# RDU-A-200
Quick Start Guide

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

A knowledge of BS5839: Pt 1: 2017: 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.
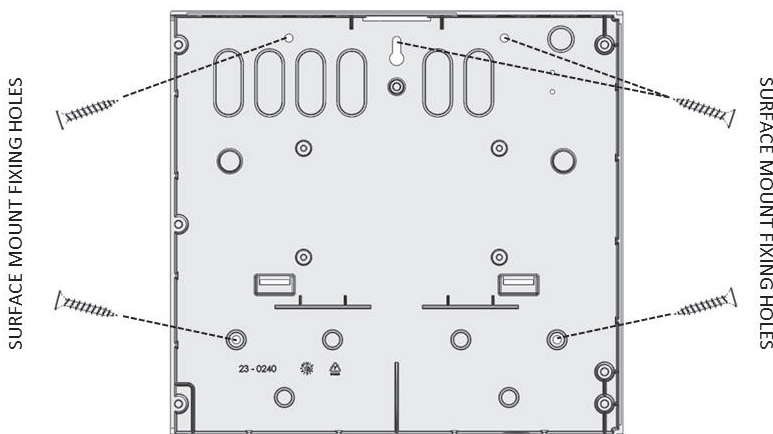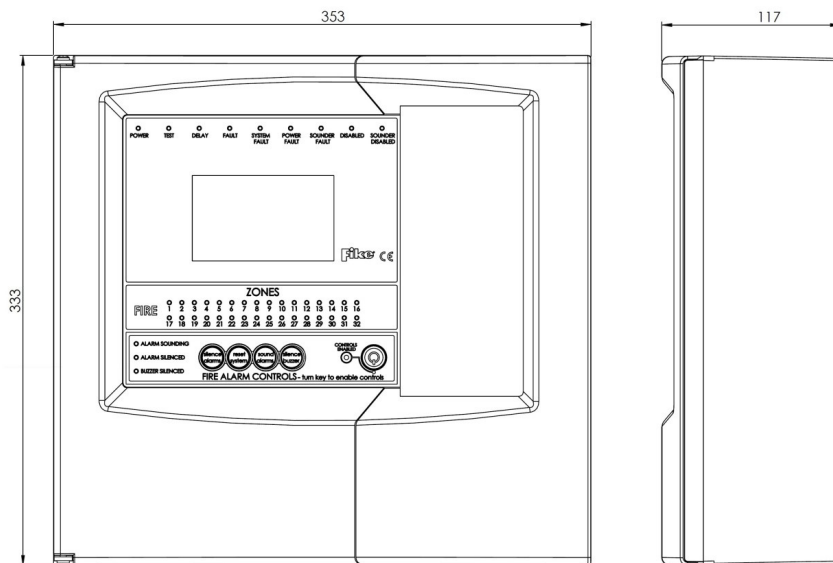
Surface Mounting

The three 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	Shift LED	Key Operation	Default code
0 – NORM	Normal	OFF	NO	N/A
1 – USER	User	ON	YES	8737
2 – SUPR	Supervisor	SLOW FLASH	NO	7877
3 – ENGR	Engineer	FAST FLASH	NO	3647

MADE IN BRITAIN

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 & Batteries

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.

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 ones will be overcharged and the service life will be reduced.

Using different capacity or type of batteries could also 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.
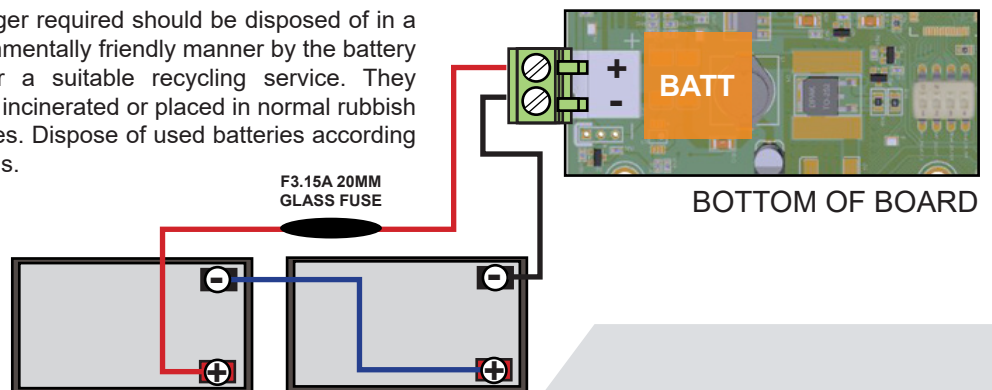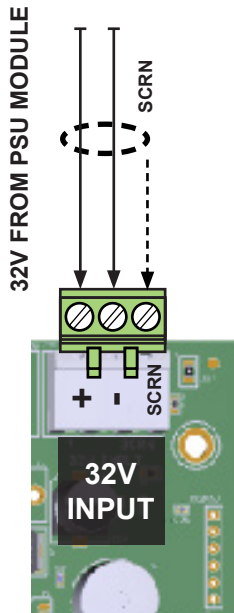
Commissioning

The commissioning process regarding the loops and devices is covered in the Control Panel Engineering & Commissioning Manuals. The repeater panel commissioning is only concerned with the functionality of the repeater panel itself.

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) cable 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.
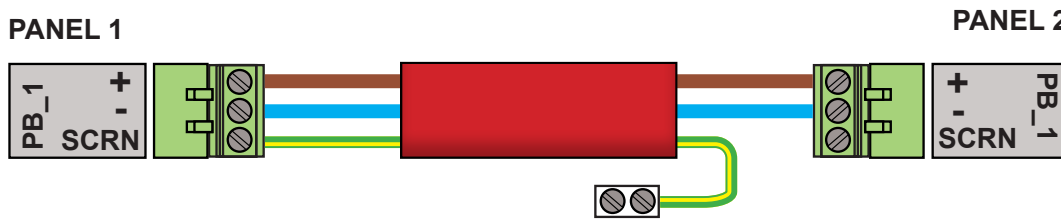
The peripheral bus must be run from the panel to the first repeater then the second repeater and so on; the peripheral bus must not be spurred from one point.
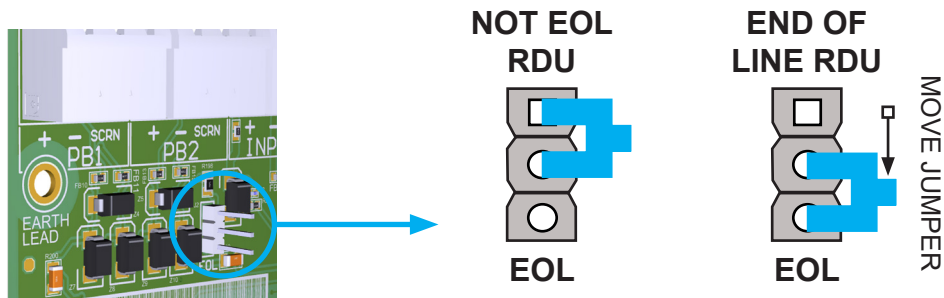
The jumpers are fitted to impedance match the cable with the driver ICs & prevent signal reflections down the cable.

The commissioning engineer will require the peripheral bus continuity and insulation readings, along with correctly marked 'as-wired' drawings and completed configuration sheets in order to commission the repeater panel.

The system configuration must be downloaded into the repeater panel using the CIE-A-200 OSP programming software using a USB lead to link to a computer. This procedure is exactly the same for the repeater panel as has been done on the main control panel. However, the configuration must be the repeater panel configuration (including the panel type being repeater and the address being the repeater address) and not the control panel configuration.

NOTE: It is imperative that the correct version of OSP is used to match your version of repeater panel. The use of an incompatible version may result in incorrect operation of the repeater panel.

When the system configuration has been downloaded into the repeater panel, the commissioning engineer should verify that all the fire alarm system events are correctly reported on the repeater panel and the repeater panel controls operate correctly.

This will involve testing the system and therefore can be combined with the overall system commissioning process.

If the repeater panel has been fitted as a system upgrade then a full system test should be carried out to verify that all the fire alarm system events are correctly reported on the repeater panel and the repeater panel controls operate correctly.

	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.
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