

# LCD upgrade kit

FOR YOUR ALLEN-BRADLEY SERIES 9 (8520MOP)  
MONOCHROME



**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)** On the front of your machine, remove the screws holding the HMI in place. Take out the HMI and keep the screws for re-installation. You will have to unplug the video cable and the other cables to take out the HMI. Please take a picture of your connection so you know where they go for re-installation.



To see the CRT and controller you must remove the back panel by unscrewing the screws hold it.

**Step #3)** This is what you got. Unscrew the fasteners holding the CRT Frame to the HMI, keep the screws for re-installation. Unplug the power connector from the board. An unscrew to the ground wire from the frame, screw the power supply ground back in. After this take out the CRT Frame from the HMI.



Screw to remove to free the CRT frame from the HMI



Unplug the monitor power from the board.



Unscrew the ground wire from the board. Re-attach the power supply ground.



**Step #4)** First discharge the CRT, it has high voltage. Be careful. Put a flat head screw driver underneath the anode lead cap so it is touching the metal part.

And get another screwdriver and cross it with the flat head used and touch the metal frame with it. After a minute take the Anode lead Cap off or unplug it from the driver board of the CRT.



Remove the Anode Lead Cap squeezing the metal pins in with a flat head screwdriver.

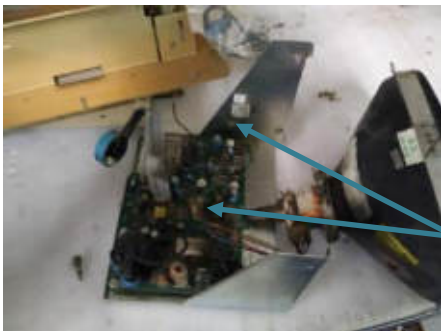
**Step #5)** Unplug the Neck Board then Unscrew the CRT from the frame (keep fasteners for re-installation). Push the CRT out of the frame and then Unplug the Yoke & Unscrew the Ground from the Yoke.



Remove the Neck Board



Unscrew the four screws holding the CRT. Keep these.



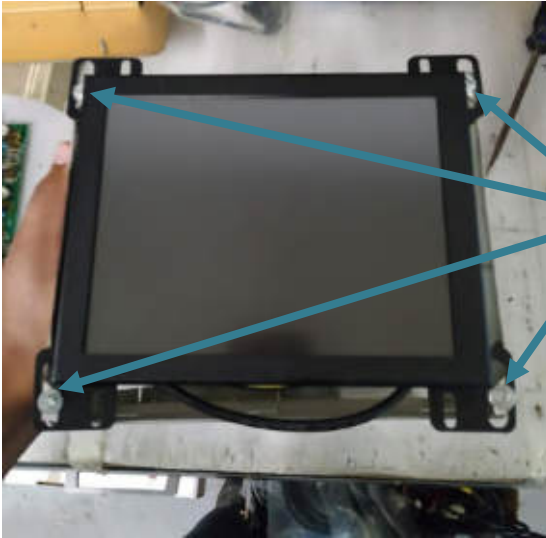
Unplug the Yoke and the Unscrew the Yoke Ground from the Frame.

**Step #6)** Now that the CRT is out you are able to remove the driver board by unscrewing the screws holding the board in place.



## INSTALLATION:

**Step #7)** Put Monitech's Monitor in the housing using the four screws previously holding the CRT in place.



With the screwdriver fasten the 4 screws to attach the New Monitech Monitor on these 4 holes.

**Step #8)** Place the CRT Frame with Monitech Monitor assembly back into your HMI by using the screws previously mounting the frame in place.

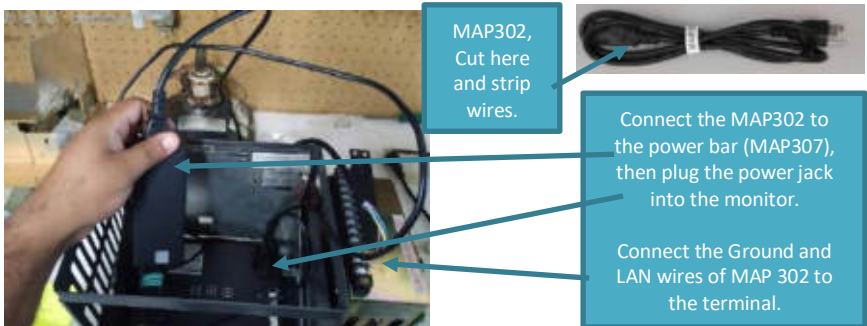


**Step #9)** Open up your MK068 box, get MAV576 (Adaptor VGA to 15 PIN LD Video Connector). Plug the VGA into the Monitech Monitor and tighten the screws. Then plug your video cable from your machine into our adaptor.



**Step #10)** For the power connection there is 3 options.

*Option 1)* Get MAP302 out of the kit. This is the power connection to a wall AC power, but if you want the power from your machine, cut the plug side and strip the wires. Then place the wires onto the AC portion of the terminals. Then you can attach to MAP307 and plug the jack side to the Monitor.



*Option 2)* Cut the jack part of the MAP307 (Power supply) and strip the 2 wires. Solder or use butt connectors to connect the red wire to controller to red wire of jack. Solder or use butt connectors to connect the black wire to controller to black wire of jack. Then plug the jack into the monitor.



Red is 12 VDC. Cut the connector off it strip the wire then use a crimp to attach to the red wire on MAP323



Black is 0 VDC. Cut the connector off it strip the wire then use a crimp to attach to the Black wire on MAP323



*Option 3)* Attach MAP302 (Power Cord) and MAP307 (Power Supply). Connect the jack to the Monitor. Plug in MAP302 to an AC Wall Outlet.

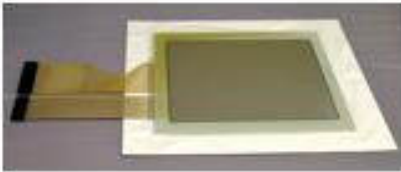
**Step #11)** Before Mounting the HMI back into the machine. Turn On power and Main Power to test the Monitor. If Video is on use the User Guide to Adjust the Screen. Then mount the HMI back into the machine.



Enjoy your rejuvenated display!!! From the Monitech Family we thank you for business.

# DISPLAY PARTS

Your source for reliable after-market solutions



For Technical Support, Call

**1-877-493-6105**

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

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