FIKE SAFETY TECHNOLOGY LTD.

RDU-A-400

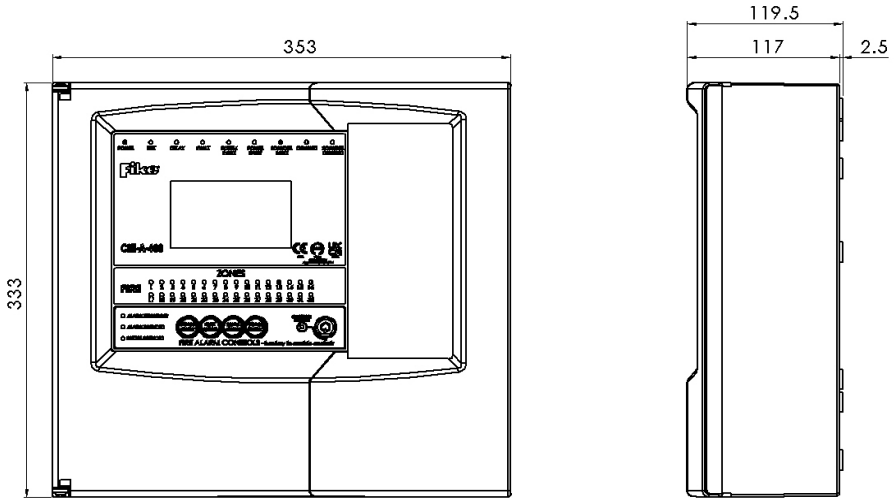
Remote Display Unit

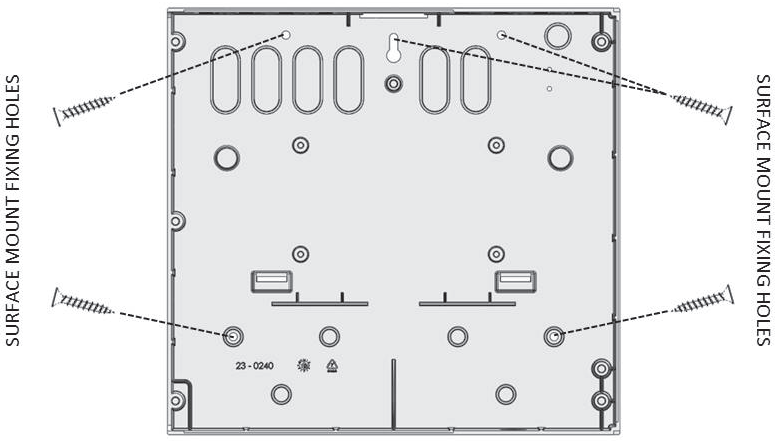
Installation Guide

Do not attempt to use this equipment until you have fully read and understood this guide.

A knowledge of BS5839-1: Fire Detection and Alarm Systems for Buildings is essential.
It is strongly recommended that a suitably qualified and competent person is consulted in connection with the Fire Alarm System design and that the entire system is commissioned in accordance with the current national standards and specifications.

Equipment Guarantee
The equipment carries no warranty unless the system is installed, commissioned and serviced in accordance with the manual and the relevant standards by a suitably qualified and competent person or organisation.





Surface Mounting

The five mounting holes should be used to secure the cabinet to a solid wall using suitable screws of at least 50mm in length. Ensure that a minimum gap of 50mm is left between the sides of the back box and any wall or projection (such as another box)

Access Level	Description	Controls LED	Key Operation	Default Code
1 – NORM	Normal	OFF	NO	N/A
2A – USER	User	ON	YES	8737
2B – SUPR	Supervisor	SLOW FLASH	NO	7877
3 – ENGR	Engineer	FAST FLASH	NO	3647

MADE IN BRITAIN

31 Springvale Industrial Estate
Cwmbran, Tofaen, NP44 5BD, UK.
+44 (0) 1633 865 556

Document No. 26-1867-01
Subject to change

Fire Alarm Controls

The menus on repeater panels are exactly the same as the menus on a control panel. However, most of the controls are not relevant for repeater panels so will give the message ‘ NOT AVAILABLE ON RDU’.

The main Fire Alarm Controls may be enabled by turning the key switch to the “Controls Enabled” position, or by entering a valid Access code (See page 1).

The menus may be navigated in one of two ways as required:

1. Use the UP / DOWN keys to move the highlighted selection and press ENTER to select the chosen one.

2. Enter the desired option number and press ENTER to select it.

Press the Esc key to exit to the previous menu.

Mains Supply

The repeater panel 230V AC supply requires fixed wiring between 1 mm^2 and 2.5 mm^2, a 3 amp fused un-switched spur with local isolation. The mains supply should be dedicated to the repeater panel and should be clearly labelled ‘FIRE ALARM: DO NOT SWITCH OFF’ at all isolation points.

NOTE* As stipulated in BS:5839-1 the RDU must not be powered on the same circuit as the CIE.

Batteries

The repeater panel requires 2 x 12V 7Ah sealed lead acid batteries. The batteries should be connected in series using the connection leads supplied. We recommend the use of type Yuasa NP7-12 (FR) or other equivalent approved type.

Do not use smaller capacity batteries on this system, smaller batteries will be overcharged and the service life will be reduced.

Using different capacity or type of batteries may invalidate any warranty.

Note that batteries are electrically live at all times and great care should be taken to ensure that the terminals are never presented with a short circuit. Care should be taken at all times, especially during transit, installation and normal use.

Use caution as there is a risk of explosion if the batteries are replaced by an incorrect type.

Batteries no longer required should be disposed of in a safe and environmentally friendly manner by the battery manufacturer or a suitable recycling service. They should never be incinerated or placed in normal rubbish collection facilities. Dispose of used batteries according to the instructions.

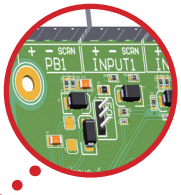
Peripheral Bus (PB 1)

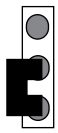
Communications between the panel and repeater is via a multi-drop RS-485 Peripheral Bus.
2-core 1.5mm2 screened fire resistant cable (i.e. FP200, Firetuff, Firecell) should be used for communications to the repeater.

The maximum total cable length from the control panel to a repeater is 500 metres.
Up to 8 repeaters can be used but they must all be within the maximum 500 metres cable length and are wired + to +, - to -, the screen must be connected to the control panel at one end only using the terminals provided. Terminate the unused end in a connector block as shown below and so on up to the maximum of 8 repeaters.

Connections

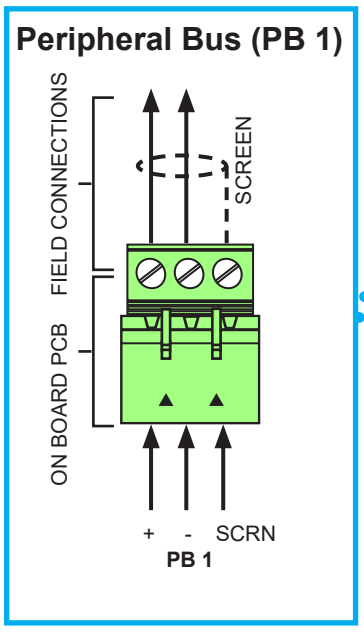
The jumpers are fitted to impedance match the cable with the driver ICs & prevent signal reflections down the cable. The jumpers must be changed on the CIE and last RDU.

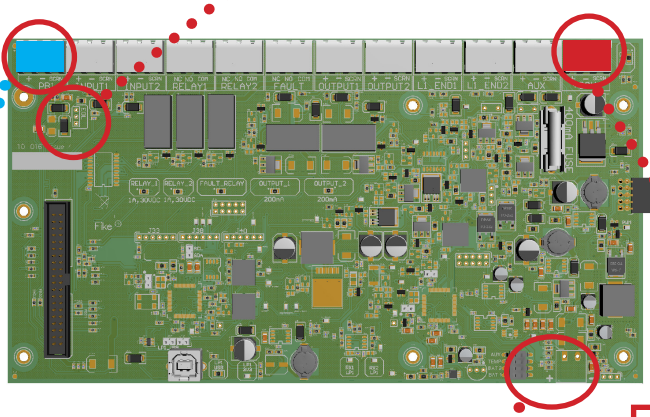


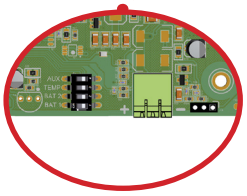


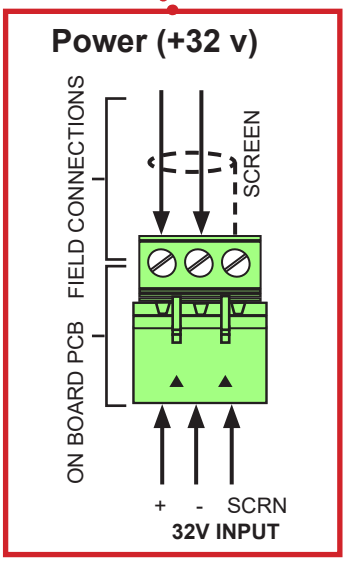
NORMAL EOL

CIE & LAST RDU EOL



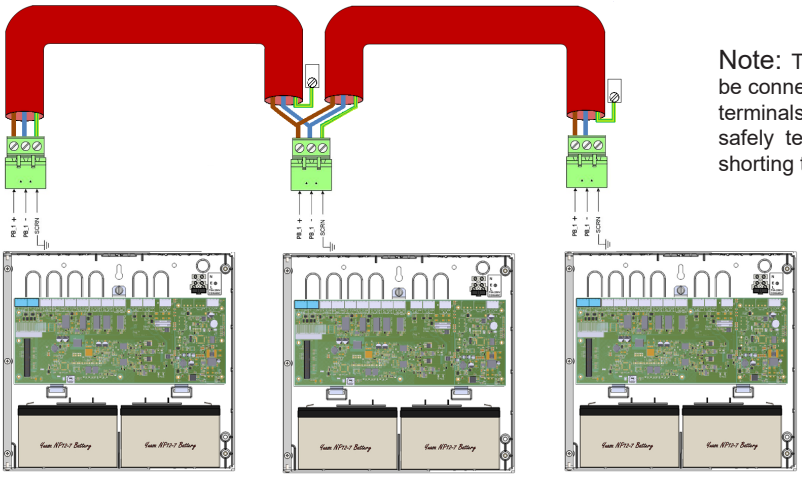






F3.15A 20mm
Glass Fuse

The peripheral bus must be run from the panel to the first repeater then the second repeater and so on; the peripheral bus must not be spurred from one point.



Note: The cable screen between each panel/repeater must be connected to SCRN Terminal at one end only using the terminals provided. Ensure the end that is not connected is safely terminated in a connector block to avoid unwanted shorting to any other point.

Terminal	Description
+	Connects to the + connection on the repeaters
-	Connects to the - connection on the repeaters
SCRN	Field cable screen connection

Programming

After installing all remote display units

Step 1. On the main panel, navigate to option 13 Peripheral Bus Settings

Step 2. Switch on supervision for the number of repeaters requiard in (option 2 RDU SETUP)

Step 3. Send the configarution to all repeaters (Option 1 INITIALIZE RDUS)

1.Peripheral Bus Settings → Initialize RDUs

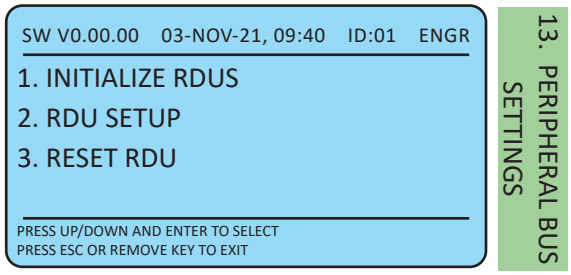
This will allow the engineer to send the configuration of the main panel to all RDUs on the system.

2.Peripheral Bus Settings → RDU Setup

This will allow the engineer to switch on the supervision for RDUs on the system.

3.Peripheral Bus Settings → Reset RDU

Function not used on panel (RDU Only)



	Technical Information
Mains	T4A Time Delayed 20mm Ceramic (in mains terminal block)
Battery Charger	700mA current limiter
Battery (reverse polarity)	F3.15A Fast Blow 20mm (in line with battery leads) Glass
Dimensions	353mm x 333mm x 117mm
Cable Type	2 core 1.5mm^2 screened fire rated cable
Operating Voltage	21-33v
Operating Current Quiescent @ 32v	30mA
Operating Current Max @ 32v	60mA
Communications	Multi-drop RS-485
Total Peripheral Bus Length	500m
IP Rating / Operating Temperature	IP30 / -5°C to +40°C
Max Number of Repeaters per Control Panel	8

Technical Support

Contact your supplier for technical support on this product.

Due to the complexity and inherent importance of a life risk type system, training on this equipment is essential, and commissioning should only be carried out by competent persons. Fike cannot guarantee the operation of any equipment unless all documented instructions are complied with, without variation. This unit complies with the EMC directive.

Fike's policy is one of continual improvement and the right to change a specification at any time without notice is reserved.
Whilst every care has been taken to ensure that the contents of this document are correct at time of publication, Fike shall be under no liability whatsoever in respect of such contents. E&OE.