OWNERS MANUAL

12" MONOCHROME CHARACTER DISPLAY MODEL JB-1201MR JB-1205MR





DESCRIPTION

NEC MONOCHROME CHARACTER DISPLAY optimized for use as a computer terminal. These are designed and manufactured to provide excellent displaying with high resolution image well suited for use with any personal or professional computer.

The few minutes you take now to read this manual should contribute substantially to keep performance for many years.

FEATURES

1. High Reliability

. All solid state circuitry stabilized power supply assures a high quality picture, regardless of changes in temperature or AC power line fluctuations.

2. Flat Screen

The flat CRT is angled at 80 degrees to reduce glare and reflections.

3. High Resolution

Video bandwidth (20MHz) is wide enough to allow display of 25 lines of 80 characters without distortion.

4. Audio Amplifier

A 1.0 watt audio amplifier is included in these models.

5. Simple and Functional Design

Attractive styling combined with the reliability of all solid-state circuitry make the **NEC** CHARACTER DISPLAY ideal for use with personal or professional computers.

EXPLANATION OF CONTROLS AND SWITCHES



1. OFF-ON · VOLUME Control

This control provides power on-off control. Additionally, as the knob is rotated further to the clockwise, volume will increase. Power is turned off when the knob is turned full counterclockwise.

2. BRIGHTNESS Control

This control permits adjustment of overall picture brightness and can be used to compensate for variations in room lighting.

3. CONTRAST Control

This control allows adjustment of the contrast between characters and the background.

4. H.HOLD Control

This control allows adjustment of horizontal stability. In the event the picture "tears" toward the left or right, or appears as diagonal stripes across the screen, adjust the H.HOLD control clockwise or counterclockwise until the picture stabilizes.

5. V.HOLD Control

This control allows adjustment of vertical stability. In the event the picture "rolls" upward or downward, adjust the V.HOLD control clockwise or counterclockwise until the picture stabilizes.

6. 75-OHM TERMINATION SWITCH

Slide this switch to the left (75 ohm) when the display is connected to equipment that has a 75 ohm output impedance. Slide the switch to the right (HIGH) when connected to a higher output impedance.

7. VIDEO IN and OUT Jacks

The jacks provide "feed through" of a video signal when it is desireable to display the video signal on more than one monitor. A standard 1.0 volt p-p video signal applied to the VIDEO IN jack will also appear at the VIDEO OUT jack. The video signal from a computer should be fed to the VIDEO IN jack via a shielded cable and RCA type phono plug.

8. AUDIO IN and OUT Jacks

Those jacks provide the same function for audio that the VIDEO IN and OUT jacks provide for video. An audio signal from a computer should be fed to the AUDIO IN jack via a shielded cable and RCA type phono plug.

CAUTIONS

1. To prevent fire or shock hazard, do not expose this monitor to rain or moisture.

2. Do not install this monitor in an excessively hot location, or in any way obstruct the ventilation holes on the bottom, sides, or top of the cabinet.

3. Keep the unit away from high-capacity transformers, motors and other magnetequipped apparatus.

4. If the same characters or graphics are shown for a long time with the BRIGHTNESS and CONTRAST controls set to maximum positions, part of the screen may be damaged. Use these controls with care.

VIDEO INPUT SIGNAL

The wave form and timing chart of recommended signals is as follows:

Input Signal Configuration





Figures in parentheses applies when the vertical frequency is 50 Hz.

The unit is factory set for the vertical frequency of 60Hz. To use the unit on the 50Hz vertical frequency, the vertical hold and vertical height must be re-adjusted.

Notes about Video Signal Input:

When a signal other than the recommended one is fed to the monitor as input, the following may occur:

SYMPTOM	CAUSES	
Shrunken screen	Data display period is too short	
Expanded screen	Data display period is too long	
Image to left or right	Data display period is out of alignment	
Moving screen	Synchronization period is different	
Dark screen when contrast is reversed	Front and back porch of video signal is missing	

CONNECTION

The following connections should be made with a computer that has a video output impedance of 75-ohm.

1. For one display and one micro computer:



Feed the video signal from the micro-computer to the VIDEO IN jack, and slide the 75 OHM TERMINATION SWITCH to the left. The Audio signal should be connected to the AUDIO-IN jack.

2. For two or more displays and one computer:



The 75 OHM TERMINATION SWITCH on all the displays except the last one should be set to the right (HIGH). The switch on the last display should be set to the left (75 ohm).

METHOD OF CHANGING LINE VOLTAGE

Power supply is 110/120/220/240 volts available. Factory preset for 240V operation. When using the unit in the area of 110/120/220 volts, re-adjust the VOLTAGE SELECTOR TIP as follows:

- 1. Remove the back cover.
- Disconnect the VOLTAGE SELECTOR TIP from the PS PWB.
- Reconnect the VOLTAGE SELECTOR TIP to the PS PWB for the local supply voltage.



EXTERNAL VIEW



SPECIFICATIONS

Picture Tube	C1270P31 (D) – ARF		
	12" diagonal & 90°	deflection	
Phosphor	Green (P31)/Orange (PUL)		
Video Input Signal	Composite video signal		
Polarity	Negative sync.		
Level	1.0Vp-p		
Impedance	75Ω (switchable to higher impedance)		
Input Terminal	Phono pin jacks		
Active Display Area	231 (W) x 175 (H) mm		
Scanning Frequency			
Horizontal	15.75 kHz (63.5 μs)		
Vertical	60 Hz (16.67 mS)	50 Hz (20.0 i	mS)
Active Video Period			
Horizontal	48.0 µS max.		
Vertical	14.61 mS max.	17.78 mS ma	ix.
Video Bandwidth	30 Hz-20 MHz (±3 dB)		
Display Characters	80 characters with 25 lines		
	5 x 7 dot matrix (6 x 8 dot/cell)		
Sound Output Power	1.0 W (10% distortion)		
Sound Input Power	0.1 Vp-p (Input impedance 5 k Ω)		
Controls		~	
Inside	H. WIDTH, V. HEIGHT, V. LIN, FOCUS,		
	SUB BRIGHTNESS		
Outside	VOLUME, BRIGHTNESS, CONTRAST,		
	H. HOLD, V. HOLD		
Operating Ambient Temperature	0 °C-+40 °C		
Power Supply	110V/120V/220V/240V 50/60 Hz		
Power Consumption	30 W		
Dimensions	360 (W) x 296 (H) x 330 (D) mm		
Weight	6.0 kg		

NOTE: The above specifications are subject to change without notice for further improvement.



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