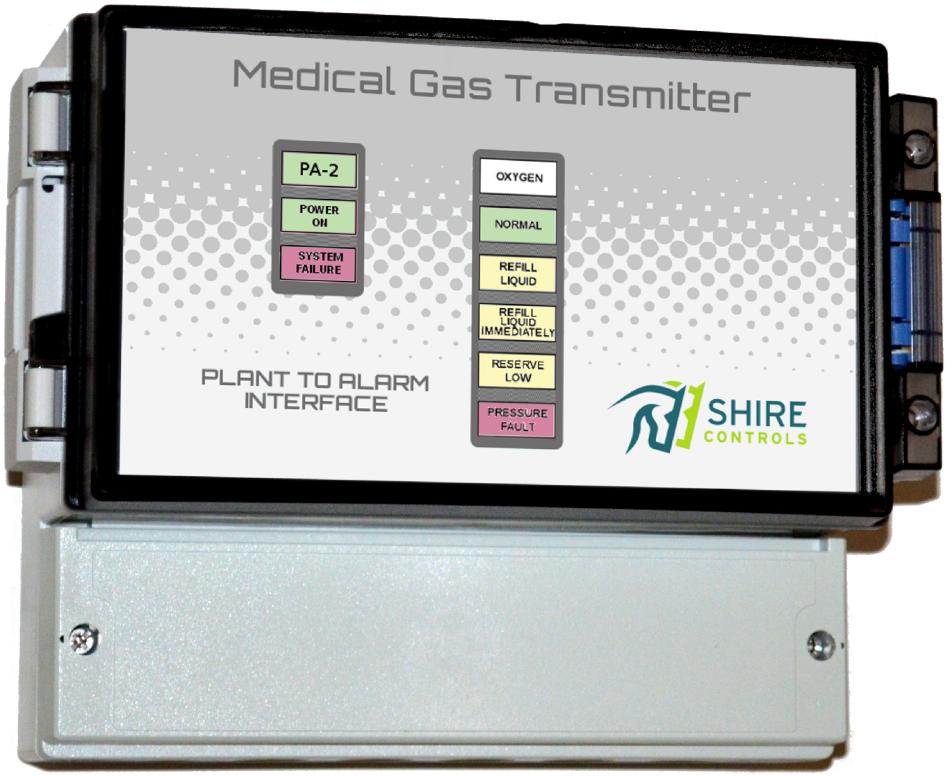
Alarm Signal Status Unit

(Plant To Alarm Interface)

for the

The SDX-15 Alarm System



SHIRE CONTROLS

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Alarm Signal Status Unit

About this manual.

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

The Alarm Signal Status Unit is a low cost means of complying with C11 & HTM02 requirements for indication of alarm status in plant rooms, manifold rooms & VIE compounds. It is mounted in a clear fronted polycarbonate enclosure, protected to IP65, suitable for use in external locations without further protection. It consists of the following indication:-

- Alarm conditions 4no
- Normal
- Power On
- System fault

The ASSU also incorporates:

- A one gas transmitter suitable for use with the SDX-15 alarm system
- Four relays, providing volt-free normally closed contacts for connection to other site systems
- A battery reserve to power the unit for a minimum of 4 hours in the event of power loss.

The ASSU monitors the wiring between the plant (or manifold) and itself via TB4 termination boards mounted in or near the contact source, checking for short or open circuits of the cable. If a fault is detected on the contact lines, an alarm condition is transmitted for the condition relating to the faulty line, the system fault lamp will flash and the 5mm round Yellow LED (on Power Supply PCB) with flash.

The system fault lamp will also flash if the ASSU fails to receive signals from a central alarm, here the 5mm round Red LED (on Power Supply PCB) with flash.

In the event of a mains power failure the system fault lamp will also flash and the 5mm round Green LED (on Power Supply PCB) with go off..

Selecting channel F inhibits the system fault resulting from a loss of signals from a central alarm.

The channel on which the service is to be transmitted is selected with a 16 way 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. The alarm contacts on the plant (or manifold) are connected via the termination board to the input terminals on the ASSU as follows:-

C	Common
l	First condition
2	Second condition
3	Third condition
4	Pressure fault

Any condition not transmitted from this AS SU must be terminated with a 56k resistor to set the condition to normal if the condition is not to be used, or with a lk8 resistor if the condition is to be transmitted from another location. The resistors are used to prevent a system fault due to short or open circuit.

Note that if a resistor is fitted, the condition must NOT be connected to the termination board. Resistor codes:-

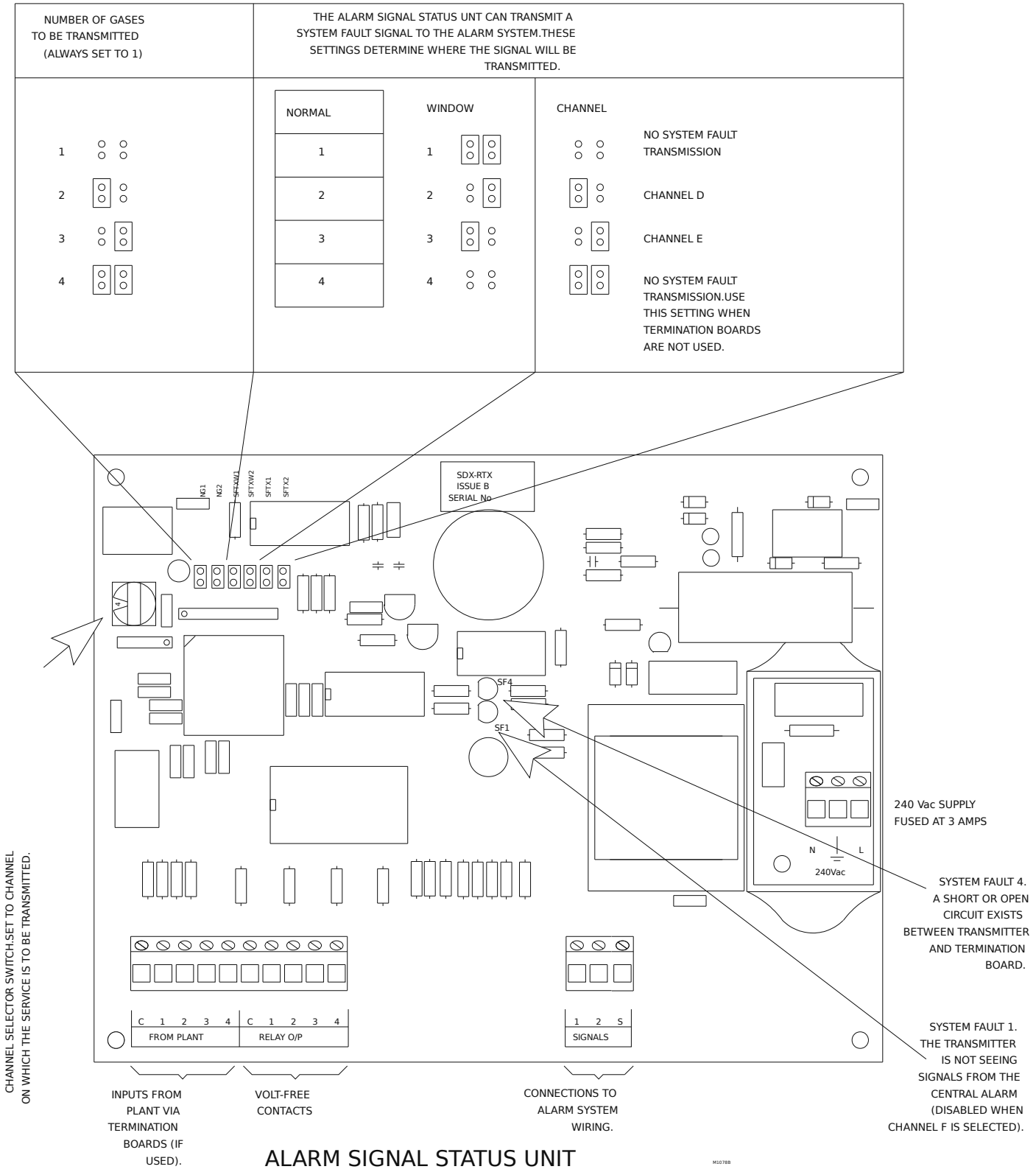
lk8 brown grey red silver, gold or red

56k green blue orange silver, gold red

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.

WARNING. This equipment is not suitable for connection to an IT power system. A readily accessible means of disconnecting the supply must be provided. The maximum prospective fault current must not exceed 1500 amps.

A 240 volt, 50/60 Hertz supply is required, which is connected to terminals under the mains terminal cover. The 2 core inter-panel wiring is connected to signal terminals l & 2. The cable screen must be connected to the "S" terminal.



ALARM SIGNAL STATUS UNIT

DECLARATION OF CONFORMITY
EU EMC Directive 2014/30/EU
UK Electromagnetic Compatibility
Regulations 2016 SI 2016 No.1091
The Low Voltage Directive 2006/95/EG
Medical Devices Directive 93/42/EEC

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Product Type
Part Of SDX-15 Plant Alarm System
Which Includes Plant To Alarm Interface

Year of manufacture 2023

Standards used (2019)
To which this declaration relates is in conformity with the following standards:

EN60601-1-2 4th Edition 2015
Emissions Standard for Medical Equipment
EN55011, Class A 2016 + A1:2017
Emissions Standard for ISM Equipment
EN60601-1-2 4th Edition 2015
Immunity Standard for Medical Equipment
EN61000-4-2 2009
ESD Requirements
EN61000-4-3 2006 + A1 + A2
Radiated Susceptibility
EN61000-4-4 2016
Electrical Fast Transient Burst Requirement
EN61000-4-5 2017
Surges Requirements
EN61000-4-6 2014
Conducted Susceptibility
EN61000-4-8 2012
Magnetic Field Immunity
EN61000-4-11 2017
Voltage Dips and Interruptions

Authorised representative
Director
Signature