



Display

Date: **November 5, 2001**Model: **LMD-151MD, LMD-181MD**Subject: **SOFTWARE UPGRADE PROCEDURE**Serial No: **ALL****DESCRIPTION**

To upgrade the software, perform the following software upgrade procedure.

SOFTWARE UPGRADE PROCEDURE**System Requirements**

- PC running Windows 95 or higher
- Terminal program capable of using X-MODEM (SUM)

NOTE: Hyper terminal supplied with Windows 95 and higher is recommended.

- RS-232 cable (D-sub 9-pin to Mini Din 8-pin)

NOTE: The RS-232 cable (1-782-348-11) supplied with BKM-11R or equivalent is acceptable. The signals associated with the pins are as follows.

2 (RX)	↔	6 (TXD)
3 (TX)	↔	8 (RXD)
5 (GND)	↔	4 (GND)
8 (CTS)	↔	3 (RTS)

- Jumper

Preparation

Perform terminal program settings as follows:

- COM port: Direct connection
- Bit per second: 38,400 bps
- Data bit: 8 bits
- Parity: None
- Stop : 1 bit
- Flow control: None

Procedure

1. Turn the unit off.
2. Use a jumper to short pins 2 and 3 of the 9-pin connection cable on the PC side (RX and TX of the service terminal.)
3. Turn the unit on and wait until the picture appears.
4. Turn the unit off again and remove the jumper from the pins.

5. Connect the RS-232 cable between the PC COM port (D-sub 9-pin) and the service terminal of the unit (Mini Din 8-pin).

6. Start the terminal program.

NOTE: When RX and TX are shorted at power-on, the boot loader starts when the unit is powered on next; however, if RX and TX are shorted twice in a row at power-on, an accidental short-circuit is presumed and the unit does not enter write mode. If this condition occurs, perform the following steps.

- a. Remove the short.
- b. Turn the unit on and off.
- c. Perform steps 3 and 4.

7. From the Windows Start menu, choose: **Programs→Accessories→Hyper Terminal.**

8. Turn the unit on and confirm that:

- Orange POWER LED blinks.
- BOOT LOADER Boot menu appears in the terminal program window.

NOTE: The next time the unit is turned off and on, the unit boots in normal mode, and the BOOT LOADER boot request clears.

9. From the PC, type **P** (write command).

X-MODEM starts.

10. From the **Transfer** menu, choose **Send File.**

11. In the **Send File** dialog box:

- a. Type the filename path in the **Filename** field.
- b. Select Xmodem in the **Protocol** field.

NOTE: The program is not written to memory until the file transmission starts. To prevent the program from executing if "P" is typed inadvertently, wait approximately two minutes, or turn the unit off.



12. The unit boots automatically when the file transfer is complete.

If the data transfer fails or the data file was typed incorrectly in the Filename field, perform steps 10 through 12 in BOOT LOADER.

CONFIRMATION

1. Press the following keys in sequence to enter service mode.
ENTER→ENTER→UP arrow key→DOWN arrow key→ENTER→UP arrow key.
2. Confirm that the correct ROM version appears in the INFORMATION page.