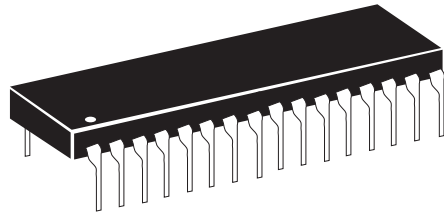


Fire•Lite LCD-40 Series Field Software Change Procedure

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ECN 98-499 P/N 50373:D



Firmware Change

This procedure outlines the mechanical installation steps required to install an EPROM in the LCD-40.

I. Software Versions

Before proceeding with the EPROM installation, check to confirm that the software (EPROM) installed in the MS-9200(C)/E is compatible with the LCD-40 software.

- (1) If software with either the Part Number 73750 or 73829 is installed in the MS-9200(C), the LCD-40 Series Annunciator must have software with a Part Number of 73779 or 73879 to operate with the FACP (Fire Alarm Control Panel). If software with a Part Number of #M9200V20 or higher is installed in the MS-9200(C), the LCD-40 Series Annunciator must have software with a Part Number of #LCD40V20 or higher to operate with the FACP.
- (2) If software with a Part Number 73846 is installed in the MS-9200E, the LCD-40 Series Annunciator must have software with Part Number 73779 or 73879 to operate with the FACP. If software with Part Number #M9200EV20 or higher is installed in the MS-9200E, the LCD-40 Series Annunciator must have software with a Part Number of #LCD40V20 or higher to operate with the FACP.

II. Handling precautions for integrated circuits

Static electricity can destroy integrated circuits (ICs)! To prevent damage to the EPROM, a wrist strap and a static-free IC insertion/extraction tool is highly recommended. The manufacturer cannot be responsible for damage to the EPROM as a result of improper handling.

III. EPROM Access and LCD-40 Removal

1. Remove the upper and lower retaining screws from the trim ring and remove the trim ring.
2. Remove the mounting screws along the outer edge of the LCD-40 flange.
3. Pull the LCD-40 out of the 3-gang electrical box to gain access to the connectors in the rear.

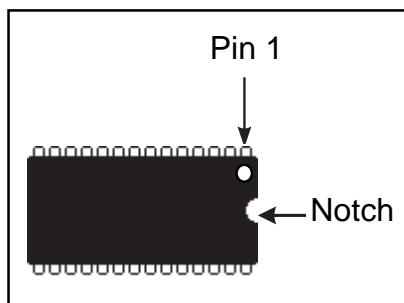
IV. System Power Sources

Always remove primary and secondary power before working on the system!

Prior to disconnecting power from the LCD-40, be sure to note the orientation of the seven terminal power connector (P2) and the four terminal EIA-485 connector (P1) on the rear of the LCD-40. These plug-in type terminal connectors are utilized for ease-of-serviceability. When reconnecting these plug-in connectors, **BE SURE** to align the rounded groove on both the plug-in connector and mating connector on the LCD-40 Printed Circuit Board.

WARNING! Enough force can be placed on these connectors to make them fit in the reverse direction.

1. Disconnect power from the LCD-40 by removing the seven terminal power connector (P2) from the back of the LCD-40. This should **ONLY** be done while power is still removed from the MS-9200(C)/E. For ease-of-serviceability, the four position EIA-485 terminal connector (P1) should also be removed.
2. Reverse the procedure, noting proper orientation, for powering-up the LCD-40 and reinstalling the EIA-485 connector.



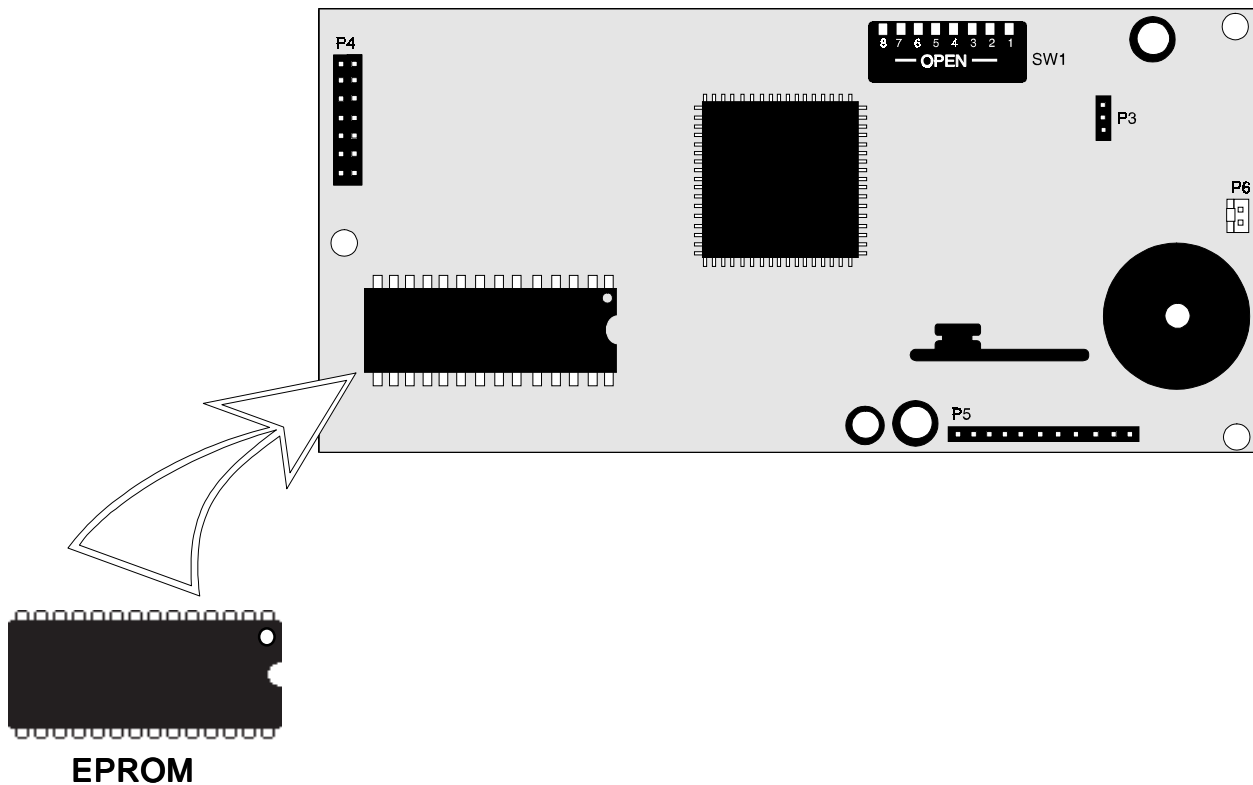
Integrated Circuit Pin Conversion

Observe proper orientation of any IC removed or installed! Note location of Pin 1 with respect to the notch in the body of the IC. The replacement EPROM must be installed in the same manner as the EPROM removed. Failure to observe this orientation will result in destruction of the EPROM. *NOTE: Some ICs may have a small dot instead of a notch for orientation purposes.*

V. EPROM Replacement

Please ensure that power is disconnected and the LCD-40 is removed from the wall mounting! Observe proper orientation of any IC removed or installed! To replace the EPROM, complete the following steps:

1. Unscrew the three retaining screws holding the printed circuit board to the metal flange. Be careful not to twist the membrane switch ribbon cable while the printed circuit board and flange are separated.
2. Disconnect the two-wire key-switch connector from header P6.
3. Locate the EPROM on the printed circuit board. For EPROM location, refer to illustration below.
4. Gently loosen and remove the EPROM.
5. Install the replacement EPROM. Observe proper orientation! The notch or dot on the IC should be facing toward the center of the board as illustrated below. Use care to insure that the EPROM's pins are not bent or broken during installation.
6. Reconnect the printed circuit board to the flange using the screws from Step 1. Make sure that both the membrane switch connector and the two-wire key-switch connector (P6) are both properly connected.
7. Reconnect the power (P2) and EIA-485 (P1) connections to the rear of the LCD-40 printed circuit board.
8. After reconnecting the power and EIA-485 connections, apply power to the MS-9200(C)/E and ensure that the LCD-40 display matches the MS-9200(C)/E LCD display.
9. If no problems are encountered, remount the LCD-40 with the screws from Step 2 of Section III, **EPROM Access and LCD-40 Removal**.



Software Changes

The following Table summarizes the LCD-40 software changes, specifying these changes by EPROM Number and Release Number.

PROM #	Release #	Summary of Changes
73779	1.0	Initial Release
73879	1.1	Corrects random watchdog resets during communication
#LCD40V20	2.0	Accommodates new Siemens 80535 'LB-Step' microprocessor. Improves LCD-40 data protection.
#LCD40V21	2.1	No functional change. Creates displayed messages that refer to the host fire panel generically worded.