

How to convert old CNC CRT monitor to LCD Monitor

[MS084R43CNCU](#)(9" CRT Replacement), [MS104R43CNCU](#)(12" CRT Replacement) and [MS121R43CNCU](#) (14" CRT Replacement) are universal replacement to replacing old CRT CNC monitors. They support all format of old CNC CRT monitor from MDA (Mono chrome, 18.4Khz), CGA (15.8Khz), EGA(21.8Khz), VGA(31.5Khz and SVGA(35.2Khz). They had upgraded to our UB54 sunlight readable LED kit. It will last 10 times longer than CCFL backlight. It comes with all parts that you need to upgrade from old CRT to LCD, the only thing you need to do is to determining where the signals go on the mating connector (DB9-F) of your old CRT. We can also help you to identify them if you email us few images about your old CRT wire harness (techsupport@lcdparts.net). Easy to install, anyone can do it! It comes with 1 year warranty.

Identifying your old CRT wire harness signal pin out.

There are many different type of connector were used on old CNC CRT monitor. With limited equipments and technical skills, the easiest way to identify the pin out would be going by color coded wire as show on above photo. We can also help you to identify them if you email us few images about your old CRT wire harness (techsupport@lcdparts.net).



Connecting wires to DB9-Male Cable:

All our universal kits come with one color coded DB9-male with wires, one DB9 female and one DB9 male connectors.



MDA connections: (Monochrome Display Adapter)

Name	Wire Color	Description
A	Silver	Connect to DB9 Metal Shield
B=Pin1	Black	Connect to Ground
C=Pin9	White	Connect to Vertical Sync
D=Pin8	Orange	Connect to Horizontal Sync
E	Blue	No Connection
F	Green	No Connection
G	Red	No Connection
H=Pin7	Brown	Connection to Video in



CGA/EGA/VGA/SVGA Connections:

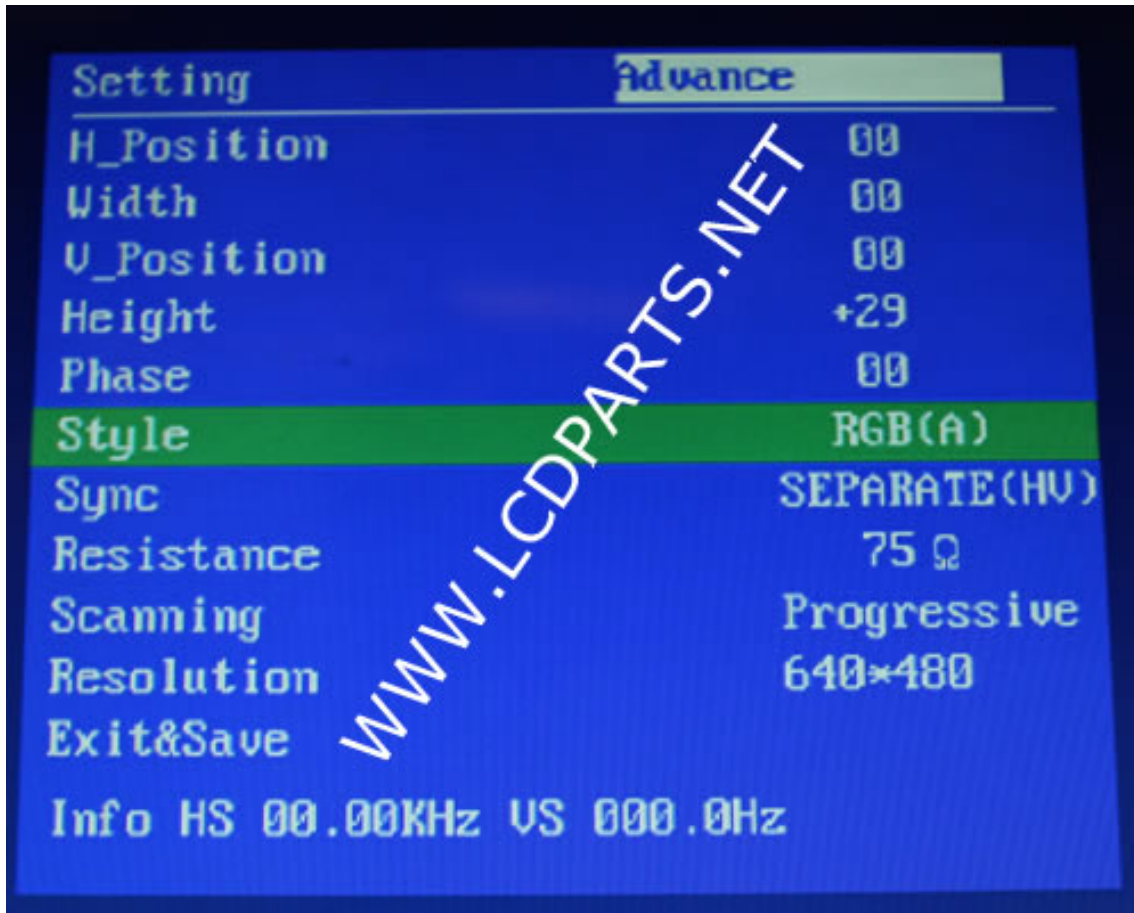
Name	Wire Color	Description
A	Silver	Connect to DB9 Metal Shield
B=Pin1	Black	Connect to Ground
C=Pin9	White	Connect to Vertical Sync
D=Pin8	Orange	Connect to Horizontal Sync
E=Pin5	Blue	Connect to Blue (B)
F=Pin4	Green	Connect to Green (G)
G=Pin3	Red	Connect to Red (R)
H	Brown	No Connection



OSD Menu and Input Connector



Button	Description
1	Power input, DC12V, ≥2A
2	Press it once it to move the cursor up/down,
3	Press it once to bring up OSD Menu. Press it again to select and press it once to exit Menu
4	Not Use (Invalid interface)
5	DB9 connector. To be connected to input



Configuration the setting and Troubleshooting

Step 1:

Selecting a correct input source as follow:

MDA=RGB(D), CGA/EGA/VGA=RGB(A), YUV color=YUV

Press MENU once, to bring up OSD Menu

Then Press - or + go to "Style"

Press MENU once, Style text will change to Red

Press + or - to select correct input

Press MENU to save it

Step 2: Changing resolution:

Press MENU once

Press - or+ go to Resolution

Press MENU, Resolution Text will change to Red

Press - or + select 640X480 Press MENU once, Press - or + go to EXIT&Save Press MENU to save it

Step 3: Adjust the image to fit LCD screen

Press MENU to bring up OSD Menu

Press - or + to select such as H-Position, V-Position, Width, and height adjustment.

Step 4: Save and Exit: Save all the parameters and exit the menu.

Note 1: If the screen shows elongated, and the overflow to the bottom of the screen, change scanning to Progressive Scan; if the adjustment of the vertical position to a maximum, the image display is still only half of the display, then change scanning mode to: interlaced scan (Interlaced).

Note 2: input impedance; select the input source impedance than with select 75Ω in Europe, relatively light, if you choose all 75Ω European white sides, you should choose for the 75Ω euro.

Note 3: the phase adjustment, if the image appears small waves up and down type jitter, can adjust the consistency with the input signal phase.

Definition of 9 pin DB9 Input connectors (Solder Side, for CGA/EGA/VGA/SVGA)

Pin	Description
P1	Ground
P2	Ground
P3	Red signal
P4	Green Signal
P5	Blue Signal
P6	No Connection
P7	No Connection
P8	Horizontal Sync
P9	Vertical Sync

