

Firmware Update Guide August 2017 Rev. 1.3

## **PROFIRE PF31xx Family – Firmware Update Guide**



This document assists the user in completing a firmware update for all the modules on a PF3100 System.



## **Overview**

This document will assist a user in completing a firmware update for all the modules on a PF3100 Burner Management System. The PF3100-00 User Interface is used to control the process, and a USB memory stick with the latest firmware bundle is also required.

The USB memory stick must be formatted with FAT32, and the firmware bundle can be located anywhere within the memory stick's folder structure. The firmware bundle file needs to have the extension \*fw\_bundle for the file to be found by the user interface; it can be renamed to suit the needs of the customer. For example, the firmware release bundle could be renamed to "Approved for Use On Site A.fw\_bundle."

## **Firmware Update Process**

- 1. Navigate through the user interface to the System Overview screen by starting at the top level (pressing the Back Button repeatedly until the screen stops changing will achieve this) and then press the Right Arrow button to highlight the Settings Tab.
- Ensure that the USB memory stick with the firmware update bundle is inserted into the USB connector on the back of the User Interface Card. The enclosure will need to be opened to gain access to the connector.
  SAFETY WARNING: Installing the USB key may cause arcing. Proper safe work procedures should be followed such as (but not limited to): pulling a hot work permit and using gas detectors to ensure the area is non-hazardous before installing the USB memory stick.
- 3. Using the Arrow buttons on the User Interface, navigate to the Update Firmware option and press the OK button.



 You will be prompted to enter a level 2 password to access the firmware update function. The default password for NA-33 and below is 2684. The default password for NA-34 and higher is 13975.



5. A pop-up will ask you to choose which Firmware Bundle to use from a list of all of the firmware bundle file names that were found on the USB drive. Select the firmware bundle using the Arrow buttons and press the OK button. If you receive a pop-up that indicates that there is no firmware bundle found, remove and re-insert the USB drive. The status LED on the User Interface will flash twice when the system connects to the USB drive. Exit from the warning dialog and re-start the procedure from step 3.



6. A pop-up will now be displayed that will fill with a list of all the modules in the system. Ensure that all modules are present. If any module does not show up in the list, locate the module that is not there and cycle its power. This can be achieved by either disconnecting the PFRN (ethernet) cable for IO modules, or by disconnecting the power connector on controller or Modbus modules. Network switches contain no updatable firmware and will not show up on this list. Once you have confirmed that all modules are present, highlight Accept and press the OK button.





7. After selecting Accept and pressing the OK button the firmware update will begin. A progress screen will be shown that displays the details for the current target, as well as the overall progress of the system. Each step for the current target will be marked as complete as they occur.



8. Wait for all of the modules to be updated. This could take several minutes depending on the size of the system. After the update is complete, a report screen will be shown. Ensure all modules have been updated. If any of the modules fail, the update process should be attempted again because there may have been a communication failure between modules.



9. When you select OK the User Interface will update. The system will re-start and the update will be complete. Do not remove power from the User Interface for a few seconds after the update to prevent corruption of the User Interface firmware.



## **Document Revision History**

Rev.	Date	Who	Description of Changes
1.0	31-May-16	CS	Initial Release
1.1	2-Jun-16	CS	Minor changes to grammar and wording.
1.2	29-Nov-16	CS	Minor formatting changes.
1.3	16-Aug-17	EH	Major formatting changes; changes to some wording.