1. INTRODUCTION
The Vigilant 1924-1 SGD transmits the Fire, Defect, Isolate and Test signals from a Fire Alarm Panel or DBA (PFA) to the NZ Fire Service via the LTX-2 Interface Unit and ATS System.

2. CONNECTION OF SGD TO LTX-2 (Refer diagram overleaf)
Distance must be less than 1000m. Wire size for 12V/0V lines:
up to 100m = 0.2sqmm, 101-500m = 0.5sqmm, 501-1000m = 1.0sqmm.
Use 0.2sqmm or greater for "A" or "B" lines (twisted pair recommended for long lines or noisy environments).
Connect SGD J3-A to LTX-2 SGD 1 "A"
Connect SGD J3-B to LTX-2 SGD-1 "B"
Connect SGD J3-"+" to LTX-2 SGD-1 "+12V"
Connect SGD J3-"-" to LTX-2 SGD-1 "0V"
(Connect SGD to LTX SGD-2 terminals if the 2nd SGD connection).

3. CONNECTION OF SGD TO PFA (Refer diagram overleaf)
If connecting to Fire Alarm Panel or standard DBA with no segment swapper, remove SEG 1/2 link and use J1 or J4.
If connecting to standard DBA with segment swapper, either: leave seg swapper in, fit SEG 1/2 link and use J1; or: remove seg swapper, remove SEG 1/2 link and use J1 or J4.
If connecting to DBA with wiring or Segment 2, fit SEG 1/2 link and use J1.
If the 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. OPERATION
The 5 indicators and buzzer indicate the current status of the PFA, test progress and acknowledgement, and polling by the LTX-2.

5.1 "POLLED" INDICATOR
OFF - SGD is not being polled (or no power).
SLOW FLASH - SGD is being polled by LTX-2.
ON - Faulty SGD, replace it.

5.2 "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 in Normal state.

5.3 "DEFECT" INDICATOR
SLOW FLASH - in Test Defect mode.
FAST FLASH - Test Defect acknowledge received.
ON - PFA in Defect state.

5.4 "FIRE" INDICATOR
SLOW FLASH - in Test Fire mode.
FAST FLASH - Test Fire acknowledge received.
ON - PFA in Fire state.

Continued ........
5.5 "ISOLATE" INDICATOR
SLOW FLASH - in Test Isolate mode.
FAST FLASH - Test Isolate acknowledge received.
ON - PFA is in Isolate state.

5.6 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.

5.7 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.