6.3.2   Loading Rigid Media

Loading flat media panels on the transport belt is straightforward. With the vacuum off simply place the panel on the mesh of the belt, align it (See 6.3.3) and turn on the vacuum.

6.3.3   Aligning Rigid Material

Tools needed

- Set-square or triangle
- Tape ruler

Aligning procedure

Generally, rigid media are aligned against the media set bar.

For an object that has no straight edges a set-square may be helpful.

1   On the front panel: turn off the Transport Vacuum.
2   On the front panel: lower the media set bar.
3   Place the media in the middle of the table resting against the media set bar.
4   Slide the side guide along the media set bar to the edge of the media.
5   A set-square may be used against the media set bar, touching the side guide, to help align the media panel.
6   Adjust the position of the media until it sits square to the Media Set Bar.
7   On the front panel: turn on the transport vacuum.
8   Remove the set-square and lift the media set bar.
9   Start printing.
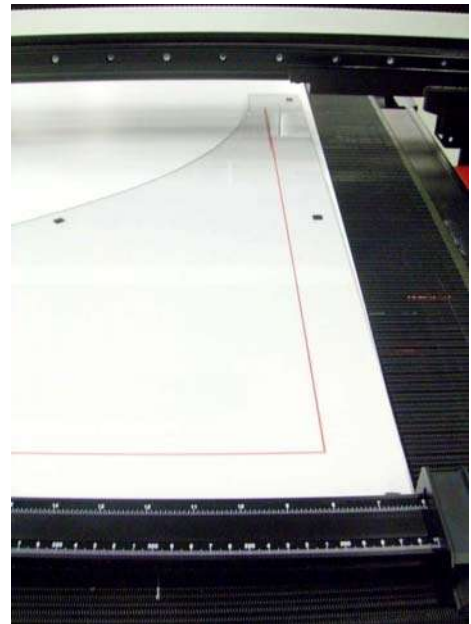
Position media against set bar
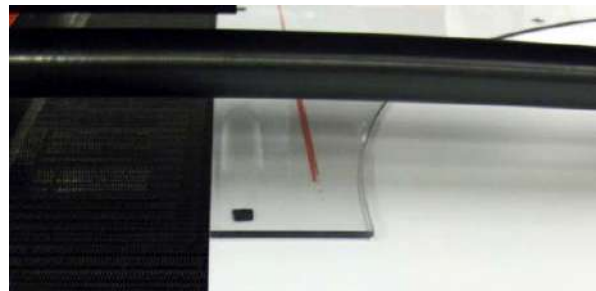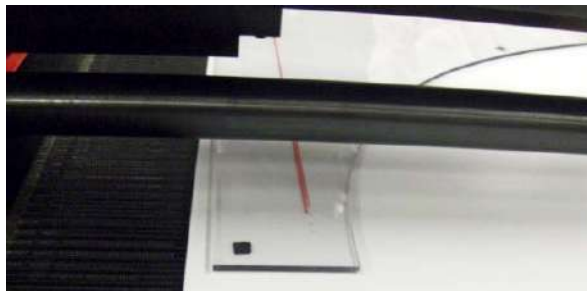
Position media against set bar

6.4 Roll media

H3200i LED supports both single and dual role printing. Both lineups can be applied as Roll to Roll and roll to sheet. The loading instructions for a dual roll are equal to those of a single roll, but requires an adapted winding and unwinding axle

6.4.1 Loading Roll Media

Roll media are installed from the unwinding axle at the back of the printer up and through the print head gap under the beam and then down to the powered rewinder axle on the front of the printer.

There are several concerns for the operator when installing roll media.

The media should be installed in the center of the transport belt bed so that the transport vacuum is evenly distributed over the width of the printing area.

The media must be squared up with respect to the transport belt. If there is an offset in the position of the media roll on the front and back axles, then wrinkles or waves will appear in the media that will cause the heads to scrape or even rip the media.

The transport vacuum is another concern. If the full width of the printer is covered by media the set point value on the vacuum PID should be reduced to low. If left at the normal (higher) value media waves "smiley - type" will occur at the backside which keep on building up media and cause head strikes.

6.4.2 Single roll loading

Aligning procedure

> **Remark:**
> Roll media should be aligned in the middle of the transport belt in nearly all cases. This balances the air leakage on both sides and avoids tension imbalance due to the weight of the media bending the roller.

Correct operation of the media transport when using roll media requires that the media be fed straight through the printing area.

The rulers on both axles and the media set bar is provided as a reference for a setsquare when aligning roll media.

Always mount the roll media in the middle of the unwinding axle and align it to the same position on the rewinding axle. After threading the media through and attaching it to the take-up roller, adjust its position left or right until the tension at the left and right edges is the same.

1 At the back panel: turn off the vacuum of the vacuum table before beginning.

2 Unlock the axle lock [1] of the unwinding axle on both sides by pushing it to the outside.
3 Place the feed axle with roll in the supports using the roll loader.

   Remark: steel axle
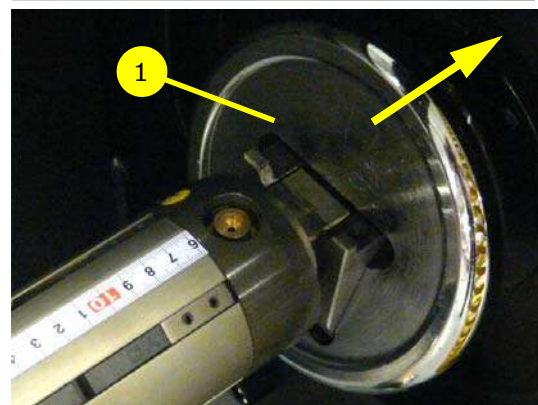
4   Lock the axle lock [1] on both sides by pulling it to the inside.
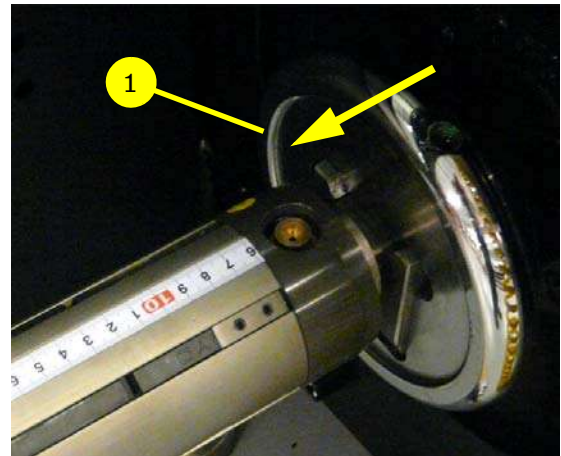
The media roll is clamped to the unwinding axle by bellows [2], which move out of the axle when compressed air is supplied to the nozzle of the axle.

5   Position the media roll in the middle of the unwinding axle using the ruler [3] on the axle.

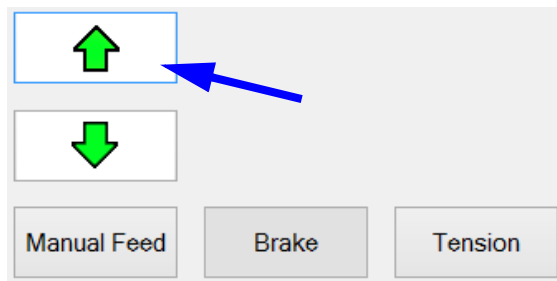6   Supply air to the nozzle of the unwinding axle using the air gun.
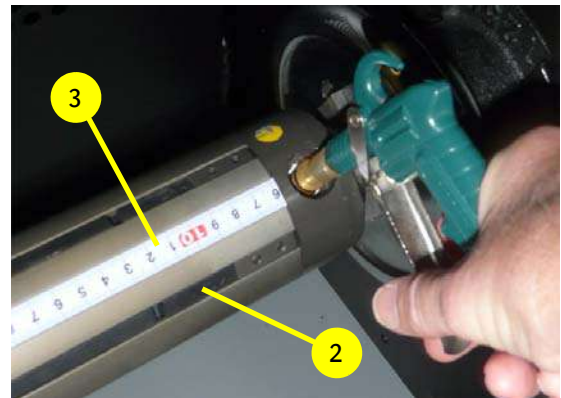
7   Feed the media to the top of the transport belt.
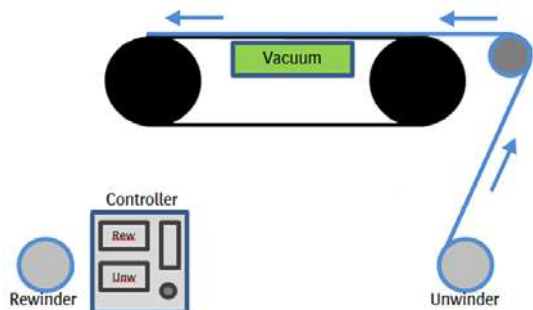
8   On the back panel: switch on the transport vacuum.

9   Check the vacuum valves and vacuum control.

10 Feed the media toward the output side using the arrow keys.
11 Switch off the transport vacuum.

12 Place an empty take-up roller on the aluminum rewinder axle at the front of the printer.
13 Position the take-up roller on the ruler of the rewinder axle so it matches with the (ruler) distances of the media roll on the unwinding axle.
14 Supply air to the nozzle of the rewinder axle using the air gun to clamp the roller on the axle.
15 Activate the brake.
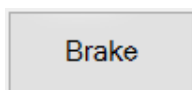
16 Pull the media from the center until it is uniform flat on the belt.

17 On the front panel: switch on the transport vacuum.

18 Release the brake with key "Brake" on the iGui.
19 On the iGui: feed manually the media till it reaches the take-up roller on the rewinder axle.
20 Tape the media onto the take-up roller.
21 Make sure the wind direction is set correctly with the "Print Side" switch, see next page.
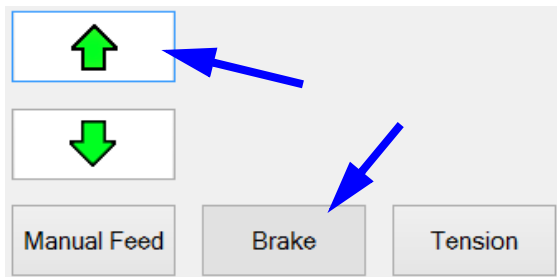
54

Shaft winding direction

- Application dependent, the printed media can be wound up print side in or out.
- The winding direction can be changed by switching between print side IN and OUT.

PRINT SIDE IN/OFF/OUT

OUT   IN

22 Set the PORA controllers of the automatic tension compensation, follow the instruction in section 6.5.
23 Activate the tension compensation with key "Tension".

Manual Feed   Brake   Tension

55
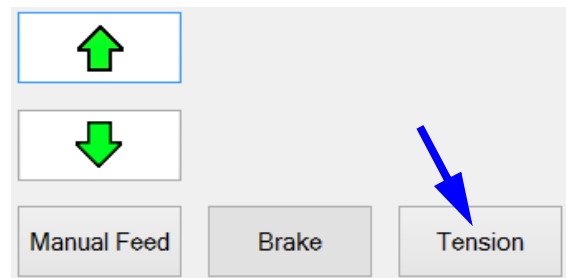
6.4.3 Dual Roll Loading

6.4.3.1 Specifications

- Maximum weight of media (incl. shaft) = 100kg (150kg) based on 320 cm print width or 31,25 kg/m.
- Maximum media width is 305 cm total (i.e. 2 x 152,5cm, or 140 mm + 165 mm).
- Each roll needs a clearance of 2,5cm split between its ends on the axle.

6.4.3.2 Components needed

- 2 Media Rolls, equal in thickness, length, diameter and elasticity.
- 2 empty cores.

6.4.3.3 Tools needed

Dual Roll Kit OW3E6

2 T-shaped Hex keys
(3 mm and 5 mm)

4 flanges
PN: D2+7170101-0335

2 differential clutches
PN: D2+7170101-0334

2 axles PN: D2+7170101-0336

Media Loader OV5YC

Remark:
- If media rolls with a different width are printed, reposition the differential clutch according to the media width by loosening the center bolt on the differential clutch with a "3mm hex key".
- When equal rolls are printed (i.e. 2 x 152,5cm) a center mark, which is engraved in the axles, can be used to center the differential clutch in the middle.
- Tighten the bolt to fix the differential clutch in position.
- Make sure the position of the differential clutch is the same on both axles.
- The bolt just needs to be loosened (not removed) to reposition the differential clutch.

Aligning procedure

1 At the back panel: turn off the vacuum of the vacuum table before beginning.

2 Load the media rolls on one axle and install 2 empty cores on the other.

3 Leave a small gap of 5mm between the edge of the media and the differential clutch.
   This space will allow a small movement of the media and prevents deformation of the material against the edge, in case it hasn't been loaded square into the printer.
4 Lock the roller/core onto the differential clutch by moving the yellow knob.
   By moving the yellow knob, the keys will expand. Make sure the keys are gripping well onto the core, preventing it from slipping.

:Anapurna H3200i LED Advanced Operator Manual (v1.0)

5 Tighten the yellow nut after the media is locked.
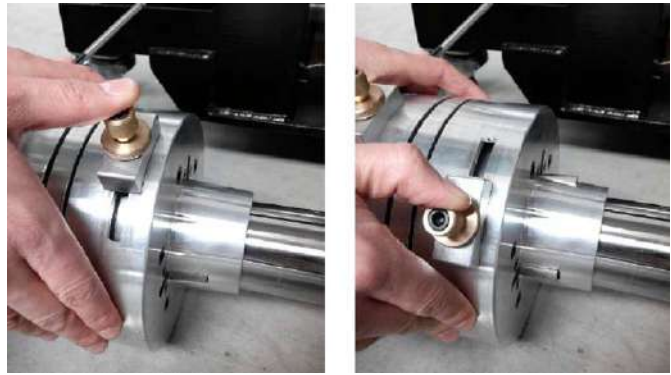
6 Install all 4 flanges into the outer edges of the media cores.
7 Preferably leave a space of 5mm between the edge of the flange and the media edge.
8 Lock the flange by tightening the outer bolt with a 5mm "hex key".

9 Unlock the axle lock [1] of the unwinding axle on both sides by pushing it to the outside.
10 Place the dual roll axle with rolls in the supports using the roll loader.
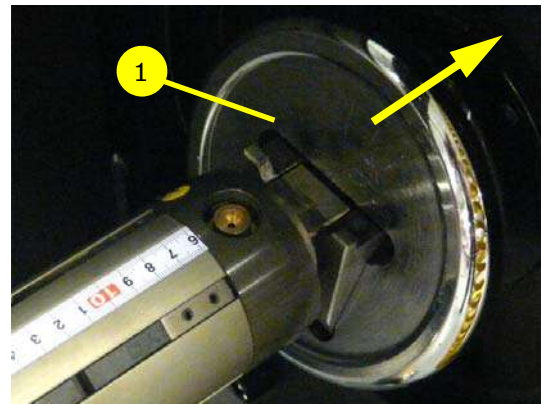
11 Lock the axle lock [1] on both sides by pulling it to the inside.
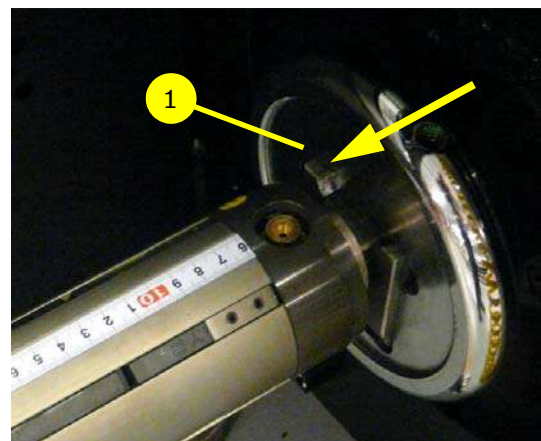
12 Feed the media to the top of the transport belt.
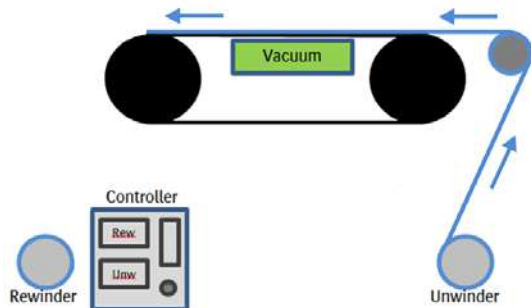
13 On the back panel: switch on the transport vacuum.

14 Check the vacuum valves and vacuum control.

15 Feed the media toward the output side using the arrow keys.
16 Switch off the transport vacuum.
17 Place the dual roll axle with take-up rollers at the front of the printer.
18 Activate the brake.
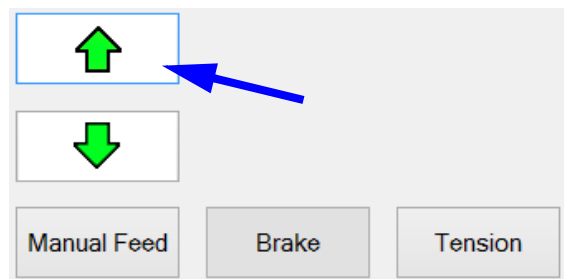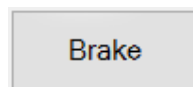
19 Pull both media from the center until they are uniform flat on the belt.
20 On the front panel: switch on the transport vacuum.

21 Release the brake with key "Brake" on the iGui.
22 On the iGui: feed manually the media till it reaches the take-up roller on the dual roll axle.
23 Tape both media onto the take-up rollers.
24 Make sure the wind direction is set correctly with the "Print Side" switch, see next page.
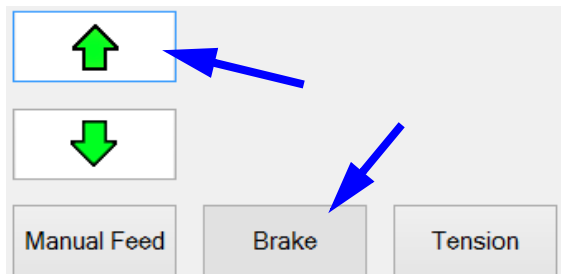
Shaft winding direction

- Application dependent, the printed media can be wound up print side in or out.
- The winding direction can be changed by switching between print side IN and OUT.

OUT   IN
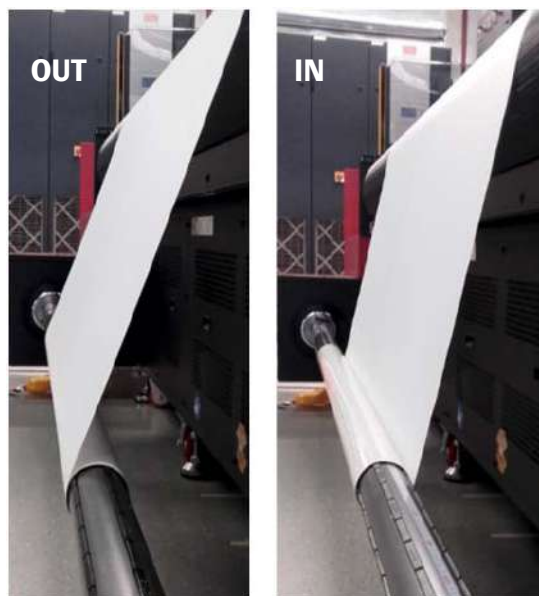
25 Set the PORA controllers of the automatic tension compensation, follow the instruction in section 6.5.
26 Activate the tension compensation with key "Tension".
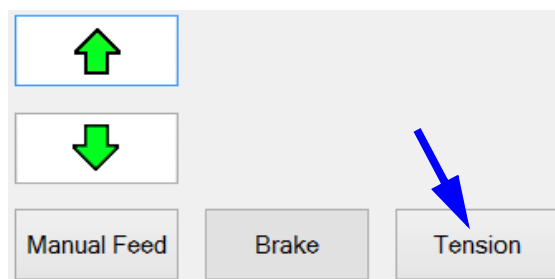
6.4.4   Unclamping media roll

Note

To unclamp the media roll: push with a finger on the nozzle of the axle to release the air pressure of the bellows.

6.5   Automatic Tension Compensation

The Automatic Tension Compensation controls the tension of the media in relation to the diameters of the unwinding media roll and the rewinding media roll.

Most of the tension compensation system is controlled via the Anapurna i-GUI software but there are certain cases where operator intervention is required.

The image below shows the regular user interface and a description of the most important features as well as details regarding some of the values that should be in the system.
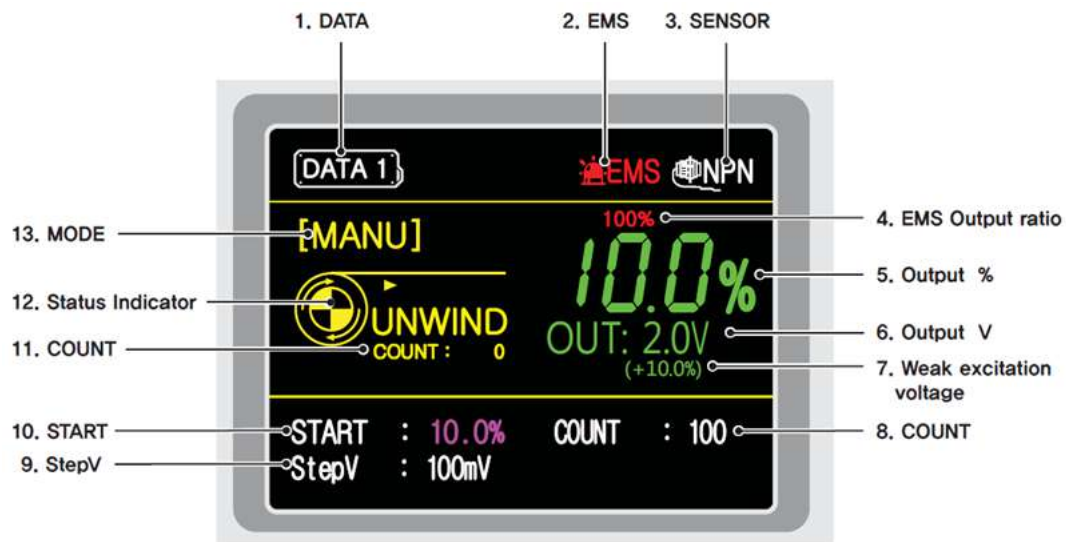
No	Description
5	Displays the current output percentage.
8	Shows after how many pulses the controller must receive before changing the output value. This will be left as 1 for all cases.
9	Shows by how much (mV) is the output changed per step. This value should be set at 18mV for all cases.
10	Displays the starting percentage – this is the value that the controller will default to when it is reset.
11	Shows the current number of pulses received by the controllers.
13	Represents the mode – either MANU for manual or AUTO for automatic. During operation the system must be in AUTO with one exception.

6.5.1 Using the Tension Compensation

The use of media tensioning is recommended to get the best possible media transport.

Remark:

When working in roll to sheet mode, the input data of the REWINDER controller can be ignored.

1 Press the key next to "Unwinder Length (m)".

Unwinder Length (m) 100.00

2 Press the key next to Media Width.

Media Information

Media Width 1500 mm

Unwinder Length 100.00 m

OK   Cancel

3 Fill in the Media Width (e.g. 3200 mm).
4 Press button "OK".

Media Width

Current Value : 1500 [mm]
Input Value : 3200

7	8	9	CLEAR
4	5	6	DELETE
1	2	3	MIN	1
0			MAX	3200

OK   Cancel

5 Press the key next to Unwinder length.
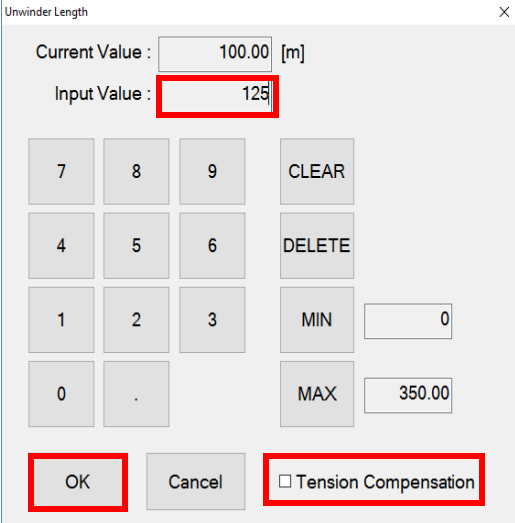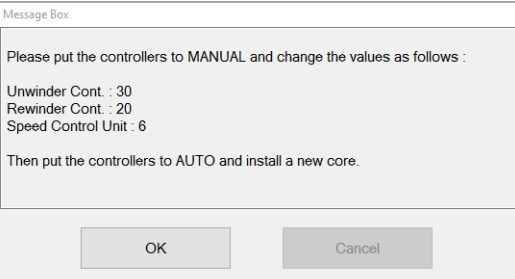
Media Information

Media Width 3200 mm

Unwinder Length 100.00 m

OK   Cancel

6   Fill in the number of meters on the roll (Unwinder Length, e.g. 125).
7   UNCHECK Tension Compensation.
8   Press button "OK".

9   Press button "OK".

10 Make a note of the following PORA values:
    • Unwinder controller
    • Rewinder controller
    • Speed Control Unit

On the controller cabinet:
11 Put the controller to MANUAL mode by pressing the button "MANU/AUTO".
12 Press the dial button long to enter the setup item.
13 Turn the dial button to change the set value (%) according to your notes.
14 Put the controllers to AUTO mode by pressing the button "MANU/AUTO".

:Anapurna H3200i LED Advanced Operator Manual (v1.0)

6.5.2   Tips and tricks

6.5.2.1   Wrinkles

1 De-activate the Media tensioning bar when wrinkles can't be avoid:
    • Very flexible media like textiles.
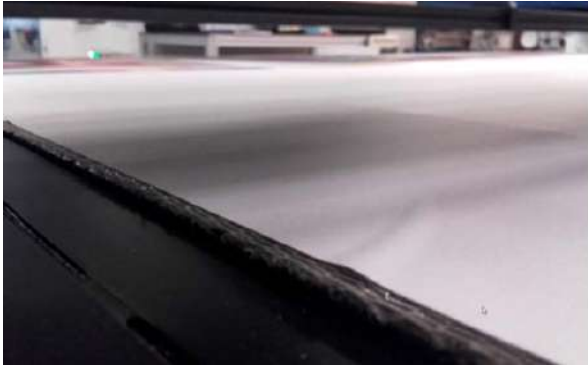
2 Make use of gradient mask (print mode masking):
    • In case wrinkles can't be avoided and results in gap or overlap print artefacts.
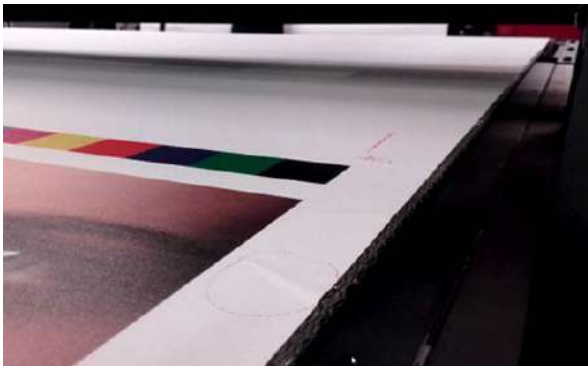
6.5.2.2   Media not tensioned during media feed

Increase the speed control set point in case the media is not tensioned during media feed.

    •   Default set-point is 7.

6.5.2.3 Media not fed straight tensioned

Increase the unwinder set point if the media is not fed straight tensioned to the conveyor belt.

Recommended: always start with equal rewinding and unwinding settings.

I.e. If the unwinder PORA is adjusted, this also must be done for rewinder PORA.

66

7   Image quality procedures

7.1   Setting the Head Gap

7.1.1   Head Gap Procedures

The height of the print heads on the bottom of the shuttle need to be set according to the thickness of the media being used via the "Gap Set" procedure. The distance the ink droplets fall from the print head to the media surface is critical for the correct operation of the printer. This procedure should be run every time the media thickness is changed. The setting is cleared when the iGUI program is started and so must be run as part of starting a new session.

The automatic procedures should be performed with the shuttle positioned in the "ideal position" marked on the shuttle beam by a pair of red triangles, or arrows. Use the Left Margin setting to position the shuttle in this region of the media transport belt.

There are also two white arrows on the side of the shuttle to indicate the location of the print heads so that the shuttle is over the media on the transport belt when the measurements are taken.

The final condition for measurement is that the transport vacuum should be turned on and the vacuum compartments in the "ideal position" area enabled.

7.1.2   Automatic Head Gap setting
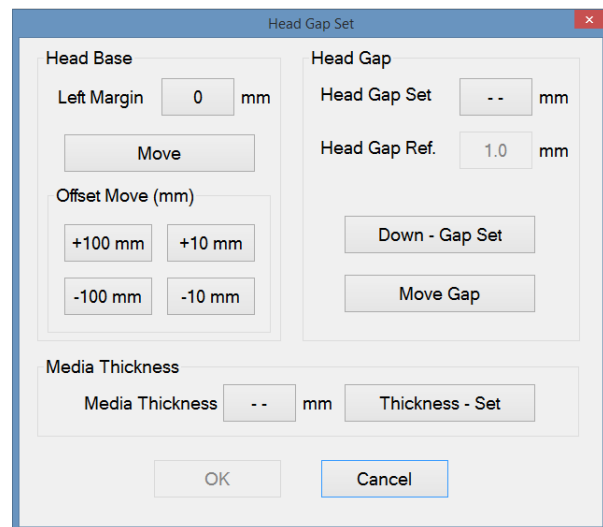
The recommended gap setting between the print heads and media is 1.3 mm. This is set as the default value at the factory.

1   Load and align some media and turn on the transport vacuum.
2   On the Control Screen: press button [Gap Set].
3   Set the left Margin to a value that will position the shuttle at approximately the center of the media.
4   Press the button [Move]. The shuttle will move to the position set.
5   Press the button [Down - Gap Set] to move down the Gap Sensor on the underside of the shuttle. The sensor lowers till it touches the media.

When the automatic procedure is completed the measured value will be showing in the head gap text field at the right of the panel.

It is possible to click this field to modify the value, but this is not recommended practice.

6   Press [OK] to signal the completion of the procedure. The shuttle will return to the Home Position while retaining its new height setting.

Pop-up Head Gap Set
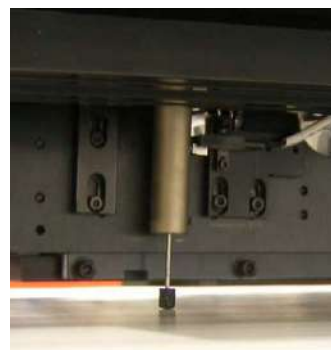
Example of a Gap sensor on media

7.1.3 Setting Media Thickness Manually

When the media thickness is known or is measured manually, its value may be entered manually to save time.

1. Load and align some media and turn on the transport vacuum.
2. On the Control screen: press button [Gap Set]. Press the button [--] next to 'Media Thickness' to open the settings pop-up.
3. Fill in the value (in millimeters with one decimal point, e.g. 0.2).
4. Press button [Thickness - Set] to confirm. The shuttle will move to a height calculated from the new thickness value and the head gap setting.
5. Press [OK] to signal the completion of the procedure.

Measuring manually
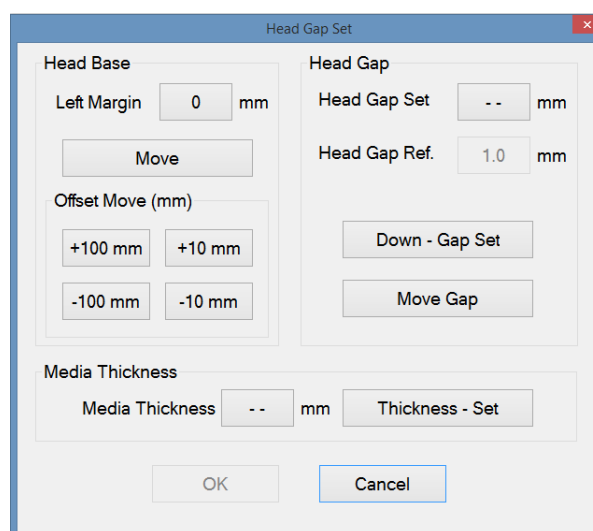
Pop-up Head Gap Set

![Remark icon] **Remark:**

Changing the media thickness setting does not require the horizontal or bi-directional calibration procedures to be performed again.

7.2 Checking and clearing inkjet nozzles

This section consists of 4 different procedures for clearing blocked inkjet nozzles, ranked by increasing time and effort to accomplish, but also by their effectiveness. These procedures need to be followed if blocked inkjet nozzles are detected by a Prime (nozzle) check. During a Prime (nozzle) check all jets of all colors are used to verify that all jets are working.

Procedures for clearing blocked inkjet nozzles

1 **Dripping:** This procedure is enough to keep the jets in the print heads from clogging when performed daily.
2 **Purge:** This procedure uses ink or storage flush under pressure to clear a more stubborn blockage.
3 **Jet Test:** Not used.
4 **Draining the color ink tubes:** Multiple nozzle failures are most likely caused by air in the ink tubes. This procedure takes time but must be done if this problem is suspected.

⚠️ **Warning:**
If you ignore the need to clear blocked nozzles, this shall lead to permanent damage of the print heads. Clean the print head with a lint free cloth. Agfa advises the Kimberly-Clark Professional Kimtech Pure W4.

7.2.1 Prime (nozzle) check print

When a check print shows that some of the print head nozzles are not working there is a sequence of operations that may be followed to restore normal operation:

After each cleaning operation a check print must be run to evaluate success. This check print is called a "Prime" for historical reasons and is run from the Control Tab of the Operator's Screen.
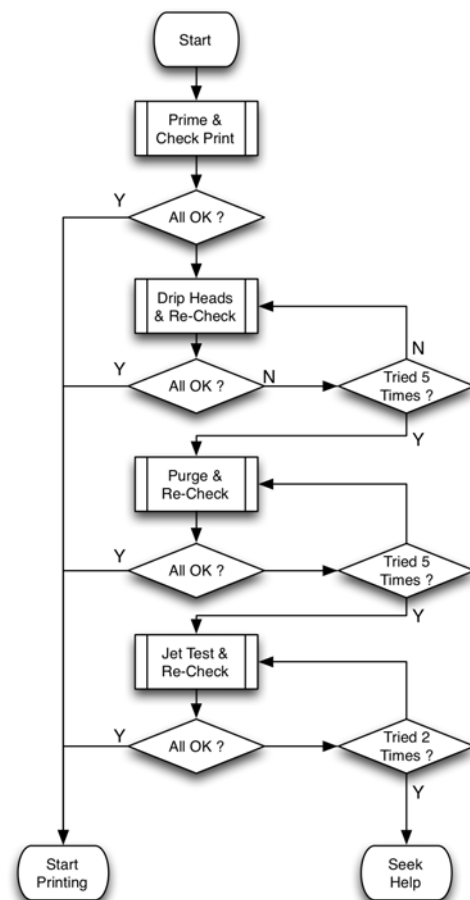
👉 **Remark:**
Always run check print jobs with the transport vacuum switched on to ensure the media is level and firmly held in place.

7.2.1.1 Performing a Prime check print

The state of the print heads can be verified with the "Prime (nozzle)" check print. The check print is a pattern that uses all nozzles on all heads, so any missing line in the color stripes, show a blocked nozzle.

Remark:
The name "Prime" stems from the time when a printed pattern was used to confirm that all ink circuits had been fully loaded with ink. This was called "priming", in the sense of priming the pump.

Warning:
It is possible to switch the UV LED units on or off. Be aware: when switched off, the ink is not cured!

Prime check print procedure

1. Check that the print heads are completely warmed up.
2. Load some media.
3. Turn on the transport vacuum.
4. Check the Head Gap (see section 7.1).
5. On the control screen: set the "Align Parameters" for the position of the media, 'Both' UV Mode, a carriage speed of 5 and select 'Print White in Alignment Patterns' if you also want to check white.
6. Press the button [Prime].
7. When the media is colored select:
   No background
   Prime all: if you want to print in color and white.
   Prime Color: if you want to print in color only.
   Prime White: if you want to print in white only.

8. When the media is white or light colored select:
   Black background
   Prime all: if you want to print in color and white.
   Prime White: if you want to print in white only.
   In this case, a black area is printed first (background). Then, a second layer is printed on top of the black area with white ink.
9. Start printing.
10. Check the print patterns.
11. Missing fine lines between the color stripes, or voids in the thicker stripes, indicate a blocked inkjet nozzle.

Alignment Parameters

C-Speed	5
Left Margin	100.0 mm
Top Margin	0.0 mm
UV	Both
Pwr L/R	20 20

☑ Print White in Alignment Patterns

Alignment Parameters

Prime

No Background	Black Background
Prime All	Prime All
Prime Color	
Prime White	Prime White

Exit

Prime
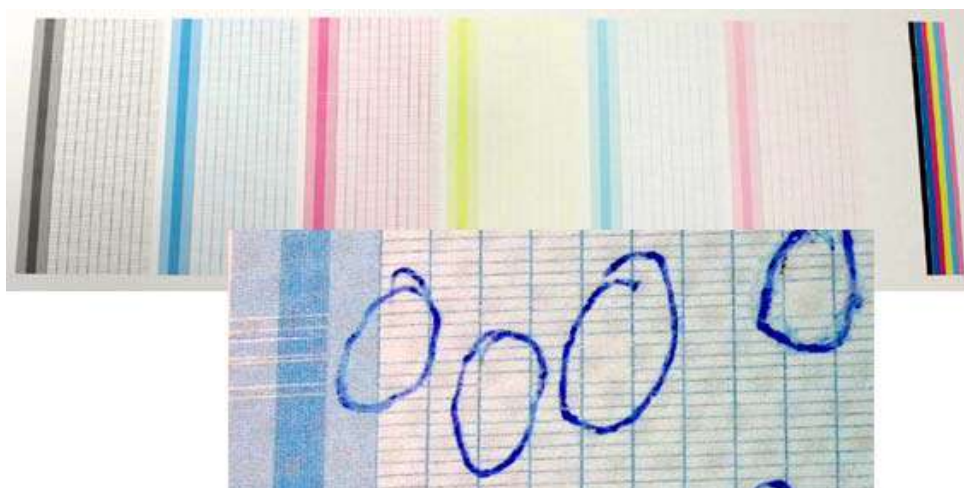
Patterns prime check

7.2.2 Dripping the Heads

Personal Protective Equipment

- Nitrile gloves and safety glasses.

The purpose of this procedure is to allow ink to drip through the print heads as a result of gravity, their normal operation.

Procedure

1 Ensure/check that the ink and print heads are completely warmed up.
2 Go to the "Control" screen.
3 Press button [Head Up] to raise the shuttle to its highest position.
4 Press button [Home Cover] to open the cover.
5 Check that all 6 ink flow valves [1] (yellow label) are in the "Ink" position.
6 Turn Off the color vacuum switch [2] and/or white vacuum switch [3].
   Switch up = ON
   Switch down = OFF
7 Ink should drip from the print heads for about 10 seconds
8 Turn the vacuum switch(es) [2] and/or [3] back on.
9 The pressure control(s) [4] and/or [5] should return to ca. -.038 for the color vacuum and to ca. -.048 for white.
10 Clean the print heads with a lint free cloth, wiping gently from back to front, observing all safety precautions.
11 On the control screen: press button [Head Down] to lower the shuttle to head gap position (the home cover closes automatically).
12 Perform another prime check.
13 Repeat the procedure if there are still voids remaining in the check print.

If the blocked inkjet nozzles are not clear after repeating the procedure 5 times, try the next procedure "Purging the Heads".

71
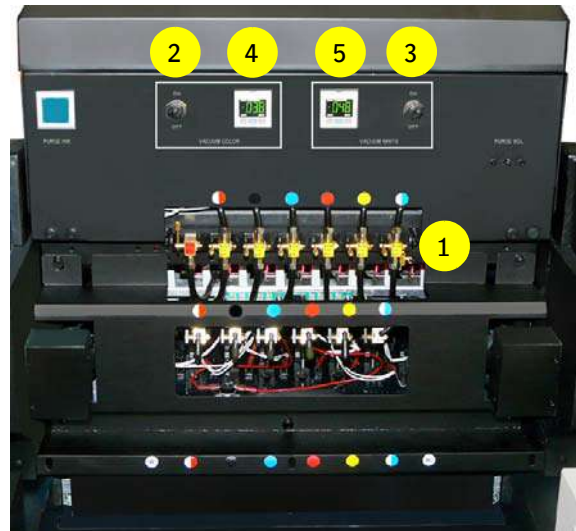
7.2.3   Purging the print heads with ink

Personal Protective Equipment

- Nitrile gloves and safety glasses.

The purpose of this procedure is to push the ink through the inkjet nozzles of the print heads under pressure.

> ⚠️ **Important:**
> This must be performed only on one single color head at a time. Purging more than one at a time risks introducing air into the print heads.

Procedure

1. Ensure/check that the ink and print heads are completely warmed up.
2. Go to the "Control" screen.
3. Press button [Head Up] to raise the shuttle to its highest position.
4. Press button [Home Cover] to open the cover.
5. Set all 6 ink flow valves [1] (yellow label) in the "Close" position.
6. Leave the storage flush flow valve [2] (red label) in the "Close" position.
7. Set the ink flow valve [1] of the head that needs to be purged to position "Ink".
8. Turn Off the color vacuum switch [3] and/or white vacuum switch [4].
   Switch up = ON
   Switch down = OFF
9. Push briefly on the "Purge button" [5] to drive ink through the print head.
10. Turn the vacuum switch(es) [3] and/or [4] back on.
11. Set all 6 ink flow valves [1] to the "Ink" position.
12. Clean the print heads with a lint free cloth, wiping gently from back to front, observing all safety precautions.
13. On the control screen: press button [Head Down] to lower the shuttle to head gap position (the home cover closes automatically).
14. Perform another prime check.
15. Repeat the procedure if there are still voids remaining in the check print.
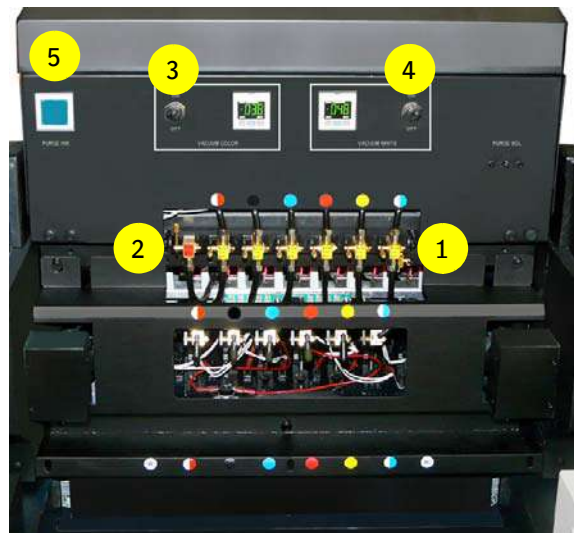
> ⚠️ **Important:**
> Do not perform this procedure when the ink supply tank is at a low level as it could introduce air into the system. If the capital letter in the green indicator button changes into a small letter (M in this example), stop purging and let the pump refill the sub-ink tank until the capital letter appears.

7.3 Checking and draining color heads

Personal Protective Equipment

- Nitrile gloves and safety glasses.

7.3.1 Checking an Ink Circuit for Air

If the prime check shows multiple failing inkjet nozzles, or if there are a few missing at the front or rear of the print head, it may be that there is an air bubble in an ink delivery circuit. Air can be introduced into a circuit by too extensive an ink purging, or if the negative pressure setting is higher than the recommended value.

Procedure

To verify if there are air bubbles in the ink circuit, follow this procedure:

1. Move the shuttle to the home position.
2. On the control screen: press button [Home Cover] to open the home cover.
3. On the control screen: press button [Head Up] to raise the shuttle to its highest position.
4. Set all 6 ink flow valves [1] to close position.
5. Turn Off the color vacuum switch [2].
   Switch up = ON
   Switch down = OFF
6. Set the flow valve [1] of the desired head to open position and let the ink drip for 2 minutes.
7. Check while dripping!
8. Turn the vacuum switch [2] back on.
9. The pressure control [3] should return to ca. -.038.
10. Check that the desired head is still dripping.
11. On the control screen: press button [Head Down] to lower the shuttle to head gap position (the home cover closes automatically).

73
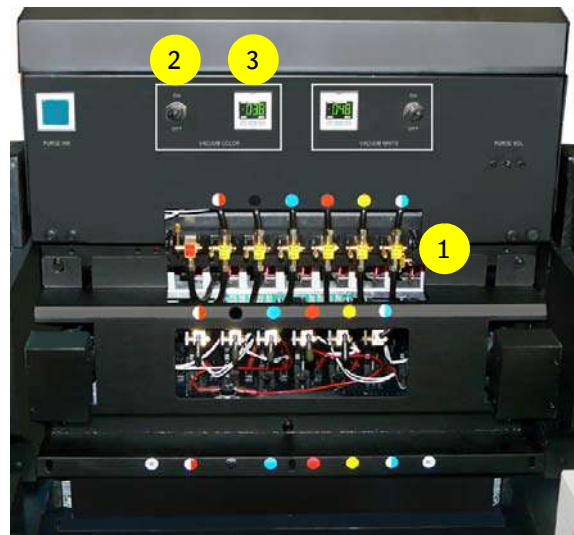
⚠️ **Important:**

If the head stopped dripping in step 7 there is air in the ink circuit and a certified technician should be called to drain it.

7.3.2 Draining a color head

Important:

Only an certified technician should perform this procedure.

In the procedure described below we will use the magenta head as an example.

Personal Protective Equipment

- Nitrile gloves and safety glasses.

Required tools

- A small container made of chemically resistant material to collect the waste ink.

Procedure

Before starting this procedure: make sure that print heads and ink circuits are at the correct operating temperatures.

1 Move the shuttle to the home position.
2 On the control screen: press button [Home Cover] to open the home cover.
3 On the control screen: press button [Head Up] to raise the shuttle to its highest position.
4 Rotate the nipple to be drained [1] 180 degrees.
5 Remove the drain cover [2] from the nipple.
6 Position your waste ink container under the drain nipple. Never attach a tube onto the drain's nipple.
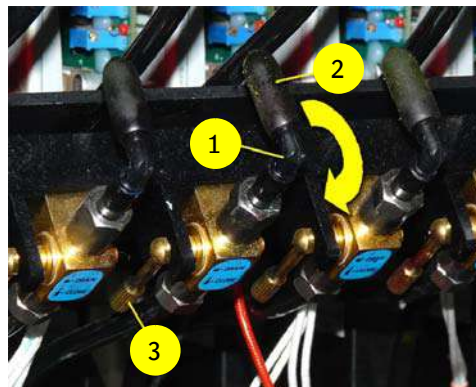
7 Check if the storage flush flow valve [4] is closed.
8 Set the ink flow valve [5] for the ink you are draining (magenta) to position "ink".
9 Close all the other ink flow valves.
10 Turn Off the color vacuum switch [6].
   Switch up = ON
   Switch down = OFF
11 Set the (magenta) drain valve [3] to position "drain" for 5 seconds.
12 Check if the ink starts to drip out of the drain nipple.
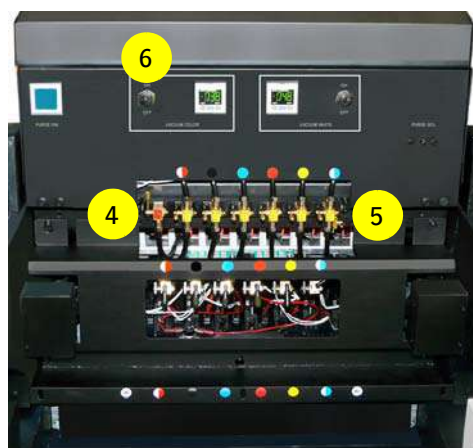
Important:

Halt this procedure when the ink supply tank is at a low level. If the capital letter in the green indicator button changes into a small letter (M in this example), close the drain valve [3] and let the pump refill the sub-ink tank until the capital letter appears.

13 Open the (magenta) drain valve [3] again.
14 Ink will resume draining and some air bubbles should be coming out of the nipple.
15 Repeat these actions until only ink comes out of the nipple.
16 Close the (magenta) drain valve [3].
17 Turn the color vacuum switch [6] back on.
18 Place back the cover on the drain nipple [2].
19 Set all ink flow valves to the "ink" position [5].

20 Leave the storage flush flow valve "closed" [4].
21 Clean the print heads with a lint free cloth, wiping gently from back to front.
22 On the control screen: press button [Head Down] to lower the shuttle to head gap position (the home cover closes automatically).
23 Set the Head Gap and Media thickness (see section 7.1).
24 Perform a prime check print to check the nozzles again (see section 7.2.1).

Dispose of the waste ink as toxic chemical waste.

Important:

When you are in doubt or have any questions with regard to the draining of the heads, please contact your local Agfa representative for advice.

7.4 Image Quality levels

Image Quality levels give an overview of the different print quality's. Each quality has its own specifications in relation to the viewing distance. The Image Quality levels are printer configuration dependent (e.g. used inks and number of colors).

Warning:
The image quality is based on the default Head Gap of 1,3 mm. If the value of the Head Gap is set larger, the print quality is deteriorating and more maintenance (cleaning base plate + led glasses) must be performed.

7.4.1 High Definition Quality

- viewing distance << 0.5 m
- No banding, no print artifacts, no visible grain
- Quality is the key word
- Difficult images, Flat tints, Fine text & Vector will be perfectly printed with the highest color gamut

7.4.2 High Quality

- viewing distance < 0.5 m
- No banding, limited level of grain allowed
- Almost perfect Quality is the key word
- Flat tints & High Key images can have limited amount of grain.

7.4.3 Standard Quality

- viewing distance > 0.5 up to 1.5 m
- Limited banding and small print artifacts allowed
- Balance (speed vs. quality) is the key word
- Easy & Difficult images, flat tints, Fine Text & Vector will print perfectly within standard color gamut

7.4.4 Production Quality

- viewing distance > 1 up to 5 m
- Low level of banding and small print artifacts allowed
- Speed is the key word
- Easy images and Fine Text & Vector will still print OK within acceptable color gamut

7.4.5 Express Quality

- viewing distance >>> 5 m
- Fast printing mode
- High speed is the key word
- Easy images and Fine Text & Vector will print good within acceptable color gamut

7.4.6 Draft

- viewing distance >>> 5 m
- Fastest printing mode
- Draft & layout are the key words
- Easy images and Fine Text & Vector will print good with limited color gamut and limited quality

7.5   Calibration

7.5.1   Ink dot placement

Remark:

Calibration must be done when the printer is sufficient warmed up / is ready for operation. It is recommended to perform a print head maintenance for printing the calibration targets!!
Refer to 7.2.2 Dripping the Heads, 7.2 Checking and cleaning inkjet nozzles.

Every print head is an assembly of four rows of inkjet nozzles. Each row has its own timing for each of the print modes, horizontal (unidirectional) and bidirectional.

During the movement of the shuttle, ink dots [4] are dropped on the media [1]. The exact placement of the dots of ink on the media is determined by the distance [3] between the media [1] and the print heads [2] (Head Gap), the moment of ink dropping, the movement speed of the shuttle and the speed of the media transport.

1   Media
2   Print head
    Horizontal (unidirectional)
    During the forward movement one black [4a] ink dot [4a] and one color ink dot [4b] are dropped. For a sharp print, it is important that both dots are exactly placed on top of each other.
    Bidirectional
    During the forward movement one color ink dot is dropped and during the return movement one ink color dot is dropped. For a sharp print, it is important that both dots are exactly placed on top of each other.
3   Head Gap
4   Ink dot

Ink dot placement
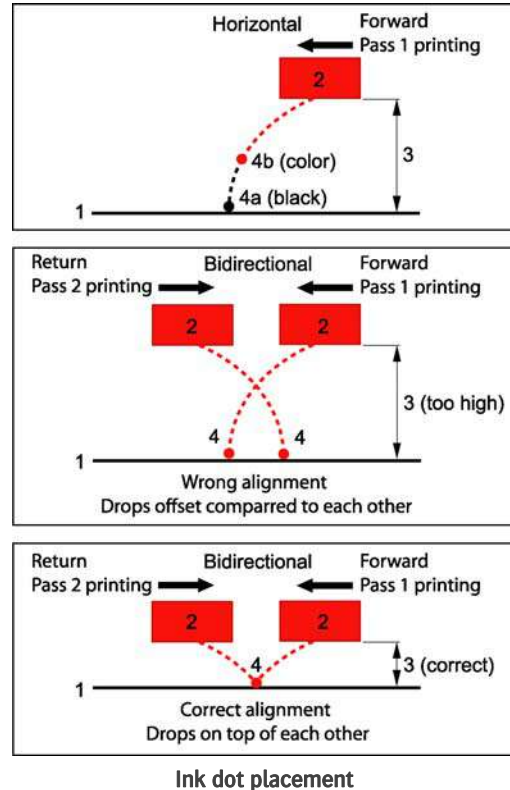
7.5.2   Calibration

There are four calibration print templates built into the iGUI software;

1   Prime, see, 7.2.2.
2   Horizontal
3   Bidirectional
4   Feed

These are calibration procedures that should be run whenever the head gap is changed. Each test pattern gives numerical feedback that allows the operator to adjust the position and moment of ink dot placement.

The alignments must be verified and adjusted when:

*   the Head Gap distance changes
*   the shuttle's speed is changed.
*   The feed speed is changed

Heat sensitive media might require a non-default Head Gap (default Head Gap = 1,3 mm) setting to reduce the heat from the UV LED units deforming the media. Humidity also has a strong influence on the media's ability to attract a charge of static electricity. When Head Gap is adjusted the horizontal, bidirectional, and feed calibrations need to be redone. The UV LED units settings may need to be adjusted as well.

⚠ **All calibrations (carriage speed and Print mode) must be carried out in accordance with the Image Quality matrix for the given printer, see section 8.1.**

Tip:

Clear media can be used to calibrate the white ink heads.
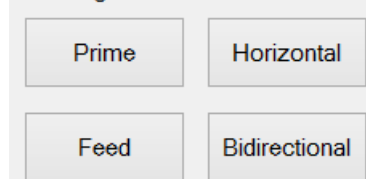
7.5.3   Calibration zone

The best location for printing calibration patterns is shown by two red arrows (triangles) on the side of the shuttle beam. Set the left margin so that the shuttle starts printing at the rightmost mark.

The white arrows, or triangles, on the shuttle show the position of the print heads front to back on the shuttle.

7.5.4   Horizontal Calibration

Each head has left and right rows of inkjets nozzles that are used to print three colored lines forming a "block". The three colored lines are overprinted with a black line. When the timing is correct the lines should lie on top of one another exactly.
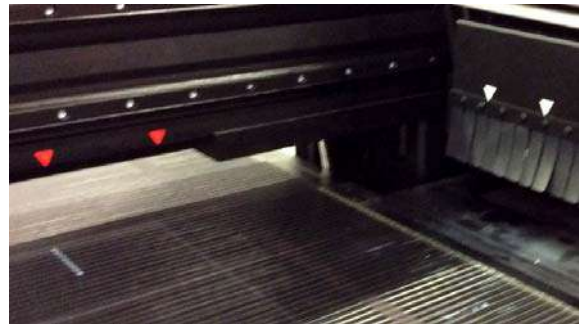
Eight rows of blocks are printed, one for each color plus the two white heads. These rows of blocks are repeated 41 times with an offset timing ranging from -20 to +20 where zero ('0') is the median. If the timing for all jets were perfect the colored lines would lie exactly on the black lines at the zero position. To know the offset to apply find the lines that exactly align with the black line for each color, note the value of the block (top/bottom row of numbers) and add or subtract the observed value to/from the shown value for each color in the Horizontal part of the calibration table.

The horizontal calibration print pattern checks inkjet timing between all of the print heads in uni-directional printing mode.

Each jet has a timing parameter in the software that controls its dropping individually, so printing a pattern that uses all jets on all heads will directly show any jets whose timing is off.

Procedure

1   Make sure the system is in an operational state.
2   Load some media.
3   Turn on the vacuum of the vacuum table.
4   Set the media thickness (see 7.1.1).
5   On the control screen: set the left margin to start printing between the 2 red arrows (triangles).
    Note: Left Margin value can be read on the ruler of the vacuum table.
6   Set UV Mode to Both.
7   Set the appropriate Carriage Speed (5 or 3).

8   Press button [Horizontal] to open the pop-up 'Horizontal Floating Pattern'.
9   Print **one after another** the following 4 "Floating Patterns" with the different resolutions and speeds of the Agfa quality print modes used from Asanti (see also the images on next page):

A.   Print with carriage speed **CS5**: Horizontal **Quality 720 DPI**
B.   Print with carriage speed **CS5**: Horizontal **Normal 540 DPI**
C.   Print with carriage speed **CS5**: Horizontal **Normal 720 DPI**
D.   Print with carriage speed **CS3**: Horizontal **Quality 720 DPI**

Remark:
CS3 is preferred when printing High Quality or High Definition white text.

Before printing these files:
The correct Carriage Speed has to be put in before opening the Horizontal Menu.
Write down on the test-print which Carriage Speed has been used!
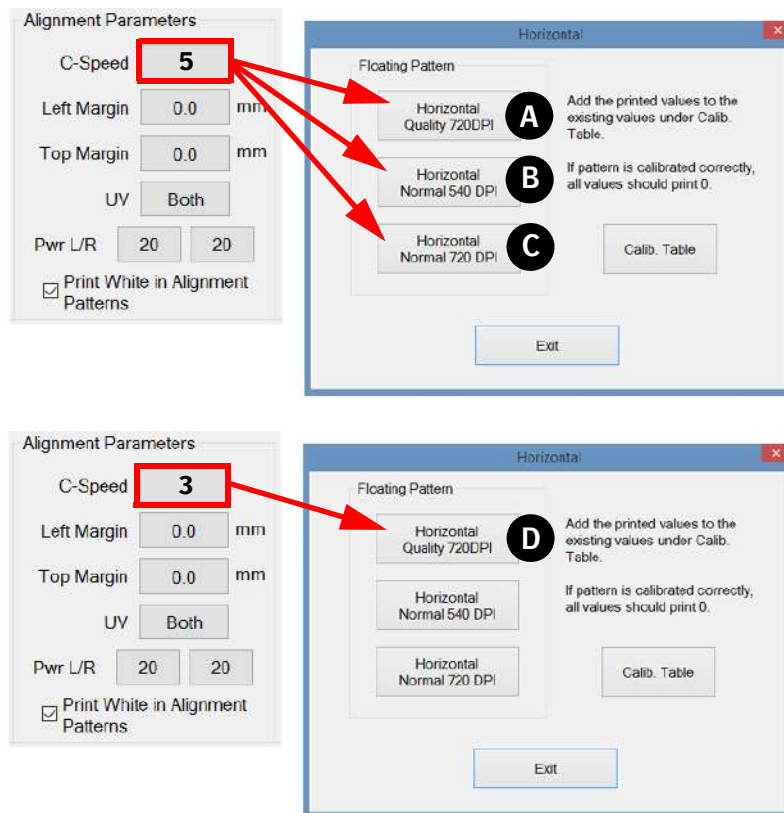
10 Repeat steps 7 till 9 to print the 4 different resolutions and speeds.

11 After the shuttle has returned to its home position, analyze each printed pattern with a magnifying glass.

12 Locate per color the lines where black and color (e.g. cyan and magenta) are exactly aligned (covered) and note the corresponding value (red ellipse) if not zero. Mostly (about 90%) are left and right equal i.e. the left and right lines are aligned at the same number.

How to change a value?

Cyan aligned with black

Magenta aligned with black

:Anapurna H3200i LED Advanced Operator Manual (v1.0)

13 Press button [Calib. Table] on the 'Horizontal Floating Pattern' pop-up.

14 Select the Mode Selection checkbox for the corresponding resolution [A].

Warning:
Be sure that you have selected the correct resolution mode [A] before you start checking the printed pattern.

15 Add or subtract the observed value to/from the shown value for each color in the Horizontal part [B] of the calibration table.
EXAMPLE:
Current value of cyan is 5. The lines are in line for the value +1. New value for cyan is: 5 +1 = 6.
Current value of magenta is -2. The lines are in line for the value -1. New value for magenta is: -2 -1 = -3

Color	Current value	Aligned value on print	New value to enter
Cyan	5	+1	6
Magenta	-2	-1	-3

7.5.5 Bidirectional Calibration

The Bidirectional calibration print pattern checks inkjet timing between all of the print heads in bi-directional printing mode.

Each jet has a timing parameter in the software that controls its dropping individually, so printing a pattern that uses all jets on all heads will directly show any jets whose timing is off.

Similar to the horizontal calibration, blocks of three lines are printed per color, but without a black line. This pattern is printed bi-directionally. When the timing is correct lines should lie on top of one another exactly.

Sixteen rows of blocks are printed, two for each color plus the four white heads. These rows of blocks are repeated 41 times with an offset timing ranging from -20 to +20 where zero ('0') is the median. If the timing for all jets were perfect the colored lines would lie exactly on each other at the zero position. To know the offset to apply find the lines that exactly align for each color, note the value of the block (top/bottom row of numbers) and add or subtract the observed value to/from the shown value for each color in the Bidirectional part of the calibration table.

Procedure

1. Make sure the system is in an operational state.
2. Load some media.
3. Turn on the vacuum of the vacuum table.
4. Set the media thickness (see 7.1.1).
5. On the control screen: set the left margin to start printing between the 2 red arrows (triangles).
   Note: Left Margin value can be read on the ruler of the vacuum table.
6. Set UV Mode to Both.
7. Set the appropriate Carriage Speed (5 or 3).

8. Press button [Bidirectional] to open the pop-up 'Bidirectional Floating Pattern'.
9. Print **one after another** the following 4 "Floating Patterns" with the different resolutions and speeds of the Agfa quality print modes used from Asanti (see also the images on next page):

   A. Print with carriage speed **CS5**: Bidirectional **Quality 720 DPI**
   B. Print with carriage speed **CS5**: Bidirectional **Normal 540 DPI**
   C. Print with carriage speed **CS5**: Bidirectional **Normal 720 DPI**
   D. Print with carriage speed **CS3**: Bidirectional **Quality 720 DPI**

   Remark:
   CS3 is preferred when printing High Quality or High Definition white text.

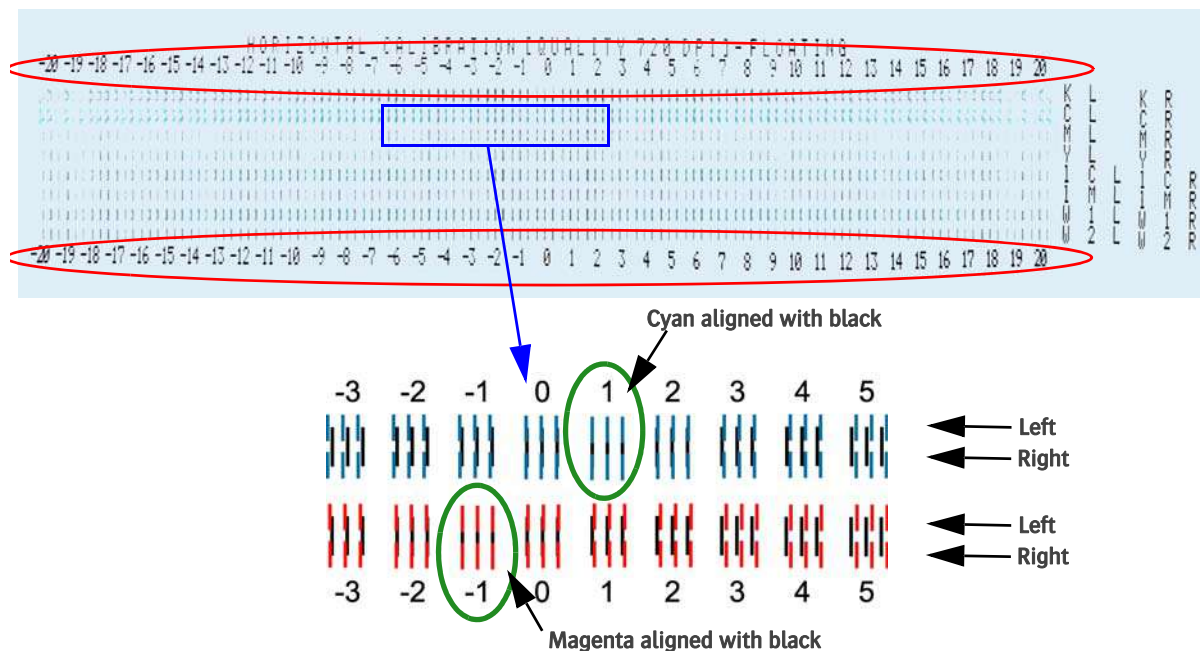   ⚠️ **_Before printing these files:_**
   The correct Carriage Speed has to be put in before opening the Bidirectional Menu.
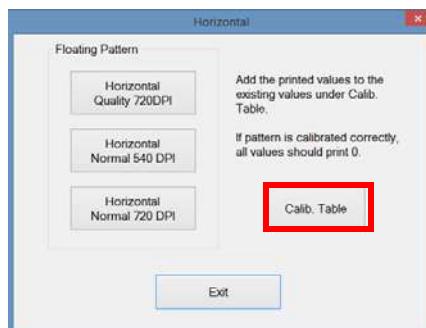   Write down on the test-print which Carriage Speed has been used!

10 Repeat steps 7 till 9 to print the 4 different resolutions and speeds.

11 After the shuttle has returned to its home position, analyze each printed pattern with a magnifying glass.

12 Locate per color the lines where black and color (e.g. cyan and magenta) are exactly aligned (covered) and note the corresponding value (red ellipse) if not zero. Mostly (about 90%) are left and right equal i.e. the left and right lines are aligned at the same number.

How to change a value?

Cyan lines aligned

Left
Right
Left
Right

Magenta lines aligned
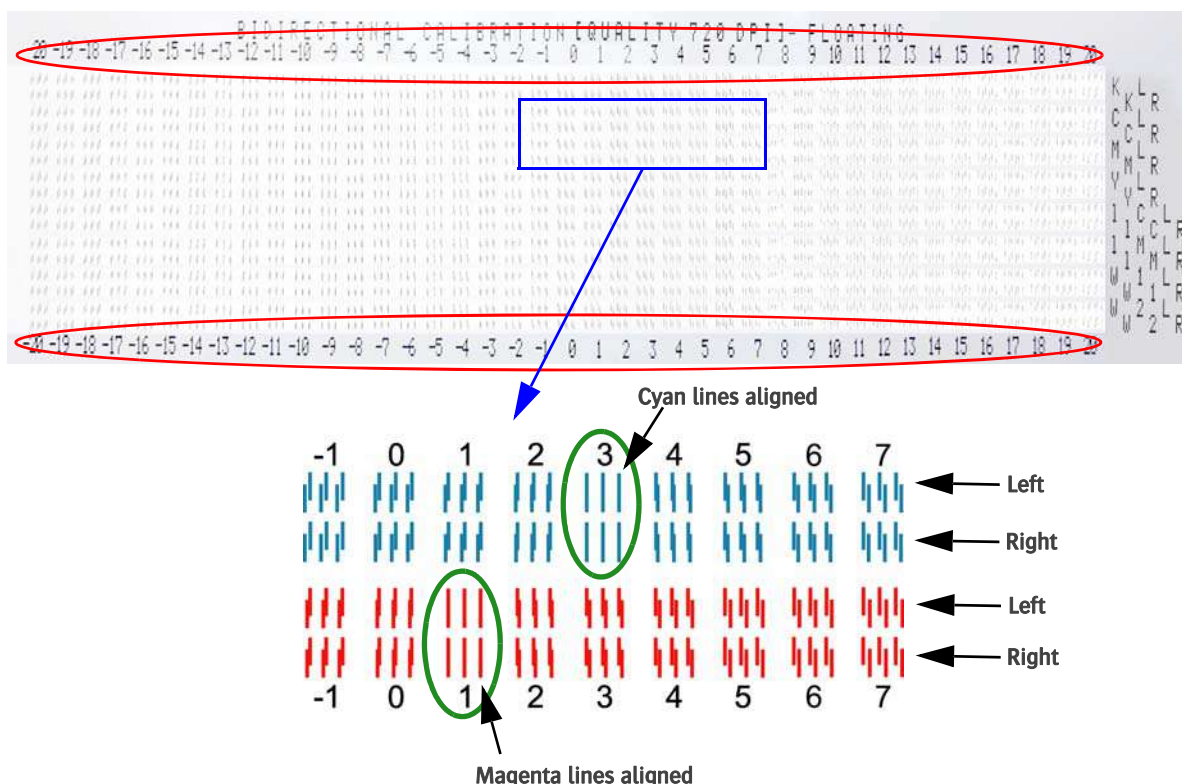
13 Press button [Calib. Table] on the 'Bidirectional Floating Pattern' pop-up.
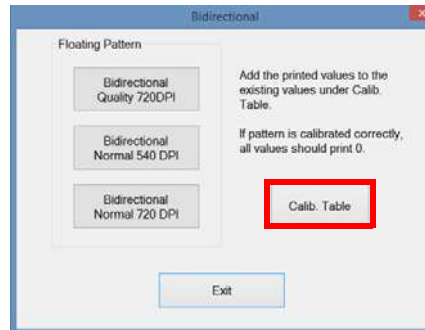
14 Select the Mode Selection checkbox for the corresponding resolution [A].

Warning:
Be sure that you have selected the correct resolution mode [A] before you start checking the printed pattern.

15 Add or subtract the observed value to/from the shown value for each color in the Bidirectional part [B] of the calibration table.
EXAMPLE:
Current value of cyan is 3. The lines are in line for the value +3. New value for cyan is: 3 +3 = 6.
Current value of magenta is 1. The lines are in line for the value +1. New value for magenta is: 1 +1 = 2

Color	Current value	Aligned value on print	New value to enter
Cyan	3	+3	6
Magenta	1	+1	2

7.5.6 Feed calibration

The feed calibration adjusts the advancement of the media transport to ensure that rows of dots are perfectly spaced in the feed direction.

Remark:

Extreme settings of the vacuum on the belt have influence on the FEEDcorr parameter.

Procedure

1 Make sure the system is in an operational state.
2 Load some media.
3 Turn on the vacuum of the vacuum table.
4 Set the media thickness (see 7.1.1).
5 On the control screen: set the left margin to start printing between the 2 red arrows (triangles).
   Note: Left Margin value can be read on the ruler of the vacuum table.
6 Set UV Mode to Both.

7 Press button [Feed] to open the 'Feed Calibration Table'.

8 Select pass mode 8P (8 passes gives sufficient accuracy because it is in the area of the higher quality modes). Optionally you can choose to print all passes one after another.

9 Print the Feed test 8P.
10 Use the 8x eye-loop to interpret the test chart.
   For each color the lines should be aligned.
   The most rear printed (the fourth line) is the most accurate. Judge this line.
11 Edit the found result in the corresponding table:

12 Check the Highlight box, this will highlight all the used feed parameters for that specific pass mode.
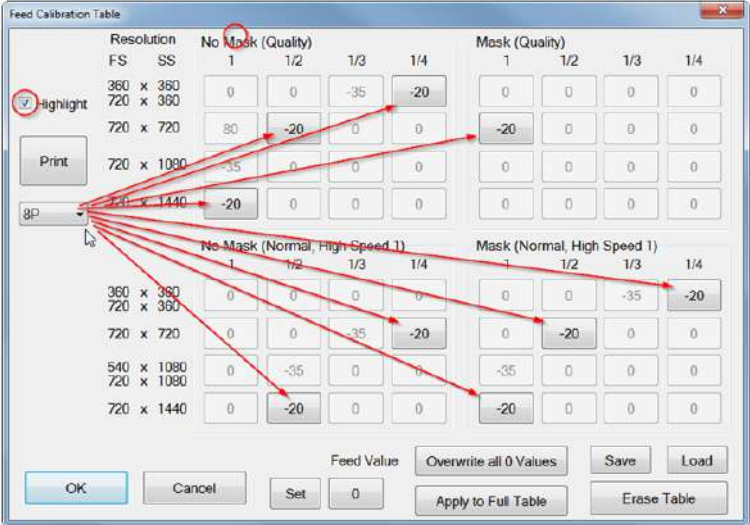
How to change a value?

13 Under the Feed button enter the new feed value, a new window opens to edit the new value and click [OK].
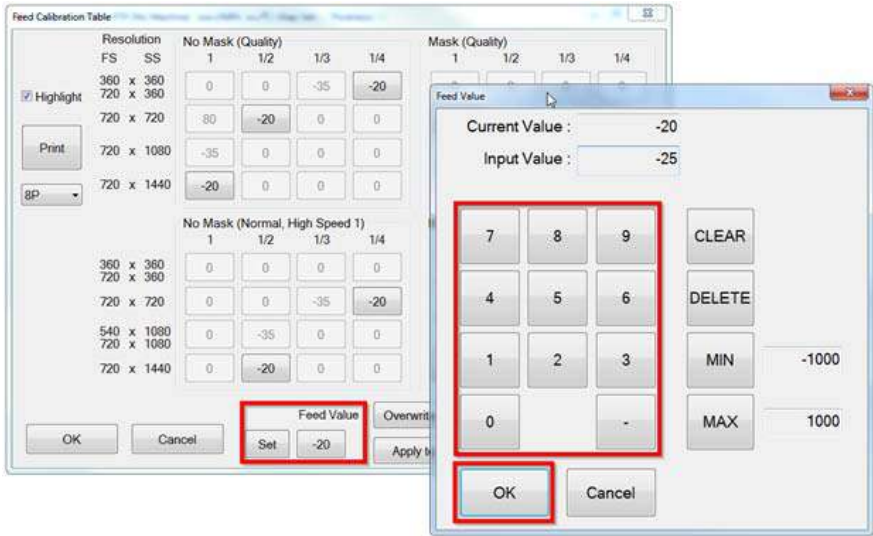
14 Click [Set] to apply this value to the highlighted feed parameters for this specific pass mode.
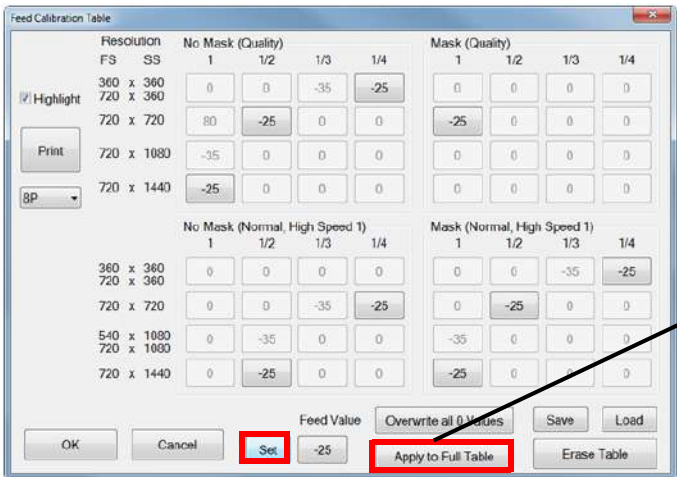
Note:
If "Apply to Full Table" is selected, all values in all print modes (1P, 2P, 3P, 4P, 6P, 8P) will be overwritten with the parameter which is currently selected on the "Feed". Normally the values are very close to each other (1 unit = 1µm correction.
These settings become a reference setting. During printing of normal customer jobs, it is possible that the feed needs to be adjusted on the fly. This is perfectly normal.

15 If necessary: fine adjust the calibration on the fly during the printing process.

Feed not correctly calibrated

When the feed control is not correctly calibrated, the printed result will have dark or light lines between the passes of the print head. This indicates a problem with the distance the media is advanced for each printing pass.
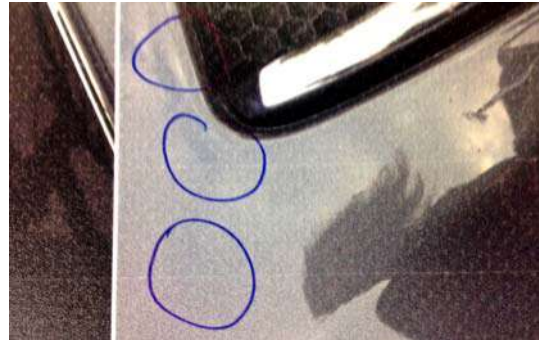
Examples of feed calibration

Feed calibration is done to ensure that multi-pass printing gives correct results. The printed patterns are done with all heads as each is adjusted individually. The following image shows the difference between a too big feed and a too small feed.

Feed too small >> increase value

Feed with a correct alignment

Feed too big >> decrease value
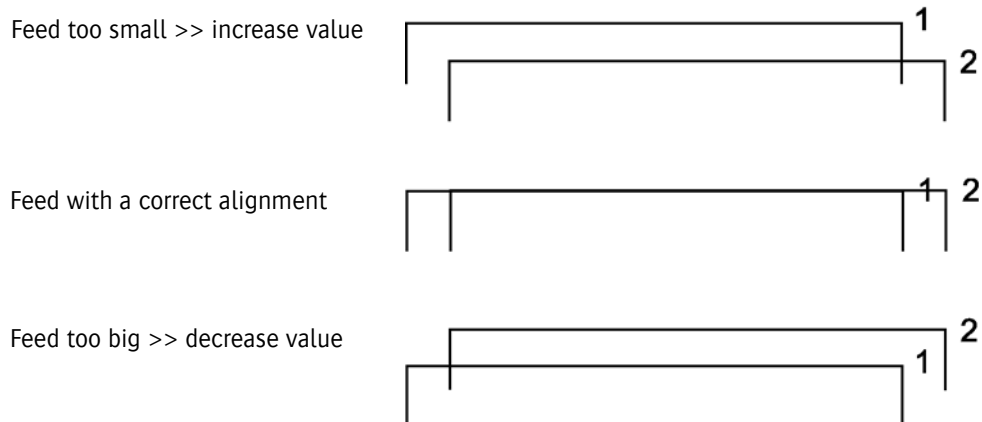
7.6 White ink circuit

7.6.1 Automatic filling of the white ink circuit with storage flush or ink

An independent processor operates the white ink circuit. It is programmed with an automated procedure for filling the circuit with either ink or storage flush.

This process is triggered by operating the white vacuum control switch [1] on the front of the shuttle along with the selector switch [2] at the back of the shuttle.

Procedure

> **Note:**
> Before starting this procedure, fill the storage flush and/or white ink until the green LED on the ink door illuminates.

1 On the control screen: press button [Home Cover] to open the home cover.
2 Switch OFF the White Ink Vacuum using the switch on front of the shuttle [1].
3 At the back of the shuttle open the cover and put the switch [2] on the White Ink Controller PCB in the required opposite position. While the vacuum switch white is off, the position of the switch on the PCB needs to be changed (only once) to activate the automatic cycle.
   Left position – "S" → fill the circuit with storage flush
   Right Position – "I" → fill the circuit with Ink
4 The automatic replacement cycle starts.
5 During the cycle a regular beeping signal will be heard and the purge button [3] will illuminate.
6 The cycle lasts about 20 minutes. The blue lamp in the purge button will go out when the cycle has ended successfully.

> If the purge button LED lamp [3] starts to blink at the end of the cycle, the cycle was not finished in time and needs help! Continue with step 7, 8 ....12.

7 Press the purge button for 3 seconds.
8 Wait 3 minutes and check that the purge LED lamp [3] has gone out. When the LED [3] goes out (beep signal continues), the automatic cycle is finished.
9 If not, repeat the manual purge (max. 5 times) until the automatic cycle continues.
10 If the problem persists ask a certified technician for help, or contact your local Agfa representative.
11 If the problem is solved, switch ON the White Ink vacuum [1] to stop the beep signal and to confirm the end of the automatic cycle.
12 The replacement cycle is complete.
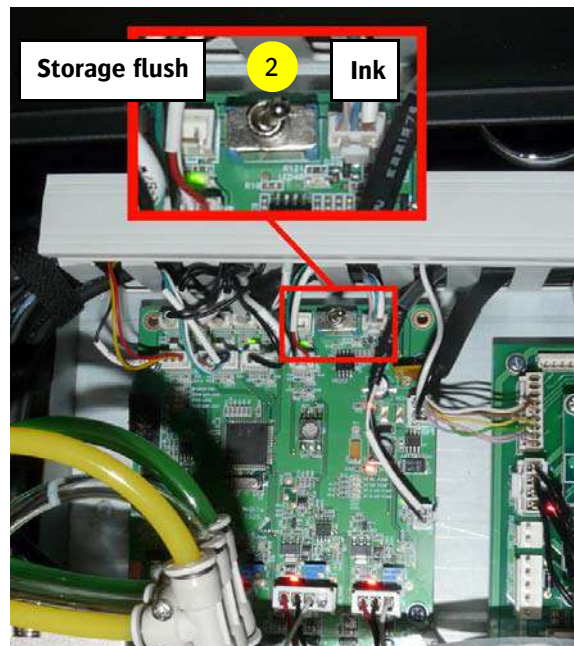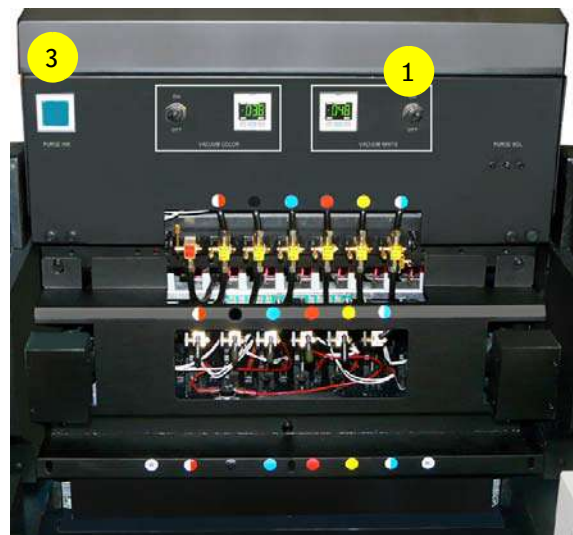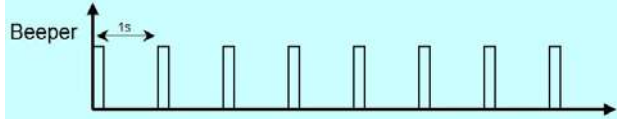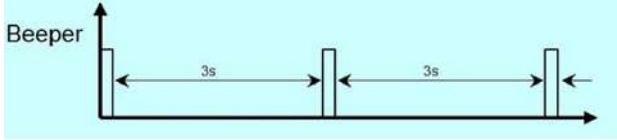
Switch at back of shuttle

7.6.2   Improved auditive alarm indication

The following signal diagrams are timelines that show activity of the white ink circulation PCB (circuit board at the back of the shuttle) and blue LED of the purge button.

The White Ink Circulation Controller has an audible signal that has 4 states:

State	Meaning
1: No sound	No alarm and no automatic cycle is running
2: Short beep 1x every second in combination with a permanent shining blue "purge button LED lamp".	An automatic cycle is running.
3: Short beep 5x per second repeated every 60 seconds in combination with a synchronized blue "purge button LED lamp".	An alarm is active.
4: Short beep every 3 seconds. The blue "purge button LED lamp" is off.	One or both vacuum switches on the shuttle are switched off.

7.6.3 Improved visual alarm indication

Signals during automatic cycle

The automatic cycles to switch from white ink to storage flush and vice versa is activated using the switch on the White Ink Controller PCB at the back of the shuttle.

1 Switch off the white vacuum (the white ink head(s) will drip).
2 Set the switch [1] on the White Ink Controller PCB for Solution (storage flush) or Ink.
3 The Beeper signal on the PCB starts and indicates together with the blue purge button LED lamp the status of the automatic cycle as shown in the figures below.
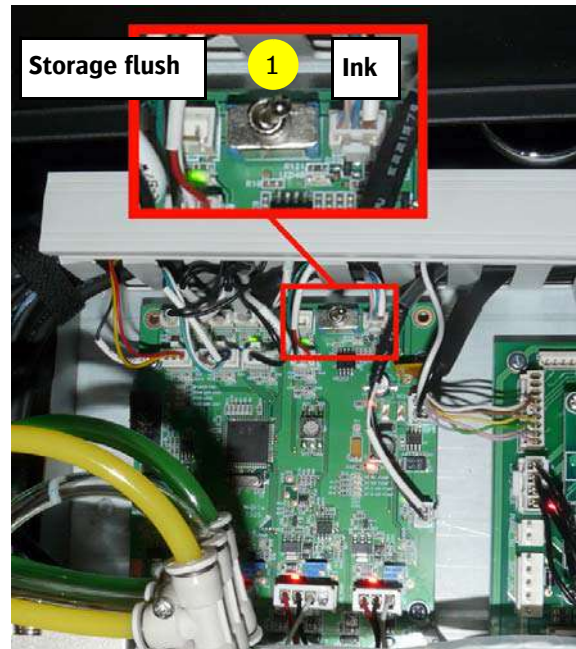
Switch on the white ink controller PCB at the back of shuttle

If the automatic cycle is running:

Short beep 1x every second in combination with a permanently illuminated blue "purge button LED lamp".
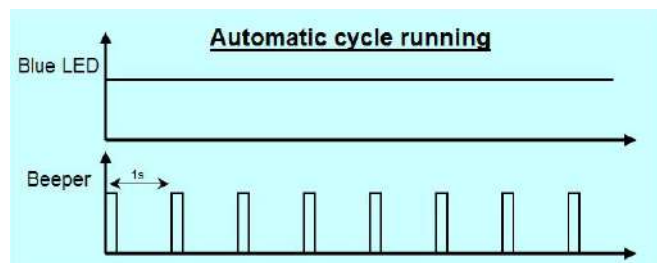
If the controller can't finish the automatic cycle:

Short beep 1x every second in combination with a blinking (on and off every two seconds) "blue purge button LED lamp". The operator should push the Purge Button for 3 seconds and then wait for at least 3 minutes.

After 3 minutes, check the status to see if the blue LED lamp stops blinking. (Repeat if necessary)
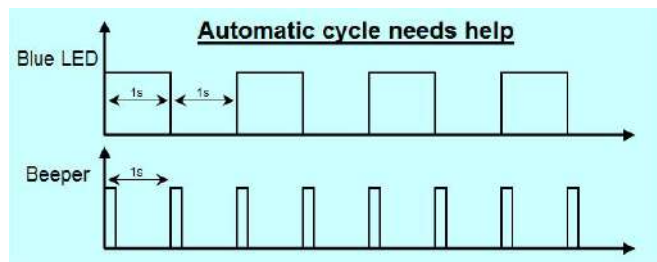
When the Blue LED lamp is no longer blinking the automatic cycle is finished.

Switching back the white vacuum switch will stop the beeper.
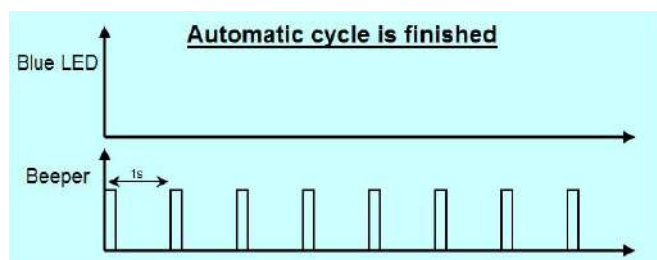
7.6.4   Alarm warning

When something is wrong with the white ink circulation or vacuum systems during normal operation (no automatic cycle is running), an alarm will be signaled. The alarm signal is indicated by the purge button flashing five times and the beeper sounding five times along with it, repeated every minute until it is cleared manually.
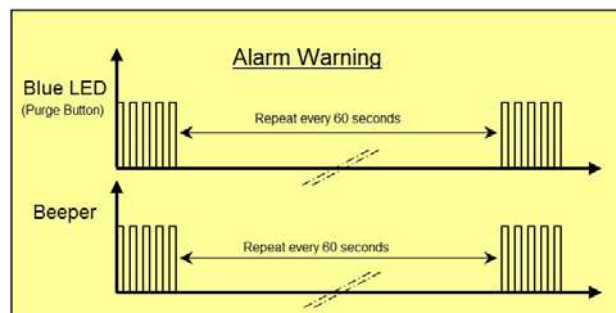
Reset Alarm

To reset an alarm, push and hold the blue purge button for at least 2 seconds, until the "blue purge LED lamp starts blinking" with both vacuum switches set on.

If the cause of the alarm still remains, then the alarm indication will occur again after a while.
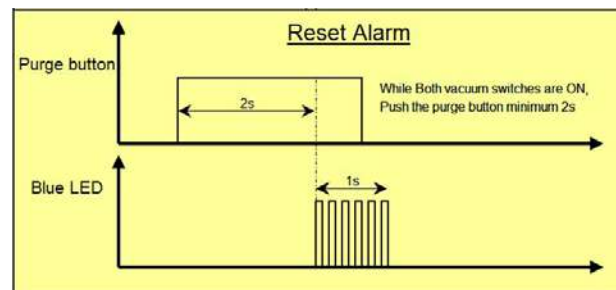
7.6.5   Activate the alarm reading

The system can generate up to 7 different alarms.

The alarm indication will not interrupt the functions of the system. It is only an indication for the certified service engineer, who should be investigating the alarm.

The status of the system (alarm read out) can always be checked by quickly pressing the purge button, while both vacuum switches are on.

If there is no alarm condition, the purge button lamp will blink fast for 3 seconds.
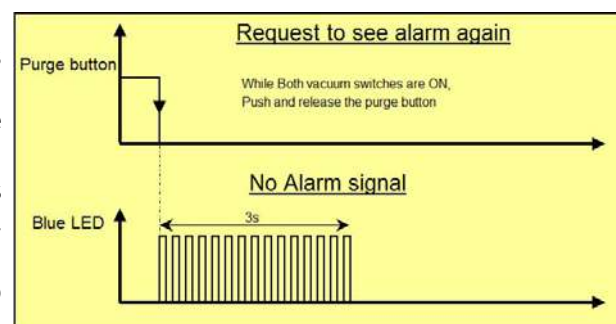
If an alarm condition exists, it will be indicated as shown in the example on the right side.
In this alarm example the circulation pump from W1 is too slow.
Possible causes: bad pump, ink overfilling.

The alarm status can be questioned and re-questioned again until it is manually reset.

If the problem is not solved, the alarm will be activated again shortly after reset.
See the section above on how to reset an alarm.
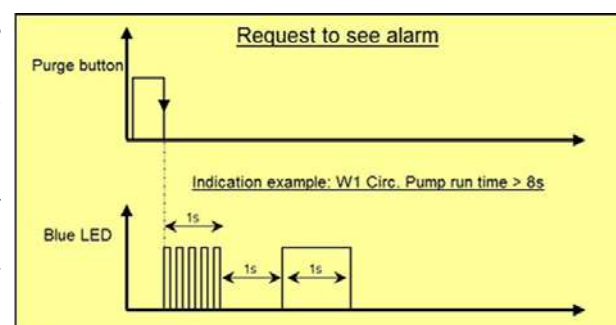
7.6.6 Alarm indications and meaning

The blue LED lamp alarm in the purge button only appears once, every time it is checked by pressing the purge button shortly (with vacuum switches on).

Number of pulses	Meaning
1 pulse	W1 Circulation pump runtime error (>8s)
2 pulses	W2 Circulation pump runtime error (>8s)
3 pulses	Power Supply Voltage is too low (<20V)
4 pulses	W1 circulation not active (less than 1 "pump activation signal" /120s)
5 pulses	W2 circulation not active (less than 1 "pump activation signal" /120s)
6 pulses	Vacuum pump C runtime >70s (while C vac. switch is on)
7 pulses	Vacuum pump W runtime >70s (while W vac. switch is on)
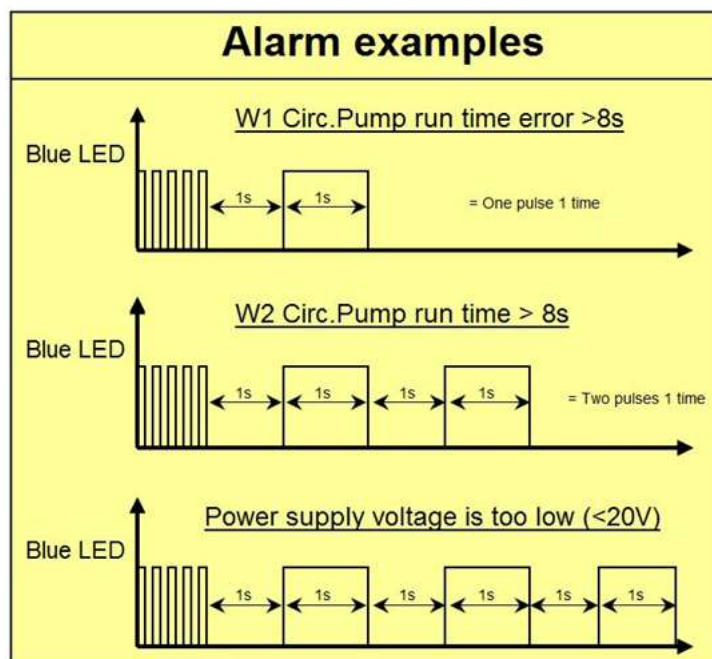
7.6.7 Purge time limitation

When both vacuum switches are off and the purge button is pushed: pressure is applied for 3 seconds maximum.
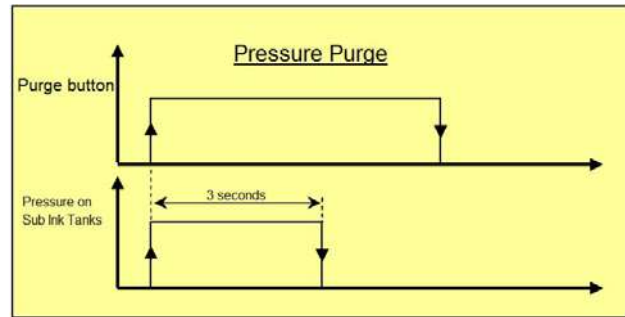
7.6.8 Vacuum switch off signal

When the color or white vacuum switch is switched off, a short beep will be repeated every 3 seconds to make the operator aware.
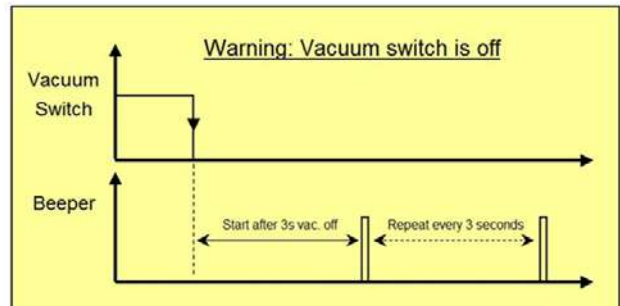
8 Printing

Follow the steps below to print an image.

1. Perform a prime check, see section 7.2.1.
2. Remove the media used for the prime check.
3. Load the required media, see chapter 6.
4. Switch on the vacuum on the front panel.
5. Close the unused vacuum compartments, see sections 6.1 and 6.2.
6. Set the Head Gap, see section 7.1.
7. Go to the print screen on the iGUI touch screen control panel..
8. Select the desired color configuration [1].
9. Press button "Open" [2] to load the image (x.RTL) that must be printed.
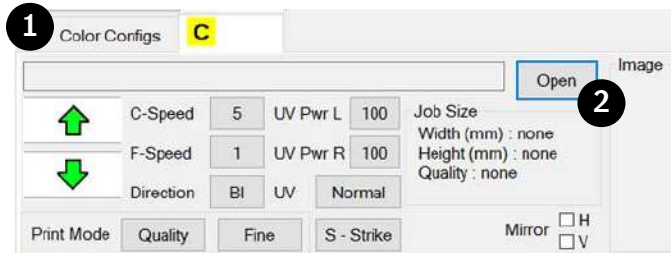
10. Check if the correct image is loaded.

Info:

All information/settings concerning the best quality for the image are integrated in the RTL file.
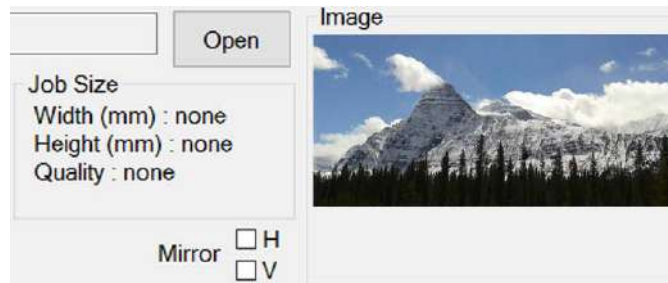
11. Set the margins, see 4.6.4.
12. Press "Start" button to start printing.
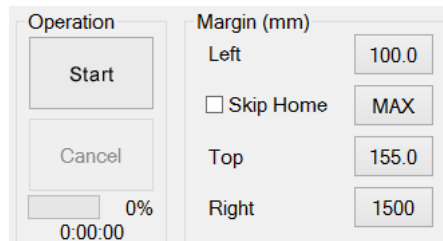
Info:

During printing the "Start" button changes into a "Pause" button.
During printing the "Cancel" button becomes active to cancel the print job.
The progress of the print job is shown in the percentage bar.

:Anapurna H3200i LED Advanced Operator Manual (v1.0)
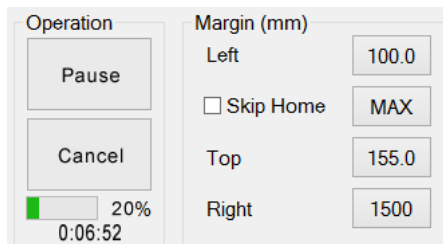
8.1 Configurations overview

Anapurna H3200i LED color configs

Print Mode	Masking Mode	Dir	(2P res) 720x360dpi	(4P res) 720x720 dpi	(3P res) 540x1080dpi	(8P res) 720x1440 dpi	Color Config	UV Setup	CS	FS
Quality	None	Bi	Draft - 129 m²/h					90 Both	5	5
Normal	None	Bi		Exp1 - 87 m²/h*	Exp2 - 77 m²/h*			90 Both	5	5
Quality	None	Bi		Prod1 - 64 m²/h*	Prod2 - 39 m²/h*			60 Both	5	3
Normal	Gradient	Bi						60 Both	5	3
Quality	Gradient	Bi		Std1 - 34 m²/h*	Std2 - 23 m²/h*			40 Both	5	3
Normal	Fine Mask	Uni						40 Both	5	1
Quality	Fine Mask	Uni		HQ1 - 19 m²/h*				40 Both	5	1
Quality	Gradient	Bi				HQ2 - 17 m²/h*		40 Both	5	1
Quality	Fine Mask	Uni				HQ3 - 9 m²/h*		40 Both	5	1

Anapurna H3200i LED High Density configs

Print Mode	Masking Mode	Dir	(2P res) 720x360dpi	(4P res) 720x720 dpi	(3P res) 540x1080dpi	(8P res) 720x1440 dpi	Color Config	UV Setup	CS	FS
Quality	Fine Mask	Uni		High Dens - 9 m²/h*			C1+C2	40 Both	5	1
Quality	Gradient	Bi				High Dens - 9 m²/h*	C1+C2	40 Both	5	1
Quality	ient - Fine l	Uni				High Dens - 5 m²/h*	C1+C2	40 Both	5	1

Anapurna H3200i LED White configs

Print Mode	Masking Mode	Dir	(2P res) 720x360dpi	(4P res) 720x720 dpi	(3P res) 540x1080dpi	(8P res) 720x1440 dpi	Color Config	UV Setup	CS	FS
Quality	FM/GR	Bi		Std W - 17 m²/h			C+W/W+C	40 Both	5	1
Quality	FM/GR	Bi		Std W - 11 m²/h			C+W+C	40 Both	5	1
Quality	FM/GR	Uni		HQ W1 - 9 m²/h			C+W/W+C	40 Both	5	1
Quality	FM/GR	Uni		HQ W1 - 6 m²/h			C+W+C	40 Both	5	1
Quality	Gradient	Bi				HQ W2 - 9 m²/h	C+W/W+C	40 Both	5	1
Quality	Gradient	Bi				HQ W2 - 6 m²/h	C+W+C	40 Both	5	1
Quality	Fine Mask	Uni				HQ W3 - 5 m²/h	C+W/W+C	40 Both	5	1
Quality	Fine Mask	Uni				HQ W3 - 3 m²/h	C+W+C	40 Both	5	1

Note: CS3 for HQ2 and Hdef WHITE when white text onl 75% white limited opacity   75% white limited opacity   50% white full opacity
* post-white supported
speed measured at 1 m depth incl. Post-cure passes =2

Info:
If white text is difficult to read, the sharpness can be improved by carriage speed 3.

9 Curing procedure

9.1 Set UV light intensity

The effect of ultraviolet light on the ink curing process is the most important factor in determining the quality and appearance of the printed results. The amount of UV light available to cure the ink is related to the light's intensity and the duration of exposure. The shuttle speed setting and the number of passes over the media indirectly control the exposure time. The operator has control over the intensity of the UV light and the amount of time that the printed ink is exposed to it.

The factors to consider when setting up for a print run are:

- The heat sensitivity of the media.
- The adhesion properties of the inks on the media.
- The power output of the UV LED units.

In general the more UV energy the ink absorbs the better it adheres to the media. But too much exposure brings a risk of changes to the color of the pigments in the ink. The intensity and exposure controls operate to mitigate this risk.

A common issue is the glossiness of the cured ink, especially on large areas of solid color, which indicates the ink was not cured well enough, due to:

- UV power settings being too low.
- The UV LED units may not be giving the required intensity due to contaminated glass plates.
- The printing mode might not be right for the image and/or the media.

Increasing the number of passes, adjusting the light intensity, and switching from Bi-directional to unidirectional printing mode may help.

Images that appear too matte may indicate the ink was over-cured due to:

- UV power settings may be set too high.

Change the UV to a lower power setting.

Some media may buckle or shrink when exposed to intense light and/or heat.

- The media may develop ripples or shrink lines.
- Ink adhesion may be a problem.

Adjustments may be made to minimize exposure and to provide time to cool off between exposures. Position the media in the middle of the table so that the shuttle's time over the media is even over its entire width. Also adjust the shuttle's travel parameters so that extra cool-down time is available at the end of each printing pass. This is done using the Right Margin and Home Skip parameters in the Printing panel.

Using a printing mode that uses fewer passes over the media may also help. Increasing the head gap may be done, but will then require re-calibration before continuing to print.

9.2   UV Controls in the Printing Panel

Direct control over the ultraviolet light exposure and the curing process is normally not necessary. The UV light intensity is set according to the quality mode when a print job is loaded but in some cases the operator may need to intervene.

The intensity levels for the left and right LED units are independently adjustable between 20 (minimum required UV power) and 100 (maximum available UV power).

The UV Mode button shows the UV Mode selector pop-up. The modes are explained in the following section.
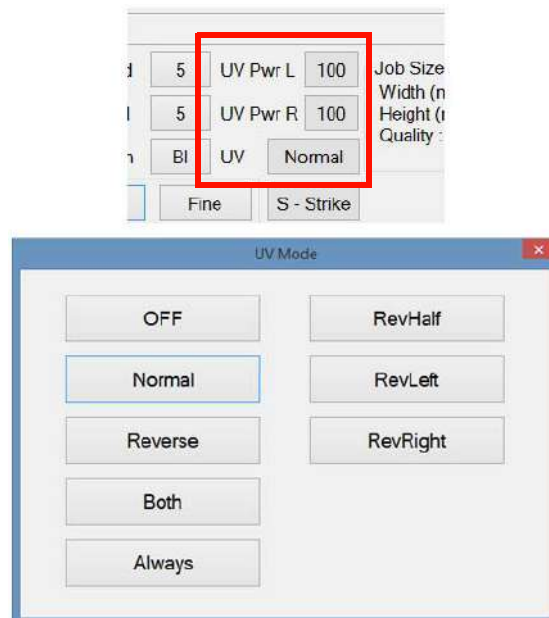
9.2.1   LED Combinations of the UV Modes

In Unidirectional printing mode the shuttle starts at the Home position moving to the other end, then returns without printing to start over. In bi-directional mode printing is also done as the shuttle returns to Home
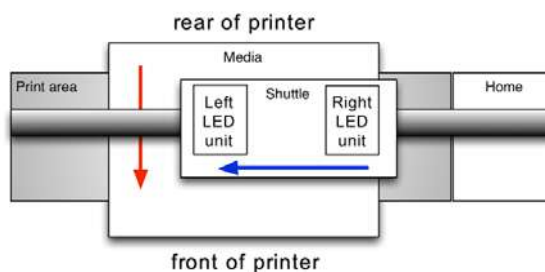
9.2.1.1   ON/OFF control.

In the following diagrams the UV LED units are shown ON or OFF by these symbols:

Blue block: UV-LED unit is on

White block: UV-LED unit is off
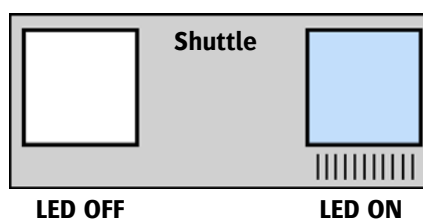
The LED units are referred to as leading or trailing the shuttle, to make clear that the media is being exposed to ultraviolet before or after the print head passes in the following descriptions.

9.2.1.2 Both (recommended)

Both leading and trailing LED's will be on during each pass to maximize the UV exposure. Both LED's stay on in both directions in both printing modes.

This improves adhesion of the ink on more difficult surfaces.

This UV mode is available in both printing modes and is suitable for most printing jobs.

Bidirectional

Left LED	Shuttle Print 1 curing 1	Right LED
IIIIIIIIII		IIIIIIIIII

Pass 1 ← **Printing**

Left LED	Shuttle Print 2 curing 2	Right LED
IIIIIIIIII		IIIIIIIIII

Pass 2 → **Printing**
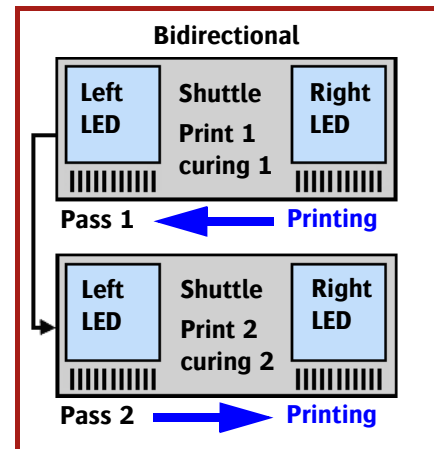
9.2.1.3 Normal (optional)

The normal mode exposes the fresh ink to UV from the trailing LED unit.

In unidirectional (horizontal) mode both LED's are OFF on return.

Unidirectional (Horizontal)

Left LED	Shuttle Print 1 curing 1	Right LED
		IIIIIIIIII

Pass 1 ← **Printing**

Left LED	Shuttle	Right LED

Pass 2 → **Return**

Bidirectional

Left LED	Shuttle Print 1 curing 1	Right LED
		IIIIIIIIII

Pass 1 ← **Printing**

Left LED	Shuttle Print 2 curing 2	Right LED
IIIIIIIIII		
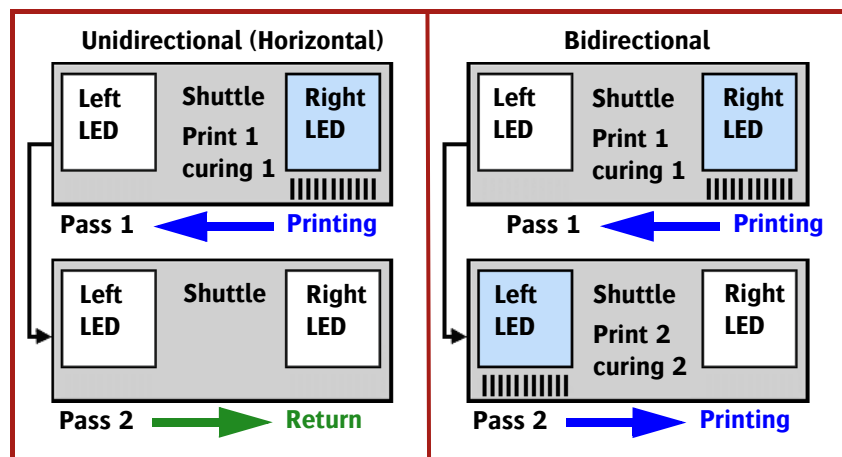
Pass 2 → **Printing**

9.2.1.4 Reverse (optional)

In Reverse mode only the "leading" LED will be used, but on the pass after a printing pass.

The delay in curing allows the ink dots to spread further before they are cured by the UV.

Recommended in unidirectional mode for a smooth glossy ink surface.

Unidirectional (Horizontal)

Left LED	Shuttle print 1	Right LED

Pass 1 ← **Printing**

Left LED	Shuttle curing 1	Right LED ||||||||||

Pass 2 → **Return**

Left LED	Shuttle print 2	Right LED

Pass 3 ← **Printing**

Left LED	Shuttle curing 2	Right LED ||||||||||

Pass 4 → **Return**

Bidirectional

Left LED	Shuttle print 1	Right LED

Pass 1 ← **Printing**

Left LED	Shuttle curing 1 print 2	Right LED ||||||||||

Pass 2 → **Printing**

Left LED ||||||||||	Shuttle curing 2 print 3	Right LED

Pass 3 ← **Printing**

Left LED	Shuttle curing 3 print 4	Right LED ||||||||||
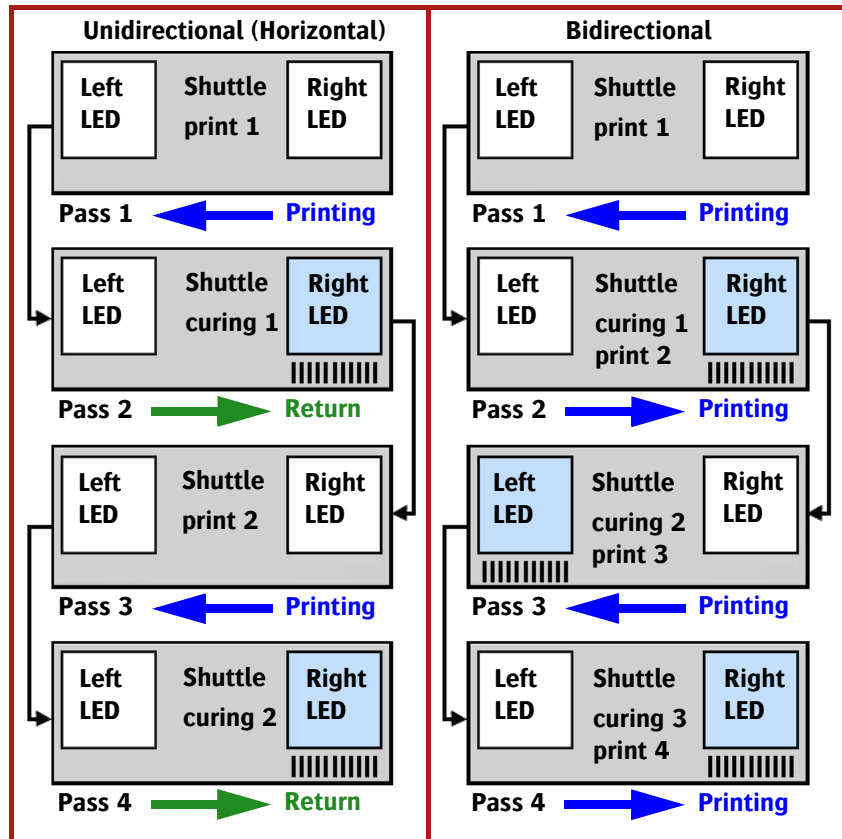
Pass 4 → **Printing**

9.2.1.5 Reverse Half (RevHalf) (optional)

Only the "leading" LED will be used, but on the following printing pass, or after a delay of two passes. During the return and following printing passes the LED's remain off. This increased delay in curing allows the printed dots to spread to their maximum extent before curing.

Recommended in unidirectional mode for a smooth glossy ink surface.

Unidirectional (Horizontal)

Left LED	Shuttle print 1	Right LED

Pass 1 ← **Printing**

Left LED	Shuttle	Right LED

Pass 2 → **Return**

Left LED ||||||||||	Shuttle curing 1 print 2	Right LED

Pass 3 ← **Printing**

Left LED	Shuttle	Right LED

Pass 4 → **Return**

Bidirectional

Left LED	Shuttle print 1	Right LED

Pass 1 ← **Printing**

Left LED	Shuttle print 2	Right LED

Pass 2 → **Printing**

Left LED ||||||||||	Shuttle curing 1 print 3	Right LED

Pass 3 ← **Printing**

Left LED	Shuttle curing 2 print 4	Right LED ||||||||||

Pass 4 → **Printing**

9.2.1.6 Reverse Left (RevLeft) (optional)

In Reverse LEFT mode only the "leading" LED will be used.

The delay in curing allows the ink dots to spread further before they are cured by the UV.

Recommended in unidirectional mode for a smooth glossy ink surface.

Unidirectional (Horizontal)			
Left LED ‖‖‖‖‖‖‖‖‖	**Shuttle** Print 1 curing 1	**Right LED**	
Pass 1	← **Printing**		
Left LED	**Shuttle**	**Right LED**	
Pass 2	→ **Return**		

Bidirectional			
Left LED ‖‖‖‖‖‖‖‖‖	**Shuttle** Print 1 curing 1	**Right LED**	
Pass 1	← **Printing**		
Left LED	**Shuttle** Print 2 curing 2	**Right LED**	
Pass 2	→ **Printing**		
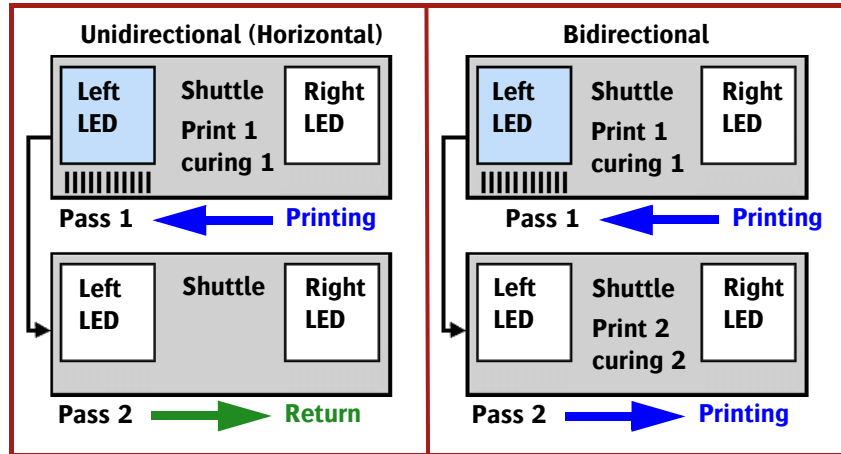
9.2.1.7 Reverse Right (RevRight) (optional)

In Reverse RIGHT mode only the "trailing" LED will be used.

The delay in curing allows the ink dots to spread further before they are cured by the UV.

Recommended in unidirectional mode for a smooth glossy ink surface.

Unidirectional (Horizontal)			
Left LED	**Shuttle** Print 1 curing 1	**Right LED**	
Pass 1	← **Printing**		
Left LED	**Shuttle**	**Right LED** ‖‖‖‖‖‖‖‖‖	
Pass 2	→ **Return**		

Bidirectional			
Left LED	**Shuttle** Print 1 curing 1	**Right LED**	
Pass 1	← **Printing**		
Left LED	**Shuttle** Print 2 curing 2	**Right LED** ‖‖‖‖‖‖‖‖‖	
Pass 2	→ **Printing**		
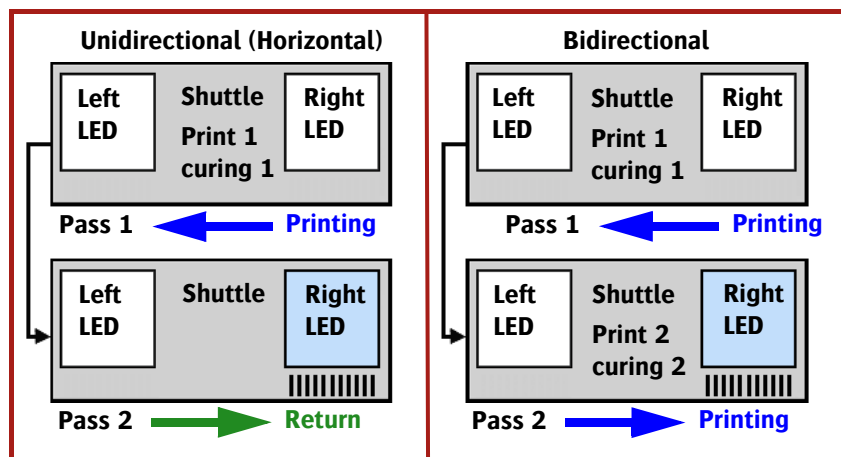
10 Maintenance procedure

10.1 Maintenance Schedule

The cleaning tasks of these schedules are described in the rest of this section.

10.1.1 Daily Maintenance

A general dusting and cleaning of the working surfaces should be done every day.

- Clean the Home Area (see 10.3.1).
- Perform a prime (nozzle) check and clean the heads if needed (see 7.2.2).
- Check and empty the Waste Ink tank, if necessary (see 10.5.1).

10.1.2 Weekly Maintenance

Perform all of the daily maintenance tasks and these additional ones:

- Clean the base plate (see to 10.3.4).
- Clean the glasses of the UV LED units (see 10.3.5).
- Check and drain the sub-air tanks (see 10.5.2).
- Rinse the storage flush supply (see 10.3.6).
- Replace the Home Tray Filter 1 (see 10.6.2).

10.1.3 Monthly Maintenance

Perform all of the weekly maintenance tasks and these additional ones:

- Clean the encoder strips (see 10.3.3).
- Replace the air filters on the main ink tanks (see 10.6.3).
- Replace the Home Tray Filter 2 (Fan Protection filter) (see 10.6.4).
- Inspect, and if necessary, clean the compressed air lines.
- Inspect, and if necessary, replace the filters in the compressed air lines.
- Inspect, and if necessary, clean the media transport belt.
- Inspect, and if necessary, replace the air filters.

10.1.4 Quarterly Maintenance

There are maintenance tasks needed every three months that may only be performed by a certified technician. Contact your service representative to setup a schedule.

10.1.5 Semi-annual Preventive Maintenance

There are maintenance tasks needed every six months that may only be performed by a certified technician. Contact your service representative to setup a schedule.

10.2 Maintenance section on the control screen
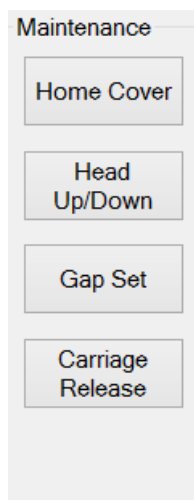
The maintenance section of the Control Tab has four buttons that control hardware features of the printer or give access to panels where maintenance tasks may be performed.

Home Cover: The Home Cover button opens or closes the cover over the ink tray at the Home Position of the shuttle.

Head Up/Down: The Head Up/Down button is used to raise the head to its maximum height or to lower it to the current setting of the Head Gap. Note that this is a toggle function; there is no way to manually set the height of the shuttle.

Gap Set: The Gap Set panel appears with the controls for adjusting the head gap clearance and media thickness settings, see section 7.1.

Carriage Release: The Carriage Release button unlocks the shuttle so it can be moved along the beam by hand. "Carriage" is a traditional term for the shuttle.

Warning:
Be very careful when you move the shuttle!
- Prevent damage and/or deformations.
- Do not damage the encoder strip!

Remark:
After button [Carriage Release] is pressed, pop-up screen "Carriage Release" appears. Press button [Home Check] to move the shuttle back to the home position.

102
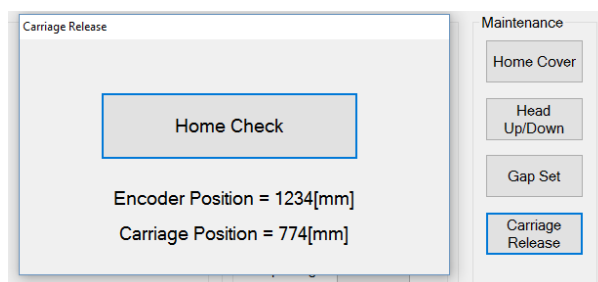
10.3 Cleaning

10.3.1 General Cleaning of the Printing Area

The shuttle and home area shall be polluted with ink stains during printing. Follow the procedure below to check and clean these parts.

* Use a moistened cloth for dusting and light cleaning.
* Use a lint free cloth wetted with isopropyl alcohol or storage flush to remove UV ink stains.

Warning:
Never use paint thinner, white spirit or petroleum distillate solvents to clean!

1   Check and clean the black areas of the shuttle.
2   On the control screen: press the button [Carriage Release] to disconnect shuttle's drive mechanism.
3   Move by hand the shuttle along the box beam as far as needed for cleaning tasks.
4   Check and clean the area surrounding the drip tray at the home position.
5   Check and clean the shuttle in the same way.

10.3.2 Print head cleaning wiper

Heads can become damaged (clogging/side-shooters) due to dust that enters the nozzle during maintenance of the head.

For this reason we advise the Kimberly-Clark Professional Kimtech Pure W4 for print head maintenance.

* CLEANING WIPER CL4 9"x9" 100 PC
* Order code: GS+600650.0

10.3.3 Cleaning the Encoder Strips

Warning:
Never use solvents nor cleaning products of any kind on the encoder strip!

The printer uses a positional sensor on top of the Box Beam to keep track of the position of the shuttle with very high precision. The shuttle carries a sensor that counts marks scribed on the strip to know its position. This strip is called an "encoder strip" because the distance along the bar is encoded in the marks that the sensor reads. If the strip gets dirty the position of the shuttle will be misread and cause imperfections in the printer's printed results.

1   Release the shuttle and move it to gain access the Encoder Strip.
2   Use compressed air to blow any dust from the encoder strip.
3   For more resistant stains take a clean, lint free cloth and wipe the strip gently from the right to the left (standing at the front of the printer).

10.3.4 Cleaning the Base Plate

The base plate can become contaminated with ink spray during printing (head gap > 1.3mm), or while cleaning (dripping or purging) and so will have to be cleaned.

1. On the control screen: press the button [Home Cover] to retract the cover over the drip tray.
2. On the control screen: Press the button [Head Up] to raise the shuttle.
3. Set all color ink valves to Closed position (see section 4.3.2).
4. Wet a lint free cloth with isopropyl alcohol or storage flush and use it to clean the black area of the base plate.
5. Keep the cloth as flat as possible to avoid contact with the nozzle plates.
6. Return all color ink valves to the Ink position
7. Once the base plate is clean, perform the procedure "Dripping the Heads" to flush any storage flush that might be in the jets out (see section 7.2.3).

⚠️ **Warning:**
When using isopropyl alcohol to clean the base plate do not allow any contact with the print heads. There is a risk of corrosion or blockage of the jet nozzles from anything but storage flush.

10.3.5 Cleaning the glasses of the UV LED units

⚠️ **Warning:**
- Be sure that the LED's are cooled down completely before starting this task!
- Wear nitrile gloves to avoid getting any uncured UV material on the skin.
- Before cleaning, check on the GUI that the safety curtains are activated or push the emergency button.

Tools needed
- Dry paper towels
- IPA pre-moistened wipe
- Nitrile gloves

1. Move the shuttle to the home position.
2. On the control screen: press button [home cover] to open the home cover.
3. On the control screen: press button [head up] to raise the shuttle to its highest position.
4. Wipe down the glass with an IPA pre-moistened wipe/towel.
5. Remove any remaining dust or debris left on the glass during the cleaning process using the pre-moistened IPA wipe.
6. If needed, use a dry towel to wipe down the light source.
7. When finished, press button [head down] to lower the shuttle.
8. On the control screen press button [home cover] to close the home cover.

⚠️ **Warning:**
Follow the procedure below if the glasses are extremely polluted with cured ink.

Cleaning extremely polluted glasses of the UV LED units

⚠️ **Warning:**
- Be sure that the LED's are cooled down completely before starting this task!
- Wear nitrile gloves to avoid getting any uncured UV material on the skin.
- Wear sharp resistant gloves when using the razor.
- If the razor needs to be replaced, dispose of the razor blade in a properly marked sharps container.
- Before cleaning, check on the GUI that the safety curtains are activated or push the emergency button.

Tools needed
- Dry paper towels
- Razor blade and handle
- 1000 grit, very fine, aluminum oxide abrasive pad
- Scissors
- IPA pre-moistened wipe
- Gloves: nitrile and sharp resistant (i.e. Kevlar)
- Sharps disposal container

1. Move the shuttle to the home position.
2. On the control screen: press button [Home Cover] to open the home cover.
3. On the control screen: press button [Head Up] to raise the shuttle to its highest position.
4. Wipe down the glass with a dry paper towel to remove any uncured UV material.
5. Carefully scrape large debits of the glass using the sharp edge of the razor.
6. Use the scissors to cut a small piece of abrasive material.
7. Scrub any remaining material from the glass that the razor blade could not remove, using the abrasive pad.

8   Remove any remaining dust or debris left on the glass during the cleaning process, using the pre-moistened IPA wipe.
9   Repeat steps 5 through 12 until the glass is clean if all contaminants.
10 If needed, use a dry towel to wipe down the light source.
11 When finished, press [Head Down] to lower the shuttle.
12 On the control screen: press button [Home Cover] to close the Home Cover.

10.3.6 Rinse the Storage Flush Supply

To keep the storage flush clean it is advisable to rinse the storage flush bar regularly.

Have a seal-able, plastic container ready for the waste storage flush.
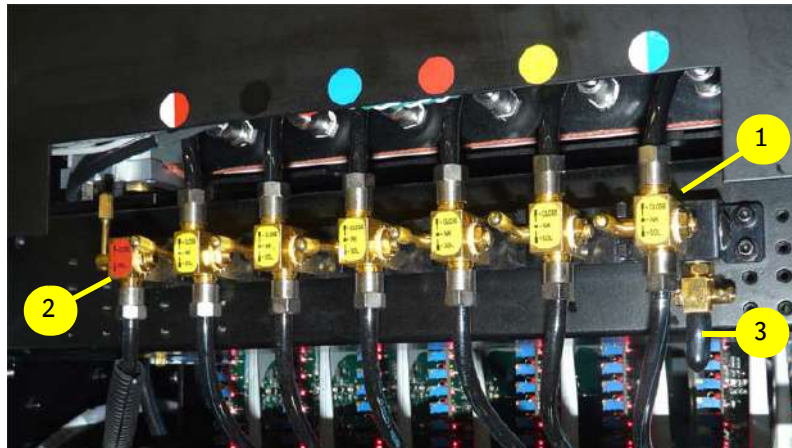
1   Move the shuttle to the home position.
2   On the control screen: press button [Home Cover] to open the home cover.
3   On the control screen: press button [Head Up] to raise the shuttle to its highest position.
4   Set the six color valves [1] to Ink position (see also section 4.3.2).
5   Set the storage flush valve [2] to position Open (see also section 4.3.2).
6   Locate the storage flush drain valve [3] at the right end of the valves.
7   Remove the rubber cap and attach a short length of clear plastic tubing to the drain valve.
8   Put the free end of the tube into the container.
9   Open and close the drain valve [3] until the storage flush flows out clear and readily. Leave the drain valve closed when done.
10 If the storage flush supply shows "empty", close the drain valve [3].
11 The sub-ink tank will start refilling automatically.
12 When the Empty indicator goes out continue the procedure.

13 Close the storage flush valve [2].
14 Remove the tube from the drain valve [3] and replace the rubber cap.
15 Leave all six color valves [1] in the "Ink" position
16 Set the storage flush valve [2] to "closed".
17 On the control screen: press [Head Down] to lower the shuttle.
18 On the control screen: press button [Home Cover] to close the Home Cover.

10.4 Refilling and bleeding

10.4.1 Refilling ink

- Only refill a tank if the indicator "Empty" appears.
- Refill a tank with 1 complete bottle of ink.

The ink supply drawer is located on the right side of the printer.

The large steel tank [1] at the left is for the White Ink, the 6 colors are to the right [2] with the storage flush tank [3] last on the right. The eight ink filters [4] are against the back wall of the drawer.

The Ink Refill Panel [5] has two indicator lights for each ink tank:

- When lit the Red indicator means low ink level (Empty).
- When lit the Green indicator means maximum ink level (Sufficient)

The ink tanks have a volume of three liters.

The "Manual Feeding" buttons bleed the ink filters on each tank.

When an "Empty" ink level indicator is ON a buzzer sounds and the iGUI software will not accept new print jobs until the affected ink tank is refilled.

10.4.2 Ink Refill after Main Ink Empty Signal

When a main ink tank goes empty a pop-up screen will appear on the PC screen ready to take the information about the refill(s) that need to be done.

1   Check the expiry date on the ink supply bottles.
2   Use the top of the ink bottle to break the ink bottle seal.
3   Top up an empty ink tank with 1 liter ink.
4   From the dropdown menu, select the ABC code for the color that will be refilled.
    The code will be next to the barcode on the bottle, like "4MRM4 G2-M ink".
5   Fill in the Lot Number. It will have the form Inn-nnnnnn, like "02-145889".
6   Press refill button to enter the data for this ink.
7   Repeat steps 1 to 4 for each ink being refilled.
8   Press OK to close the pop-up.

Agfa strongly recommends that each ink refill be logged so that in case of a problem Customer Care will have the complete history of the engine's operation to help in diagnosis.

:Anapurna H3200i LED Advanced Operator Manual (v1.0)

10.5 Emptying and draining

10.5.1 Emptying the Waste Ink Tank

⚠️ **Warning:**
- Nitrile gloves, protective clothing and safety glasses must be worn for this procedure.
- Do not mix waste UV ink with solvent based inks.

☝️ **Remark:**
It can take some time for the waste ink to start flowing

🌳 The waste ink, cloths and gloves used during cleaning must all be disposed of in a manner approved for hazardous chemical waste.

The waste ink tank is placed in the cabinet under the back control panel. When the tank is close to full the status indicator 'Waste Tank' is lit red.

⦿ Run	⦿ Waste Tank	
⦿ Error	⦿ Ionizer	
	⦿ Media Set	⦿ Gap Set
	⦿ Safety Sensor	
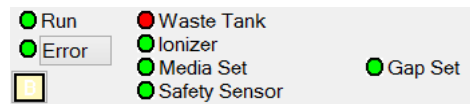
Agfa recommends to check the waste tank daily and empty it once a week.

1. Have ready a seal-able container of at least 1 liter fluid capacity that is made from a chemically resistant material.
2. Open the cover at the back left of the engine.
3. Place the container underneath the spigot [2] of the Waste Tank [1].
4. Open the red handle [3] to drain the tank.
5. Close the red handle [3] when the flow of waste stops.
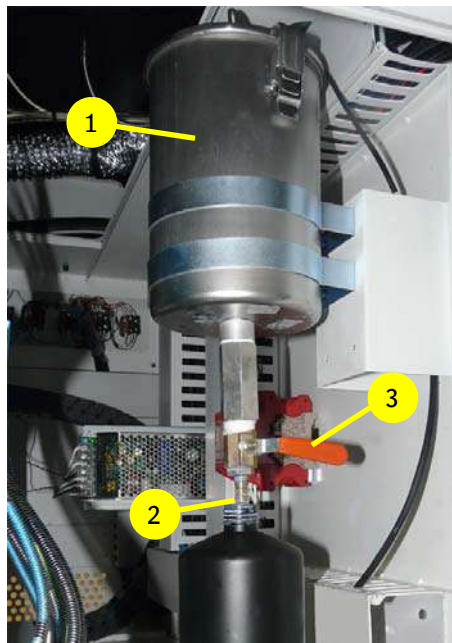
10.5.2 Draining the Sub-air Tank

Negative air (vacuum) pressure in the sub-air tanks in the shuttle is used to hold the ink in the print heads to have precise control over the flow of ink during printing. If the suction draws ink up too far it will enter these tanks and interfere with ink control. In this event the sub-air tank(s) must be drained using this procedure.

1   Have a seal-able, plastic container ready for the waste ink.
2   On the control screen: press button [Home Cover] to open the home cover.
3   On the control screen: press button [Head Up] to raise the shuttle to its highest position.
4   Set all the color flow valves [1] to closed position.
5   Set the storage flush flow valve [2] to closed.
6   Turn off the vacuum for the color ink circuit [3].
7   Turn off the vacuum for the white ink circuit [4].
8   Open both valves on the back of the shuttle and catch the ink in the container.
9   If the drain is clogged with ink sediment use a pin or paper clip to open it.
10 When the flow of waste inks stops close the valves.
11 Return all the color flow valves [1] to the Ink position. The heads will start to drip.
12 Turn the color vacuum [3] back on. The color heads should stop dripping.
13 Turn the white vacuum [4] back on. The white heads should stop dripping.
14 Wipe the print heads.
15 On the control screen: press [Head Down] to lower the shuttle.
16 On the control screen: press button [Home Cover] to close the Home Cover.
17 Perform a prime check to verify that the print heads are working correctly (see section 7.2.1).

109
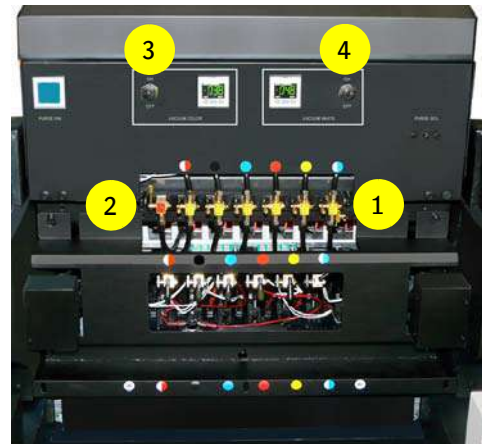
10.5.3 Draining the air pressure circuit

Depending on the compressor location, water vapor can condense into liquid in the input air filters or in the main air tank. The input air filters are equipped with valves that will open when the water reaches a certain level, draining it via the tubes.

The main air tank is in the compartment at the end of the printer. Have a container ready to catch any water that may drain out. The drain tube should have its free end placed in the container and then the air tank may be checked for water by opening the "water drain out" valve.

10.6 Replacement

10.6.1 Replacing the air filters for the LED modules

It's important to replace the air filters (spare-part: one set contains 10 pieces) of the two LED modules as soon as a distinct visual polution appears. Each LED module requires 4 filters: 2 on each side of the LED module (see arrows).

Order code air filter for LED module (GS+613337.0): GS+613702.0
(1 set = 10 pcs, 4 needed per LED)

10.6.2 Replacing the Home Tray filter 1

Home Tray filter 1
Order code: D2+7320100-0202

NOTE: To cover 6 months maintenance there is a Home Tray filter kit.
Content of the kit:
  - 26x Home Tray filter 1 (D2+7320100-0202)
  - 6x Home Tray filter 2 (Fan Protection filter D2+7320100-0203)

Order code Home Tray filter kit: D2+59313-0032

> **Warning:**
>   - Wear nitrile gloves to avoid getting any uncured UV material on the skin.
>   - Before replacing, check on the GUI that the safety curtains are activated or push the emergency button.

1 On the control screen: press button [Head Up] to raise the shuttle to its highest position.
2 Press button [Carriage Release] and push the shuttle away from the home position.

3 Remove the cover frame of Home Tray filter 1.
4 Replace Home Tray filter 1.
5 Refit the cover frame of Home Tray filter 1.
6 When finished, press button [Home Check] to move the shuttle back to the home position, see section 10.2
7 Press button [Head Down] to lower the shuttle.

10.6.3 Replacing the air filters for the filler caps of the color tanks

The filler caps of the color tanks are equipped with air filters. The filters need to be replaced monthly to ensure optimum pressure management.

The figure shows a close up of a new, clean filter and a used one for comparison.

Order code air filter: D2+7360103-0002

10.6.4 Replacing the Home Tray filter 2 (Fan Protection filter)

Home Tray filter 2 (Fan Protection filter)
Order code: D2+7320100-0203

NOTE: To cover 6 months maintenance there is a Home Tray filter kit.
Content of the kit:

- 26x Home Tray filter 1 (D2+7320100-0202)
- 6x Home Tray filter 2 (Fan Protection filter D2+7320100-0203)

Order code Home Tray filter kit: D2+59313-0032

Warning:
- Wear nitrile gloves to avoid getting any uncured UV material on the skin.
- Before replacing, check on the GUI that the safety curtains are activated or push the emergency button.

1 On the control screen: press button [Head Up] to raise the shuttle to its highest position.
2 Press button [Carriage Release] and push the shuttle away from the home position.

3 Pull the holder of the Home Tray filter 2 out of the ink drip tray.
4 Replace Home Tray filter 2.
5 Push back the holder of the Home Tray filter 2 into the ink drip tray.
6 When finished, press button [Home Check] to move the shuttle back to the home position, see section 10.2
7 Press button [Head Down] to lower the shuttle.

11 Trouble shooting

11.1 Image Quality Issues

Agfa is only able to respond to image quality issues seen using Agfa selected RIP software and in Agfa's standard image configurations. When issues occur in an image processed by a third-party RIP application the first step should be to re-process the source file using an Agfa approved RIP application into a standard Agfa Image Quality configuration, and then printing both version on high quality vinyl media for an accurate comparison. If the issue is present in both then contact Agfa Customer Care for assistance.

Symptom	Possible cause	Action
White lines between the printing passes	Feed direction movement between rows is set too high	Decrease feed adjust value
Black lines or overlap in printing passes	Feed direction movement between rows is set too low	Increase feed adjust value
Prime shows ink contamination	Heads may have been flushed with dirty storage flush.	Rinse the storage flush bar and let the heads drip till ink is pure again.
Images are too glossy / sticky / not dry Black lines / overlap in printing passes	Bad curing, not enough UV UV setting too low	Increase UV power & number of passes or check UV LED units glass plates.
Images are too glossy / sticky Not dry	storage flush is mixed into the Ink	Drip the heads. Print some solid color regions to clear the polluted ink
Distorted image	Inaccurate jetting	Check Head gap & media height. Check horizontal & directional calibration.
White comes out underneath the color.	White generation problem	Check white settings in RIP software. Use "choke" functionality
Gloss banding	Bi-directional printing can cause a slight gloss banding in certain colors due to the sequence of inks.	Print unidirectional

113

11.2 iGUI Error Messages

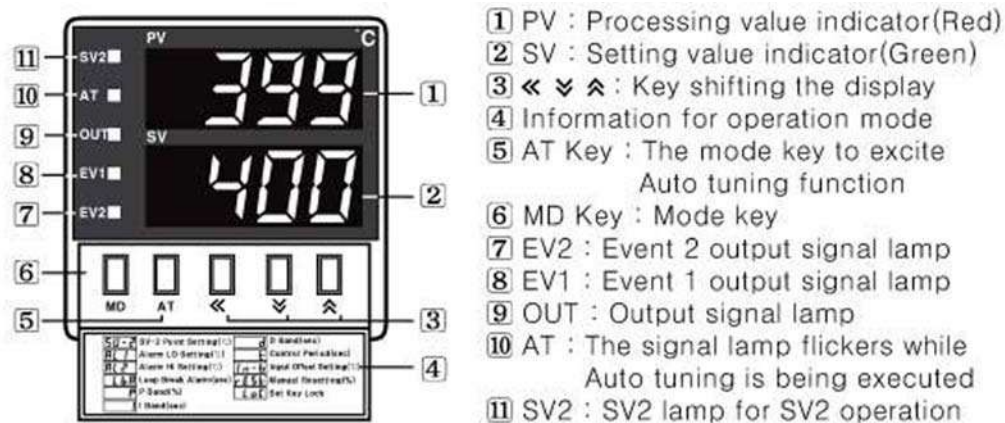| Error message	Possible cause	Action	Recovery
iGUI cannot be started	Shortcut not valid after upgrade	Start iGUI from its installation folder	Create new shortcut on the desktop
iGUI cannot be started	Window "COM 3 port Open Fail" iGUI was already open	Press [OK] iGUI starts, but all in error. Close iGUI – Engine Sleep mode press [No]	Maximize the already open iGUI from the taskbar.
<<Pause – Refill Overtime>>	Ink refill exceeded the time out value.	Press [OK] to continue.	Verify it only occurs 1 – 2 times.
ERROR: Waste Ink Full	Waste ink tank is full.		Empty Waste ink tank.
ERROR: Safety Sensor	Shuttle Path Light Curtain activated	Reset the system [OK] button	Clear print area. Check media for wrinkles. Redo Head gap & Media Thk. Adj. vacuum settings
ERROR: Wing Sensor	Shuttle Wing Sensor has been activated	Reset the system [OK] button	
ERROR: Move Range Over	Print job is positioned outside the table dimensions. Status "Data send error"	Verify that Left margin + image width + right margin <= table width	Adjust margins and press [Start]
ERROR: Air Low Pressure	Main compressor/ engine problem	Follow the Emergency engine breakdown procedure.	Restart engine after problem is fixed.
ERROR: White/ Color INK Overflow	ink has flowed into the sub air tank	Drain the sub air tank	

The RIP vendor is responsible for testing their software, creating profiles and providing support to their customers. On request Agfa can provide a Software Development Kit (SDK) describing the file format that a RIP program needs to follow to be usable by the :Anapurna printers.
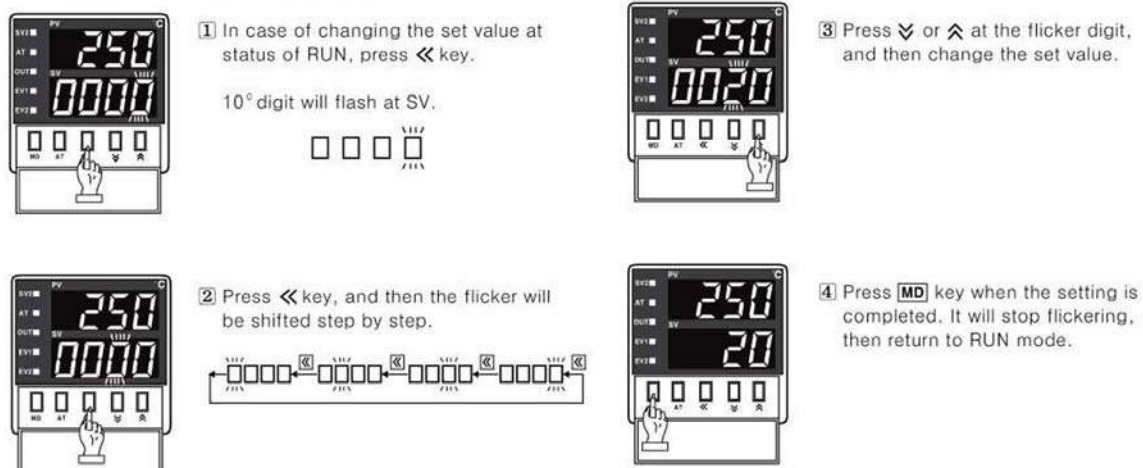
12 Varia

12.1 Changing the PID Settings

There are several temperature and pressure settings in the ink jet printer that must be maintained within a certain range of values. The devices that do this are Proportional Integrating Differential controllers, or PIDs. They have a set point value that is the target setting for the value, and an input that should be connected to a sensor to provide real-time data for the comparison. The controller also has output(s) that act on the system being controlled to bring the actual value back to the set point if it drifts away.

12.1.1 Description of the Controller's Set Point

① PV : Processing value indicator(Red)
② SV : Setting value indicator(Green)
③ ≪ ⩒ ⩓ : Key shifting the display
④ Information for operation mode
⑤ AT Key : The mode key to excite
    Auto tuning function
⑥ MD Key : Mode key
⑦ EV2 : Event 2 output signal lamp
⑧ EV1 : Event 1 output signal lamp
⑨ OUT : Output signal lamp
⑩ AT : The signal lamp flickers while
    Auto tuning is being executed
⑪ SV2 : SV2 lamp for SV2 operation

To modify the PID's set point flip down the small cover below the numeric display and use the setting controls revealed:

How to change the set value

① In case of changing the set value at status of RUN, press ≪ key.

10° digit will flash at SV.

② Press ≪ key, and then the flicker will be shifted step by step.

③ Press ⩒ or ⩓ at the flicker digit, and then change the set value.

④ Press MD key when the setting is completed. It will stop flickering, then return to RUN mode.

Open the small lid on the display and use the setting controls.

Remark:
- The green value is the target value
- The red value is the actual measured value

12.2 Using the Vacuum Pressure Controller

Temperature and Vacuum settings are regulated by electronic controllers mounted on the shuttle and/or on the front of the printer at the home end. Temperature settings will be set by trained Agfa personnel as part of the installation of an :Anapurna printer and should not be changed by the operator. Vacuum settings may have to be adjusted by the operator when certain media types are used.

Push the blue [SET] button on the Pressure Gauge to show, and optionally change, the controller's settings. Use the grey arrow buttons to change the indicated standard value.

In the following lists the "<n>x" symbols indicate that the Set button should be pressed again to show the next value in order. So press once (1x) for the n_1 parameter value, twice (2x) to see the value of H_1, etc. The values indicated are the factory settings.

12.2.1   White ink vacuum pressure controller

Push the blue SET button to begin:

Display shows current Measured Value

1x → n_1 = -.049

2x → H_1 = .002

3x → P_3 = -.336

4x → H_2 = .004

5x → C_5 = 0

12.2.2   Color ink vacuum pressure controller

Push the blue SET button to begin:

0x → Measured Value

1x → n_1 = -.049

2x → H_1 = .002

3x → P_3 = -.336

4x → H_2 = .004

5x → C_5 = 0

12.3 Internal Printer Controller

The printer is managed via an integrated Printer Controller (PC).

12.3.1 PC Hardware Features

The PC is a Windows computer complete with:

- hard disk with 2 partitions. (C,D)
- 2 x 1000Base-T network cards (LAN cards).
- Keyboard (may be Wireless)
- Mouse or Track ball (may be Wireless)
- 4x USB ports at the PC screen

12.3.2 PC Configuration

- Drive C: Windows Operating system.
- Drive D:
- File Structure
    a   Share_In folder
    b   1_To_Be_Printed folder
    c   2_Printed folder
    d   3_To_Be_Deleted folder
- Service Test files
- Software
    e   Adobe Acrobat Reader (not pre-installed)
    f   iGUI
    g   UltraVNC (not pre-installed)
    h   Virus scanning software (not pre-installed
- System Restore

The folder "Share_In folder" is secured for access only by userid "agfa" and password "agfa". It is recommended that this userid's password be changed after installation. This folder is to be shared from the PC so that it may be accessed from the customer's network to make it easy to transfer image files to the printer.

12.3.3 Network Configuration

The PC is equipped with 2 network cards, called LAN cards, where LAN means Local Area Network.

- The printer's internal network uses IP addresses 192.168.253.4 - 192.168.253.5.
- LAN1 faces the printer's internal network and is normally given a fixed IP address of 192.168.253.4.
- LAN2 faces the customer's network and its IP address should be set according to the customer's network policies.

The LAN2 connection to the external network is used to give customer access to the printer for transferring files for print jobs. For more information on network setup contact your local network administrator.
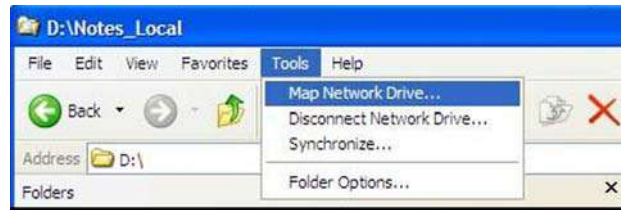
Caution:
If the customer network is using the same IP range as the printer's internal network the printer's network must be changed to avoid IP address conflicts. Consult a network administrator to find a non-conflicting range.
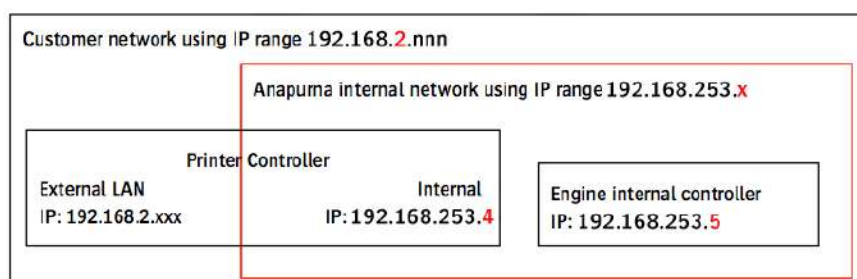
12.3.4 Connecting to the 'Share_In Folder'

    1   Open Windows explorer on the PC screen.

    1   On the Tools Menu select "Map Network Drive…"…

    2   In the pop-up dialog that appears fill in the network path with:
"\\<IP Address>\Share_In replacing the IP address placeholder with the actual IP address of the PC on the customer network.

    3   Click on the link "connect using a different user name.

    4   Fill in user name "agfa" and password "agfa".

    5   Click OK.".

Now the folder on the :Anapurna PC is connected to the machine on the customer network and the connection allows any user on the network to drop .RTL files to be printed in a convenient manner.

12.3.5 Use of the 'Share_In Folder'

Use this folder for job files only and specifically not as an archive for finished jobs.

Since print jobs are usually huge data files (0.5 − 4 GBytes) the transfer of a file can take significant time, load the network, and slow down the printers PC computer. Agfa advises that the SoftRIP program should use the Share_In folder as its output destination.

Tip:

- Copy the print jobs manually from the SoftRIP destination folder to the Share_In folder.
- Clean up the finished jobs regularly to avoid disk space problems.