Jig Height: correspond to the height of any template used for positioning the object
- Offset: in cases where it is necessary to move the print for the image to be printed centered on the object, the values set in Centering from the left move the image on the X axis (left/right) and Centering the top on the Y axis (low/high).

NB:
In the calculation, the driver adds the height of the Object and that of the Support (Template), so if you do not know the individual heights, but only the global one, simply write it as the Object Height value and set the Support Height value equal to Zero .

The minimum height of the objects, including any template, is 32 mm. and the maximum height is 50 mm.

Breva Control Center – Settings Menu – Cartridge Tab
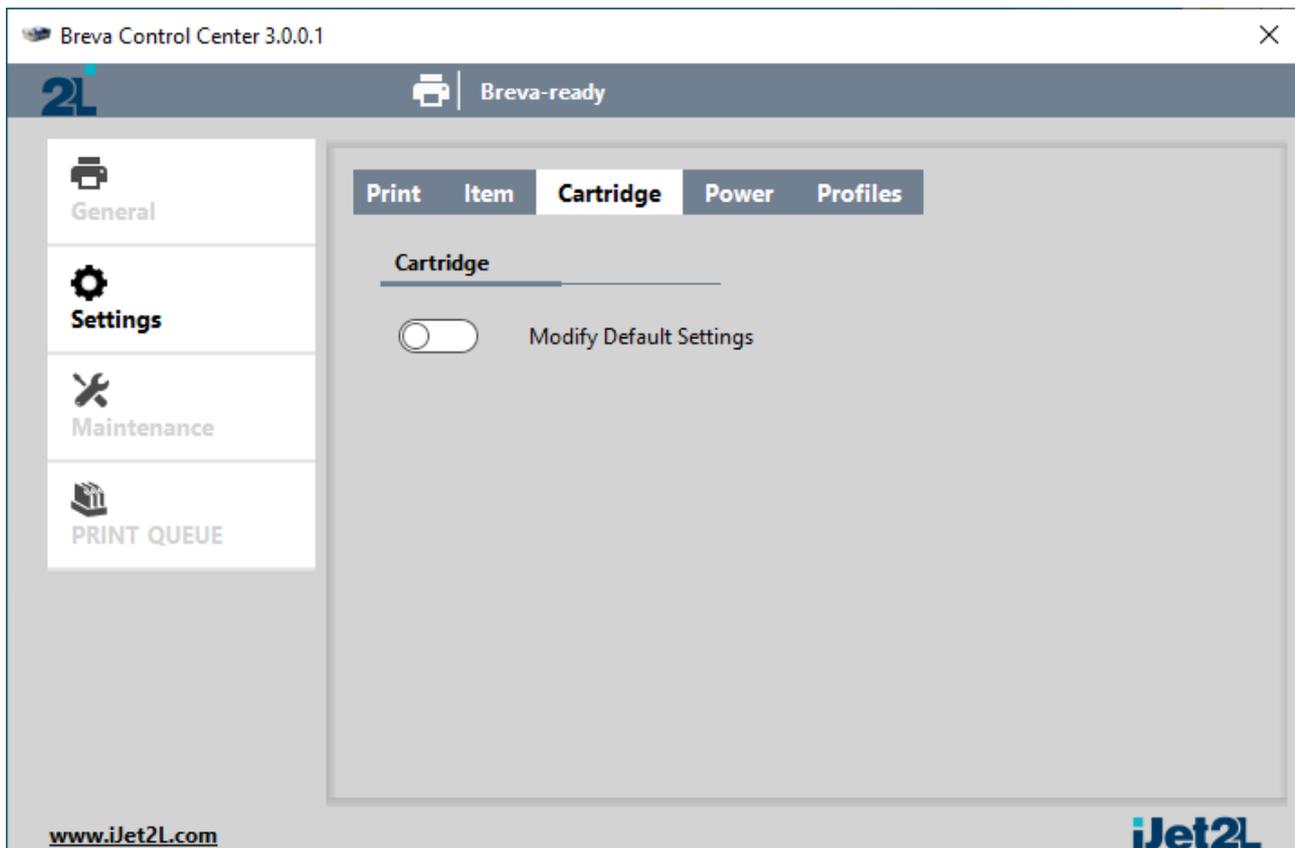
Cartridge menu to be modified ONLY in Tech Advanced Mode.
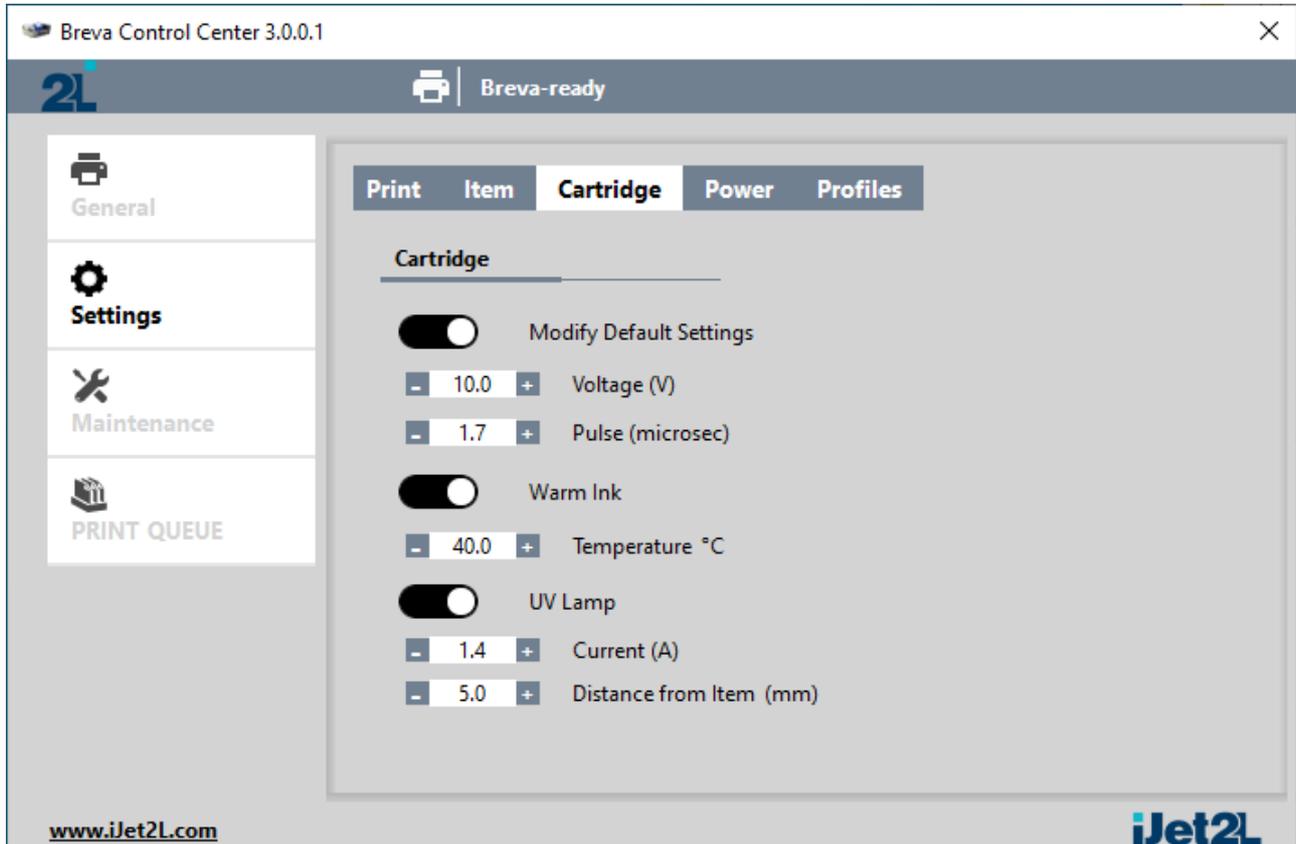
The Ink values contain approved and validated ink values. To be modified ONLY in Tech Advanced Mode.

If UV lamp is ON, the lamp will be powered with the indicated Ampere.
The optimal distance from the object is 5 mm.

Breva Control Center – Settings Menu – Power Tab
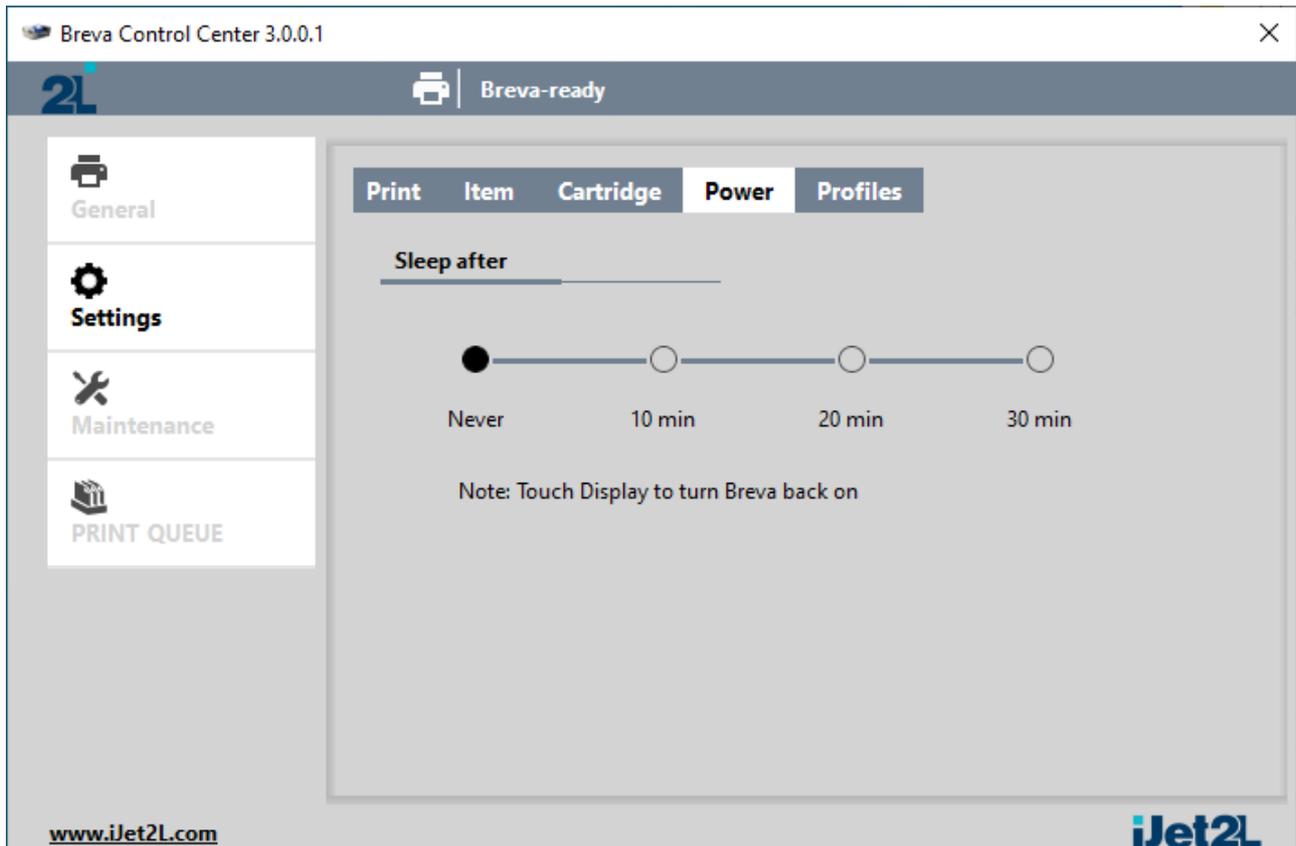
The Shutdown menu oversees the settings for activating Sleep mode.

The user can set after how long the Breva must be in idle / Sleep Mode by selecting his choice.
To turn the Breva back on just touch the display.

On the Breva display there is the switch icon. It is used to put the printer in sleep or turn off the printer completely.
Just touch the display, anywhere, to turn the printer back on.

NB: If the printer is in Sleep mode, the ignition is immediate, while if the printer is off, the ignition times are longer because it must carry out the complete ignition procedure as when inserting the power cable.

If the power cable is removed, the Breva switches off regularly and when the power is restored it switches on again.
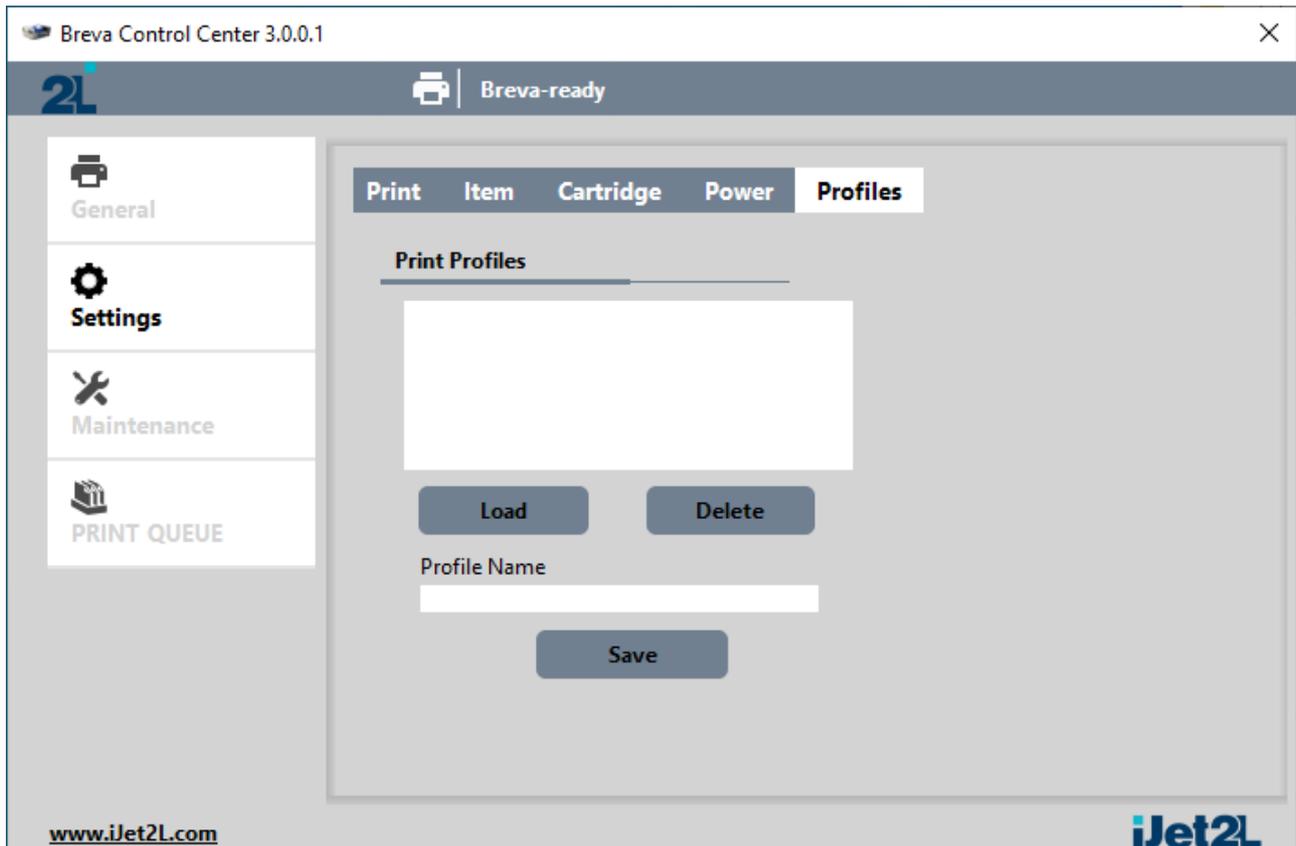
It is a particular function that allows you to save the settings by giving it a profile name.
The stored parameters are those relating to all the settings.

Once you have defined the settings required for optimal print, you type a specific name into "Profile Name" and press "Save".

The Profile Name will be shown in the main window and can be recalled at any time pressing the "Load" button.
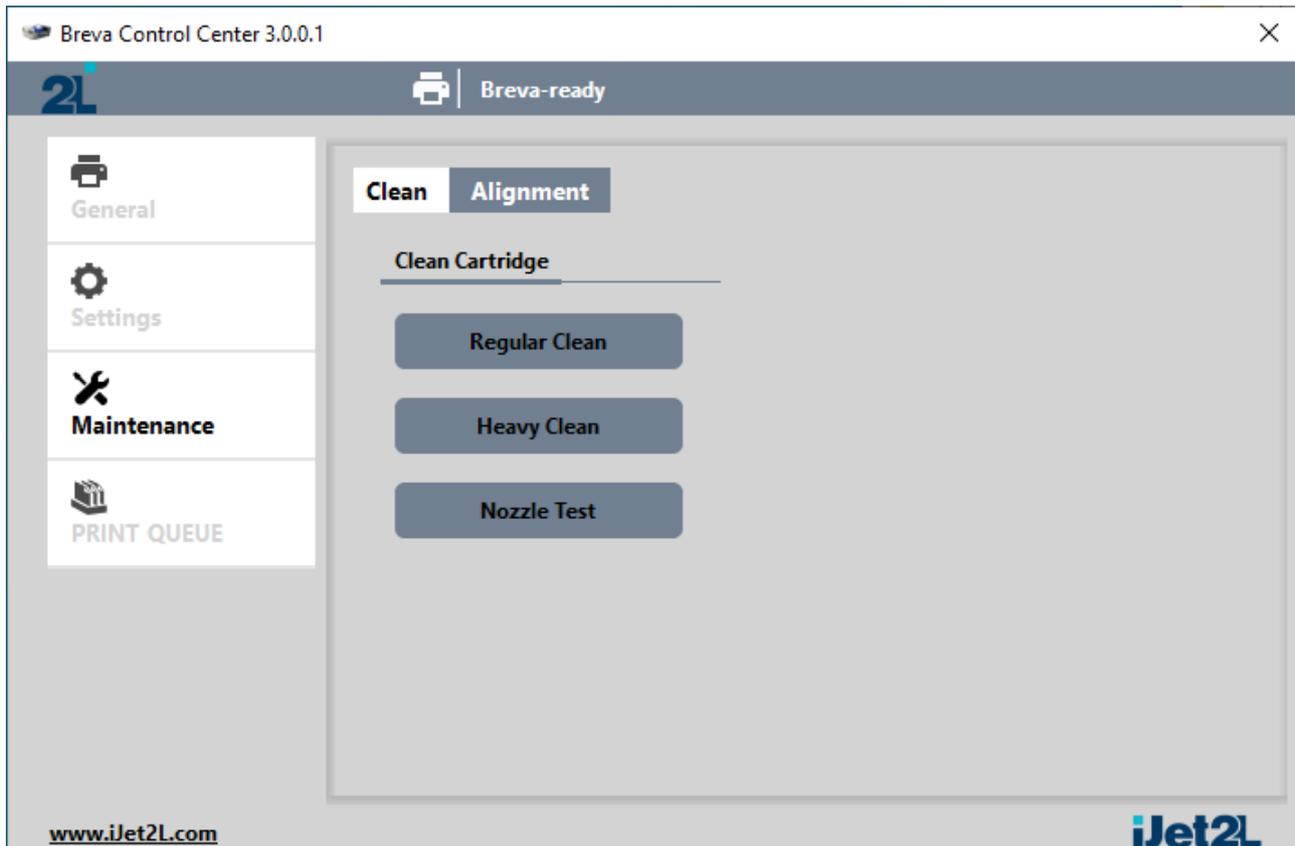
Among the Cleaning functions we find:

Nozzle Test: performs a printout where all the nozzles are present in order to check if and how many nozzles are clogged.

Regular cleaning: Run regular clean if the nozzle test showed only one or two broken lines.

Heavy Cleaning: Run one or two heavy cleaning cycles if the nozzle test showed many broken lines or fuzzy print.
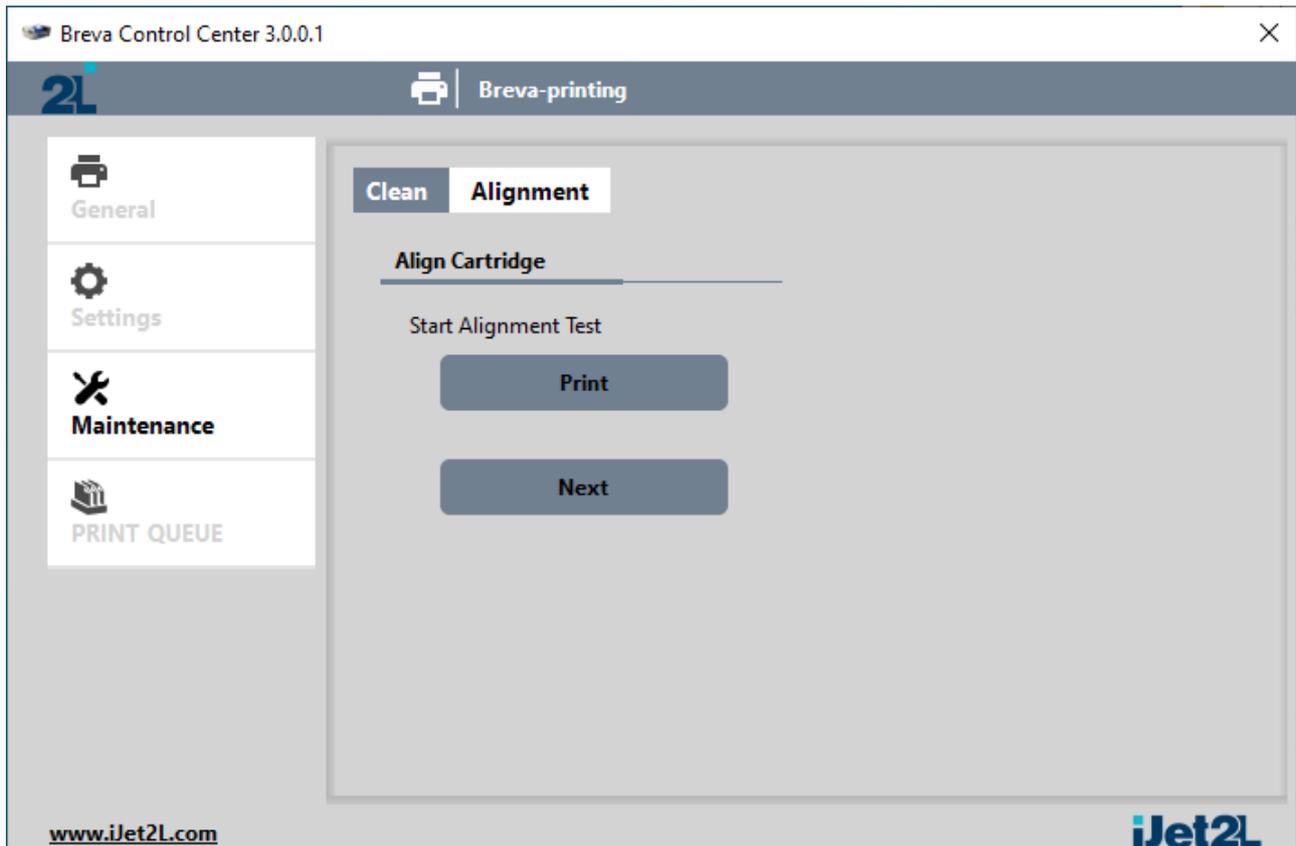
Head alignment features are found in the Alignment menu.
If the outlines of the printed characters are not well defined or there is a misalignment between the printing from left to right compared to that from right to left, it is necessary to check the alignment of the head and restore it.

For verification printing, a sheet of paper to be printed on must be used.
In the Tag menu, set values such as to bring the print head to the correct distance from the sheet. Alternatively is advised to use Startup Jig 35.

We suggest using the Setup cartridge (iJet2L Setup), setting the Print Quality to Quality level. Do not use High Quality.

By pressing the button "Print", a print similar to the following is obtained
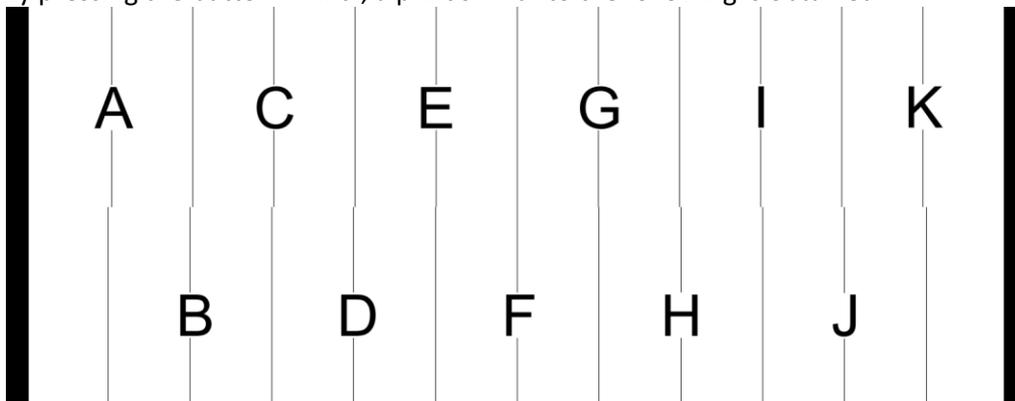
After printing, press on Next
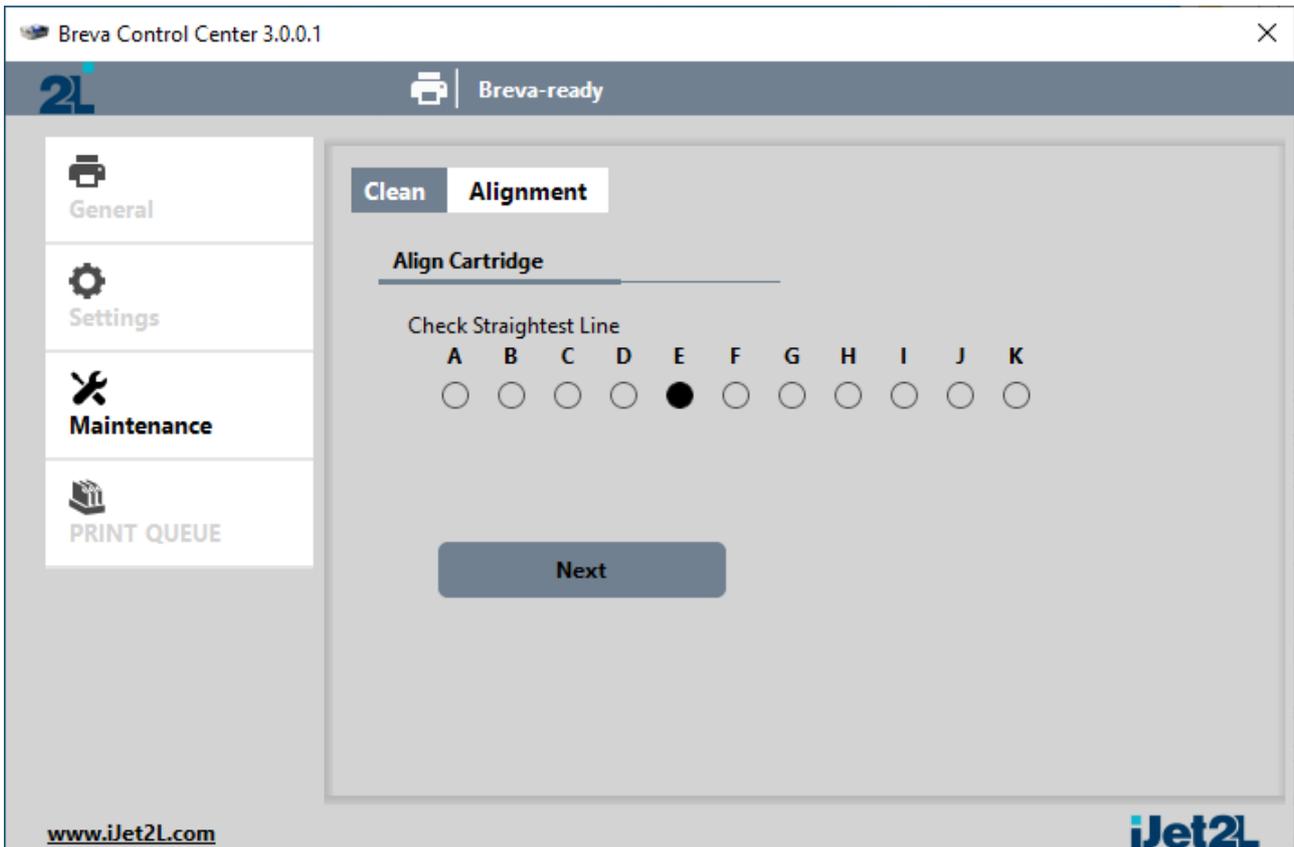
Observe the printout and select the letter corresponding to the vertical line that is aligned.
Click on Next
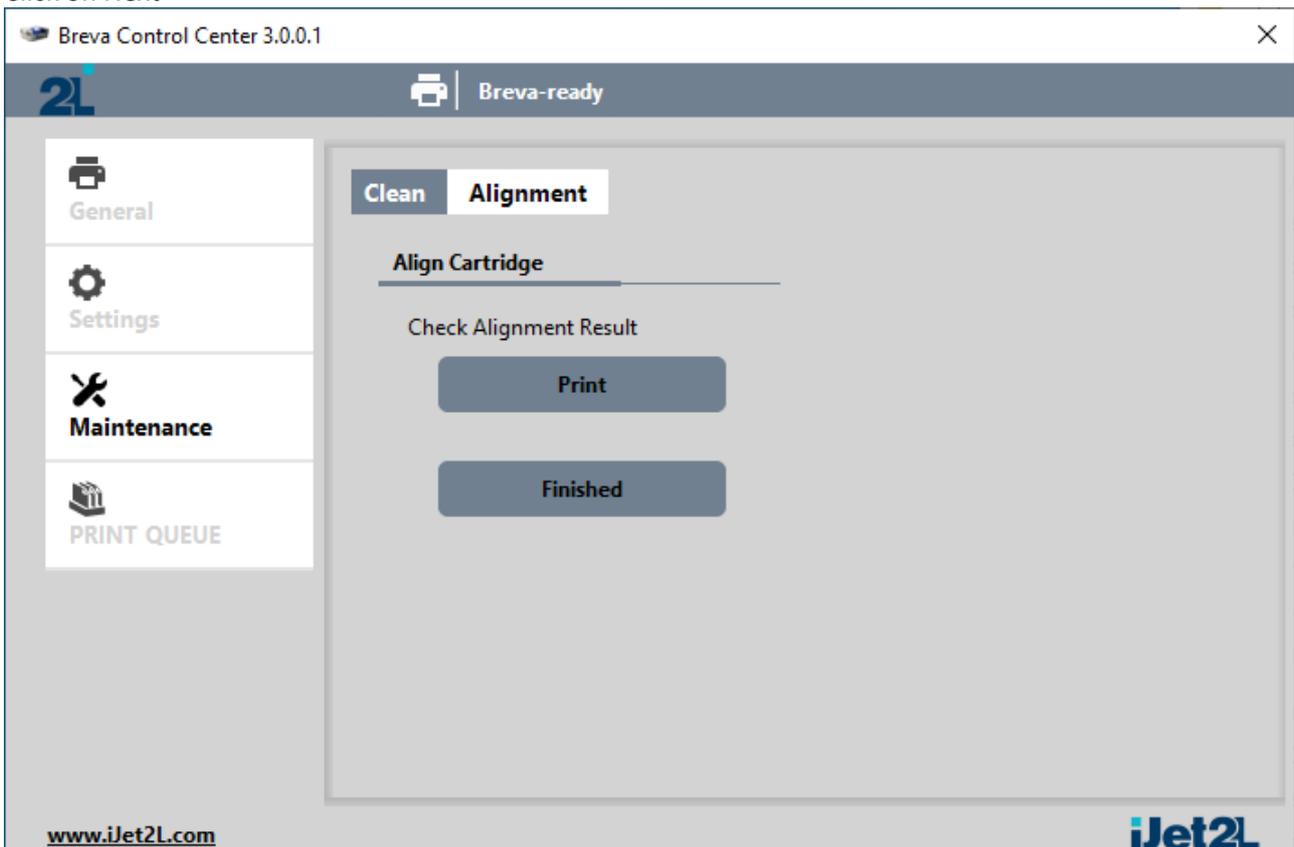
Press "Print" on Check the alignment result to make a check print.
The vertical lines must be aligned as in the drawing.

Press "Finished" to exit.
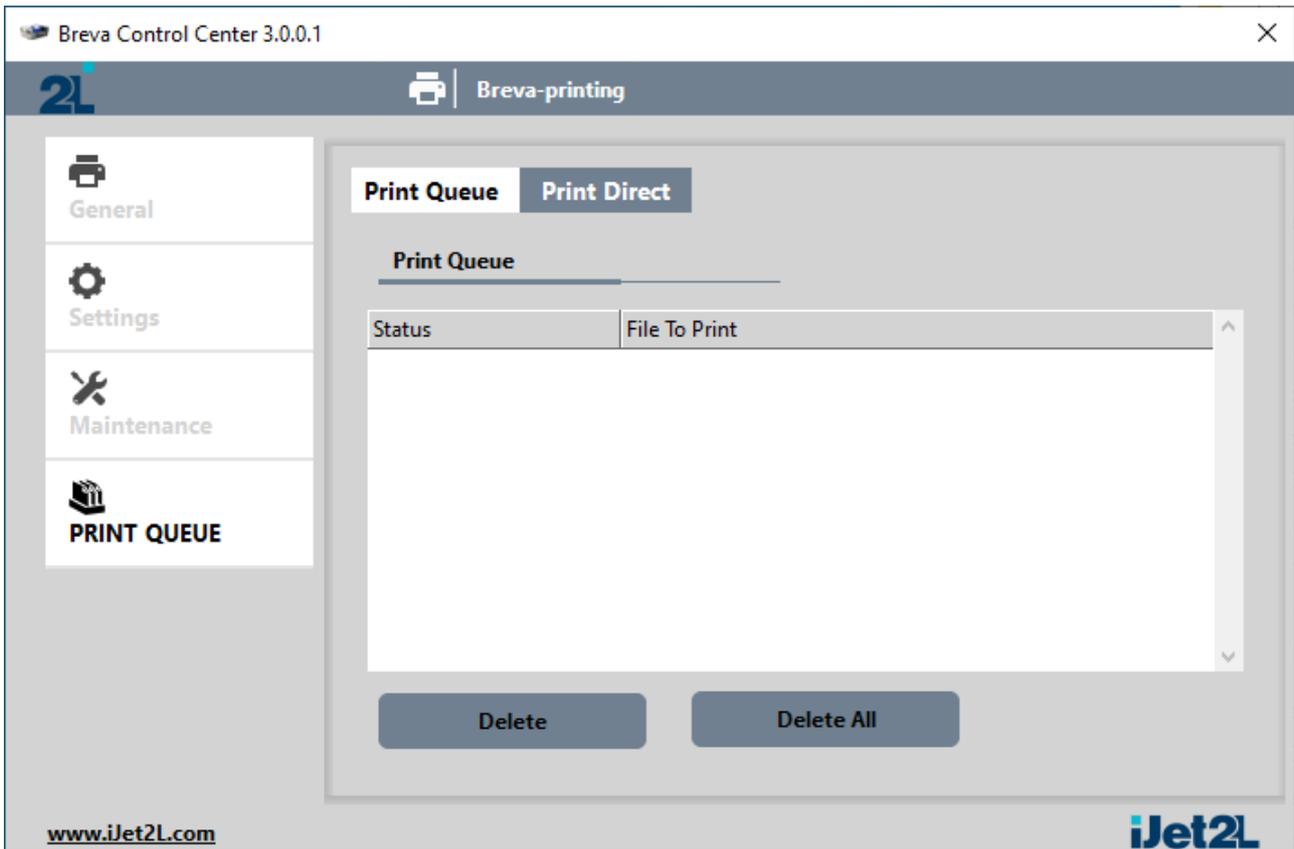
In the Print Queue menu you will find the list of current prints.
It is possible to delete a single print or all those in the list.
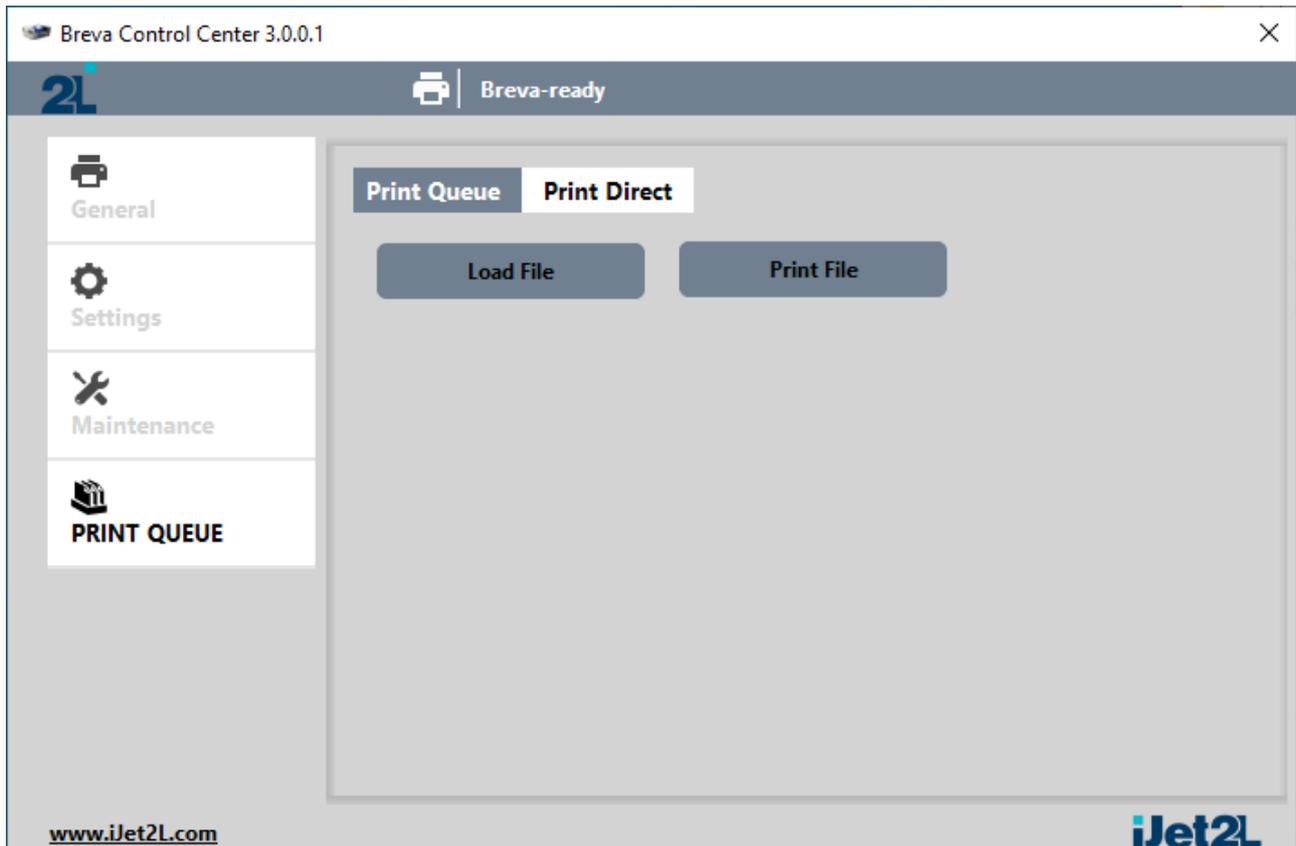
The Direct Print function allows you to launch printing directly in the most common graphic formats.

Press Upload File to choose the image. This will be displayed in the space below.

Pressing Print File is sent to the printer.

If the Show print preview function in the General menu is selected, a new window opens where you can change the settings of the printing parameters.

Upgrading Firmware

Upgrades to firmware (printer system software) are available online. For information on how to locate the current firmware version on your printer, click the "info" icon on Breva display.

CAUTION! The printer must be plugged in to an AC outlet during a firmware upgrade. Do not interrupt printer power during an upgrade.

To upgrade firmware:
1. On a computer, go to the technical support website @ www.ijet2l.com/support.
2. Find firmware updates and the most recent BREVA firmware.
3. Download the firmware.
4. Save the downloaded file to a USB drive.
5. Plug the printer in to an outlet using the power cord and adapter.
6. Connect the USB drive to the USB A port on the printer. The printer recognizes the upgrade file and displays a message on the touchscreen.
7. Follow the instructions on the touchscreen. When the upgrade is complete, the printer restarts.

Cleaning

Cleaning the printer can improve print quality and legibility. It also increases output, machine life, printer reliability, and performance.

Cleaning the Print Head and Nozzles

The print head is built into the ink cartridge.
To save ink and avoid unnecessary cleaning cycles, first test the nozzles to see if they need cleaning.

To test the nozzles:
1. On the computer connected to the printer, run the Breva Status Monitor.
2. In Status Monitor, click Maintenance and then Clean.
3. In Status Monitor on the computer, click Print Nozzle Test.
4. Load Setup Jig 35mm with an A4/Letter sheet of paper on top

In Status Monitor, click Print.

If the printed grid has fuzzy or broken lines, clean the print head. (If the top and bottom halves of the vertical lines don't match up, align the print head. See "Alignment" on page 16.)

Example: Print head needs cleaning
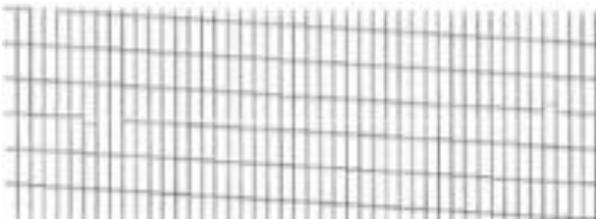
Example: Print head does not need cleaning.
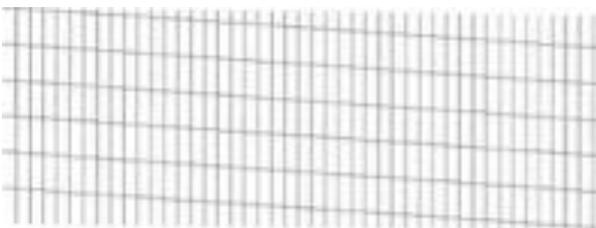
To clean the nozzles and print head:
1. In Status Monitor, click Maintenance and then Clean.
2. Click either Regular Clean or Heavy Clean depending on the severity of the test result.
   - Run regular clean if the nozzle test showed only one or two broken lines.
   - Run one or two heavy cleaning cycles if the nozzle test showed many broken lines or fuzzy print.
3. Print the nozzle test again to verify that the nozzles are clean. If the nozzles still need cleaning, proceed with the remaining steps.
4. Remove the ink cartridge from the printer. See "Change Ink".
5. Lightly moisten a clean, lint-free cloth with isopropyl alcohol. Hold the cloth against the nozzles for three seconds. This wicks some additional ink onto the cloth.

6. Gently wipe in one direction.
7. Reinstall the ink cartridge.

Wipe in this direction. ←

↑
nozzles and print head
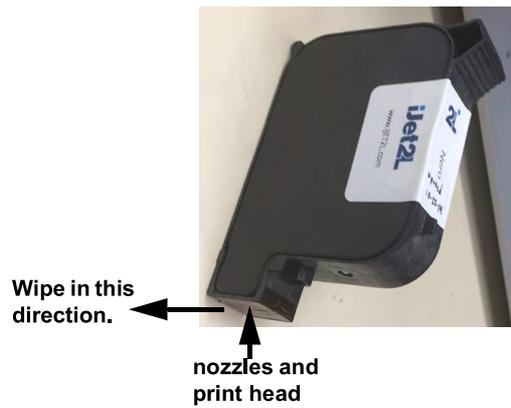
Troubleshooting

The following sections provide information to help troubleshoot issues with the printer.
- The "Troubleshooting Scenarios" section below contains a list of possible issues you may encounter with information about the cause and solutions.
- "Error Messages" provides a list of error messages with cross references to related information in this manual.

Troubleshooting Scenarios

1. The printer is jammed

Problem: An object has jammed between the tray and the printer during printing.
Solution: Follow these steps to clear the jam.
   1. Tap Cancel or Stop on the touchscreen to stop the printer.
   2. Return to the Home screen and tap Maintenance.
   3. Tap Clear Jam and wait for the printer to move the print head out of the way.
   4. Open the cover on the printer and remove the obstruction, then tap OK.

2. Print is fuzzy or broken

Problem: The finished printing is fuzzy, unclear, or has broken spots without ink.
Solutions:
- Test and clean the print head. See "Cleaning" on page xx.
- Align the print head. See "Alignment" on page xx.
- Adjust the supply thickness using the Status Monitor. See "Print" on page xx.

3. Print is too heavy or too light

Problem: Either too little or too much ink is being applied to tags.
Solutions:
- Adjust the ink saturation. See "Print" on page xx.
- Check the print quality setting. Try increasing the print quality to get darker print, or decreasing it to get lighter print.

4. Print is too heavy or too light

Problem: Cannot send print job. Printer do not print
Solutions:
- From PC, open Windows Explore and navigate to C/ProgramData/sTager (If you do not see the directory, you should clear the flag for hidden files).
- sTager directory most remain empty at all times. If you see any file, delete it, then close Breva Control Center and restart

Error Messages

Error messages on the printer include instructions to address the situation. The table below lists error messages and provides references to additional information in this manual when applicable.

Error Title	Related Information
Door Open	The printer must be operated with the door closed.
Ink Error	Either the ink cartridge is empty, no cartridge is installed, the installed cartridge is incompatible, or the contacts are dirty. • To check ink levels, see "General" on page xx. • To install a cartridge see "Loading Ink" on page xx. • To clean the contacts see "Cleaning the Contacts" on page xx
Movement Fail	Movement is restricted when attempting to return to the home position. • Make sure the power cord or USB cable is not restricting printer movement. • Look for anything restricting printer movement and follow the steps in "The printer is jammed" on page xx. • A pulley or belt could be loose. Call technical support. See "Technical Support" on page xx.
Microswitch Fail	