# **User Manual**







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# **Features**





If you need to print, laminate, and convert continuous material, the NeuraLabel TotalPress offers the complete solution.

It may be used as in-line with your NeuraLabel Callisto Label Printer or as a stand-alone unit. Simply print your continuous labels with a black registration mark and easily laminate and die cut with this remarkable machine. The TotalPress uses a combination of an electronic mark sensor together with precision electronics and touchscreen to ensure an amazing +/- 0.3mm registration accuracy.

Die cutting is handled by an 18.5" circumference magnetic cylinder. It uses economical flexible steel cutting plates, for very high precision and long die life.

The use of high-quality electronics for logic control ensures the TotalPress will produce high quality, accurate labels. When combined with back-slitters, post-slitters, dual output mandrels for easy finished roll separation, and an easy to navigate touchscreen control panel, the TotalPress is the complete solution to your laminating and die-cutting requirements.

# Specifications

Print Speed	Variable Speed Control Up to 18 inches per second (457mm per second)	
Print Quality	1200x4800 DPI Full Color	
Ink	NeuraLabel Durable Pigment Ink	
Structure	Steel Frame with LED Illuminated Work Area	
Cutting Dies	Flexible steel - From 50mm to 380mm Repeat	
Laminate	Self Wound or Linered	
Dimensions	90.55" (230cm) W X 56.66" (149cm) H X 33.46" (85cm) D	
Weight	429.9 lb (195 kgs) net	
Print Web Width	12" (304mm)	
Maximum Web Width	13" (330mm)	
Maximum Diecutting Width	13" (330mm)	
Maximum Diecutting Length	15" (381mm)	
Maximum Roll Diameter	17.3" (440mm)	
Maximum Laminate OD	11.8" (300mm)	
Maximum Finished Label Rewind	11" (280mm)	
Maximum Waste Matrix Rewind	11.8" (300)	
Razor Slitter Assembly	6 Knives - Lateral Adjustment 0.47" (12mm)	
Back Slitters	2 Rotary Knives	
Power	240v; 9amps	

Powered Unwind	3280 feet (1000 Meters)
Sensor Mark	5mm x 7mm Registration: +/ - 0.2mm
Registration Sensor	Laser with Adjustment of 3.9" (100mm)
Lateral Die Head Adjustment	0.47" (12mm)
Core Sizes	3" (76mm)
Loop	Proximity sensors
Motors	2 Servo, 4 Speed control
Control	PLC and Servo controllers

# Installation

### Unpacking

**Caution:** This machine is extremely heavy. Do not attempt to move the crate or machine without suitable lifting equipment. Failure to follow these instructions may result in serious injury.

- 1. Remove the top panel of the crate and then the 4 side panels
- 2. Inspect the TotalPress for damage prior to removing it from the base of the crate
- 3. Undo and remove the four M10 bolts holding the four corners of the TotalPress to the base of the crate
- a. You may need to lift the crate using a forlift to hold the nuts underneath the base that secure the bolts
- 4. Lift the TotalPress from the base plate using a forklift
- a. It is recommended that the front of the TotalPress be facing the forklift.
- 5. Attach the feet to the four corners
- a. Install the feet so they are above the bottom of the wheels. This will allow you to roll the TotalPress to the operating lo c a t i o n .
- b. The two center supports will have feet already attached
- 6. Move the TotalPress away from the crate base and carefully lower to the floor
- 7. Roll the TotalPress to the operating location
- a. Be sure the rollers are not locked before attempting to roll the unit
- 8. Lower the feet so the TotalPress is level and supported by the feet
- 9. Connect 240V power to the TotalPress

**Caution:** Use a forklift to remove the TotalPress from its crate. Do not attempt to lift the unit manually!





View from underneath the crate





### **Adjusting Pinch Rollers**

The TotalPress is supplied with pre-set maximum roller settings. If the machine is supplied with no roller pressure, simply rotate each arm clockwise until it stops. **Do not use excessive force.** 

The TotalPress is fitted with silicone rubber nip rollers. Do not use a knife on these rollers and clean with a mild solvent if required.

### NIP ROLLER PRESSURE



## **Components** Identifying Major Components

Caution: Do not proceed until you have a good understanding of the major components of your machine and their locations. Do not attempt to start or run the TotalPress before reading the instructions detailed on the following pages.



### **Safely Features**

Caution: The safety features included with your machine are for your protection. Never remove warning labels or disable cut out switches. Be aware of your emergency stop location and use common safety precautions and care at all times.

Following is an outline of the main safety features included with the TotalPress. Please ensure that you are familiar with all of the safety features before proceeding.

- EMERGENCY STOP: Note the location of the emergency stop switch. The switch is designed to immediately stop the press and apply the motor brakes. Follow the on-screen instructions to resume operation after an emergency stop.
- ELECTRICAL CABINET: The cabinet is secured by 4 – 4mm bolts which should be kept tight at all times and removed by authorized technicians only.
- DRIVE BELTS: These are inside the back cover. If the back cover is open, ensure that hands, hair, or clothing cannot be caught in the drive belts.
- NIP ROLLERS: The orange rollers are driven by powerful motors. Never under any circumstances place fingers, hair, or clothing near the nip rollers while the machine is running.
- WARNING LABELS: These labels indicate important safety considerations for your machine. Never remove, damage or obscure warning labels.





### **Connecting Power**

Caution: Do not proceed until you have a good understanding of the major components of your machine and their locations. Do not attempt to start or run the TotalPress before reading the instructions detailed on the following pages.

The Total Press requires 240V power input for operation.

- Simply plug the power cord connected to the outlet directly into the power socket on the left-hand side of the TotalPress.
- Power cords used in the EU must comply with IEC 60227 or IEC 60245, appliance inlet comply with IEC 60320 or IEC 60799, or shall be rated at a minimum for the current.



 Once the Control Panel on the front of the TotalPress boots up, touch **Start** and follow the on-screen instructions to complete the power-up process (see next page).



# **Overview**

### **The Control Panel**

The Control Panel includes a number of interactive touchscreen buttons and data entry fields.

### **Startup Screen**

The first screen seen on powering up the TotalPress is the Startup screen. Touch the **Start** button to continue with the boot process.



### **Restart Screen**

The Restart screen will appear next. You can touch any of the **Restart** buttons to restart the indicated component, or **Continue** to complete the restart process.

This screen will also appear after the Emergency Stop button is released.

### Program Run Screen

The Program Run screen, also referred to as the Main screen, is where most operation occurs.

### **Cycle Count**

Indicates how many times the die has cut. This number does not include cuts made during manual media feeding.

The count can be changed or cleared; touch the small button to the right of the number to bring up the numeric keypad to clear the count or enter any number.

### Set

Enter a number to auto-stop the cutter at a pre-determined count. Touch the small button to the right of the number to bring up the numeric keypad.

If set to zero, the auto-stop feature is disabled.

### Label Pitch Length

Indicates the length of the die plate as entered in the Settings screen. This value can only be changed in the Settings screen.





### Printer On | Printer Auto | Printer Off

Set the printer operational state by touching one of the three buttons.

- Printer On allows the printer to print at any point, regardless of the press operational status.
- **Printer Auto** will pause the printer when the press stops and continue printing when it is changed to running.
- Printer Off will pause the printer until this setting is changed to On or Auto.

### Print Speed

Indicates the print speed as entered in the Settings screen.

### Die Offset

Adjusts the top of cut position for fine-tuning position of the cut along the direction of media travel. Either touch the small button to the right of the number to bring up the numeric keypad or use the two arrow buttons to change the value.

### Home Cycle

Touch this button if the message below the button line says *Machine Needs Homing* to sync with the registration marks.

This is necessary after an Emergency Stop, at a splice point, or if the registration setting has been off but has been turned back on.

### Auto | Semi-auto

Touch this button to toggle between **Automatic** and **Semi-automatic** mode. Semi-automatic mode will run 1 revolution of the cylinder after the **Start** button is touched and stop.

#### *Start* and *Stop*

Starts and stops the cutter operation. Stopping will always occur at the Home position.

#### Loop Sensor status

If the Loop Sensor has been set to bypass mode, this button will read *Loop Sensor Off*, and can be pressed to turn the loop sensor back on. The loop sensor cannot be turned off from this screen; touch **Settings** to open the Settings screen if the sensor needs to be bypassed.

#### Settings

Opens the Settings screen.

### Manual

Opens the Manual operation screen.

#### Parameter

Opens the Parameters screen. These settings should not be altered without NeuraLabel advice. Parameters password 2727

#### **Parameters**

Opens the first of two parameters screens. This button is password protected and should not be used unless directed to make changes by NeuraLabel Support.

#### **Settings Screen**

This screen is used to modify the operational settings of the press.

#### **Units**

Set to either *Metric* (mm) or *Inch*. Pitch Length and Print Speed values are converted when changing from one to the other.



### Label Pitch Length

Touch the small button to the right of the number to open the numeric keypad to enter in the label pitch length. Measurements are from the top of one registration mark to the top of the next.

#### **Print Speed**

Enter the print speed in this field. You can also select the speed by touching the **6"/sec** or **12"/sec** or **18"/sec**.

### Infeed/Outfeed Speed

The Infeed and Outfeed speed settings can be changed, if necessary. It is not recommended that these speeds be changed unless issues are occurring.

### **Registration On/Off**

Toggles the Registration sensor on or off. Turn registration off when cutting blank labels

#### Loop Sensor On/Off

Toggles the loop sensor between on and off.

#### Manua Screen

Use the buttons in the Manual screen to feed media through the TotalPress. The top buttons operate all motors, or you can use the other buttons to activate a specific motor.

*Operation is one -way only - you cannot back up the media.* 

#### **Parameters Screen**

The Parameters button is password protected. Changes should only be made to the parameters under the guidance of Technical Support.



### **Diagnostics Screen**

The Diagnostics screen displays the current state of the sensors, motors, and servos.

The green highlighted items shown, relate to the servo motors and controllers. If one of these is not highlighted, check the controllers for a fault code.

All other items should highlight green, only when the particular sensor is activated. If you suspect a problem with a sensor, activate it to see if it highlights green. If it does, the sensor is working correctly.

K0 - Unwind Top Sensor	X20 - Feed Servo Ready
X1 - Unwind Bottom Sensor	X21 - Feed Servo On
X2 - Spooler Loop Bottom Sensor	X22 - Feed Servo Ok
X3 - Spooler Loop Top Sensor	X23 - Cylinder Servo Ready
X4 - Infeed Bottom Sensor	X24 - Cylinder Servo On
X5 - Infeed Top Sensor	X25 - Cylinder Servo Ok
X6 - Outfeed Bottom Sensor	X26 - Spooler Slow Sensor
X7 - Outfeed Top Sensor	X27 - Machine Enabled
PG1 - Registration Sensor	
DOG1 - Cylinder Home	
STOP0 - Feeder Motors OK	

# **Loading Media**

Caution: Ensure that the power is disconnected before you begin to load your media for the first time unless you have a good understanding of the general operating procedures.



Load the unwinder with the desired media. Follow the path shown above, either through the printer for in-line operation or using the Offline Media Path to cut blanks.

Once though the printer, use the printer to either feed or print media until y o u h ave enough media to feed through the TotalPress converter as shown above.

When using the inline method of production, to stop and start the conversion process, the printer is in control of both sections of the machine. Simply pause or stop the printer to stop the unwinder and the TotalPress converter.

It is also important that the speed of the Callisto Printer not exceed the speed of the TotalPress converter. If the printer is slower than the converter, the converter will stop and start automatically, keeping the loops at a constant level.

**TIP:** It is best to <u>not</u> unload the old media before loading new, even if changing the media width. Splice the new media to the end of the old media to avoid re-threading the entire media path.

# **Adjusting the Guide Collars**

Many of the metal rollers include adjustable guide collars to keep the media to a straight path. You will need to adjust the guide collars during the initial s e tup, and anytime you change media widths.

**Only the collars on the operator side of the TotalPress should be adjusted.** The collars to the rear of the TotalPress are in line with the unwinder back plate and should not need to be moved when the media has been correctly loaded.

- 1. Loosen the set screw on any collar that needs to be repositioned.
- 2. Position the collar so it is just out of contact with the media.
  - a. Do not position the collars closer together than the width of your media.
- 3. Tighten set screw to hold collar in place.
- 4. Repeat with each collar in the TotalPress

It is recommended that you follow the paper path from the input media roll to the output roll(s) when adjusting collars to verify that all are in the correct positions.



# **Using the Splicing Table**

The splicing table enables the user to join rolls of media together neatly and correctly, to allow smooth passage through the die cutting, stripping, and slitting processes. Follow the instructions below on the use of the TotalPress splicing table.

- When the current roll of media is finished, stop the TotalPress or the loop sensor will stop the machine when it sees no media.
- 2. Push the Emergency Stop button.
- 3. Load the new roll of media onto the unwind mandrel, with the media unwinding counter-clockwise.
- 4. Load through the paper path so the new media can be held in place by both locking arms.
- 5. Align the old and new media on the splicing table, with the new media on top of the old.
- 6. Lower both left and right locking arms.
- 7. Using a sharp knife, cut through both pieces of media, in the slot on the splicing table.
- Lift both layers of media on right side and apply tape under the bottom layer, as smoothly as possible. Tape will be above left side.
- 9. Lift **top** layer of media on **left side** and apply to the tape as well aligned and as smoothly as possible.
- 10. If laminate is not being applied, place another piece of tape across the top of the splice; if laminate is being applied, the top tape is not required.
- 11. Lift both locking arms and remove the two sections of detached media.
- 12. Using scissors or a sharp knife, cut the excess tape on each side of the media as close to the media as possible.
- a. Do NOT wrap excess tape over the edges of the media!
- 13. Feed the spliced media through the printer prior to printing.
- 14. Release the Emergency Stop button and **Restart** the TotalPress. You are now ready to continue.



## **Adjusting Mark Sensor Position**

The TotalPress machine is fitted with an amplified laser black mark sensor. It can be moved laterally within the die cutting area to reduce set up time for each job and minimize any setting changes. Follow these instructions when setting up a new job.

- 1. Open the **Manual Control** screen and advance the media until the laser sensor is aimed at a registration mark.
- 2. Loosen the thumbscrew and slide the sensor so the laser is at the center of the mark, laterally, if necessary.
- 3. Tighten the thumbscrew.
- 4. Return to the Main screen and touch Settings
- 5. Enter the **Pitch Length** and return to the **Main** screen.
- 6. Verify that you have enough slack between the printer and the press to perform at least two full cuts.
  - a. Print more labels, if needed.
- 7. Touch the **Home Cycle** button.



**TIP:** If you do not adjust the collars towards the back of the press and regularly place the registration mark at the same position in your artwork, the position of the sensor should not need to be changed.

### **Recalibrating the Mark Sensor**

The mark sensor is sent already calibrated to read a black mark on white media.

Follow these instructions if the sensor needs to be recalibrated for different media.

Before carrying out this procedure, you should have the sensor already positioned on the black mark on your media, as outlined above.

1. With the laser pointing directly onto the black mark, move the small switch on the right from **RUN** to **SET**.



- 2. Press the orange button on the left **once**. The display will flash and change to 2PntTch or something similar.
- 3. Manually move the media a little forward so the laser is pointing onto the media color only.
- 4. Press the orange button on the left once more.
- 5. Set the small switch from **SET** to **RUN**.
  - a. Test that you have taught the sensor correctly by inching the machine slowly past the next mark. The laser indicator should flash orange when it sees the black mark. This indicates that you have taught the sensor correctly.
- 6. Return to the Main screen and touch the **Home Cyde** button.

### **Cutting Blank Labels**

Cutting blank labels requires that Registration be turned **Off**. The offline media path should be used (see *Loading Media*).

- 1. Touch the **Settings** button on the main screen.
- 2. The **Registration** button will show the current setting; touch the button to toggle the setting to **Off**.
- 3. Enter the Label Pitch Length.
  - a. You should always have at least 0.125"
    (3mm) of gap between the bottom cut on one plate pass and the top of the next.
  - b. If there's more than one label vertically on the cut plate, set the length so the gap between die plate cuts is consistent with the gaps on the die plate.
- 4. Touch the **Run** button to return to the main screen when **Registration** is set as needed.
- 5. Touch the **Settings** button on the main screen.
- 6. The **Registration** button will show the current setting; touch the button to toggle the setting to **Off**.
- 7. Enter the Label Pitch Length.
  - a. You should always have at least 0.125"
    (3mm) of gap between the bottom cut on one plate pass and the top of the next.







- b. If there's more than one label vertically on the cut plate, set the length so the gap between die plate cuts is consistent with the gaps on the die plate.
- 8. Touch the **Run** button to return to the main screen when **Registration** is set as needed.

### **Removing Waste**

Make sure your printer is stopped before removing your waste matrix. Follow the instructions below for the safe and effective waste removal on the TotalPress

Use these instructions to remove your media waste.

- 1. Stop the TotalPress.
- 2. Attached a cardboard core to the waste mandrel.
- 3. Break the waste to the right of the stripping bar.
- Touch the Manual button in the main screen, then touch and hold the button labeled Cylinder & Feed Rollers while keeping the waste taut.
- 5.
- 6. Lead the waste around the idle roller and up to the core on the waste mandrel.
  - Using the idle roller as shown will keep the waste at a constant stripping angle, regardless of the size of the waste roll.
- 7. Once the waste is attached to the core, touch the

Run button to return to the main screen.

8. Touch the Home Cycle button if prompted.





## **Loading Laminate**

Caution: **Never** attempt to attach laminate while the machine is operating. Always keep the cutter idle until the laminate is past the Nip Rollers and you are well clear of the Nip Roller area.

### The width of your laminate must be less than the width of your media roll.

Use these instructions to load and thread lined or un-lined laminate.

- 1. With the machine STOPPED, attach a roll of laminate on the mandrel, centered on the media.
- 2. Remove the safety cover from the first nip roller.
- 3. Thread the laminate (black line) until the laminate reaches the application point in front of the nip rollers.
  - a. If using self-wound/non-lined laminate, follow the path of the dashed black line.
  - b. If using lined laminate, follow the path of the black line, releasing the laminate backing and threading it to the laminate waste mandrel (red line).
- 4. Attach the laminate neatly and squarely to your media.
- 5. Test run your machine as described on in the *Adjusting mark sensor position* section to verify that the laminate tracks correctly through the machine. If necessary, adjust your laminate roll, waste mandrel roll, and laminate guide collars until both your media and laminate track correctly.



### Laminate Adjustments

Tension adjustments are important when running lamination. Follow the instructions below to ensure that your laminate and media webs run in line consistently.





Clockwise: more tension, stronger rotation Counter-clockwise: less tension, weaker rotation

Do not over tighten your laminate unwind clutch adjustment. Excess tension can cause the web to move and the labels to curl. There should be just enough tension to keep the laminate taut as it unwinds.

Make sure that your laminate liner rewind has less tension than the laminate unwind. Excess tension may cause the laminate to run loose and follow the liner.

Make sure the laminating rollers are adjusted down until they stop, using firm finger pressure. The paper clutch must be used. It should create a firm tension on the printed media between the paper clutch and the laminating rollers. Without good tension in this area, the web may drift from side to side.

Ensure that the paper guides are adjusted so that there is no room for the media to move from side to side. Your printed media roll should be straight and tight to help avoid any web movement.

### **Attaching Die Plates**

Use these instructions to attach a die plate to your magnetic cylinder. The machine has adjustments for moving the label in relation to the die so your plate does not need to be in the exact lateral position at this stage. Concentrate on getting the die plate attached to the die line on the magnetic cylinder and as close as possible to the desired position across the web.

- 1. Touch the Manual button on the Main screen.
- Watching the cylinder, touch and hold the solution labeled Cylinder and Feed Rollers until the -of-die line on the cylinder (highlighted in green below) can be seen and is about two-thirds of the way up.





**Note:** The section of the cylinder with the die line will have wider vertical silver section than the rest of the cylinder

- 3. Align the top of the die plate with the cylinder line, roughly in line with the printed media. See *Image 1*.
  - a. Cutting will be skewed if the die plate isn't aligned with the cylinder line.
  - b. Allow only the top edge of the die plate to contact the magnetic cylinder line.
- 4. Slide the plate into the closest correct lateral position possible to the media or print. Before attaching the die further, ensure your cylinder is in the center of its lateral adjustment. See *Image 2*.
- 5. Carefully allow more of the die plate to come in contact with the magnetic cylinder. See *Image 3*.
  - a. Touch and hold the <u>solution</u> button again to slowly rotate the cylinder, allowing more of the die plate to contact the magnetic cylinder.
- 6. Continue rotating the cylinder until the plate has reached the top of the cylinder.
- 7. Touch **Run** to return to the Main screen and touch the **Home Cycle** button.
- 8. Touch the **Settings** button and set the **Label Pitch Length** and **Print Speed**.
- 9. Verify the **Registration and Loop Sensor states are correct for your operation,** then touch **Run** to return to the main screen.





- 10. Run a few cuts to verify the die plate alignment.
  - a. If the lateral alignment needs adjusting, move the lateral cylinder adjustment.
- 11. If the die is cutting too soon or too late, use the **Die Offset** on the Main screen to adjust the position.
- 12. Range: -10mm to +10mm
- 13. Increase the value to move the **cut** to a later position; lower the value to move to an earlier position. Once the die is aligned and the cut is positioned, you are ready to begin cutting.

## **Removing Die Plates**

Use these instructions to remove a cutting plate from your magnetic cylinder.

Touch the Manual button on the Main screen. Lift and hold the tail end of your die. Watching the cylinder, touch and hold the button labeled Cylinder reverse.

- 2. Continue pressing the Cylinder Reverse button until you can remove your die.
- 3. The cylinder will be in the correct position to attach your next cutting die







## **Back Slitting**

The TotalPress comes with two rotary blade back slitters that can be used to back slit the liner prior to the media being cut by the die. The back slit liner will remain adhered to the waste material when the waste is removed.

The back slitters are located on a bar just below the metal roller prior to the input nip roller.

### Adjusting the back slitters

Each back slitte r is positioned independently, but fine adjustments can also be made to both at the same time.

- 1. With the TotalPress *stopped*, loosen the pressure on the rotary blade by turning the pressure knob counterclockwise.
- 2. Loosen the thumbscrew on the left side of the back slitter.
- 3. Reposition the back slitter and tighten the thumbscrew on the left side.
- 4. Tighten the thumbscrew on the right to increase the pressure on the rotary blade.
- 5. Apply only enough pressure to the rotary blades to cut through the liner.
- 6. Run the TotalPress to verify that the liner is being cleanly slit without slitting the media itself, adjusting the pressure as needed.
  - a. If the blades are cuttingall the way through the media, reduce the pressure.
  - b. If the liner is not cut cleanly, slightly increase the blades' pressure.
- You can fine adjust the lateral position of the back slitter assembly using the adjustment knob on the front of the TotalPress.
  - This adjustment will move both back slitters at the same tim e without changing the distance between them.







### Slitting

The TotalPress can be fitted with shear knives for slitting. Follow the directions below for the correct use of your slitting knives

The knives are most effective when slitting liner only, although they can be used to slit stock.

The knife should be positioned with the blade against the right side of the slitting bar.

Use the sideways adjuster to move the knives from left to right once set. A clockwise movement of the adjustment knob will move the knives away from the operator.

Remove and reverse the blades if they become dull. Replacement blades are available.

When not in use, slide and lock the knives out of the way against the left edge of the slitter bar. Always use caution when using the knives as they are very sharp.

Always operate the machine with the safety guards on.



### **Designing Labels**

The best way of designing labels will depend on your label design software. The following information may be helpful although it may not be relevant in all cases.

- 1. If possible, use the file that was sent to the die manufacturer as the template for your artwork file. The cut lines will be positioned and sized correctly for you already, allowing easier alignment of the artwork.
- 2. **Do not move the cut lines!** Align the artwork to the cut lines. Set the page length to the die plate length as indicated.
  - a. Set the page width to your media width, which should be wider than the die plate width to allow for a black mark at least 7mm wide x 5mm deep.
  - b. Most graphics packages use guidelines or grids that can be used to separate the artboard into sections that relate to the die to allow for better sizing and alignment.
- 3. The example below shows a die 2 across, 2 around. The blue guidelines in the artwork split the screen area into four quadrants, one for each individual label.
  - a. For full bleed labels, create artwork that extends beyond the cut lines.
  - b. Place your black mark, which should be at least 7mm across the web and 5mm along the web, at the top of the label, on the right side as shown.
  - c. There cannot be any artwork in a vertical line with the mark as this will interfere with registration!
- 4. A good practice is to always place the mark in the same position when creating new artwork. This will reduce the sensor position adjustments needed for cutting.
- 5. A wider registration mark will also reduce the need for sensor adjustments. Hide the cut lines (in black) for the print file.



**TIP:** Create a page template with your software program for each die plate you use. Include all details such as page size and black mark size, and position. Once you have a template, you will find label design extremely simple.

### Troubleshooting

### **Media Problems**

#### My media is moving from side to side

Make sure the roller collars are fitted correctly against the media. Check to make sure there is not too much pressure on the laminating rollers. Use the minimum tension possible on your laminate roll. Make sure your paper clutch is clean. You must use the Loop roller. My media is breaking when the paper is indexing Your die may be cutting through the liner. Is the media threaded correctly? Is there adhesive build up on the guides, rollers or anvil? There may be something on your anvil or under the die. My media is creasing as it enters the feed rollers Make sure your printer or roll of blank media is aligned correctly with the roller collars. Lighten the tension on the unwind mandrel clutch. My label waste matrix keeps breaking You may be using too much tension on the waste rewind clutch. Are your labels cutting correctly? Is there too large a gap between your labels? Do you have at least 5mm of waste on each side of the media? Make sure your stripping bar is clean. If you are using an irregular shape, you may need to remove the waste at a different angle or position or possibly change the orientation of your cutting die to make stripping easier. My cores are slipping on the mandrel. Do not use cores with a wall thickness of less than 3mm. My machine will not start when I press the start button Is your Loop sensor turned on but not seeing media? Has your pre-determined count been reached? Try pressing the Emergency Stop and resetting the machine. Try turning the machine off and restarting the machine My slitting waste keeps going into my label roll or nip roller Try running the waste up into the label area of the waste matrix. Use the slitting waste aids to encourage the waste to fall to the floor. Attach some thin copper wire to one of the steel shafts and drape the wire over the labels to reduce static. My lamination is bubbling or creasing as it is applied You may have too little tension on your laminate roll. The laminating nip roller pressure may be set too lightly. Ensure the top and bottom laminating pinch rollers are clean and free of dirt and adhesive. My media is jumping out of the paper guides at the infeed Your guides may have adhesive build-up on the inside. Verify that the media is webbed through the media path correctly. Verify that you are using the Loop roller. Your guides may be set too tightly against the media.

Is your media a slit roll? It may have varying roll width.

#### My labels keep wrapping around the nip roller

You may have an adhesive build up, or part of a label on your nip roller.

Your labels may be lifting slightly and sticking to the nip roller as they pass through.

Your labels may have a heavy coating weight of adhesive, which may be bleeding from the edges of the label, causing them to stick to the roller.

### **Registration Problems**

#### I have changed my media, and now the sensor is not reading the mark

You may need to re-teach your sensor as outlined in the section *Adjusting mark sensor position*. Is your sensor mark in line with the sensor?

### I have added laminate, and the sensor is not reading the mark correctly

If your laminate now covers the sensor mark, you may have to re-teach your sensor as outlined in the section *Adjusting mark sensor position*.

### I am using colored media, and the sensor is reading both the mark and the media

You will have to re-teach your sensor as outlined in the section Adjusting mark sensor position.

#### My register is moving in and out

Slow your machine down, or lengthen your electronic black mark setting.

Your printer's label pitch may be moving.

Re-teach your sensor as outlined in the section Adjusting mark sensor position.

Is your machine set to Blank label mode? See section Cutting Blank Labels.

### The machine is timing out before it reaches the mark

Check to see if the nip roller directly in front of the magnetic cylinder is engaged.

Your front-drive nip roller may not be pressed firmly enough against the paper. Increase the pressure of the front nip roller you are using to drive the paper through to rectify this problem.

### **Cutting Problems**

### My die cuts everywhere except one area on one side

There could be something stuck to the bearings of the magnetic cylinder or the ends of the anvil, preventing cutting in that area. Always inspect the anvil and cylinder to make sure they are clean. **My die has gone blunt (or is slightly damaged) in one small spot** 

You can underlay the die plate with a very thin material, like a 15-micron BOPP or similar, but the easiest and most permanent way to fix the low spot is to paint a small amount of nail polish underneath it. Only a small amount will be required. It must be dry before re-attaching the die. **My die is cutting through.** 

# You will need to order your dies for a particular material and, specifically, for the thickness and type of liner. It may cut through if you use it on a thicker material than it was made for.

### My die is new and will not cut properly.

Remove the die and test another die that you know works on the media you are using. If there is no problem with the other die, check the instructions you gave the die maker for the new die. If all is in order, do not attempt to make the die work by underlaying or any other method. A new die should cut perfectly, and you should contact your supplier and request a replacement immediately.

### My die cuts along the web but not across the web.

Are you cutting the specified material for which the die was ordered?

How old is the die? It may be blunt if it has been cutting polyester or another abrasive material. The across-the-web cuts work much harder than the along-the-web cuts, so they are generally the first to wear.

Double-check that you also have enough pressure on the die adjusters, as the cross cuts require more pressure to cut through the face stock than the along-the-web cuts.

Do not use excessive force when tightening the die adjusters. You may damage the bearings or drive motor.

### My die cuts through intermittently, about ever 6-7"

Check your anvil, as most likely there is something stuck to it.

### **Electrical Problems**

#### My machine will not start at all, and there is no display on the screen

Is your machine plugged in?

- Is your machine switched on?
- Is there power to the wall socket?

If so, check the fuse inside the power supply where the plug goes into the machine.

### My display screen is on, but the machine won't start

Check the Main screen for a message that the Home Cycle needs to be run.

Does the Loop sensor "see" any paper?

Has the pre-determined counter reached its setting?

Is the Emergency Stop depressed?

Verify that you are either connected to a 240V power source or to the internal power converter.

#### My machine stopped suddenly

Check that the unwind is working and feeding paper to the loop sensor properly.

Check the label count in case it has reached its target setting.

If the display reads "Registration fault", you have missed a mark and will have to re-home the machine. If the paper feed motor is under undue stress for a period of time, the machine can shut down as a safety thermal overload is activated. Shut the machine down and wait a couple of minutes, then restart.

### Maintenance

### **Maintenance Schedules**

The following are recommended maintenance schedules to ensure the continued trouble free running and operation of your TotalPress. Following these schedules is strongly advised as they will ensure your equipment's longevity.

### **SERVICE/ REPAIR OF TOTALPRESS**

If any section or part of the TotalPress needs to be serviced, removed, repaired, or replaced, the TotalPress must first be disabled by switching the power switch off **and** disconnecting the power cord from the TotalPress.

Remove the appropriate guard or unlock and open the relevant rear door to access the part requiring service or replacement.

Once the part has been serviced, repaired, or replaced, reinstall any guards, close and lock rear doors, and remove any work tools from the TotalPress.

Once the TotalPress is secure, plug the power cord back in and turn on the power switch. When testing the TotalPress after the repair, use the FEED button to test the repaired part **at a slow speed**. If this is successful, set the TotalPress to RUN **at slow speed** for a longer test.

**Warning:** Failure to follow the above procedure could result in electrical shock, personal injury, or damage to the TotalPress

### Daily Maintenance

- Each morning, clean the anvil and also the end bearers of the magnetic cylinder thoroughly and apply a thin layer of spray lubricant with a cloth to all of these areas.
- Apply a few drops of oil to the gears of the magnetic cylinder and the carriage rails.
- Using the Feed button, inch the machine over and clean the entry and exit nip rollers. Do not wipe these rollers while the machine is in motion.
- Clean any adhesive residue from the paper infeed rollers, paper guides, and anywhere else it may have built up along the web paths.
- Check that the mark and loop sensors are connected and operating correctly.

### Weekly Maintenance

- Apply a drop of oil to each of the clutch adjustment threads.
- Apply a drop of oil to the thread of the paper carriage adjustment knob.
- Apply a drop of oil to each of the brass roller carriage ends.
- Apply a drop of oil to the thread of the slitter adjustment if applicable.
- Gently clean any paper/glue residue from the paper infeed clutch pads with a dry cloth.

### Monthly Maintenance

- Carry out a visual inspection of the entire machine to check for any parts that may have been tampered with, loosened, or adjusted improperly and rectify these.
- Use a mild cleaning detergent; clean the entire body of the TotalPress.
- Report any damaged or work parts for replacement.

### **Buying Die Plates**

### What and How to Order

Important: The following information should be used as a guide only. Please consult your die maker for their specific requirements.

Below is an example of the information that will be required by your die maker when ordering a die. The example is of a 3 high by 3 across 3.5630" x 4.5276" rectangle, 0.1282" corner radius, 0.2362" gap, 3mm distance between cuts and top and bottom edges. Supplying a sample of the material to be used with your order is advisable if you do not have specifics on the label material.



★ A I | N \* VERTEY THAT TT MATCHES YOUR SPECIFICATIONS. WHILE WE WORK HARD TO ENSURE ACCURACY THE FINAL RESPONSIBILITY IS HELD BY THE PERSON(S) RECEIVING THIS PROOF You will see from this example that the following are required when ordering a die:

- Label size
- Number across and around
- Gaps between labels across and around
- Corner radius
- Specifics of the media to be cut or supply a sample.
- Detailed layout you require
- Base plate size you require
- Web direction
- Magnetic cylinder circumference (15")
- Type of machine being used (13" AUSTIK DIAMOND)

### **Magnetic Cylinder Information**



### Magnetic Cylinder Certificate of Conformity

The enclosed item(s) conform to the following specifications within standard tolerances. (Metric Units)

### Austik Diamond Intermittent Rotary

Customer: MP Etiketter	
Customer Number: 12571	
PO:	
Crder Placed By:	Sales Order Number:
Salesperson:	Serial Number: DLP P1801
Product: Magnetic Cylinder	
	Press Type: 9.5 SPECIAL
Number of teeth on Gear: 120	PPA: 1/8" CP 20°
Roll Repeat: 381mm (15")	Measured Bearer Diameter: 121.330
	Measured Body Diameter: 120.365
Lift Bolts: N	Final Diff:
Bearer Diar	meter - Body Diameter = Diff
Bearer Diameter	
Body Dame	ter
	D D promin

Date: OCT 2016

Mirror-finish tight-tolerance magnetic cylinder: Difference of body and bearer diameters held to +.0000/-.0001"(2.5 microns).



#### FCC SUPPLIER'S DECLARATION OF CONFORMITY (SDoC) to 47 CFR PART 15, SUBPART B CERTIFICATE OF FCC COMPLIANCE

Equipment under Test: Model Number: Serial Number: Manufacturer:	Diamond 2100 Label die cutter Diamond DLP 2100 DLP P1801 Austik Pty Ltd
Tested for: Address:	Austik Pty Ltd Factory 6, 20 Burton Court Bayswater, VIC 3153 Australia
Phone: Email:	+61 3 9720 4722 stewart@asutik.com
Responsible Party: <sup>1</sup> (located in US)	Signature
	Name Address Phone
Standards:	47 CFR Part 15 – Radio Frequency Devices Subpart B – Unintentional Radiators
	ANSI C63.4: 2014 American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
Result:	The Test Sample complied with the applicable FCC Part 15B requirements. Refer to Report M180801-2 for full details
Test Dates:	22 <sup>nd</sup> August & 3 <sup>rd</sup> September 2018
Issued by:	EMC Technologies Pty. Ltd., 176 Harrick Road, Keilor Park, VIC 3042, Australia. Phone: +61 3 9365 1000, Web: www.emctech.com.au
Issue Date:	24 September 2018
Test Engineer:	lan Ng
Attestation:	I hereby certify that the device(s) described herein were tested as described in this report and that the data included is that which was obtained during such testing
Authorised Signatory:	Chris Zombolas Technical Director EMC TECHNOLOGIES PTY. LTD.

<sup>1</sup> FCC 2.1077 3) requirement (refer to Appendix D for further details).



Accredited for compliance with ISO/IEC 17025 - Testing. The results of tests, calibration and/or measurements included in this document are traceable to Australian/national standards. NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration and inspection reports.

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Report No. M180801-3

### CERTIFICATE OF COMPLIANCE

Device: Model Number: Serial Number: Part Number:	Diamond DLP 2100 DLP 2100 DLP P1801 N/A	
Manufacturer:	AUSTIK PTY LTD	
Tested for: Address: Phone Number: Contact: Email:	AUSTIK PTY LTD Factory 6, 20 Burton Court Bayswater VIC 3153, Australia +61 3 9720 4722 John Stewart stewart@austik.com	
Standards:	IEC 61010-1:2010 (Ed. 3.0) , EN 61010-1:2010	
	Safety requirements for electrical equipment for measurement, control, and laboratory use	
	Part 1: General requirements	
Result:	The Test Sample complied with the limits of test standard. Refer to Report M180801-3 for full details.	
Test Date(s):	28 November 2018 – 6 December 2018	
Date of Receipt of Device:	27 November 2018	
Issue Date:	15 April 2019	
Test Engineer:	Afreque Mohamed	
Authorised Signatory:	A. Gayly Arun Gayen	
EMC Technologies Pty Ltd Issued by: EMC Technologies Pty. Ltd., 176 Harrick Road, Keilor Park, VIC, 3042, Australia. Phone: +613 9365 1000 E-mail: <u>emc-general@emctech.com.au</u> Web: <u>www.emctech.com.au</u>		
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### ELECTRICAL SAFETY TEST REPORT

### IN ACCORDANCE WITH IEC 61010-1: 2010 (Ed. 3.0), EN 61010-1: 2010

#### 1 INTRODUCTION

Electrical Safety tests were performed on the Diamond DLP 2100, Model: DLP 2100 in accordance with the requirements of IEC 61010-1:2010 (Ed 3.0), EN 61010-1:2010. The details of the Equipment Under Test (EUT) and the test results are provided.

The test sample was provided by the client. All results herein apply only to the test sample.

#### 1.1 Laboratory Overview

EMC Technologies Pty. Ltd. is an independently owned Australian company that is A2LA accredited to ISO 17025 for electrical safety testing – Accreditation Number 5082.01.

#### 1.2 Test Laboratory/Accreditations

Measurements were performed at EMC Technologies' laboratory in Keilor Park, Victoria Australia.

Table 1-1: Accreditations for Conformity Assessment

Country/Region	Body	
Australia/New Zealand	A2LA	Accreditation Number: 5082.01
Europe	European Union	Notified Body Number: 0819
USA	FCC	Designation Number: AU0001
Canada	ISED Canada	Company Number: 3569B
Japan	VCCI	Company Number: 785
Taiwan	BSMI	Lab Code SL2-IN-E-5001R



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