



T-Gen2 Grade 2 8 Zone Expansion Board Installation Instructions (FP1128)

Installation Instructions

1. Description

The T-Gen2 Grade 2 8 Zone Expansion Board is designed for use with the T-Gen2 Emergency Warning System where a Grade 2 16 Zone Expansion Door is fitted. It expands the display capacity from 12 (4+8) to 20 zones. Alternatively it can be used as a spare part for the 8 Zone Display Board already fitted to the 16 Zone Expansion Door.

These instructions cover the fitting and connection of the Grade 2 8 Zone Expansion Board in a Grade 2 16 Zone Expansion Door. The details of any necessary changes to the T-Gen2 configuration, or other hardware are not covered here.

The FP1128 Grade 2 8 Zone Expansion Board includes all the required hardware to mount and wire the board to a Grade 2 16 Zone Expansion Door.

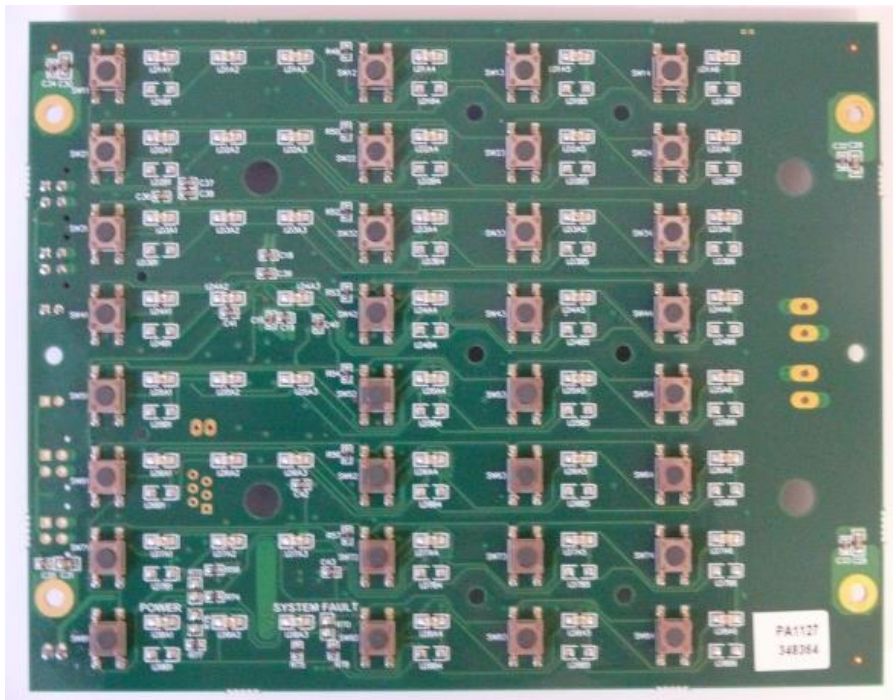


Figure 1 – Grade 2 8 Zone Expansion Board

2. Grade 2 8 Zone Expansion Board

Before installing the Grade 2 8 Zone Expansion Board, check that all items in the kit are present and undamaged.

Qty	Description
1	Grade 2 8 Zone Expansion Board
1	FA3028 GRADE 2 LED DIFFUSER (for fitting to a Grade 2 16 Zone Extender Door)
1	734-008 UBus LOOM 600mm (for wiring to a Grade 2 16 Zone Extender Door)
12	SC0172 M3 X 6 SCREW (for mounting 8 Zone Expansion Board)
1	LT0684 INSTALLATION INSTRUCTIONS (these instructions)
4	SU0020 CABLE TIE (for securing wiring to Grade 2 16 Zone Extender Door)

3. Mounting the Grade 2 8 Zone Expansion Board

The Grade 2 8 Zone Expansion Board is mounted to a Grade 2 16 Zone Extender Door (FP1126 or FP1127). First fit the LED diffuser to the back of the Extender Door taking care that the diffuser is fitted in the correct orientation. Next mount the 8 Zone Expansion Board on the Extender Door with 12 off M3 x 6 screws.

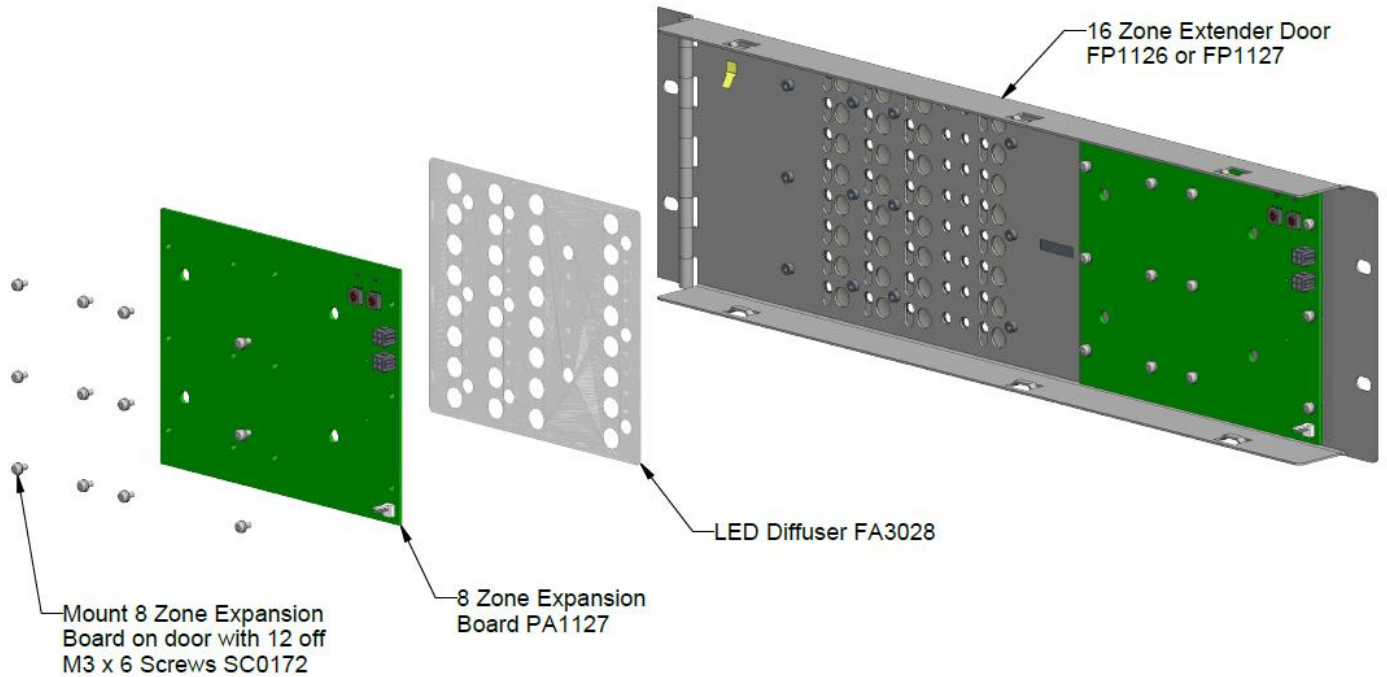


Figure 2 – Grade 2 8 Zone Expansion Board Mounting

4. Wiring the Grade 2 8 Zone Expansion Board

A Grade 2 8 Zone Expansion Board is connected to a Grade 2 16 Zone Extender Door 8 Zone Board (J3) using the UBus loom 734-008. Secure the UBus loom to the Zone Extender Door with 4 cable ties provided.

WARNING: DO NOT CONNECT/DISCONNECT THE UBUS LOOMS (J3/J4) WITH POWER APPLIED – THIS MAY DAMAGE THE EQUIPMENT.

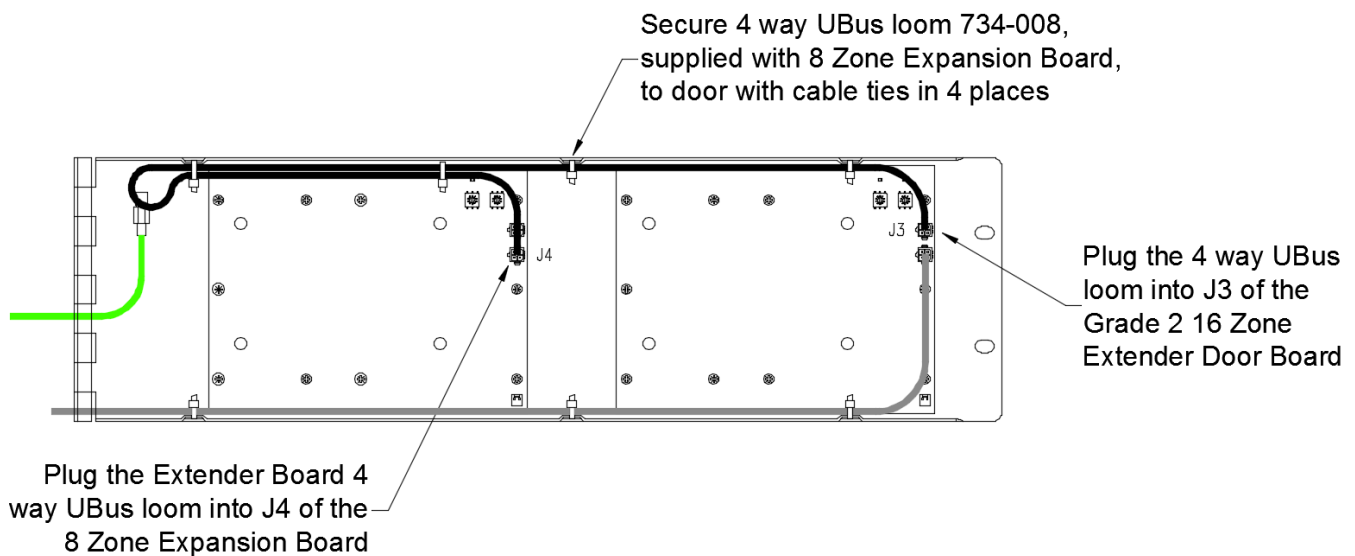


Figure 3 – Grade 2 8 Zone Expansion Board Wiring

When using the 8 Zone Expansion Board as a replacement board; power down the panel, remove the UBus cable(s), 12 screws, and the existing board.

Set the address of the replacement board to the same as the original board. Mount the new board while making sure the diffuser is placed flat to the door, using the 12 screws. Place the UBus cable(s) back then test the panel for correct operation.

5. Door Labels

The zone buttons are labelled using a slide-in label. Two blank labels are provided with the Grade 2 16 Zone Extender Door. You can also generate labels using a Word template (LB0692).

The labels are inserted via the slots in the front of the door overlay.

6. Configuration

The UBus address rotary switches, SW1 and SW2, on the 8 Zone Module need to be set to:

- 01 – for the front module (zones 5-12)
- 02 – for the second module (zones 13-20)

The Link LK1 (UBUS EOL) is to be fitted on a single pin (not bridged) and connector J7 (INPUT) left unconnected.

The T-Gen2 used with the FP1128 Grade 2 8 Zone Expansion Board will need to be configured to enable the 8 Zone Expansion Board. This can be done by increasing the number of zones for the T-Gen2 in its SmartConfig configuration.

Refer to the T-Gen 2 Installation Instructions (LT0667) and the SmartConfig Programming Manual for instructions on configuring the T-Gen2. SmartConfig Lite (SF0323) and its User Manual (LT0345) can be downloaded from the Fireplace: <http://vigilant-fire.com.au>.

7. Status LEDs

The functionality of the LEDs mounted on the front of the User Interface is described in LT0682.

The 8 Zone Expansion Module has 2 internal status LEDs for fault diagnostics:

LED Name	Colour	Description
POWER/ LINK	Green	<p>OFF – no power applied.</p> <p>Flashing every second – operating and communicating with the Grade 2 User Interface and the T-Gen2.</p> <p>Steady On – not communicating with the Grade 2 User Interface or T-Gen2, or faulty.</p>
SYSTEM FAULT	Yellow	<p>OFF – no fault present.</p> <p>Flashing – fault present</p> <p>When a System Fault is present the SYSTEM FAULT LED shows a sequence of 8 flashes followed by a pause, with each flash short (250msec) if that fault is not present and long (750msec) if that fault is present.</p> <p>The system faults are indicated in this order:</p> <ol style="list-style-type: none"> 1. 8 Zone Module not communicating with the Grade 2 User Interface or T-Gen2. Check the connection from the 8 Zone Module to previous modules, to the Grade 2 User Interface and from the Grade 2 User Interface to the T-Gen2; The T-Gen2 configuration selected, number of zones in T-Gen2 configuration, and Address Rotary switch setting on the 8 Zone Module. This fault occurs when the T-Gen2 is in programming mode (i.e., PC USB connection active). 2. Invalid Address (Not 01...99). Try rotating the address rotary switch and then back to the desired address. If cannot be fixed, replace the 8 Zone Module. 3. Firmware CRC Incorrect. Replace the 8 Zone Module. 4. Software Fault. Contact Johnson Controls. 5. Unexpected restart occurred. Something happened to cause the 8 Zone Module microprocessor to restart. Clears once status sent to T-Gen2. If does not clear, even after power down/up, replace the 8 Zone Module. 6. No Configuration Data. Will occur on startup until the T-Gen2 sends the necessary configuration data to the User Interface. 7. Will not occur. 8. Hardware mismatch. Replace the 8 Zone Module.

8. Power On and Testing

For the first tests apply mains power only to check the operation of the T-Gen2 and User Interface without a battery. Once this is confirmed a battery can be connected. The T-Gen2 and Grade 2 User Interface will need to be configured and connected properly.

- Power on and wait for the T-Gen2 to start up (<10s).
- Check the POWER and AUTO LEDs on the User Interface turn on and that no faults are generated. If faults are generated refer to the T-Gen2 Instructions (LT0667) to use the OLED display to determine the faults that are present.
- Press the SPEECH button for the first zone and use the emergency PA microphone to make an announcement. Check this is heard in the Zone loudspeakers. Press the SPEECH button again to deselect SPEECH.
- Repeat for each configured zone, especially those on the 8 Zone Expansion Modules.
- Use the Test Lamp function (press Silence Buzzer for 3 seconds) to test all indicators.

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