

INSTRUCTIONS FOR USE Shire Controls Ltd. RTX-1 Transmitter

RTX1 Transmitter For The SDX-15 Plant Alarm System

About this manual.



When you see this symbol, the associated text in **bold type** refers to something which may cause danger or damage.

Transmitters introduce signals from plant etc. onto the multiplexed signal wiring. The RTX1 is designed to be mounted within the same enclosure as the alarm contacts when used for medical applications, as cable monitoring is not used.

The RTX1 is a self-contained unit, used where indication of the alarm condition is not required locally, e.g., when a manifold or plant has an integral plant to alarm interface, and is available as a one gas (4 condition) unit. The service is selected, as in the alarm panel, with a rotary switch. Each service on the system is allocated a channel when the system is initially set up, this being entered on the log sheet.

For example, if Oxygen is allocated channel 1, this plant could be connected to the alarm input terminals on the transmitter, which would then be set to channel 1.

The Red System Fault LED (5mm round) will flash if the RTX1 does not see the signals from the central alarm on the system, either because of a cable fault or because no central alarm is installed. In this case, all alarm conditions will default to alarm.

Mounting

Fix the plastic box securely using the mounting holes at each corner.

Connecting

Connect 230-volt 50/60 Hertz live, neutral & earth to the appropriate terminals.

The two core inter-panel wiring is connected to the 'Signal' 1 & 2 terminals to the 1 & 2 terminals on the nearest SDX-15 Plant alarm or transmitter (using a cable size of at least 0.5sq mm, cable may be a maximum of 500 meters).

Volt-free Inputs from the Plant of Manifold Should be connected to the 'Inputs' Terminals as follows:

Across C Common & 1 First condition Plant Fault or Change Cylinders

Across C Common & 2 Second condition Plant Emergency or Change Cylinders Immediately

Across C Common & 3 Third condition Reserve Low (Use wire link if not used)

Across C Common & 4 Fourth condition Pressure Fault

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Note:

Any condition not transmitted from this transmitter must be linked out to set that condition to normal if the condition is not to be used or left open circuit if the condition is to be transmitted from another transmitter. It is important to ensure that any condition is only transmitted from one location although other conditions on the service may be transmitted from other transmitters.

Supply



This equipment is not suitable for connection to an IT power source.

A readily accessible disconnect device must be provided.

The supply must be fused at 3 amps.

The Maximum Prospective Fault Current must not exceed 1500 amps.

The cable must not be shared with any other system.

Cables must have a minimum of 20mm clearance from all other cables.

The 2 core inter-panel wiring must be connected to earth at both ends.

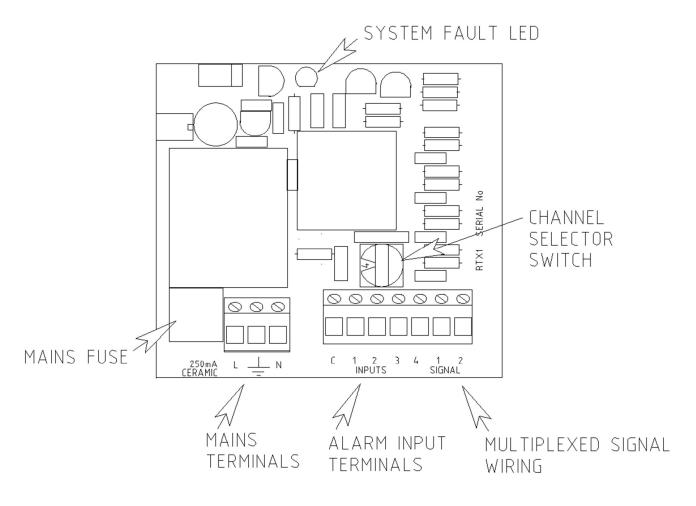


Figure 1: Transmitter Set-up

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