FireClass FC600 Series Panels Commissioning Instructions

Introduction

The following sections provide information about configuring and testing the system.

At this stage, the system hardware (installing ancillary boards), mounting, wiring, and configuration of the different components of the FireClass FC600 series of panels is complete.

A comprehensive test procedure cannot be provided as the testing must be in accordance with local regulations and practice. Sites also differ in terms of the system design, including the "cause and effect" logic built into the system configuration. Tests, therefore, must be individually planned to suit the specific site requirements.

Instead of a comprehensive test procedure, this document provides guidelines in the form of an example procedure.

DANGER

Incorrect commissioning of the fire protection system produces a danger of failure, possibly leading to death or serious injury, in the event of a fire.

You must fully test the system, according to the system configuration, and any local regulations in force.

Powering up the panel

1 Connect the batteries to the FC-FI/FC-FI-1 card. The control panel will not start at this point as the mains is not connected. Check if the fuse is inserted in each Fuse Kit in line.

2 Connect the mains to power up the control panel. The LCD should now show an 'Initialization in progress' message, counting down to the completion time.

3 The internal buzzer might now sound to alert you to faults. To silence the buzzer, press the **Silence Buzzer** key.

4 The first time you switch on the panel, the display will show an "Unexpected Restart" message and the general fault LED lights.To clear this fault, press the green **RESET** button on the front of the panel. Then, the panel will display a "Reset in Progress" message and clear the fault LED and the "Unexpected Restart" message.

Making control panel checks

1 If you see any of the symptoms detailed in section "System non-operation" on page 3, follow the procedure in the same section.

2 On the control panel, use the **Test Buzzer, LEDs & Display** operator function. The buzzer and all LEDs and indicators are now activate. If any of these do not activate, investigate the fault.

3 On the control panel, check that the appropriate faults are reported. At this stage you have not connected the loops, so the Fault LED is lit, and the "No Response" device fault events are displayed.

Setting the time and date

At this stage, set the control panel time and date.

1 To set the control panel time and date, you must login with the passcode. Unless you are logged in, there is no option in the menu to set time.

2 Press the **Passcode** key (**F3**) and enter the `User ID and Passcode`.Then, you have access to the full menu options with 4- Time/Date .

Checking the firmware issue

1 Ensure that the operator is logged in to display the firmware loaded; 7 - Service, followed by 2 - Maintenance, then 7 -S/W versions. After, the display will list all the versions of the software installed.

2 Check that the latest issue panel firmware is loaded onto the panel.

3 If later firmware needs to be loaded onto the panel, use the MZX Consys application, running on a PC

Downloading the configuration

Follow the steps below to update your panel. You need the firmware and site configuration loaded on a USB stick (drive).You can also download the configuration and firmware using a serial lead. For more information, see the Transfer Menu Overview page in the Consys Help files.

Reference document

For configuration/firmware update details, refer to the FireClass Express help file.

There are three levels of update available for the FC-FI/FC-FI-1 based FireClass FC600 panels:

- Runtime update: The panel has a working configuration.
- Startup mode: The panel has correct firmware but no configuration.
- Rescue mode: The panel does not have the required version of firmware.

Runtime update

Use this mode for updating a preconfigured panel.

To use the Runtime update mode, create a USB drive with a panel configuration in FireClass Express.

To store the configuration of the panel to a USB drive, use the FireClass Express menu point: Transfer >To USB > Panel Firmware and configuration.

It is not necessary to select the firmware in the dialogue menu before transferring to the USB.

Quick start - login details

Access type	User ID	Passcode
User Access	01	1234
Supervisor Access	02	8812
Engineer Access	99	999999

Table 1: Quick start - login details

Updating the control panel

1 While the panel is running, fit the H3 link on the FC-FI/FC-FI-1board.
2 Insert the USB stick containing firmware or panel configuration information into the FC-FI/FC-FI-1 USB slot.
3 Press the **Passcode** key (**F3**).
4 To update the panel, enter the `User ID and passcode`.
Note: the user requires sufficient privileges associated with their ID to complete these steps.
5 Select the **Service** menu (7).
6 Select **Panel Setup** (9).
7 Select the FireClass project from those available on the USB device.
8 If it is necessary to move between projects, use the **>>** key (**F2**).
9 Select the panel to update and press **Enter (F5)**.
10 To confirm the update, press **Yes (F4)**. The progress of the update displays on the screen. Wait for the update to complete.
11 Follow all of the instructions on the screen. Instructions require you to remove the H3 link from the FC-FI board, and the USB drive, before restarting the panel.
12 To restart the panel, press **Enter (F5)**.

Note

You must remove the H3 link and the USB drive before restarting the panel.

Startup mode

WARNING

The Startup mode should be used with caution as it changes the firmware of the panel.

Use the Startup mode to update the panel firmware or panel configuration (node address of the panel, load the menus in the local language, and so on.)

To use this mode, in FireClass Express, create a USB drive with the **Startup** information menu and panel configuration.

Proceeding in the control panel

Ensure that the H3 link is fitted. Insert the USB drive into the FC-FI/FC-FI-1 board. Press the SW1 (MASTER RST) on the FC-FI/FC-FI-1 momentarily. **Note:** It takes several seconds for the process to begin.
The panel restarts in the **Startup Mode.**

1 The panel restarts in the **Startup Mode.**
2 To login, use the `User ID and Passcode` provided when creating the **Startup** information in FireClass Express.
3 Select **USB download (1)**.
4 Select the appropriate project on the drive, and press **ENTER**.
5 In the next screen, select the appropriate panel and press **ENTER**.
6 To confirm the update, press **Yes**. The contents of the USB drive download onto the panel. The contents include the firmware or configuration or both depending on the selection created within FireClass Express.
7 Follow all of the instructions on the screen. Instructions require you to remove the H3 link from the FC-FI board, and the USB drive, before restarting the panel.
8 To restart the panel, press **ENTER**.

Rescue mode

WARNING

The Rescue mode should be used with caution as it changes the firmware of the panel.

Use the Rescue mode to update the firmware; or, if the panel fails to boot and you have to rescue the panel, to reload its firmware. Note, when you use this mode it rewrites new firmware onto the panel.

Creating a USB drive with the Startup information menu and panel configuration

1 In FireClass Express, select Transfer > To USB >Panel and CUI Startup information.
2 Set **Based on** to the correct CPU type (FC-FI or CPU801). If you select the incorrect type, the panel

is inoperable. Repeat the process using the correct type.

3 Select the template and passcode for the service configuration.

4 Press **Transfer to USB**.

Loading a valid configuration in the control panel

1 Insert the USB drive containing the panel **Startup** information to the XP (USB) socket.

2 Insert the J5:1 (M BOOT) link.

Press the **SW1** (**MASTER RST**) on the FC-FI/FC-FI-1.

Note: It takes several seconds for the process to begin.

The panel restarts in the **Startup Mode.**

3 The panel loads the firmware from the USB drive into the panel and boots into the startup mode.

4 To load a valid configuration, follow the instructions from the section "Startup mode" on page 2.

Firmware update

If a LIOMCU firmware update is required, refer to the steps in the relevant Technical Information Bulletin (TIB).

Connecting the loops and devices

NOTICE

Inappropriate loop wiring changes may damage the control panel.

Before you make loop wiring changes, or connect the loop to the controller, follow these stipulations:

- Make sure you have tested the wiring and ensured that there is no fault.
- Power down the controller.

1 To power down the control panel, first disconnect the mains, and then disconnect the batteries from the FC-FI/FC-FI-1 card.

2 At the control panel insert the loop connectors into their FC-FI/FC-FI-1 board sockets.

3 To set the device addresses, use an FC490ST Service and Programming Tool. If appropriate apply the devices' address labels.

4 Fit the detectors to their bases. Make sure all other addressable loop devices are in place.

5 Power up the control panel again and check that all faults are now cleared.

If you see any of the symptoms detailed in section "System non-operation" on page 3, follow the procedure in this same section.

Testing the monitoring and devices

1 When you perform the checks, be aware of any "cause and effect" rules in the control panel's configuration. You need to check for the correct system responses to the tests you have conducted.

For example, on the panel it may be the intention that activating a call point activates all sounders and door release mechanisms in the zone. You need to make sure this actually happens.

2 On the control panel, check that each device is activated correctly (for example, test the call points by inserting the activate key, test smoke detectors with a smoke aerosol can). If required, use the control panel's printing facilities to produce a hard copy check list.

3 Test the sounders (local and loop) by activating them:

– Press the control panel **Evacuate** key (this issues an alarm).

– In addition to pressing **Evacuate**, or as an alternative, activate a manual call point.

Check that each sounder is actuated.

After the test, press the **SILENCE/RESOUND** key, then the **RESET** key.

Be aware of the possible nuisance caused by the alarms, and take any required measures.

4 To test the open circuit monitoring, disconnect any EOL resistors or associated circuits in the system. Ensure that the control panel reports the appropriate faults. When complete, restore the system to normal.

5 To test the short circuit monitoring, replace any EOL resistors or associated circuits in the system with a short circuit. Ensure that the control panel reports the appropriate faults. When complete, restore the system to normal.

Hand over to the customer

The hand over to the customer must be in accordance with standard Company instructions.

Make sure that the following criteria is met:

- The customer is provided with a copy of the cable routing diagrams and test results you have made.
- The customer knows how to operate the panel, and is aware of any local regulations in force.
- The customer knows the User IDs and associated access codes for the panel.
- The customer has access to the FireClass FC600 Series Panels and Repeaters User Manual.
- No documentation is left in the Controller housing or any other associated housing.

System non-operation

Only follow this section if referred here from elsewhere in the guide.

Clear the stored data if the control panel displays the following symptoms:

- No keys are operative.

- The **SYSTEM FAULT LED** is lit (on the front panel).

To clear the stored data, complete the following steps:

1 Fit jumper J5-H2 on the FC-FI/FC-FI-1 board
2 Briefly press SW2 (M RST) **Reset** button.
3 Wait for 15 seconds.
4 Remove H2 and repeat step 2.

FC-FI/FC-FI-1 headers

For information on the various headers and connectors on the FC-FI/FC-FI-1 board, refer to the FireClass FC600 Series Panels and Repeaters Installation Guide.

If the fault occurs again, replace the FC-FI/FC-FI-1 board.

Consignment note

Note on firmware update

While commissioning the panel, check the version number of the factory-loaded firmware, as described in the user guide. If the panel firmware is not the latest version, update to the latest firmware using FireClass Express, as described in this document.

Shipped Items

Table 2 lists the items shipped with the FC600 series panels.

Item	Part No.	FC602S	FC604S	FC602S Scandinavian	FC604S Scandinavian	Used on
CON PLUG 02P RM3.5 SCREW TERM	125.261.368	1	1	1	1	Various Field Terminal Connectors
CON PLUG 02P RM5 SCREW TERM	125.261.369	12	12	12	12	Various Field Terminal connectors
CON PLUG 4WAY 5.0MM PITCH	125.261.296	3	5	3	5	Sounder and Loops connectors
CON PLUG 03P RM3.5 SCREW TERM	125.261.371	2	2	2	2	Various Field Terminal connectors
CON PLUG 03P RM5 SCREW TERM	125.261.372	4	4	4	4	Various Field Terminal connectors
RES M-FILM 10K 0.6W 1% MRS25	125.652.103	2	2	2	2	End of Line (EOL) resistors
RES STD 2K 1% 0.6W METAFILM TH	125.652.202	2	2	2	2	End of Line (EOL) resistors
CAP ALU BIPOL 330uF 50V 20% TH	125.800.705	2	2	2	2	Sounder End of Line (EOL) capacitor
WASHER BZP O/D 20 I/D 5.2 FARN	2400285	4	4	4	4	Wall mount fixings
UNIVERSAL FIXING PLUGFISCHER U	2400286	4	4	4	4	Wall mount fixings
WOODSCREW 10 X 2.5" ROUDNHEAD	2400489	4	4	4	4	Wall mount fixings
SCREW M3 X 6 PAN	115.858.034	5	5	5	5	Wall mount fixings
ROHS CABLE TIE BASE	120.207.082	2	2	2	2	Securing Field Cabling
ROHS CABLE TIE 115MM LG 2.5MM	120.207.064	10	10	10	10	Securing Field Cabling
TEXT INSERT ITALIAN	120.514.631	1	1	0	0	Insert on Panel Door
TEXT INSERT SPANISH	120.514.634	1	1	0	0	Insert on Panel Door
FC ICON INSERT	120.514.635	0	0	1	1	Insert on Panel Door
INSERT ICON EVACU-ATE FIRECLASS	120.514.644	1	1	0	0	Insert on Panel Door
ROHS FUSE KIT INLINE (BATTERY)	125.024.183	1	1	1	1	Fuse holder for battery Cable assy
CABLE ASSY BATTERY S	125.121.293	1	1	1	1	Cable assy for battery connections
CABLE TEMP SENSOR	125.121.319	1	1	1	1	Temperature sensor for battery
ISO 7045 SCREW M5x6	115.858.064	4	4	4	4	Wall mount fixings
BENTEL 5 W T/BLK COVER	2000944	1	1	1	1	Mains power supply cover
HAZARD SYM 12x12 BLACK ON YELL	2200395	1	1	1	1	Mains power supply warning label

Table 2: Shipped items

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