

# FF396-2 REPEATER PANEL INSTRUCTIONS

## PRODUCT OVERVIEW

The Standard 10 Way Repeater Panel system consists of two main components:

1. The wall mounted Repeater Panel which contains a 10 zone receiver circuit board.
2. A Transmitter Board which is mounted in the main fire control panel unit.

The Repeater Panel displays the zone(s) from which a fire condition has been initiated by illumination of a steady red light(s). When the alarm sounders are silenced at the main control panel the zone light(s) on the Repeater Panel are extinguished, and the Fault light is illuminated. This state is maintained until the main control panel is Reset or other Zones are triggered. The Fault light is also illuminated in the case of a Lamp Test or fault condition at the main control panel. The nature of the fault is not indicated and must be determined at the Main Control Panel.

When mains power to the whole Fire Alarm system is correct then a green Mains On light is illuminated.

The Repeater Panel has an integral fault sounder which mimics the Main Control Panel fault sounder and thus can be muted from the main control panel.

There is provision for locally testing the Repeater panel lights & fault buzzer via the "Test Lamps" button on the front of the Panel.

### More than 10 Zones

If required an additional extender transmitter and receiver boards may be added to the Main Control panel and Repeater Panel respectively to increase the number of zones to be indicated to a total of 20.

### More than one repeater

Up to three Repeater Panels can be controlled from one Main Control Panel transmitter board.

## INSTALLATION - FIRST FIX

### RUNNING CABLES AND ENSURING COMPLIANCE WITH BS5839

Decide on the position of the panel and mark any plans accordingly. Have the fire officer check them to ensure any special requirements are complied with. Run cables between the main fire panel and the required position of the repeater panel.

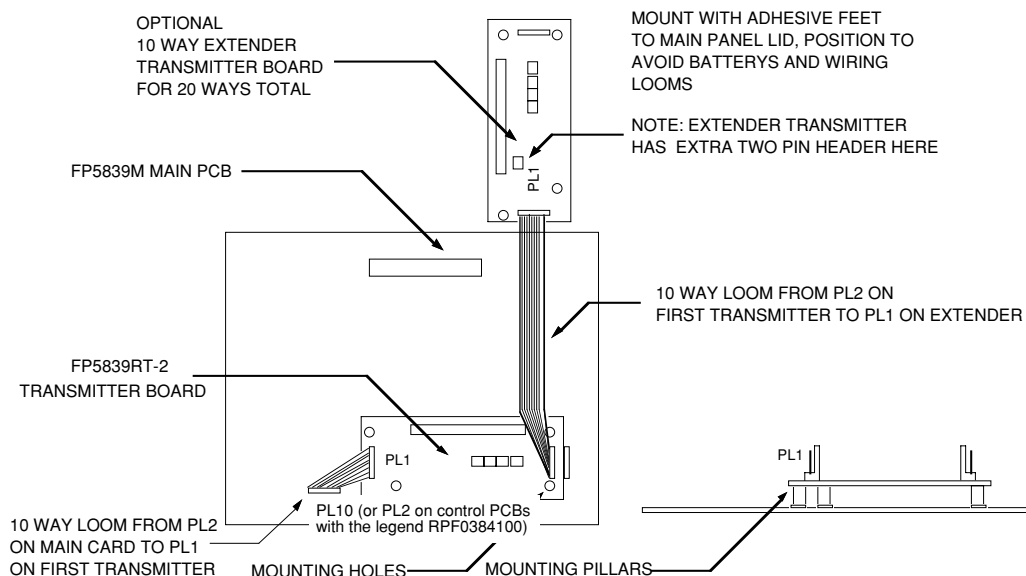
The number of cables can be determined from the Panel Interconnection Section described below.

Consideration should be given for spare cores in case of system expansion at a later date.

## INSTALLATION - SECOND FIX

Isolate the main control panel from the mains. The power supply fault light will show and fault buzzer will activate. Remove the lid socket screws, hinge the lid down and remove the battery leads.

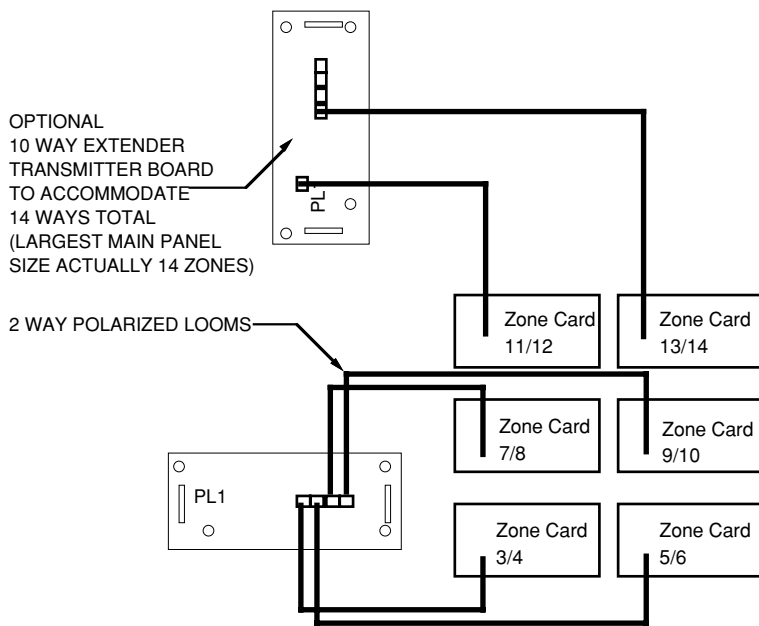
Take the repeater transmitter board and using the mounting pillars provided, mount the board above the main control board in the position shown in the diagram below:



When the transmitter board is correctly mounted on the main panel board the 10 way polarized loom must be connected between PL1 of the transmitter board and PL10 of the main control PCB (PL2 on control PCBs with the legend RPF3084100).

**Zone Card Connections**

For connections to the zone cards refer to the following diagram:



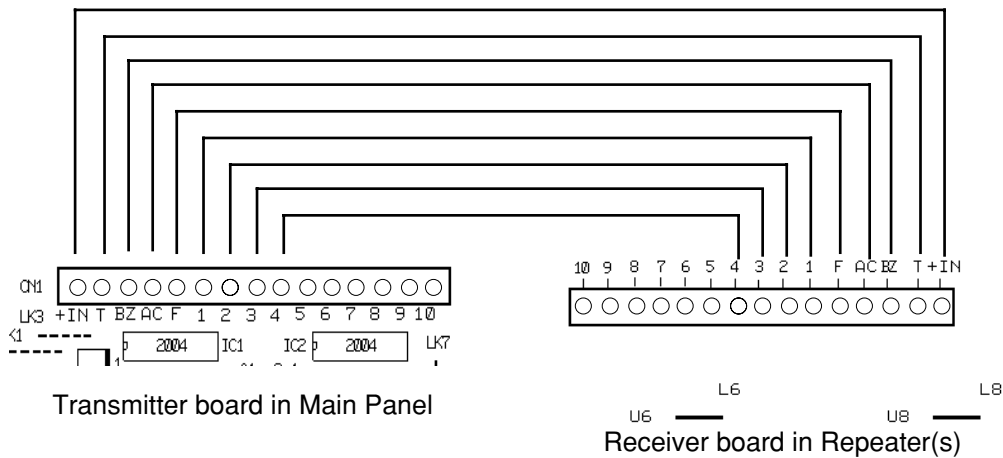
Connections between transmitter board and zone cards are made using the 2 way polarized looms

**Connection of the Interpanel Wires**

The wires connecting the main and Repeater Panel can now be installed.

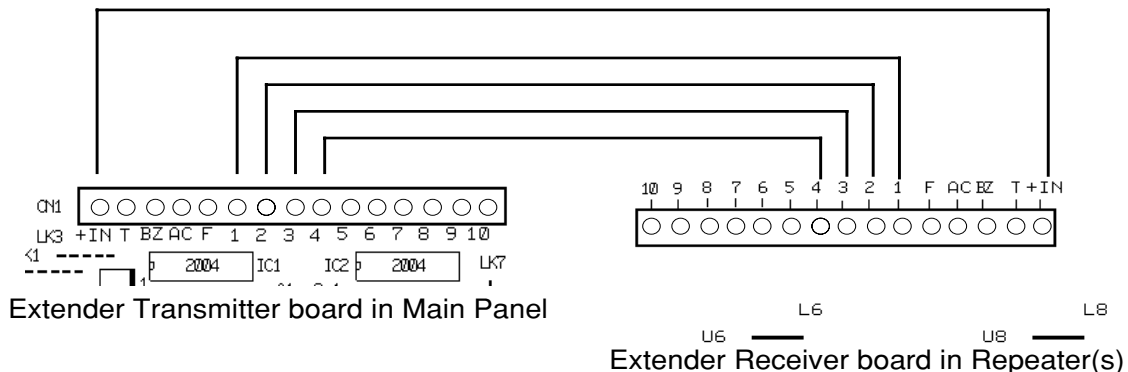
There are five control wires denoted +IN, T, BZ, AC, and F and a wire for each zone to be repeated from 1 to 10. Only the zones to be repeated need be connected. Therefore for a 6 zone repeater there will be 5 + 6 = 11 wires total.

Connections for a 4 Zone repeater

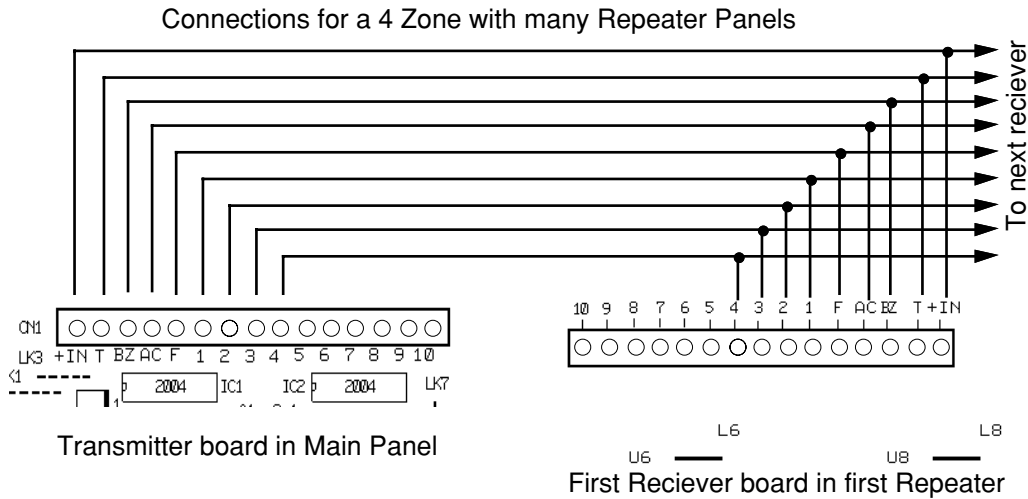


NOTE. If an extender transmitter board is fitted then only 1 control wire +IN is required. See below.

Connections for Zones 11 to 14 via extender boards



For more than one Repeater Panel from one Main Panel wire as below:



### Fitting the Repeater Panel

Remove the two socket screws at the top of the panel and then remove the lid from the base, and place in a safe position. Screw the back of the panel to the wall using the the four fixing holes. The cables to the main panel can be brought in through the back or through the holes in the top of the unit.

### Fitting Repeater Extender Receiver Boards

If an 10 way extender board is to be used then it should be fitted while the lid is separated from the panel base. Orientate the board as the first 10 way board and secure with the 6 spacers and nuts supplied.

Remount the lid on the base and commence wire installation.

Connect up the cores as the transmitter end, ensuring that no cross connections have been made.

Secure the lid and then commission.

### Commissioning

Reconnect the batteries and mains supply.

Check that the Main Control Panel is in the Normal state.

At the Repeater Panel(s) check that the only the green MAINS ON led is lit.

Press the TEST LAMPS button on the front of the repeater lid.

The panel will now be in the following state:

The zones that have been connected will have their respective lights lit, the FAULT light will be lit and the warning buzzer will be sounding.

Note that if more than one Repeater Panel is fitted then pressing any Test Lamps button on any Repeater will activate the other Repeater Panels also.

Release the TEST LAMPS button and the panel will return to Normal.

Repeat this test for any other Repeater Panels on the system.

Give the system a full functional test and check that the Zone indication on the Repeater Panel(s) match those on the Main Panel, correcting any crossed connections as necessary.

### REPEATER SPECIFICATION

#### TRANSMITTER BOARD

**Power supply:** 12V Taken from main control board

**Total output current limited to:** 350mA

**Quiescent Current with 10 Zone receiver panel:** 7.4mA

**Max current taken by Transmitter board and one Receiver board:** 100mA

**No of 10 Zone Receiver boards capable of being driven by one Transmitter board:** 3

### DISPLAYS

#### 10 ZONE RECEIVER BOARD

1 x MAINS ON LED; 1 x GENERAL FAULT LED;

10 x ZONE FIRE INDICATION LEDS

#### CONNECTION BLOCK

**Largest acceptable conductor size:** 1.5mm Diameter

**Smallest acceptable conductor size:** 1.0mm Diameter

DIMENSIONS Width 405mm x Height 267mm x Depth 92mm

WEIGHT 3.7 Kilo