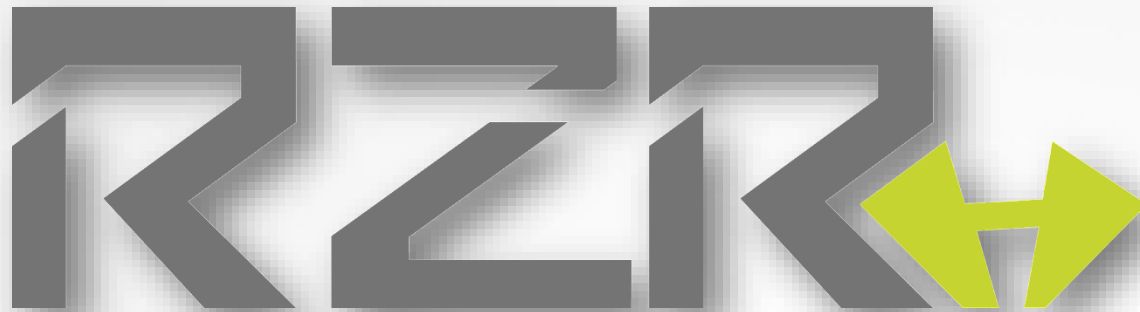


**Getting
Started
Guide**





NOTICES

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TECHNICAL SUPPORT

If you need technical assistance, you can reach a Digital Print Specialist at +385 1 4618-003 or at azonprinter.com



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Product Overview

Install. Create. Click. Print. Yes, it's that easy.

The Hale printer is an ideal solution for UV-LED printing applications and materials including plastics, wood, aluminum, canvas ceramics, glass, and more.

- Accepts media up to: 47.2" (L) x 12.9" (W) x 7.5" (H) (1199 x 328 x 191 mm) 20 lbs. (9 kg)
- Maximum print area of 31" (L) x 11.75" (W) (787.4 x 298.5mm) with pass through capability for longer media
- Azon UV inks bond to materials such as plastic, wood, and stone. Using Azon adhesion promoters, the inks will also bond to many slick surfaces, such as glass, aluminum, and metal*
- A fixed print bed offers accurate printing on heavy materials
- Built-in vacuum in the print bed ensures a secure hold on lightweight materials
- Prints white and clear gloss ink
- High-power UV-LED light cures ink instantly for a cleaner, safer print
- Simple, easy to use software
- "Smart laser" beam detects object height automatically even on clear media
- Ultra vivid white ink
- Our commitment to providing personalized customer service
- Access to library of templates for efficient and profitable production

** All media should be tested for adhesion and durability.*

Safety Features & Regulatory Compliance

Read these guidelines before operating your Azon Hale printer

- Anyone who will be operating this printer should be trained on all guide lines and procedures.
- Keep your printer out of direct sunlight, which will interfere with the performance of the printer and the UV inks.
- Always keep the protective UV lid down during operation. UV light can be harmful with direct exposure to skin and eyes.
- Do not touch the print bed or print head while the printer is in use.
- Keep hair, jewelry and loose clothing away from moving parts.
- Do not attempt to repair your printer unless the guide specifically says to do so. Only factory certified Azon service technicians should disassemble, repair, or access internal components.
- When performing maintenance always power down as instructed to prevent injury.
- Only use Azon UV Inks and cleaners with your printer.
- Keep all inks, cleaners and primers out of reach of children.
- Use promoters in a well-ventilated area.
- Dispose of all expired and uncured inks in accordance to local and state laws.
- Always wear provided safety glasses and nitrile gloves whenever there is the possibility of exposure to uncured inks.



Choosing a Location

Choose Wisely

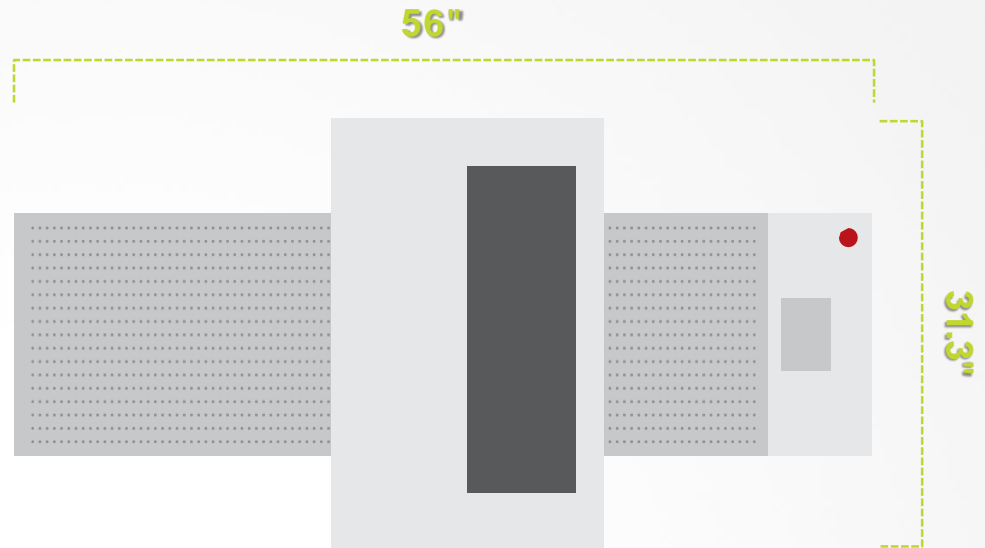
- The Azon Hale weighs about 247 lbs (112 kg) so be sure you have the proper equipment/manpower to move that amount of weight
- Position your printer on a stable, level surface so it doesn't move while printing (an unstable surface will impact your print quality)
- Select a well-ventilated, dust-free area out of direct sunlight
- Allow enough room on all sides of your printer for easy access
- Access to an electrical outlet of 220 / 110 v +/- 10% VAC, 50-60Hz is required
- Be sure your doorways and walk ways are wide enough to maneuver the printer through to it's final location

Printer size

- 56" (L) x 31.3" (W) x 53.1" (H) (1422 x 795 x 1349 mm)
247 lbs. (112 kg)

Suggested work space

- 135" x 112"
(3429 mm x 2845 mm)



Temperature and Humidity

- **During operation**
Temperature 68°F to 90°F (20°C to 32°C) Relative humidity 35% to 80%
No condensation
- **During non-operation**
Temperature 59°F to 95°F (15°C to 35°C) Relative humidity 20% to 80%
No condensation

The printer environment should NOT drop below the recommended temperatures and NEVER near or below freezing. This can cause ink to expand and damage the print head and ink lines. If the temperature close near freezing, raise to recommended temps as soon as possible and let the machine warm up for 24 hrs. before turning it on.

Getting to Know Your Printer

Printer Anatomy

Getting to know the printer hardware is important. In this section, you will find diagrams of the printer and its parts. Be sure to familiarize yourself with the parts and descriptions, as they will be referenced throughout this guide.

1	Front Top Cover
2	Emergency Stop Button
3	LCD Screen
4	Adjustable Legs
5	Gantry
6	Print Bed
7	Power Button

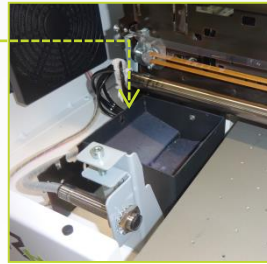


Getting to Know Your Printer

Printer Anatomy

- | | |
|---|-------------------|
| 1 | Ink Purge Tray |
| 2 | Top Back Cover |
| 3 | Power Socket |
| 4 | Main Power Switch |

1



2



3



4

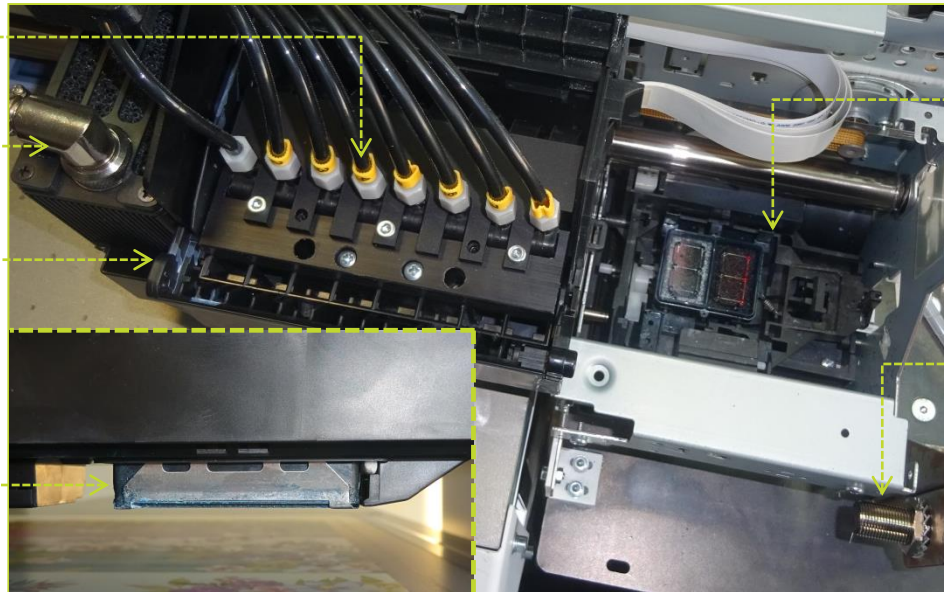
- | | |
|----|---------------------|
| 5 | Dampers |
| 6 | UV/LED Light |
| 7 | Carriage |
| 8 | Pump & Cap Assembly |
| 9 | Print Head |
| 10 | Height Sensor Laser |

5

6

7

9



8

10

Getting to Know Your Printer

Emergency Stop & Power

1 Emergency Stop Button

The Emergency Stop button should only be used for true emergency stops, **NOT** for regular shut down.

- To stop the machine instantly due to an emergency simply push the button. This stops all printer functions.
- To resume normal operation turn the Emergency Stop button to the right and it will “release” or pop out.



2 Sub Power Button

- Located on the Settings Menu of the LCD screen. Pushing this button will put your printer into a “sleep-mode”.

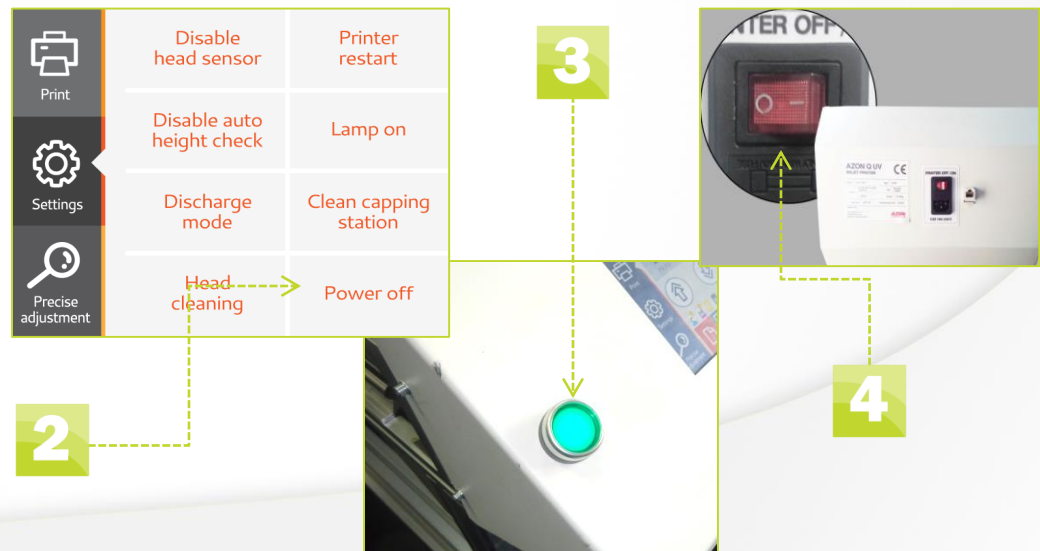
3 Power Button

- Located on the front of the printer. Push this button to completely shut down the printer.

4 Main Power Switch

- Located on the back of the printer this also completely shuts down the printer.

NOTE: The back switch must be ON in order for the front Power button to work.



Getting to Know Your Printer

Ink Bottles



Always wear the recommended safety gloves and glasses when working around uncured ink.

If you get ink on your skin, wash right away with soap and water.

Fill ink bottle **BEFORE** you turn the printer **ON** for the first time.

You received a complete set of bottles in your starter kit - Cyan, Magenta, Yellow, Black, White and Varnish. It is extremely important to follow all guide lines and procedures when using any type of UV ink.

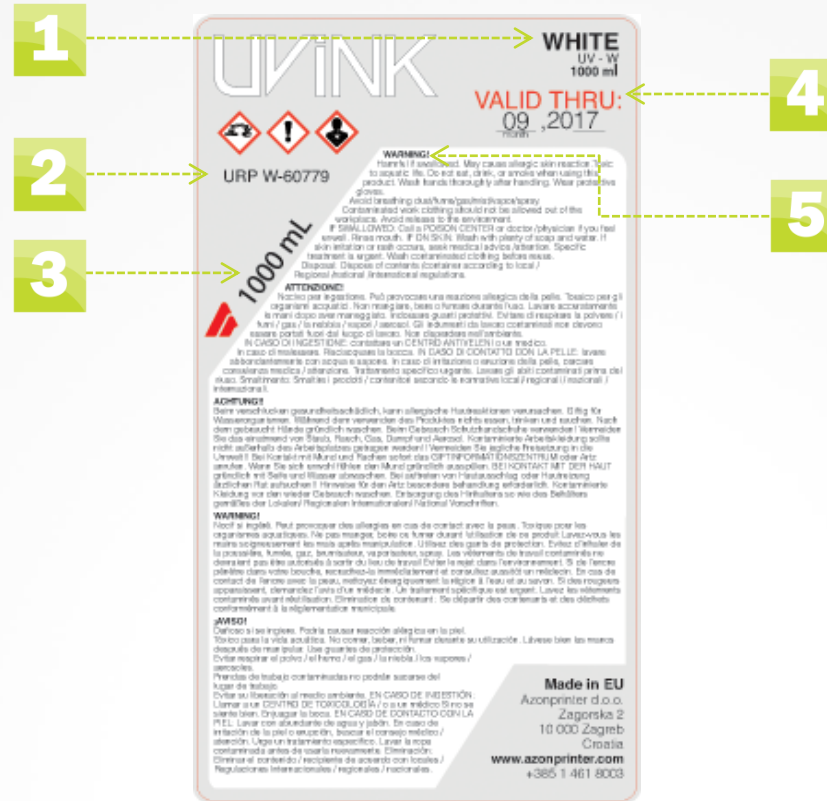
Why? UV inks when uncured can be harmful. Once cured by the UV LED light source inside your printer they are no longer harmful and can be handled freely.

- Inks are to be stored in a dry, cool location away from children.
- Keep inks out of direct sunlight.
- Always gently shake only the white ink cartridges and/or transport bottle before you install it into the printer. Shake for 1 minute.
- Each ink cartridge has an expiration date on the label and must be properly disposed of at the end of the expiration month. Be sure to check your shelf stock as well as the cartridges in your printer.
- To prevent throwing away unused ink due with expiration we recommend that you set up an inventory management plan.
- Properly dispose of all ink bottles in accordance to local and state law.
- Dispose of empty bottles the same as you would ones with ink in them. Even though it appears empty there will still be traces of uncured ink remaining.

Getting to Know Your Printer

Ink Bottles

- 1 Color Name
- 2 Batch Number
- 3 Volume
- 4 Expiration Date
- 5 Warning/Disposal



White Ink Bottle Label



White Ink Bottle

Bottles Locations

Ink bottles need to be filled before you turn your printer ON for the first time (how to fill bottles)



LCD Touch Screen

Opening Screen - Examples

Turning on the main power switch located on the back of the printer and the power button on the front of the printer will turn on the LCD touch screen.

BUTTON EXAMPLE

- All functions have color filled icons when they are Active and white filled when they are Non-Active.
- Push the icons to turn the function ON, and push again to turn the function OFF. Some need to be held for 2-3 seconds to activate.

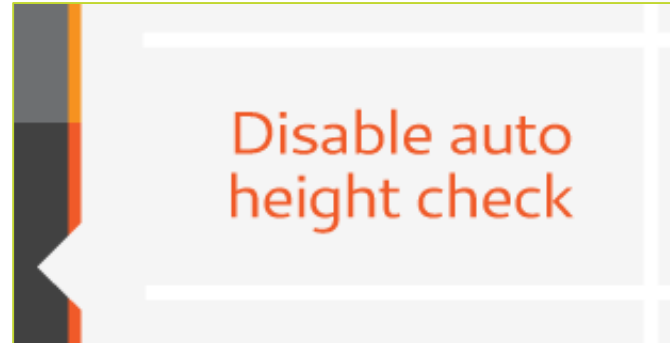
Active Buttons



Opening Screen



Non-Active Buttons



LCD Touch Screen

Print Menu

1 Print Menu/ Main Menu

2 Print Ready

- Push when you're ready to print
- When this button is active, you cannot use the FORWARD/BACK function
- **To Be Safe:** Stand clear; the gantry will move all the way forward to the zero point when you push the Print Ready icon

3 Indicator Lights

- Solid Green dot indicates print ready
- Red/Yellow dots indicate error

4 Pause

- Will stop a job during printing and restart where it left off when un-paused.

5 Auto Gantry UP/ DOWN

- When held for 3 seconds gantry will keep moving UP/DOWN and then stop automatically

6 Gantry FORWARD/ BACK

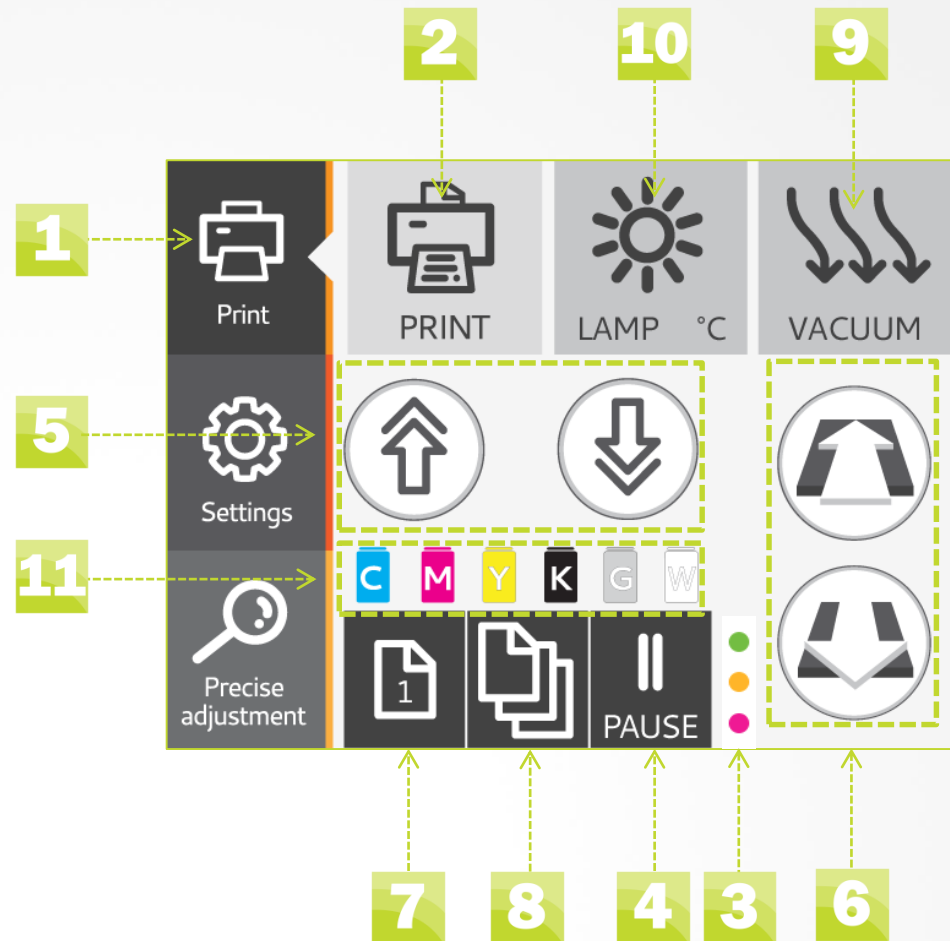
- When held for 3 seconds the gantry will continue moving and then stop automatically

7 Single Layer Printing

- Use when printing one layer of ink

8 Multi - Layer Printing

- Used when printing two or more layers of ink automatically
 - 2 Layer function: prints white and color separately
 - 3 Layer function: prints white, color and glass separately
 - Infinity function: achieves a tactile effect



9 Vacuum

- Turns the bed vacuum ON/OFF

10 Auto UV Light

- Turns the UV Light OFF and ON

11 Ink Levels

- When icon start to flash its time to refill bottles

LCD Touch Screen

Settings Menu

1 Settings Menu

2 Printer Restart

- This will cancel the current print job in the printer, but not in the computer. To completely restart/cancel you must do so in the printer AND the computer

3 Head Cleaning

- Starts the automated print head cleaning process

4 Clean Capping Station

- Unlocks the carriage and shuts down your printer so you can manually clean the capping station

5 Disable Head Sensor

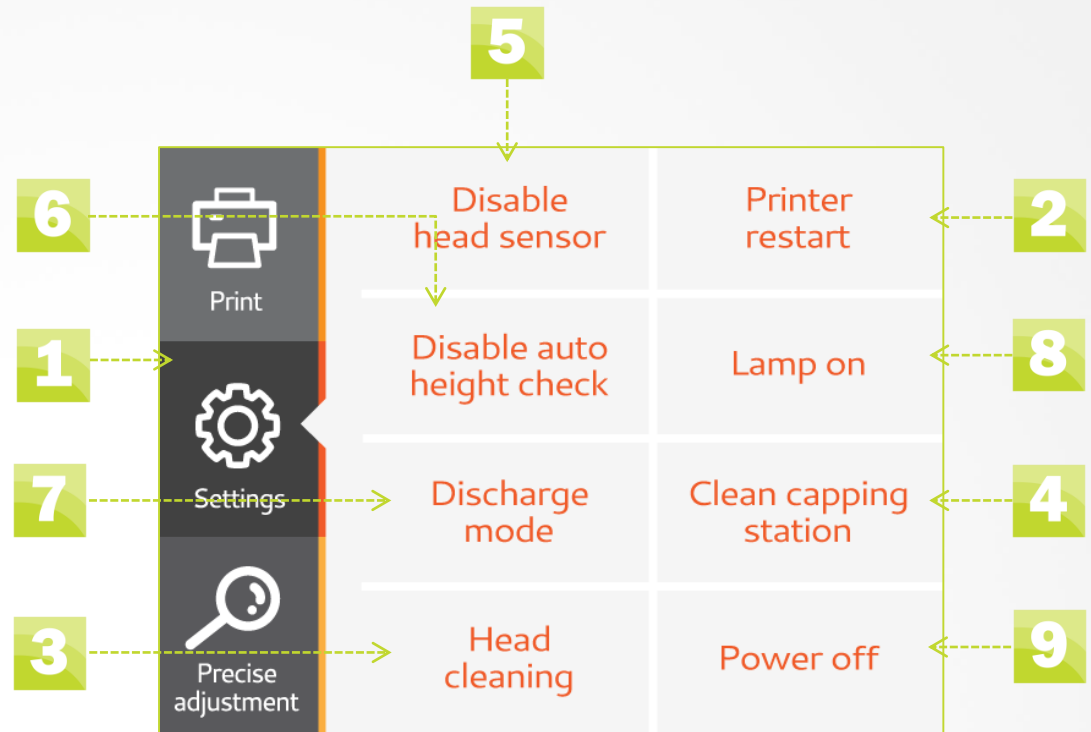
- Turns off the laser sensors so you can manually adjust the print head with the Gantry UP and Gantry DOWN

6 Disable Auto Height Check

- Stops the printer from automatically checking the height
- The laser sensors will still be on and will stop the printer when the DOWN button is used

7 Discharge Mode

- This allows jobs to be sent from your computer to the printer
- Needs to be turned on before printing and off during a nozzle check



8 Manual UV Light

- When this is active, the Auto Light is OFF so you must manually turn the UV Light ON and OFF

9 Power OFF

- Turns the printer off, but does not shut it down completely
- To shut the printer down completely, push the Power OFF on the display, Wait until its safe to continue. Press the Green button on the front OFF and the Main Power switch on the back OFF.

LCD Touch Screen

Precise Adjustment Menu

1 Precise Adjustment Menu

2 UV Light Power Levels

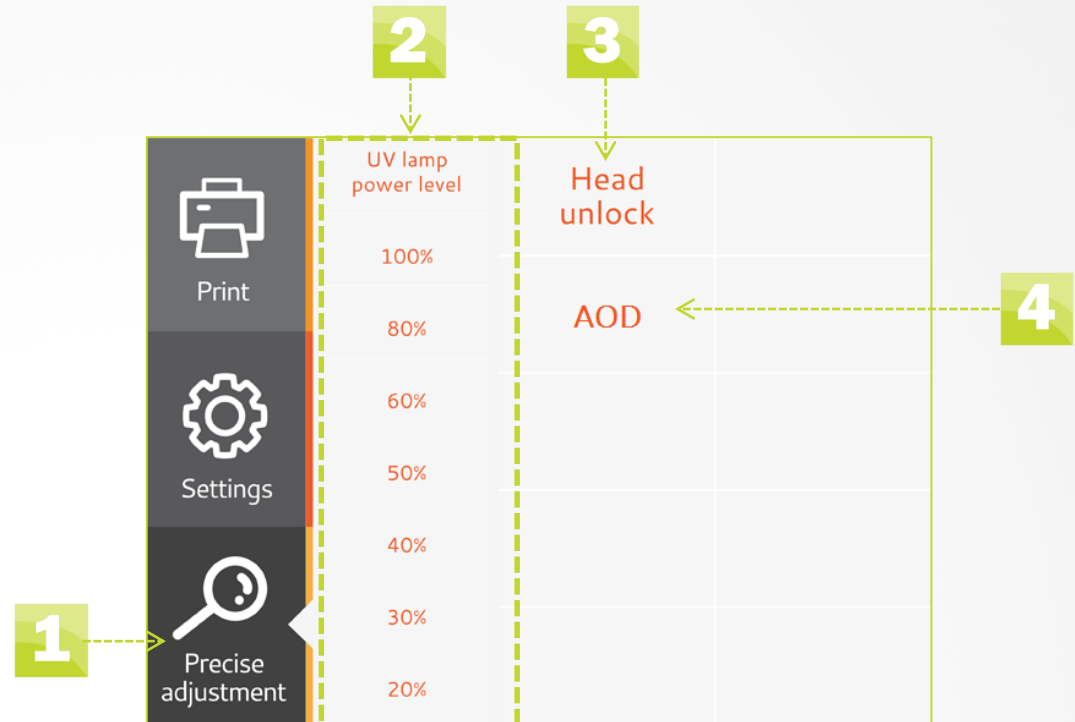
- This allows you to select how intense you want the UV/LED light to be

3 Head Unlock

- This will unlock the print head carriage ,so it can be moved manually across X axis [scan]
After task is finished tap head unlock again and printer will return print head carriage in its original position

4 AOD [Agitation on demand]

- In case of long hours printing, if opacity of white ink decrease shake white ink bottles and tap AOD button
[this function is used to ensure optimal white ink opacity]



Setting Up Your Printer

Filling Ink Bottles



Fill ink bottles **BEFORE** you turn the printer **ON** for the first time

Quick Tips

Open printer bottles one at the time
All printer and transport bottles are labeled
White ink transport bottles need to be shaken
before pouring white ink into printer bottle

What You Need

Full set of UV ink bottles

Step 1

Open printer bottle which you want to fill with corresponding ink .

[open one bottle at a time to prevent any UV exposure / dust or any other influence which may occur while bottle is open]



Step 2

Open ink bottle , remove protective folium and pour ink from ink bottle to printer bottle

[make sure to pour ink in correct printer bottle]



Step 3

Close printer bottle

[make sure to close the bottle all the way]



Shake only white ink inside transport bottles
prior to pouring into printer bottle



Shake white ink inside printer bottles every
day before starting up machine

Setting Up Your Printer

Turning the Printer on for the First Time



Fill ink bottles **BEFORE** you turn the printer **ON** for the first time

Quick Tips

Read the entire chapter before turning on the printer for the first time
The printer will not turn on if the Emergency Stop Button is ON

What You Need

Full set of UV ink bottles

Step 1

Check that the main power switch on the back of the printer is set to OFF.

1



Step 2

Plug the AC Power cord into the back of the printer and into the wall.

2



Step 3

Make sure the Emergency Stop button is not engaged. If it is, turn it to the right until it “releases” or pops out

3



Step 4

Switch on the power ON button on the back of the printer.

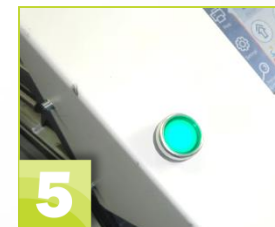
4



Step 5

Push the Power button on the front of the printer ON.
Flipping on the main power will turn on your LCD touch screen.
This is the display that will show until the printer “warms up” and is ready for the next step

5

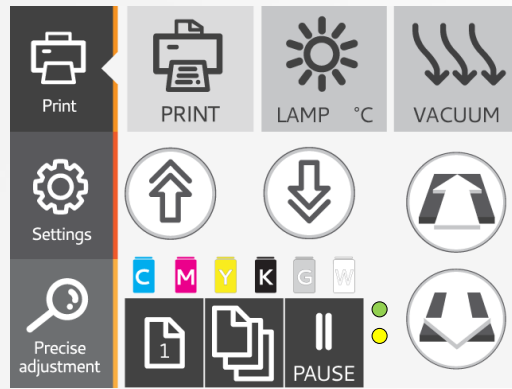


Setting Up Your Printer

Ink Charge

Quick Tips

If LCD touch screen shows green and yellow light and ink charge wont start , turn the machine off and back on , continue with ink charges



Step 1

Open the top back cover of the printer and plug in the USB cord to the printer and to your computer.

[THERE ARE 2 USB CONNECTORS MAKE SURE TO CONNECT THE ONE ON MAINBOARD. The left one]



Step 2

Open Azon production manager. This program was installed by your technician.

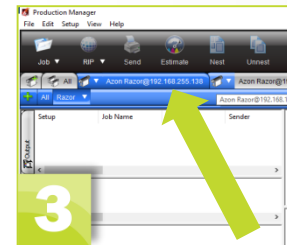
Step 3

Select printer queue .
[in cases of multiple machines its important to select queue]



Step 4

Click on default job properties and go to tab number 4.

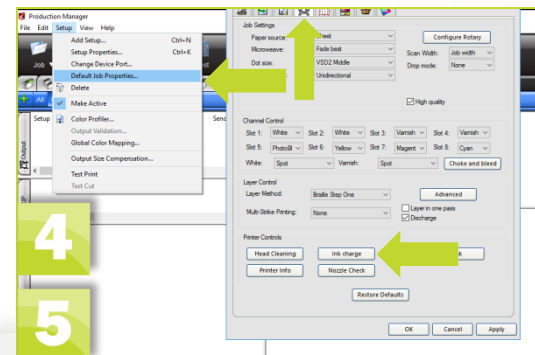


Step 5

Initiate ink charge
[repeat it for 7 times]

Step 6

Pull out USB cable , close the back cover.



Setting Up Your Printer

Nozzle Check



Fill ink bottles **BEFORE** you turn the printer **ON** for the first time

Quick Tips

Why? This will allow you to see if any of the print nozzles are clogged

Nozzle Check should be performed Daily - before you begin printing your first job of the day

When executing a nozzle check, ignore the "zero point" sticker on the print bed and position as instructed. If the sheet is positioned at the "zero point" the test print will get on the surface of your print bed. **ONLY** ignore "zero point" when doing a nozzle check

What You Need

- Nozzle Check Sheet
- Paper towels
- Safety glasses
- Multipurpose cleaner
- Nitrile gloves

Step 1

Check for the solid green light that indicates the printer is "ready"

Step 2

Place the black and white nozzle check sheet on the print bed

The top of the sheet should be 120 mm from the beginning of the table [6 dots away]

The edge of the sheet should be at the very edge of the print bed

The black half should be on your left and the white half should be on your right

Step 3

Push (hold for 1-2 sec) the Auto Gantry DOWN button.

The gantry will lower and stop automatically.

If the print head doesn't move, it means it's already all the way down.

Step 4

When the gantry stops, select the Settings icon, select Discharge to turn it OFF

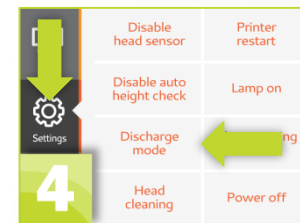
Step 5

Press the "PRINT MENU" button

Press the Print button and

Stand clear, the gantry will move forward towards the test sheet to position to print.

When ready the green light will be solid on the Print Menu



Setting Up Your Printer

Nozzle Check



Fill ink bottles **BEFORE** you turn the printer **ON** for the first time

Quick Tips

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- Paper towels
- Safety glasses
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- Nitrile gloves

Step 6

Open Azon production manager. This program was installed by your technician.

Step 7

Select printer queue .

[in cases of multiple machines its important to select queue]

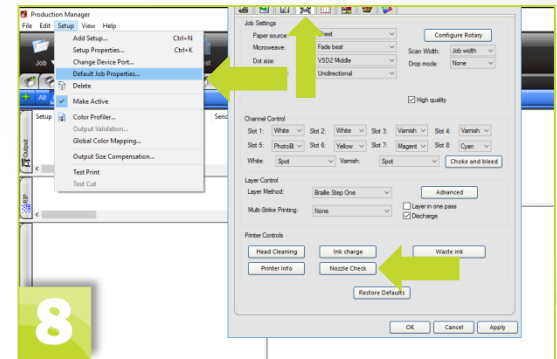
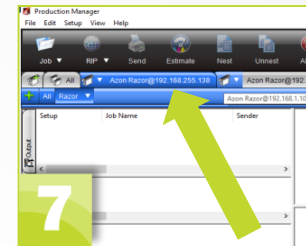
Step 8

Click on default job properties and go to tab number 4 Initiate nozzle check

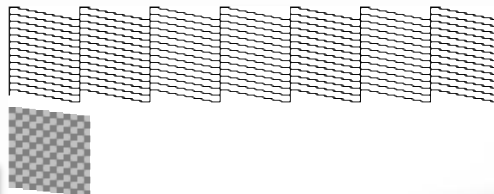
Step 9

When the Nozzle Check is complete carefully inspect the sheet. Remember that the ink is NOT cured so it will smudge if you touch it. If there are no/few gaps in the printed pattern you are good to proceed.

(If there are excessive gaps, see the next page)

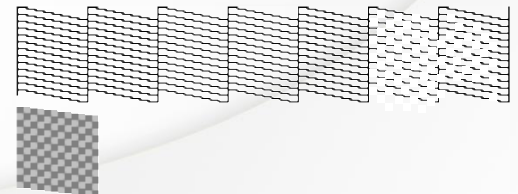


Good Nozzle Check



9

Cleaning Needed



Setting Up Your Printer

Nozzle Check - If Excessive Gaps



Perform the following steps if the Nozzle Check resulted in excessive gaps in the print

Step 1

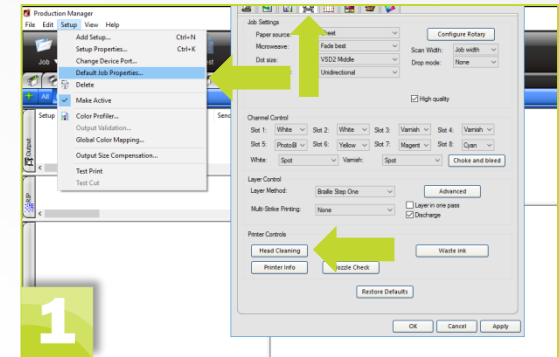
Click Head Cleaning on your computer screen
This will start an automatic cleaning of the print head which will pull more ink into the lines

Step 2

When the auto cleaning stops repeat another Nozzle Check

Step 3

If nozzle check is still not good even after autocleaning , call your local Azon Technician for advice



Shutting Down Completely

Shutting Down Your Printer



By switching off the power in the correct sequences, the capping unit will seal the print head properly. If the correct shut down procedure is not followed it may result in the breakdown of the print head and ink leakage.

Never turn off your printer by pressing the emergency button... unless it's an emergency

Quick Tips

Shutting down your printer should be performed every night after you have cleaned the print head and the capping station you may completely shut down your printer
Always turn the power switched off when you have finished for the day
Never switch off the main power or unplug the power cord suddenly while operating, doing so may damage the print head.
Always switch off the sub power first
(the "Power OFF" icon on your LCD screen)
If the main power is accidentally switched off or there is a power failure, immediately turn the main power and sub power back on

Step 1

Hold down the Power OFF button on the Setting Menu

Step 2

Wait for the screen „Press the button to turn off the printer“ to appear

Step 3

Push green button on the front of the machine
[left from LCD touch screen]

Step 4

Optional - you can switch the Main Power OFF at the back of the printer

