

TWINFLEX pro Repeater



Repeater Panel, Remote Display Unit (RDU)



The TWINFLEX®pro repeater panel is smaller than the TWINFLEX®pro control panel.

It does not itself connect to or control detection devices. Instead, it connects to a control panel and reports events which occur on the control panel.

It can also perform system controls over the network (i.e. Silence Alarms, Reset, Sound Alarms & Silence Buzzer).

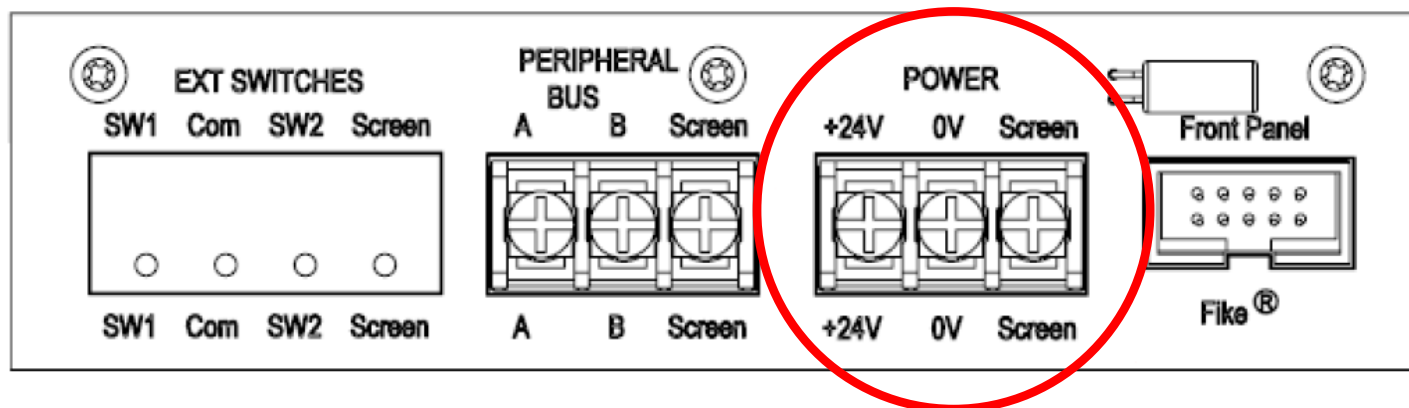
A maximum of 8 repeater panels can be connected to a single control panel.

The maximum cable length from the control panel to a repeater is 500 metres.

If 8 repeaters are used they must all be within the maximum 500 metres cable length.

2-core 1.5mm² screened fire resistant cable (i.e. MICC, FP200, Firetuff, Firecell, Lifeline or equivalent)

Power Supply & Connections



24V DC Power is provided from the control panel via Aux+ and Aux-.
2-core 1.5mm² screened fire resistant cable

When powering a repeater from the panel the extra current will reduce the battery backup run time and has to be allowed for in the battery calculations.

Current Drawn by Single Repeater @ 24.0V DC

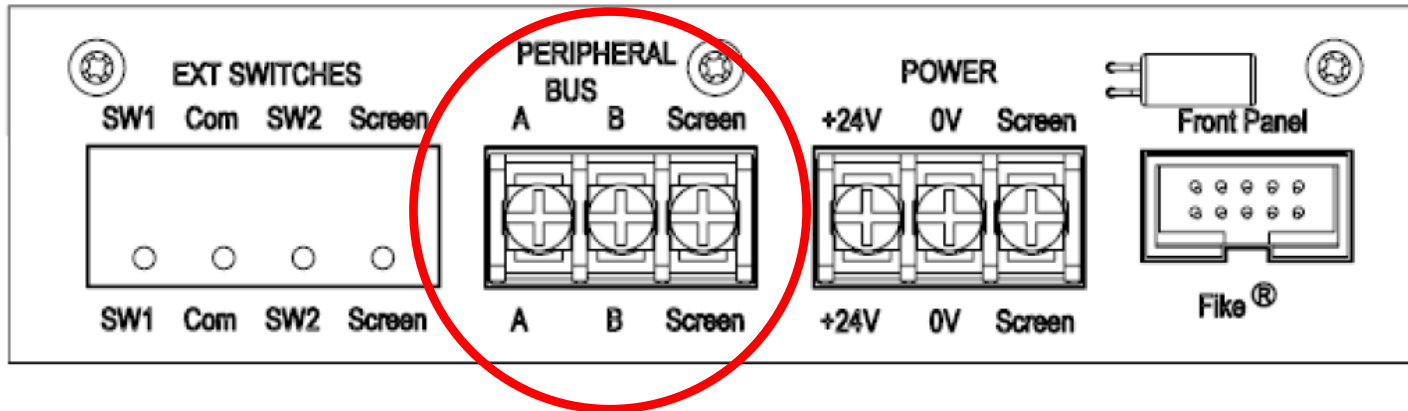
Quiescent (default screen no back light)	16.0mA
Controls enabled, back light on	50.0mA

Separate Power Supply Requirements

The repeater can be powered by a separate 24v power supply if required.

The repeater working voltage range is between 21V DC to 32V DC with a maximum current of 50.0mA.

Peripheral Bus Connections



Communications between the panel and repeater is via a multi-drop RS-485 Peripheral Bus. 2-core 1.5mm² screened fire resistant cable wired A to A, B to B, Screen to Screen and so on up to the maximum of 8 repeaters.

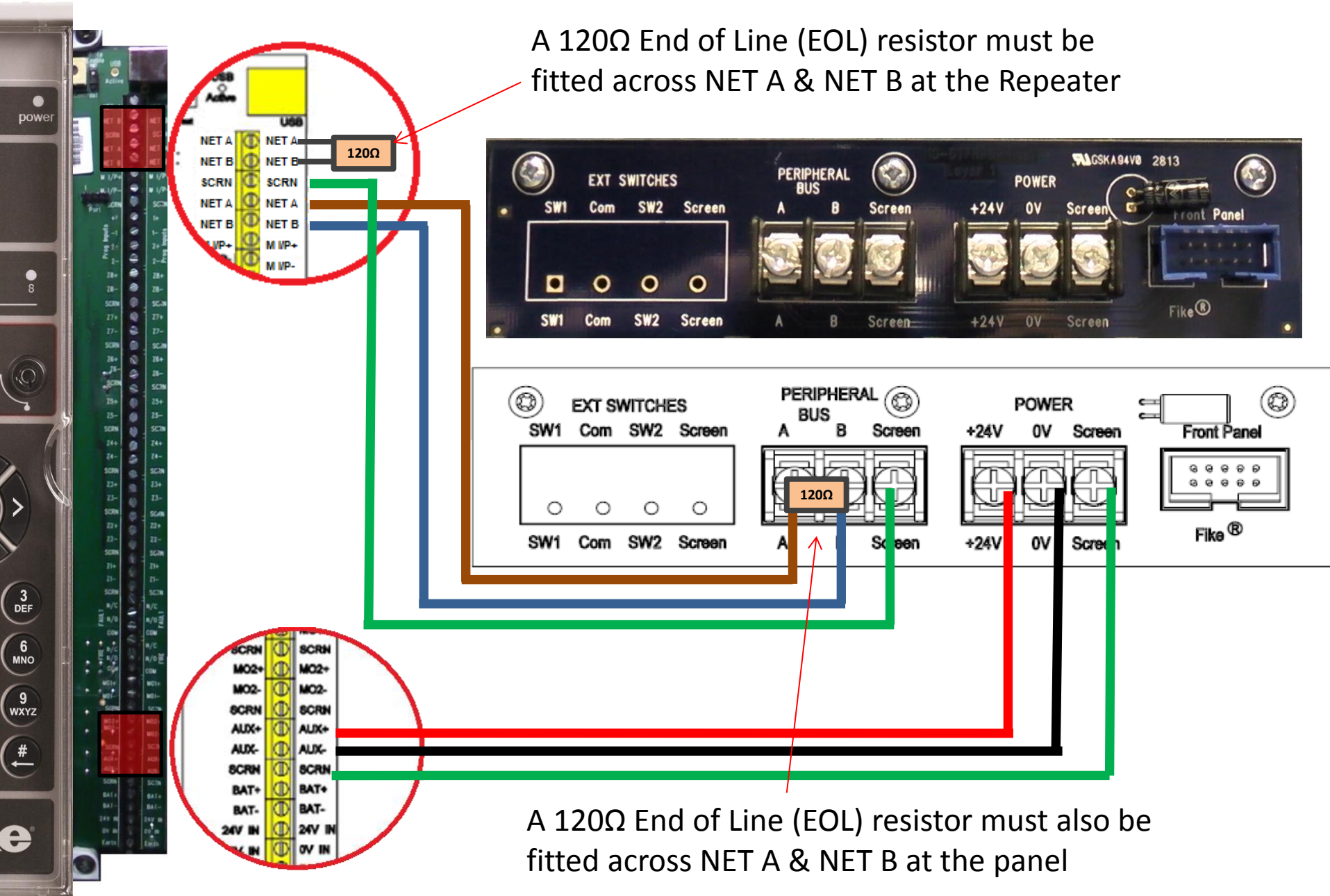
The peripheral bus must be run from the panel to the first repeater then the second repeater and so on; the peripheral bus must not be spurred from one point.

There are two sets of peripheral bus connections on the panel. These are linked in the panel so either set can be used. A 120Ω End of Line (EOL) resistor must also be fitted across NET A & NET B at the panel.

On the repeater a 120Ω End of Line (EOL) resistor must also be fitted across A and B but only on the last repeater on the network.

Connections

A 120 Ω End of Line (EOL) resistor must be fitted across NET A & NET B at the Repeater



A 120 Ω End of Line (EOL) resistor must also be fitted across NET A & NET B at the panel

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Main Control Panel Peripheral Bus Settings

NOTE: The main control panel should be set to a number in the range of 10 to 99 when using repeaters.

This is done by logging onto Engineers Mode and selecting option 9 Panel Details, then select option 4 PNL Identification, then option 1 Panel Number. The write Enable switch will need to be on for changes to take place.

To setup the main control panel to use repeaters, log into Engineers Mode and select Option 3 Enable / Disable, then option 5 peripheral bus and set the peripheral bus to ON.

From the main Engineers Menu select option 11 Peripheral Bus, within this select:

Option 1 PB RDU Supervise. In this option there is a list of 1 – 8 repeaters, (RDUs).

Enable the repeater(s), (RDUs) that are being used and are connected to the panel.

This will enable the panel to monitor the repeaters and report them as missing if there is a cable break or loss of communications.

When this is done press ESC to go back into option 11 Peripheral Bus. The main control panel should now be setup for the repeater(s).

Note: If RDU addresses are enabled that are not on the network the panel will report them as “Missing”.

Repeater Quick Setup Guide

STEP 1

Engineers Mode



option 9 Panel Details



option 4 PNL Identification



option 1 Panel Number

panel should be set to a number in the range of 10 to 99

STEP 2

Engineers Mode



Option 3 Enable / Disable



option 5 peripheral bus



peripheral bus to ON

Peripheral bus must be switched on

STEP 3

Engineers Mode



option 11 Peripheral Bus



Option 1 PB RDU Supervise



Enable the repeater

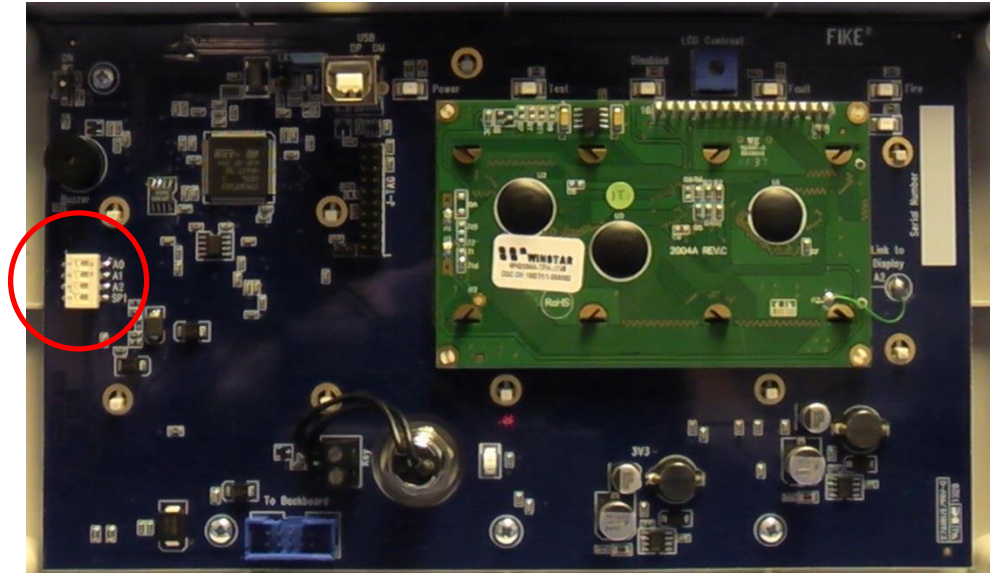
All repeaters being used must be enabled

The write Enable switch will need to be on for changes to take place
And a system reset must be done before exiting Engineers mode

Setting Repeater Number

Address settings

A0 (1)	A1 (2)	A2 (3)	Repeater Address
Off	Off	Off	1
On	Off	Off	2
Off	On	Off	3
On	On	Off	4
Off	Off	On	5
On	Off	On	6
Off	On	On	7
On	On	On	8



Each repeater has to be set with a unique number address in the range 1 – 8, the default number is 1. If more than one repeater is used on a single panel the repeater numbers will need to be changed, this is done using DIL switches A0 to A2 located next to the buzzer.

Note: The DIL switches are only read on power up. The repeater must be powered down and back up again for changes to take effect.

Repeater Buzzer

The local repeater internal buzzer can be switched off using DIL switch SP1 (4) on the bank of switches located next to the buzzer.

SP1 (4) set to On = buzzer on

SP1 (4) set to Off = buzzer off