Firmware Change

This procedure outlines the mechanical installation steps required to install a PROM in the UDACT-F.

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

System Power Sources
Always remove power before working on the UDACT-F!

Integrated Circuit Pin Conversion
Observe proper orientation of any IC removed or installed! Note location of Pin 1 with respect to the flattened corner and dot on the body of the IC and the relationship to the flattened corner on the IC socket. The replacement PROM must be installed in the same manner as the PROM removed. Failure to observe this orientation will result in destruction of the PROM.
UDACT-F Board and Software PROM Compatibility

Hardware and software enhancements allow UDACT-F compatibility with newer Fire•Lite control panels. Due to these enhancements, it is extremely important to be aware of the following:

✔ New UDACT-F software PROMs will not operate with older versions of UDACT-F boards
✔ Old UDACT-F software PROMs will operate with newer versions of the UDACT-F boards

When replacing a software PROM in an existing UDACT-F, the board revision number and software PROM number must first be determined.

• UDACT-F Board Revision
  The board revision letter is located at the bottom of the UDACT-F board, centered on the mounting tab as illustrated below. The information appears as follows:

  UDACT-PCC REV X

  where X represents the revision letter. Use this letter to determine which PROM chip to use.

• Software PROM Number
  The software PROM Number is located on the PROM label.

• Compatibility Requirements
  Ensure that the software PROM is compatible with the UDACT-F circuit board as follows:

✔ For REV H or earlier boards, software PROM chips with Part Number DACTF01.0 or earlier must be used. The UDACT-F will not operate with later version EPROMs

✔ For REV I or later boards, software PROM chips with Part Number DACTF02.0 or later must be used. Note that earlier versions of the EPROM can be used but it will not contain the latest software enhancements

Refer to the Software Change Table on page 4 of this document
**PROM Replacement**

Observe proper orientation of any IC removed or installed! To replace the PROM, complete the following steps:

1. Remove power before replacing the PROM.
2. Carefully remove keypad from main board to expose PROM U23. Note that the four legs of the keypad snap into the main circuit board and a ribbon cable located at the bottom of the keypad connects the keypad to the main circuit board.
3. Locate U23 (lower right of the board).
4. Gently loosen and remove the PROM from U23.
5. Install the replacement PROM in location U23. Observe proper orientation! The dot on the IC should be positioned to the left and the flattened corner of the IC should align with the flattened corner of the socket. Use care to insure that the PROM's pins are not bent or broken during insertion.
6. Carefully replace keypad into main board.
7. Reapply power.

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**Programming and Testing**

Reprogram and test the UDACT-F after PROM replacement.
# Software Changes

The following Table summarizes the UDACT-F software changes, specifying these changes by PROM Number and Release Number.

<table>
<thead>
<tr>
<th>PROM #</th>
<th>Release #</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>73602</td>
<td>1.0</td>
<td>Initial Release</td>
</tr>
<tr>
<td>73623</td>
<td>1.1</td>
<td>Add Remote Station, improve sine wave generator function, prohibit improper entries into the 24 hour clock</td>
</tr>
<tr>
<td>DACTF01.0</td>
<td>1.2</td>
<td>Fixed code wheel matching data reporting when used with Type mode. Limited number of point troubles reported to 14 per hour</td>
</tr>
<tr>
<td>DACTF02.0</td>
<td>2.0</td>
<td>Added MS-9600 functionality</td>
</tr>
<tr>
<td>DACTF02.1</td>
<td>2.1</td>
<td>Initialize all of Type mode for MS-9600 application</td>
</tr>
<tr>
<td>DACTF02.2</td>
<td>2.2</td>
<td>Change firmware code to replace MC68HC11A1 microprocessor with MC68HC11E1 (code will still work with MC68HC11A1 microprocessor)</td>
</tr>
<tr>
<td>DACTF02.3</td>
<td>2.3</td>
<td>Corrected a problem in which certain points (569-572 in Type Mode) did not report correctly.</td>
</tr>
</tbody>
</table>