**INSTALLERS, SERVICE & LINE MECHANICS:** PLEASE READ THIS MANUAL AND FAMILIARIZE YOURSELF THOROUGHLY BEFORE ATTEMPTING TO INSTALL OR SERVICE THE DALEMARK EQUIPMENT DESCRIBED HEREIN. FOR FURTHER ASSISTANCE, CONSULT OUR FACTORY STAFF.

### **OPERATION MANUAL & PART LIST**

#### SERIES XXTREME/64-xx THERMAL PRINTING SYSTEM

SERIAL NO.

When ordering, always provide the following information:

- MODEL NUMBER
- SERIAL NUMBER
- PART DESCRIPTION & PART NUMBER AS SHOWN IN PARTS LIST

DALEMARK INDUSTRIES, INC. EXCEL PARK 2 575 PROSPECT ST., SUITE 211-212 LAKEWOOD, NEW JERSEY 08701 PHONE: 732-367-3100 FAX: 732-367-7031 E-Mail Address: sales@dalemark.com Website: www.dalemark.com

# DALEMARK XXTREME/64

The XXTREME/64 Thermal Printing System is designed to feed and print sheet-fed card stock, pouches and lids. This Printer is based on the Novexx Solutions 64xx Tabletop Thermal Printer which is the primary Manual for the XXTREME/64.

#### **IMPORTANT NOTE:**

# When setting up the XXTREME 64xx Printer you <u>must</u> select the appropriate Product Sensor in the Advanced Setup of the Novexx Print Driver.

Products should be center-fed with the Print Head centered on the Print Head Axle.

#### CAUTION: DO NOT MOVE PRINT HEAD WITH POWER APPLIED.

The Ribbon should be loaded in the center. Select Ribbon size to be slightly wider than the image to be printed. The Ribbon Feed occurs when both the 'ENTER' and 'FEED' buttons are depressed simultaneously in OFFLINE mode. Ribbon supply can be either coated-side-in (CSI) or coated-side-out (CSO).



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# **Printer Setup**

1. Remove the Printer from its box and place all shipping materials in a location where they can be used later should the Printer need to be shipped back for repair or maintenance.

2. Follow the setup instructions on the following pages for any options your Printer may have.

3. Plug the Printer in using the supplied power cord and turn it on.

4. Install the Thermal Ribbon as shown on the following Ribbon diagram page.

5. Place One piece of your product into the Infeed section of the Transport unit. Then place another making sure you shingle the product over the first product. Then add a third and shingle. This insures that the bottom product will always be the first to feed thereby minimizing the chance of a jam. Now you can add your stack of products up to 6" high depending upon product. Adjust Side Guides so product feeds straight with little resistance.

6. Set material length under Printer Menu. See Menu system page.

7. Feed a few samples through and make sure that the Printer feeds as desired (should feed consistently with a gap between the samples - adjust Separator Knob to control gap).

1. Press ONLINE to put the Printer in OFFLINE MODE

2. Press FEED to make the Printer run a product through (it will run through as many products as times the FEED button is pressed).

8. Download the driver to be used with the Printer to your computer. https://drivers.loftware.com/brand/novexx-solutions \*\*\*NOTE\*\*\* For USB Setup install driver BEFORE plugging USB Cable to Printer.

Download the file provided by the website. You will need to unzip it and run the installer executable on the computer that will manage the Printer. Click next and agree to the License Agreement. The Printer Driver you will need to install is the NOVEXX 64-xx, where xx is the size of the Print Head in inches (4, 5, or 8). On the next page select the Port that the Printer is attached to be it USB Port for USB, Network Port for Ethernet, or Other for Centronics, COM1, or RS-232. For an Ethernet connection, create a new Network Port with the IP address "ie.192.168.001.204" and port "9100". Note that the listed IP address is the default one and can be changed on the Printer if it is preferred to use an IP address different than the one listed. Then, input the desired IP instead of the default and make sure to change the IP address on the Printer. To change the IP address on the Printer see Network Parameters or refer to the Printer 2

interface of the Quick Setup. After you have selected the desired Port or created a new network port and optionally changed the name of the Printer Driver to whatever you like. Click Finish. The Driver should be ready for use.

9. Open Labeling Software and set size, sensor, darkness, and print speed settings in Printer Driver.



# ADDENDUM TO 64xx MANUAL

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PRODUCT SENSOR ADJUST

#### **Ribbon Loading**

Open the cover and place a roll of the proper Thermal Transfer Ribbon provided by Dalemark onto the Ribbon Supply Mandrel so that the Ribbon will unwind with the coated side facing down. Place an empty ribbon core on the Ribbon Take-Up Mandrel. For coated side in ribbons, the Ribbon roll will unwind in a counter-clockwise direction and the Ribbon will come off the top side of the roll. For the coated side out ribbons these directions will be opposite. Peel the leader from the roll of Ribbon, draw it underneath the Ribbon Guide and Print Head, and then up and over the Ribbon Drive Platen. Ensure that the supply and take-up cores are aligned on their respective mandrels. Use the adhesive on the ribbon leader (if present) to apply itself to the empty core on the ribbon take-up mandrel. While doing this process remove any wrinkles from the Ribbon. After adhering the Ribbon leader to the empty core, you can hand rotate the Take-Up Mandrel to advance the Ribbon and remove any persistent wrinkles. Moving the Ribbon back and forth gently along the length of the Ribbon Guide, Print Head, or Ribbon Drive Platen will help remove any major wrinkles.



Menu System

#### Menu System

Here is an example of how to navigate and change the value of a function within the XXTREME 64's menu structure:

The machine starts in ONLINE mode. We want to change the material length to xxx.xx mm. In order to do so, press the ONLINE button and the screen should now say *OFFLINE* in the upper left hand corner. Press the PROG \*ESC button and the machine will enter the Menu and say *Print Info*. Press the CUT button and the screen will say *Print Parameters*. Press the ONLINE button and the screen will say *Print Speed* on the bottom line. Press the CUT button three times or until the screen says *Material Length* on the bottom line. Press the ONLINE button and the screen will display the currently selected material length. Use the CUT and/or FEED buttons to adjust the material length to xxx.xx mm, and then press the ONLINE button to confirm the selection. The screen will then return to displaying *Print Parameters* on the top line and *Material Length* on the bottom line. Press the ONLINE button. The machine will then change back to being in ONLINE mode and display *ONLINE* in the upper left hand corner of the screen

## ADDENDUM TO 64xx MANUAL

#### HOPPER

The product is placed between two adjustable Hopper Guides to center feed from the bottom of the product stack. The guides are positioned by sliding on Mounting Bar. When loading an empty Hopper place one product between Side Guides and position forward to Separator and then add additional product to the stack.



Side Guides and Product Lift define the Hopper. First move the Side Guides to their outer-most position. Open Hopper Side Guides to allow single product to be placed in the Hopper, centered over Feed Rollers. Slide each Side Guide to edge of product, leave a small space to prevent binding of the product.

Place five to ten pieces of product in the Hopper. With the Printer 'OFFLINE', depress the 'FEED' button to confirm that product feeds straight and uninhibited.

The Separator Adjustment can be raised or lowered to allow a single product to advance. The following product is inhibited until the first product exits the Hopper. The Product Lift Arm can be used to help feed product and should be raised to allow the entire stack to feed.

#### **PRODUCT SEPARATOR**



Static Separator

The Separator allows the Feed Belt to pull one product from the bottom of the stack of products in the Hopper, while restricting the upper products from moving forward until the next product is exposed to the Feed Belt.

The Separator Belt is used as a Separator by mounting to back plate with an adjustable tension plate. There is an Adjustment Knob to set the desired pressure for product separation.

#### **PRODUCT SENSOR**

The Product Sensor is installed or removed differently for various products. To accommodate customer products that vary in width by more than three inches, the Reflex Sensor is installed. For products that have a black or dark bottom side, a Punched or Full Size Sensor must be used.



Punched Sensor and Reflex Sensor beneath Print Head



Full Size / Material Sensor before Print Head



#### PUNCH/REFLEX SENSOR POSITION ADJUSTMENT

Reflex or Punch Sensor beneath Print Head

Adjust Reflex or Punch Sensor position beneath the Print Head with Knob on outside of Print Head mounting. Adjust Full Size Sensor by loosening the thumbscrew under sensor and sliding on rail then retighten.

Two or more Pressure Rollers hold product against the product Feed Roller to present product to Print Head and Platen Roller.



PRINT HEAD REMOVED TO SHOW ROLLERS. WITHOUT EXIT ROLLER

Images to be printed should be created in the center of the label using the print head full width (4.2" for Model 6404; 5" for Model 64-05; 6.2" for Model 64-06; or 8.4" for Model 64-08). The Product Feed Length setting should always be the feed length or greater of the product being printed.

The image being printed should not start printing within the first 10mm of product leading edge to ensure reliable Ribbon Save function.

It is recommended for stiff product that the printing stop before the last 25mm, trailing edge, of the product. An Optional Product Conveyor/Re-stacker may be required in some cases to maintain a level plane on some stocks to ensure quality print.

To minimize the error 'NO GAP FOUND', increase the 'Missing Label Tolerance' from the default value of 2, under the 'SYSTEM PARAMETERS', to 3 or greater.

The print speed of the XXTREME/64 should not exceed 10" per second.

#### **CLEANING FEED ROLLER**

The FEED ROLLER should be cleaned with each Ribbon Roll change. If the bottom side of product being printed leaves a residue on the FEED ROLLER, cleaning may be required more often. Effective with systems shipped after September 10, 2012, the TRANSPORT will slide back to allow access to the FEED ROLLER for cleaning. The operator will use the Support Bar (for locking the Side Plates) to move the TRANSPORT.



TRANSPORT FORWARD FOR PRINTING



TRANSPORT BACK FOR CLEANING

#### **EXIT CONVEYOR**



XXTREME 64-xx Exit Conveyor

An Exit Conveyor is installed to ensure the printed product exits the print head area after printing. The Exit Conveyor is driven by a belt attached to the modified Platen Roller. The Conveyor is mounted to the printer frame and print head assembly.

#### ACCUMULATOR TRAY WITH GUIDES



Standard Accumulator Tray

The Standard Accumulator Tray with Magnetic Guides allows the printed product to stack for easy retrieval after being printed



Angled Accumulator Tray for Flexible Product (Optional)

The Extended Product Accumulator Tray is angled to allow the longer product to stack after printing without causing product jamming. The Guides assist the restacking.



**REV 7 BELT & PULLEY CONFIGURATION** 

TRANSPORT TOP VIEW – TOP PLATE REMOVED

#### **REV 7 BELT & PULLEY LISTING**

<u>ITEM</u>	<u>P/N</u>	Description	
1	PM-2349-1250 GSM 975-HR380-10 WRS	Main Feed Belt, 1.25" Wide, Green Smooth Main Feed Belt, 5/8" Wide, White Ribbed/Slotted	
2	PM-2349-011-1	Motor Drive Belt, Stepper Motor to First Compound Pul	lley
3	PM-2349-012	Drive Timing Belt	
4	PM-2349-049	Intermediate Timing Belt	
5	PM-2349-012	Drive Timing Belt	
6	PM-2349-046-2	Output Roll Timing Belt – Transport Exit Drive Belt	
А	V-7011	Motor Timing Belt Pulley	
В	V-7010	Timing Belt Pulley	
С	V-7012	Timing Belt Pulley	
D1	V-7010	Timing Belt Pulley	
D2	V-7010	Timing Belt Pulley	
Е	V-7013	Timing Belt Pulley	
F	V-7010	Timing Belt Pulley	
G	V-7014	Timing Belt Pulley	
Η	V-7009	Exit Roller Timing Belt Pulley	
Ι	V-7015	Transport Exit Spur Gear	
J	V-7015	Transport Exit Spur Gear	
<b>K</b> 1	B200016	Rear Belt Guide Pully Assy (Not Shown)	
K2	B200017	Front Belt Guide Pully Assy (Not Shown)	
L	V-0153	Shaft Collars (3)	
М	V-0739	Stepper Motor	
3/11/2	5	Rev. 7	18

Ν	PM-2349-3102-1	04/05 Transport Top Exit Pressure Roller Ass'y.
	PM-2349-3102-2	06 Transport Top Exit Pressure Roller Ass'y.
	PM-2349-3102-3	08 Transport Top Exit Pressure Roller Ass'y.
0	PM-2349-3103-1	04/05 Transport Bottom Exit Drive Roller Ass'y.
	PM-2349-3103-2	06 Transport Bottom Exit Drive Roller Ass'y.
	PM-2349-3103-3	08 Transport Bottom Exit Drive Roller Ass'y.

**PRODUCT SEPARATOR** Assy P/N: B-200025



Components for Separator

- A B-200018 Mount Plate
- B B-200019 Mount Block Assy w/screw
- C B-200020 Curved Pressure Block
- D B-2756 Knurled Knob
- E B-200021 Separator Belt Strip
- F B-200022 Stainless Steel Pressure Strip

### Side Guides, Fingers, and Hopper Parts

A	B-200023	Inner Side Guide, Plastic
D	B-200024	Outer Side Guide, Plastic
B,C	B-200025	Hold-Down Fingers (2)
	B-200029 B-200027 B-200028	Adjustable Product Lift Arm (Not Shown) Inner Hopper Plate Outer Hopper Plate

#### EXIT CONVEYOR



#### Exit Conveyor:

B-200015-1	Exit Roller w/Pulley (64-04/05)
B-200015-2 B-200015-3	Exit Roller w/Pulley (64-08)
NUL A 5052	$\Gamma = (D_{1}, \dots, D_{n})$
N V-A3833 V-5885-1	Exit Pressure Rollers (2) Exit Drive Belt
99352	Plastic Exit Lever w/Spring
B-200025	Inside Exit Roller Support Brkt.
B-200026	Outside Exit Roller Support Brkt.

<u>Exit Trays</u>		
B-200002	64-04/05 Flat S.S. Accumulator Tray with Ma	agnetic Posts
B-200003	64-06 Flat S.S. Accumulator Tray with Magn	etic Posts
B-200004	64-08 Flat S.S. Accumulator Tray with Magn	etic Posts
	Rev. 7	22

B-200007-1	64-04/05 Angled S.S. Accumulator Tray with Magnetic Posts
B-200007-2	64-06 Angled S.S. Accumulator Tray with Magnetic Posts
B-200007-3	64-08 Angled S.S. Accumulator Tray with Magnetic Posts

# **Electrical Parts**

Item	<u>P/N</u>	Description
	NV-A0978	XXTREME/64-04 Print Head
	NV-A0979	XXTREME/64-05 Print Head
	NV-A0980	XXTREME/64-06 Print Head
	NV-A0981	XXTREME/64-08 Print Head
	NV-A1182	XXTREME/64-04/05 Print Head Harness Cable
	NV-A1244	XXTREME/64-06 Print Head Harness Cable
	NV-A1941	XXTREME/64-08 Print Head Harness Cable
	NV-A5401	XXTREME/ 64-XX Power Supply
	NV-A6621	XXTREME/64-XX CPU Board
	A1504	Fork Punch and Reflex Sensor
	A4756	Adapter Cable for Punch/Reflex. Printer mfd. before April 2003
	A1958	Forked Punch Sensor

#### Maintenance

#### Cleaning Products:

Regular servicing and cleaning work is necessary for safe operation and high running performance. The servicing intervals are dependent on the operation and ambient conditions, daily operating times, and the print medium. Regularly clean the Print Head and Feed Roller by removing any paper, adhesive, and ribbon residues using a dust-free cloth and a neutral cleaning solution. Do not use any cleaning agents which could damage or destroy the coating surfaces, labeling, display, type plates, electrical components, etc. Avoid acidic or alkaline solutions. Ethanol and/or Isopropyl Alcohol (not Rubbing Alcohol) are recommended for non-rubber parts. The rubber rollers and platens are easily cleaned and rejuvenated using our #107E Water-Based (or similar) Rejuvenator/Cleaner. All rubber parts should be cleaned when feeding operation becomes diminished.

#### Cleaning the Print Head:

- 1. Switch off the Printer. Wait for power down.
- 2. Pull out the Main Power Cord.
- 3. Remove Product and Ribbon.
- 4. Unscrew the two Thumb Screws on the Print Head Module until the entire Print Head Module can be rotated clockwise on the Contact Axle Shaft.

CAUTION! The Print Head is a sensitive electronic component and can be easily damaged by electrostatic charges. Therefore, discharge any bodily static electricity before coming into contact with the Print Head by touching the base plate of the printer. The Print Head does not need to be removed. Mark the position of the Print Head on the contact axle shaft if it is not against the inside wall or outside stop.

- Clean the Print Head using a dust-free cloth and a neutral cleaning solution. CAUTION! Do not use any objects with sharp edges. Metal objects should NEVER be allowed to come into contact with the Print Head surface. They can damage the individual elements of the Print Head causing an un-repairable dead zone to form.
- 6. After cleaning return the Print Head Module to its original position and re-tighten the thumb screws.
- 7. Press the Thumb Screw on the tapered edge of the Square Axle Shaft and ensure the exact positioning of the Print Head Module on the Shaft. Also pay attention to the position of the Print Head in relation to the edge of the product to be printed.
- 8. Before switching the Printer on check whether the Print Head cables are still properly connected. If not re-seat the Print Head cables.

#### Changing the Print Head:

The Print Head is adjusted to the Print Head Module during manufacture. As a result the Print Head can only be replaced in conjunction with the Print Head module. Before starting, make a note of the resistance value of the new Print Head (denoted on the sticker on the Print Head). It is the 4 digit number following the letter R. When placing the Print Head on the Print Head Shaft ensure that the Print Head is lying flat.

- 1. Switch off the Printer. Wait for power down.
- 2. Pull out the Main Power Cord.
- 3. Remove product and ribbon.

CAUTION! Wait at least 3 minutes after switching off the Printer before removing the Print Head Cables from the Print Head. Mark the position of the Print Head on the Axle Shaft to ensure proper alignment when re-installing.

4. Unscrew the two thumb screws on the Print Head until the entire Print Head Module can be removed from the shaft. Take care not to touch the connector contacts or the thermal edge of the Print Head.

CAUTION! The Print Head is a sensitive electronic component and can be damaged by electrostatic charges. Therefore, discharge any bodily static electricity before coming into contact with the Print Head by touching the base plate of the Printer.

- 5. To install, move the new Print Head Module to the original position and tighten the thumb screws.
- 6. Press the thumb screw on tapered edge of the square axle shaft and ensure the exact positioning of the print head module on the shaft. Also, note the position of the Print Head in relation to the edge of the label and the metal Platten Roller pully. DO NOT let Print Head edge contact metal pully.
- 7. Plug the Print Head Cable back in.
- 8. Switch Printer on.
- 9. The resistance value of the Print Head must be entered using the interface menus while in off-line mode. "SYSTEM PARAMETERS" -> "HEAD RESISTANCE"

CAUTION! Entering an incorrect value can damage the Print Head and/or affect print quality

#### Cleaning the Product Sensor

The Sensors can be cleaned using compressed air to blow any debris from in between the sensing points or on top of the Sensor Eye. A paper towel may also be folded and passed across the Sensor to clean it. The Print Head may need to be removed to access the Reflex and Punch/Material Sensor.

#### Transport Disassembly

To change any Belts on the Transport follow steps below while taking pictures to make reassembly easier and to record position settings.

You want to only remove the outside frame plate (the side shown in the pictures) of the Transport and Top Plate.

- 1. Remove the Transport from the Printer. There may be two screws on the bottom of the Printer that hold it in place. Mark the position of the transport then remove the screws and gently lift out the transport.
- 2. There should be a plug for the Motor that you pull thru the sidewall hole. Once out you can unplug it and set the printer aside.
- 3. Use tape or a marker to mark the set position of the Product Lift Arm on the back of the Transport, then unscrew the red knob to remove the Arm and Pivot assembly.
- 4. Mark the Side Guide positions so they can be reinstalled in the same spot later.
- 5. Remove the 4 Flat Head Screws (2 on each side) that hold the 2 vertical 'Z' arms in place. You should then be able to pull the whole assembly with the separator, side guides, and hopper plates up and away.
- 6. Remove the 2 Flat Head Screws that hold the Outside Bracket of the Exit Rollers and remove the Upper and Lower Outside Bracket. The Top Roller should be free and placed to the side. The Bottom Roller will still be attached by the Belt.
- 7. Remove the 4 Flat Head Screws on the Top Plate that surround the opening of the Transport Belt. These Screws hold a Plastic Plate that goes under the Belt and Top Plate.
- 8. Remove the rest of the Screws holding the Top Plate and remove the Plate by sliding back and away.
- 9. Remove the 6 Cap Screws that hold the outside Frame Plate on and remove the Plate.
- 10. You should now be able to swap out the Transport Belt. Be sure the new Belt is placed in the center grooves of the pullies (White Transport Belts only).
- 11. Make sure the Plastic Guide Plate is placed under the Transport Belt.
- 12. Replace the Outside Frame Plate by carefully aligning the Shafts into the Bearing holes. You may need to apply pressure to spread the Shafts due to Belt tension. Replace 6 Cap Screws.
- 13. Put Top Plate back on making sure the tapered screw holes are facing up.
- 14. While reaching underneath the Top Plate thru the front of transport hold the Plastic Plate against the Top Plate and replace Screws being careful not to strip plastic threads.
- 15. Replace the rest of Screws in the Top Plate.
- 16. Replace the Upper Exit Rollers and align both Upper and Lower Rollers with the Outside Bracket and replace Screws in Bracket.
- 17. Reinstall the Vertical "Z" Side Arms and replace the 2 Screws on the side of each Arm.
- 18. Replace Rear Lift Arm and make sure it is in the proper position.
- 19. Make sure the Vertical Separator Assembly is straight and not angled and that Side Guides are in proper position.
- 20. Plug Transport Motor back in and place Transport back in Printer and secure Bottom Screws. Make sure Transport is in its correct position and Exit Rollers don't contact the red guides on Printer.