

# LED Backlight upgrade for a Red Lion Controls Model GL350



**MONITECH**  
PRACTICAL SOLUTIONS FOR INDUSTRIAL DISPLAYS



# IMPORTANT:

## WARRANTY

Before using any MONITECH product please carefully review this Manual as well as any additional documentation provided with your shipment.

### Attempting any of the following will void product warranty:

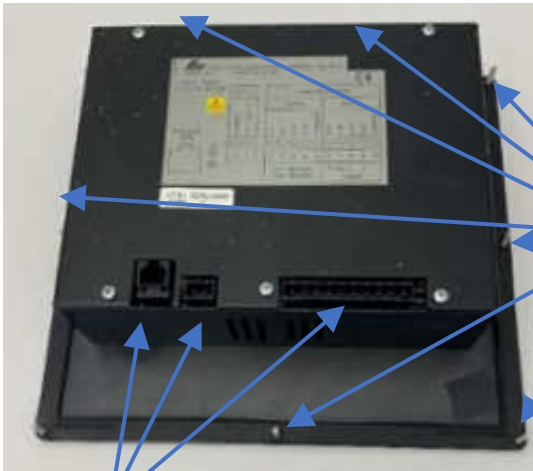
- unauthorized repairs or parts replacement
- inappropriate use or placement: exposing product to liquids, harmful gases, electrical shock, physical shock, temperatures beyond the range of -4°F to 140°F (-20°C to 60°C)
- use of electrical voltage other than 12V 4.16A (power supply and AC cable provided)
- Removal or modification of serial, product, or warranty labels.

	<b>WARNING</b>	
	<b>ELECTRICAL HAZARD DO NOT OPEN</b>	
TO AVOID ELECTRICAL SHOCK DO NOT OPEN PRODUCT CASING. UNAUTHORIZED REPAIRS OR PARTS REPLACEMENT ARE PROHIBITED AND WILL VOID PRODUCT WARRANTY. PLEASE RETURN TO MONITECH FOR REPAIRS.		

# REMOVAL:

**Step #1)** Turn off turn off main power, turn off machine.

**Step #2)** Unplug the power plug and communication cables from the back of the HMI. Take the HMI out of the machine by unscrewing the fasteners holding it in place.

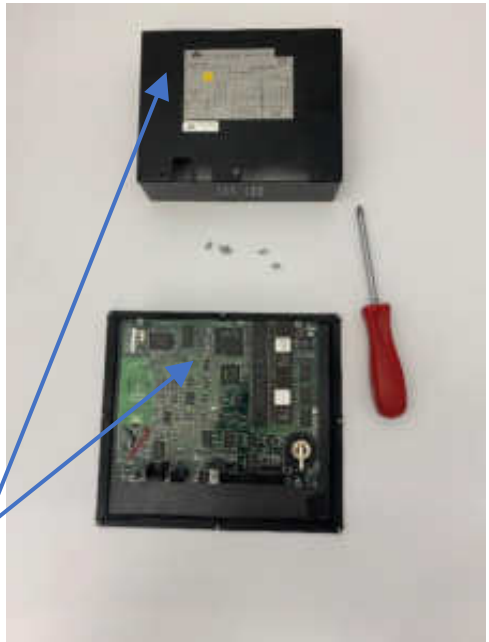


Unscrew these fasteners to take out the HMI out of the machine. Keep the fasteners for re-installation

Unplug these connectors

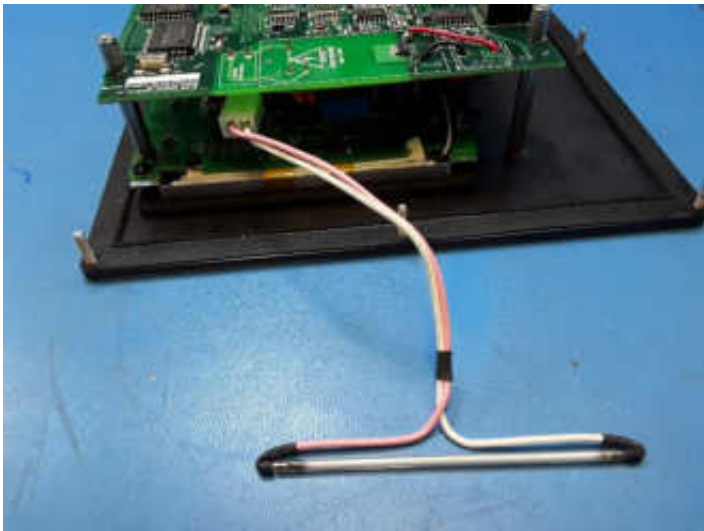
**Step #3)** Remove the back cover. To access the LCD panel, you might have to remove the top circuit board.

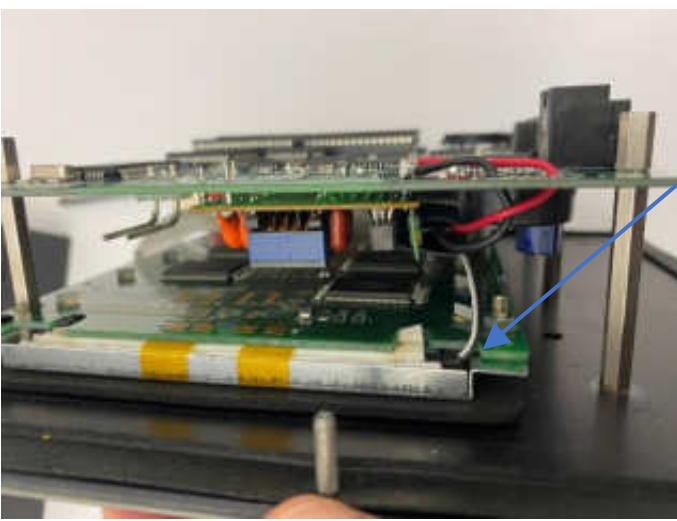




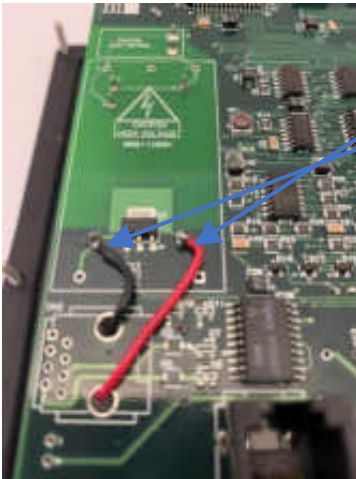
Remove the back cover. To access the LCD panel, you might have to remove the top circuit board.

**Step #4)** Remove the CCFL bulb and slide in the LED strip. Make sure the LEDs are facing into the LCD panel





**Step #5)** Solder the wires onto these points. Best technique is to add solder to the points on the board, then add solder to the wires, then solder the wires to the points

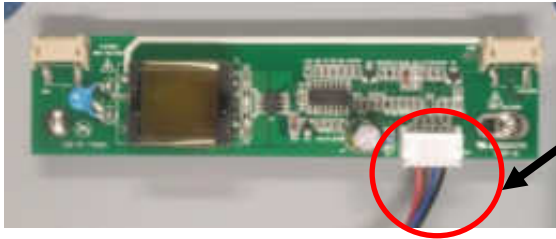


**Step #6)** Mount the LED Inverter board to somewhere that is can be zip tied. Test the Backlight by applying 24 VDC to the unit.

**Step #7)** If everything works then mount the controller board and back cover back on the HMI frame.

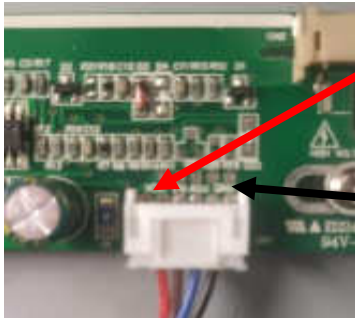
**IF YOU HAVE A DIFFERENT INVERTER:**

**Step 1: Identify the the Ground and 12 VDC Wires on the input of your Inverter Board. With a Voltmeter.**



**Inverter**

**Input Connector**

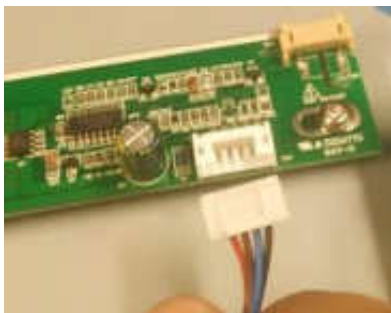


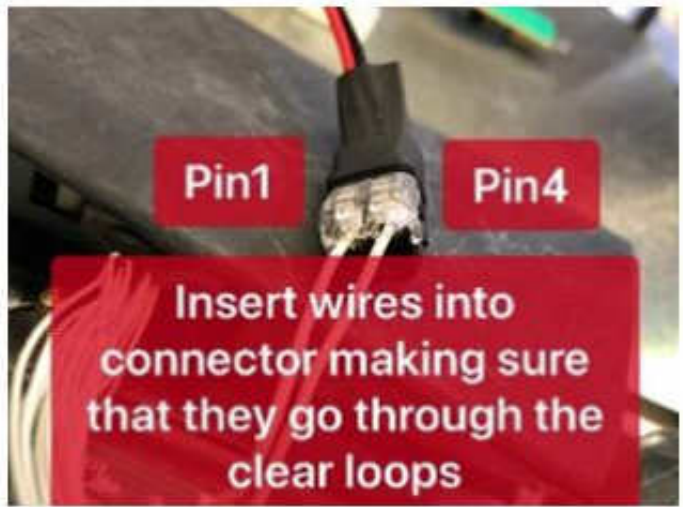
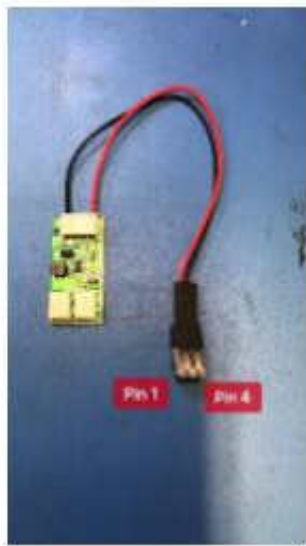
**12 VDC**

**GROUND**

**NOTE: IF YOU CAN NOT FIND THE 12 VDC & GROUND. YOU CAN TYPE IN THE INVERTER PART # ONLINE. YOU DOWNLOAD THE DATA SHEET AND FIND OUT THE PIN\_OUT OF THE INPUT POWER. THER YOU CAN GET THE 12 VDC and GROUND.**

**Step 2: Now that you have idenfitted the 12 VDC & GROUND you can take the wires out of its connector. Then connect the ground of the inverter input to our black coming out of our board. Then connect the 12 VDC of the inverter input to our red coming out of our board. Use the white dual clip black connector to connect the wires together.**





**NOW YOU CAN  
SEE THE CREEN  
IN YOUR  
HMI!!!**

**Enjoy your rejuvenated HMI. Call us to order more HMI replacement parts.**

**For Technical Support, Call**

**1-877-493-6105**

**[Support@Monitech.com](mailto:Support@Monitech.com)**

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