ECONOMY LCD USER GUIDE

For 8.4”, 10.4”, 12.1”

MONITECH
TAKE 2
ELECTRONICS

1. Important Info

WARRANTY
Before using any Take2Electronics 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.

2. Feature specifications

Support Timing Table (but not limited to)

Item	Resolution	H. Frequency kHz	V. Frequency Hz
1	620 x 256	15.613	50.365
2	650 x 215	16.013	61.118
3	650 x 215	16.304	62.229
4	640 x 215	16.606	63.382
5	630 x 215	16.800	64.122
6	640 x 215	15.750	53.030
7	680 x 215	15.104	57.649
8	604 x 436	26.445	57.386
9	754 x 353	24.822	59.812
10	750 x 365	24.408	57.566
11	680 x 350	23.196	59.477
12	640 x 400	31.469	70.087
13	640 x 480	31.469	59.940
14	640 x 480	35.000	66.667
15	640 x 480	37.861	72.809
16	640 x 480	37.500	75.000
17	720 x 400	31.469	70.087
18	800 x 600	35.156	56.250
19	800 x 600	37.879	60.317

Note:

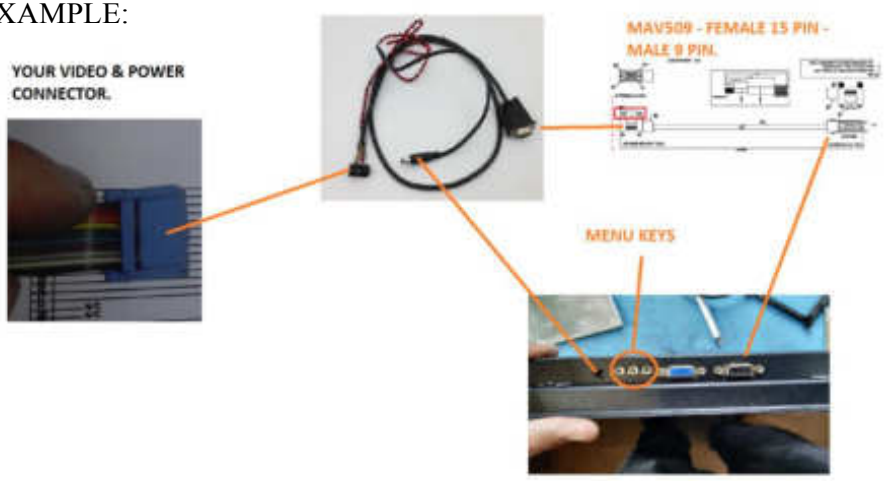
1. YPbPr = YUV
2. Input Horizontal Frequency Rate 12 kHz to 40 kHz automatically recognized.
3. Support Interlaced Scanning and Line by Line Scanning.
4. Support Vertical Resolution from line200 to line 600 automatically recognized.
5. Support variable Horizontal Resolution automatically recognized.
6. Support RGBHV (separate sync), RGBS (composite sync), automatically recognized.

3. Interface Definition:

Item	Specs
① DC12V	Power input, DC12V, ≥1A
② +、-	Click it to move the cursor up/down, or modify the value
③ MENU	press it to enter into OSD menu; click it once to select and click again to exit the current line
④ NULL	Invalid interface
⑤VIDEO IN	Interface of 9Pin cable, to be connected to the original signal of industrial machines

Note:
Use the **MALE 9 PIN to FEMALE 15 PIN CABLE** to get your video signal. Connect the male 9 pin side to the monitor and connector the female 15 pin side to our adaptor cable.

EXAMPLE:



4. Definition for I/O Interface:

PIN	Input Signal
p1(GND)	Connect to the ground
p2(GND)	Connect to the ground
P3(R)	connect R(ed) interface of the input device
P4(G)	connect G(reen) interface of the input device
P5(B)	connect B(lue) interface of the input device
P6	Undefined(null)
P7	Undefined(null)
P8(H)	connect H(CS) interface of the input device
P9(V)	connect V interface of the input device

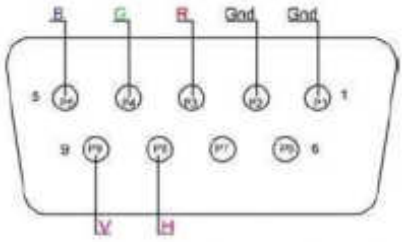


Figure: Definition for Input Channel II

5. Accessories& Details

Definition of 9 Pin cable

Name	Wire color	Signal
H	Brown wire	Undefined(null)
A	Silver web	Shield
B	Black wire	Ground(GND)
C	White wire	Vertical Frequency Rate(V)
D	Orange wire	Horizontal Frequency Rate(H)
E	Blue wire	Blue(B)
F	Green wire	Green(G)
G	Red wire	Red(R)

9 pin cable

6. Mounting for 12.1, 10.4 & 8.4 inch monitors.

You will need to take all the driver board and parts of the CRT assembly out of the CRT Housing. You will use this frame to mount to our monitor. With each monitor there is mounting brackets that you will have to fasten on to the monitor to be able to mount the CRT Frame. Keep the video cable and power cable.

Dimension of 8.4" LCD Monitor (Already Mounted)

Dimension of 10.4" LCD Monitor

After mounting these brackets to the monitor, mount the assembly to the CRT frame.

Dimension of 12.1" LCD Monitor

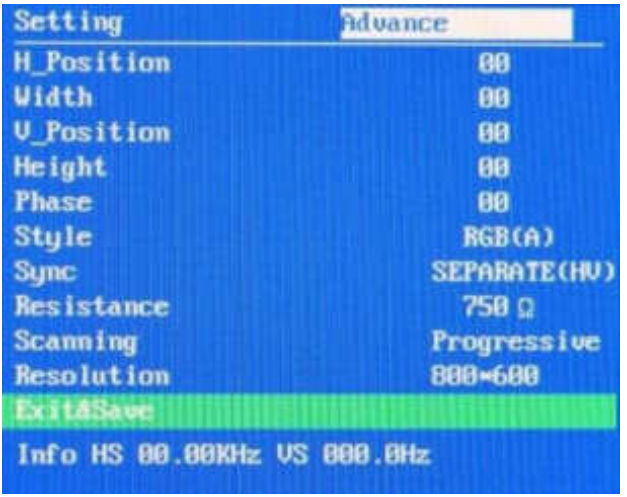
After mounting these brackets to the monitor, mount the assembly to the CRT frame

7. Use menu to adjust your image.

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.



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 which may make it appear that image is not clear or letters are missing parts (an H might had a thick size and a thin side, instead of both side the same). Adjust the width so that the image is to the far left and right of the screen. 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

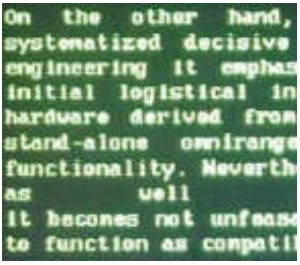
RGB (A) is the default. If you are using this LCD as a monochrome and want a black and white screen instead of green, change the style to YUV. RGB (D) is also available.

SYNC

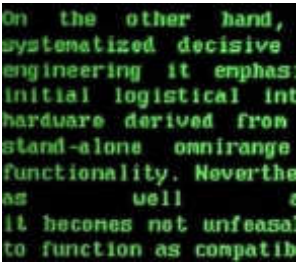
This setting automatically detects what you are using. You can adjust to Separate (UV), Composite (S) or SOG (sync on green).

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 & rarely needs adjustment.

RESOLUTION

Defaults to 800 X 600. If the video still won't fit on screen after adjusting the WIDTH setting, change the resolution to 640 X 480.

EXIT + SAVE

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

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.

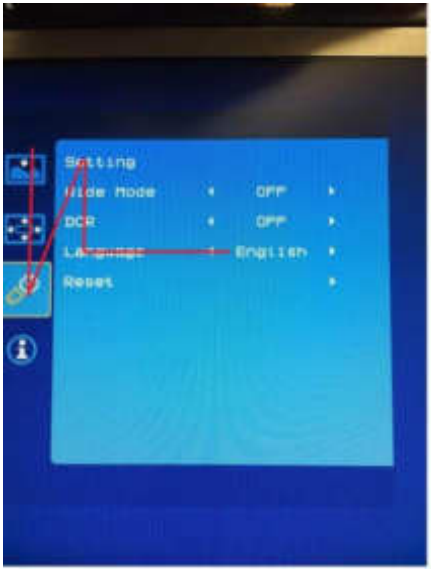
The text is too bright.

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.

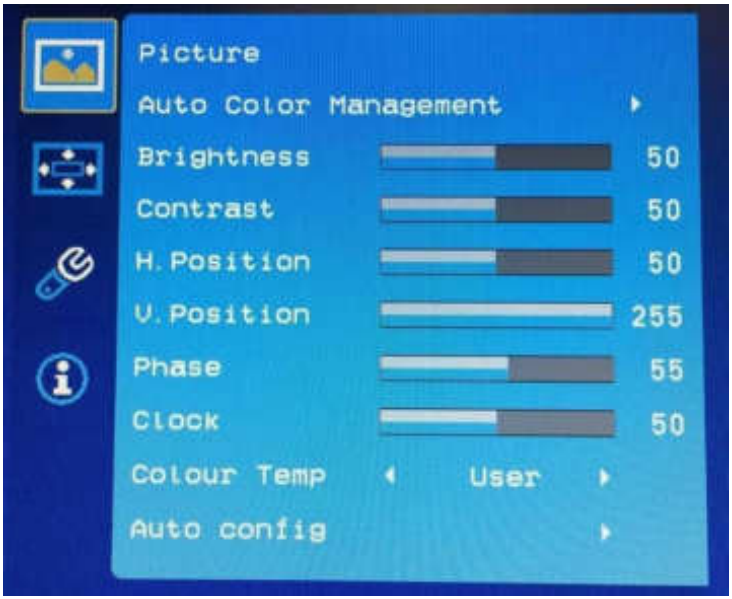
Changing The Menu to English



To change Language:
Press:
-Menu
-Left
-Left
-Menu
-Left
-Left
-Left
-Menu
-Left, until you see English

The 5 Button Menu

AUTO: Automatically adjust the screen display.
MENU:



Brightness, Contrast, Color, Image position, OSD tools POWER: Power button to turn on/off the monitor. LEFT: Move left RIGHT: Move right

8. Trouble Shooting:

8.1 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.

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. **PLEASE REFER TO PAGE #4 NOTE.**

IF YOU HAVE A BLUE SCREEN WITH A MENU THAT WILL NOT GO AWAY, THEN YOUR HORIZONTAL SYNC PULSE IS NOT GOING TO PIN 8 AND/OR YOUR VERTICAL SYNC PLUS IS NOT GOING TO PIN 9

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