VIGILANT SGD 2-WIRE 12/24V ALARM TRANSMITTER 1924-13

LT0107

1. INTRODUCTION

The Vigilant 1924-13 2-Wire SGD transmits the Fire, Defect, Isolate and Test signals from a Fire Alarm Panel or DBA (PFA) over 2 wires to the NZ Fire Service via the LTX Interface Unit and ATS System. The SGD derives its power locally from the system and has an on-board reserve supply to ensure signalling for a short time if the main supply fails.

2. CONNECTION OF SGD TO LTX (Refer diagram overleaf)

Distance must be less than 1000m. Use 0.2sq mm or greater for "A" and "B" lines (twisted pair recommended for long lines or noisy environments).
Connect SGD J3-"A" to LTX SGD-1 "A".
Connect SGD J3-"B" to LTX SGD-1 "B".
(Connect SGD to LTX SGD-2 terminals if the 2nd SGD connection etc).

3. CONNECTION OF SGD TO PFA (Refer diagram overleaf)

Connect SGD J3-"+" and J3-"-" to Fire Panel supply or DBA Supply (cut LK10 if 24V).
Connect to Fire Alarm Panel or DBA using either the input screw terminals, J4 (remove SEG 1/2 link) or plug-on connector J1 (SAFE Transponder compatible-use SEG 1/2 link to select correct segment).
If the Brigade test switch has a pole wired in series with the isolate switch, bridge this pole of test switch to prevent simultaneous test and isolate.

4. ADDRESS SELECTION

Give 1st SGD address 1 i.e. fit address link 1, remove 2,4,8,16 and connect to SGD-1 on LTX. Give 2nd SGD address 2. i.e. fit link 2, remove 1,4,8,16 and connect to SGD-2 on LTX. (Valid addr. 1-16).

5. MAINS EARTH

In some panels 0V and mains earth are linked together. This link must be broken when a 2-wire SGD is fitted to such a panel.

6. OPERATION

The 5 indicators and buzzer indicate the current status of the PFA, test progress and acknowledgement, and polling by the LTX. Provided the SGD has been powered up for a few minutes, when the 12/24V supply is disconnected, the SGD will continue to operate for several minutes in its power-fail-hold-up mode although the indicators will not be visible.

6.1 "POLLED" INDICATOR

OFF - SGD is not being polled (or no power).
SLOW FLASH - SGD is being polled by LTX.
ON - Faulty SGD, replace it.

6.2 "NORMAL" INDICATOR

OFF - Invalid address selected, no power or in D, F or I.
SLOW FLASH - in Test Normal mode.
FAST FLASH - waiting for a test acknowledge.
ON - PFA is in Normal state.

6.3 "DEFECT" INDICATOR

SLOW FLASH - in Test Defect mode.
FAST FLASH - Test Defect acknowledge received.
ON - PFA is in Defect state.

Continued .....

6.4 "FIRE" INDICATOR

SLOW FLASH - in Test Fire mode.
FAST FLASH - Test Fire acknowledge received.
ON - PFA is in Fire state.

6.5 "ISOLATE" INDICATOR

SLOW FLASH - in Test Isolate mode.
FAST FLASH - Test Isolate acknowledge received.
ON - PFA is in Isolate state.

6.6 ALL INDICATORS EXCEPT "POLLED" FLASH

Power-up initialisation or 15 second warning (buzzer sounds as well) if PFA has been switched or SGD has timed out of Test mode or PFA de-isolated with PFA still in Fire state. Clear Fire or isolate PFA before 15 seconds is up to avoid fire call to brigade.

6.7 BUZZER

Beeps every 10 seconds - Address invalid or SGD faulty (replace).
Beeps every second - Program re-start or 15 second warning if PFA has been switched or SGD has timed out of Test mode or PFA de-isolated with PFA still in Fire state.
Beeps twice/second - Test Fire acknowledge received.

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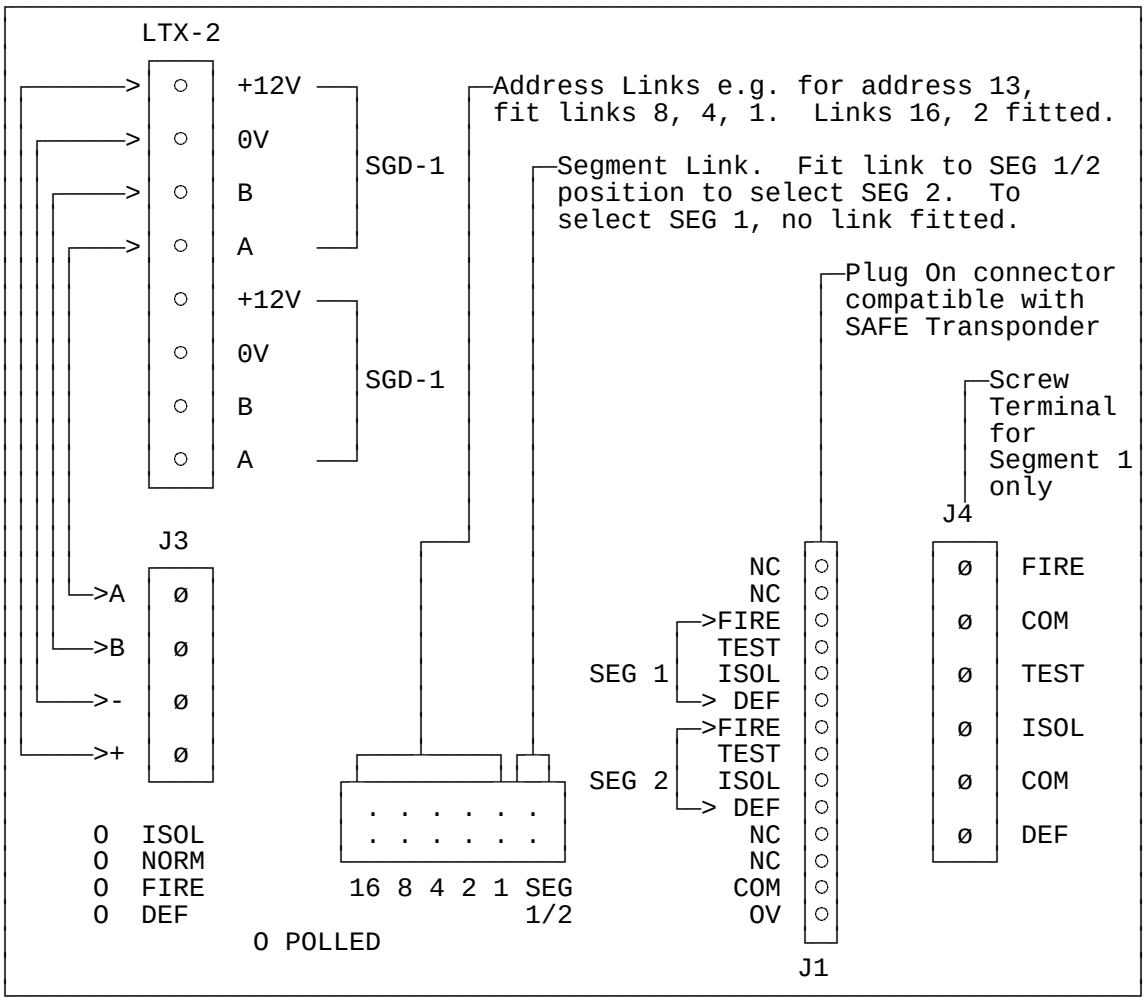
LTX-2
+12V
0V
B
A
+12V
0V
B
A
SGD-1
SGD-1
Address Links e.g. for address 13,
fit links 8, 4, 1. Links 16, 2 fitted.
Segment Link. Fit link to SEG 1/2
position to select SEG 2. To
select SEG 1, no link fitted.
Plug On connector
compatible with
SAFE Transponder
Screw
Terminal
for
Segment 1
only
J4
J3
>A
>B
>-
>+
O ISOL
O NORM
O FIRE
O DEF
O POLLED
16 8 4 2 1 SEG
1/2
SEG 1
SEG 2
NC
NC
>FIRE
TEST
ISOL
> DEF
>FIRE
TEST
ISOL
> DEF
NC
NC
COM
OV
J1
FIRE
COM
TEST
ISOL
COM
DEF