Set up your 9-inch LCD

ML090PT0116S SERIES

MɒNITECH
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.

⚡	**WARNING**	⚠
	ELECTRICAL HAZARD **DO NOT OPEN**	
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.		

1. Secure a video signal.

After mounting your new Monitech LCD into the control panel and attaching the video and power cables, the monitor will power up automatically. It should also start receiving the video signal from your machine. If you are getting no video signal, your screen will be blue. Make sure the video cable is secured. To be sure, unplug and reinsert.

2. Start with the 3-button menu.

Now that you have your video signal, use the 3 buttons on the back of the LCD to optimize the video for your specific machine. IMPORTANT: ignore the top 5 buttons for now.

Press MENU to open the menu. Press MENU again to select an item. When the item is selected, it will turn red. Press ◀ or ▶ to adjust values. Press MENU again to go back to the list, then use the arrows to move up and down in the list. As long as you are getting a video signal, your settings will be automatically saved.

```
Setting          Advance
H_Position              00
Width                   00
V_Position              00
Height                  00
Phase                   00
Style               RGB(A)
Sync         SEPARATE(HV)
Resistance          750 Ω
Scanning      Progressive
Resolution        800×600
Exit&Save
Info HS 00.00KHz VS 000.0Hz
```

The picture above shows the default values for each item. The bottom line (Info) shows specific values for your machine's video signals. NOTE: If the Info values show 00.00, there is no video signal. Again, verify that the video cable is secured before you do anything else.

3. Size your video image.

Focus on the first five settings. Don't worry about brightness or contrast yet.

H POSITION (HORIZONTAL)
The default value is 00. The range is -99 to +99.

WIDTH
This is a very useful setting: use it to adjust the width of the video on your screen. Use it as well to eliminate vertical lines. The range is -99 to +99.

V POSITION (VERTICAL)
Defaults to 00. The range is 00 to +99.

HEIGHT
The height defaults to 00 and the range is 00 to +99.

PHASE
After you use the WIDTH setting, some vertical lines may still be present. Use this setting to eliminate them entirely.
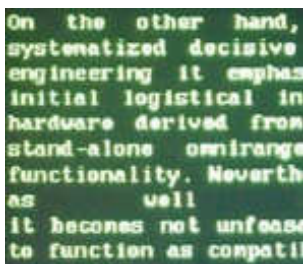
STYLE

RGB (A) is the default. If you are using this LCD as a monochrome and want a black and white screen instead of green, change the style to YUV. RGB (D) is also available.
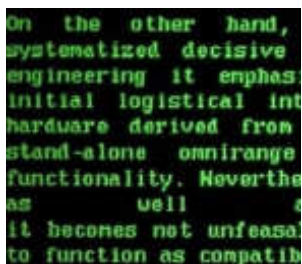
SYNC

This setting automatically detects what you are using. You can adjust to Separate (UV), Composite (S) or SOG (sync on green).

RESISTANCE

750 Ω is the default. If your video is saturated or text is "blooming" like the image on the left, change it to 75 Ω.

BEFORE   AFTER

SCANNING

Defaults to Progressive and rarely needs adjustment.
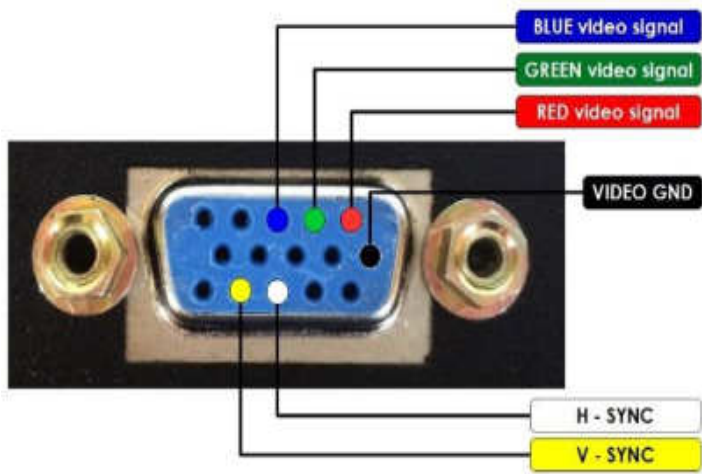
RESOLUTION

Defaults to 800x600. If the video still won't fit on the screen after adjusting the WIDTH setting, change the resolution to 640x480.

EXIT + SAVE

The menu will exit and save automatically after 20 seconds. If you are in a hurry, you can select this item manually.

Video connector

This picture shows the value for six pins on the video connector at the back of the monitor. (The other pins are not used.)

Tips to optimize your image

My screen is blue.
This means the LCD is getting no video signal from the machine. Reseat the video connector and secure it.

I cannot see a right or left edge of the image.
In the 3-button menu, select WIDTH and adjust down until you can see the right edge of your video. Now you can adjust the whole screen.

The text is dim or the screen is blank.
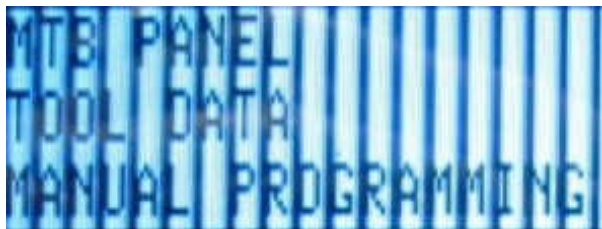In the 3-button menu, set RESISTANCE to **750 Ω.**
To fine-tune it, use the 5-button menu and adjust BRIGHTNESS in the COLOR setting.

The text is too bright.
In the 3-button menu, set RESISTANCE to **75 Ω.**
To fine-tune it, use the 5-button menu and adjust BRIGHTNESS in the COLOR setting.

Vertical lines are interrupting the image.

In the 3-button menu, select WIDTH and adjust values until the lines disappear. When you have done all you can do with this setting, select PHASE to fine-tune it.

How do I deal with intermittent video issues?
Ensure the video cable does not run close to high-power devices or cables. Ensure all cables are securely seated and free of damage.

For Technical Support, Call
1-877-493-6105
Support@Monitech.com

MONITECH
PRACTICAL SOLUTIONS FOR INDUSTRIAL DISPLAYS

20 Howard Place
Kitchener, Ontario N2K 2Z4 Canada
519-725-2222
www.monitech.com
sales@monitech.com