

Commercial FMU Firmware Updates - Recovery Information

Command driven captures of the old firmware must be taken prior to installation of new or recovered firmware for version comparison and to ensure firmware meets customer needs. For instructions on how to connect to an FMU using a laptop, see Product Bulletin 111. Use the following commands to capture reports.

Commands to run during FW Update/Recovery

These commands must be run for every FMU, and the resulting reports must be saved.

Indication for use	Command	Reports
For a basic FMU without credit cards, receipt printers, tank monitors, odometer option, keyless, or proximity cards, make a screenshot of the following command reports	13	Configuration Report: be sure configuration in FMU matches configuration in software
	A1	Stored Prompts: look for stored custom prompts
	22	Current Main Prompt
	5e	Current Data Entry Options Configuration
	5f	Current System Options (Menu 2) Configuration
	59	Current System Options (Menu 1) Configuration
	AD	Additional Data Collection Menu
If the Odometer Option is being used, perform the following	5c	Current Odometer Options Configuration
If a Tank Monitor Interface is being used, perform the following	5a	Current Tank Monitor Interface Configuration
If a Keyless System is being used, perform the following	6f	Current Keyless Options
If Proximity Cards are being used, perform the following	8f	Proximity Card Configuration Menu
If the site is using Receipt Printers, perform the following	3b	Current Product Price List
	44	Set Receipt Header Message
	46	Set Receipt Footer Message
	5b	Current Receipt Printer Configuration
If the site is using Credit Cards, perform the following	3b	Current Product Price List
	CC,5	Display Configuration on Terminal Screen
	5d	Current Credit Card Options Configuration

CAUTION In all cases, download transactions before beginning the update/recovery to ensure nothing is lost.

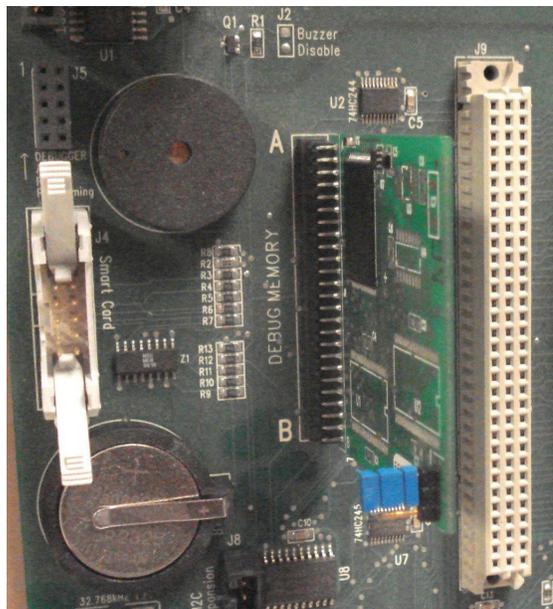
If performing an update or recovery for a credit card customer, open batches must be settled before beginning the update/recovery. Failure to do so may result in loss of credit card information for billing purposes. Batch settlement options are in the CC command. The menu choice will differ for different credit card networks.

If it is not possible, work with the customer to determine what options or additional hardware are installed so the desired settings may be made.

NOTE When actually performing the FMU firmware update or recovery, the FF command should be performed on the FMU prior to and immediately after the update/recovery.

Transfer FW Images To/From Flash Loader

- FMU power must be turned off, and the Flash Loader must be plugged into the DEBUG MEMORY receptacle on the FMU main board.
- Ensure the A and B markings are matched when installing the Flash Loader. The receptacle and Flash Loader are labeled with 'A' and 'B'.



Flash Loader Installed in Main Board DEBUG MEMORY Receptacle

Copy FMU Firmware Images from the Flash Loader to the FMU Main Board

The copy process does not remove the firmware image from the Flash Loader. It is copied. Perform the following:

1. Verify the jumper is installed on the Flash Loader top two pins.
2. Verify FMU power is turned off.
3. Carefully plug the Flash Loader into the FMU main board DEBUG MEMORY receptacle matching A to A and B to B.

4. Turn on FMU power. The firmware image will be transferred from the Flash Loader to the FMU main board. Display prompts will appear on the FMU display showing progress of the transfer.
5. When the transfer is complete, turn off FMU power, and remove the Flash Loader.
6. Restore FMU power. The display should reflect the new firmware image as the FMU initializes.

Copy FMU Firmware Images from the FMU Main Board to the Flash Loader

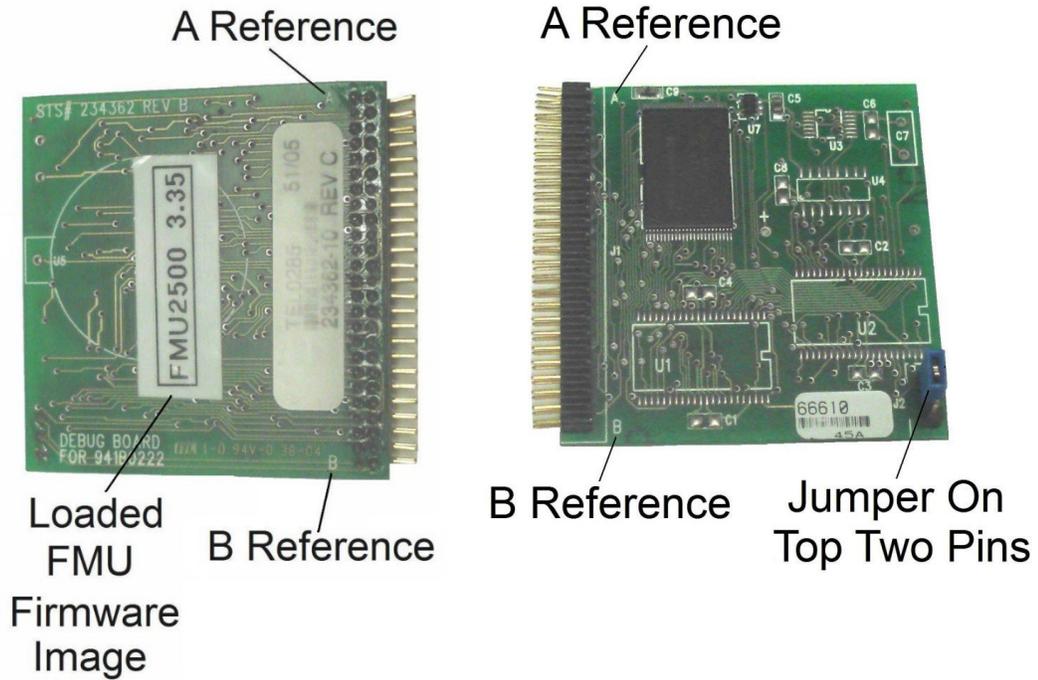
Perform the following:

1. Verify the FMU is using FMU firmware version 3.66 or later.
2. Verify the FMU main board is CPLD v4 or later.
 - a. Make a laptop connection in accordance with Product Bulletin 111.
 - b. Type Procomm command F8. The CPLD version of the FMU main board will be listed.
 - c. Disconnect the laptop connection.
3. Verify the jumper is removed from the top two pins of the Flash Loader
4. Verify FMU power is turned off.
5. Carefully plug the Flash Loader into the FMU main board DEBUG MEMORY receptacle matching A to A and B to B.
6. Turn on FMU power.
7. Using a Supervisor Key, go to System > Flash, and select WRITE TO FLASH LOADER. The firmware image will be transferred from the FMU main board to the Flash Loader. Display prompts will appear on the FMU display showing progress of the transfer.
8. When the transfer is complete, turn off FMU power, and remove the Flash Loader.
9. Label the Flash Loader with the new firmware image version.
10. As required, restore FMU power.

Upload FW Images to FMU

The Flash Loader (STS part number 234362C) is a small circuit board, which may be used to upload FMU firmware images to an FMU-2500Plus, FMU-3500, and FMU-3505 main board or to copy FMU firmware images from an FMU-2500Plus main board into the Flash Loader.

The copy application must be with FMUs utilizing firmware v3.66 or later and main boards with CPLD (Complex Programmable Logic Device) v4 or later.



Flash Loader (Both Sides Views)

In FMUs using firmware v3.65 or later, the CPLD version of any installed FMU-2500Plus circuit boards may be determined with a laptop connection (see [Copy FMU Firmware Images from the FMU Main Board to the Flash Loader](#)).

NOTE Failure to remove FMU power or failure to match the A and B reference points when installing the Flash Loader will damage the Flash Loader.

TIP If any questions arise, contact Syntech Systems, Inc.'s Customer Satisfaction Center (CSC) at 1-800-888-9136, ext. 2, or email support@myfuelmaster.com.

Change Log

Date	Description
11/13/2014	Original
02/22/2017	Added CAUTION on page 1: In all cases, download transactions before beginning the update/recovery to ensure nothing is lost. Reformatted to latest company style sheet
10/12/2020	Rebranded/Reformatted
7/06/2021	Combined PB-198 Flash Loader Use with PB 218 and changed name to 'Commercial FMU Firmware Updates - Recovery Information.'