

**VIGILANT MULTIDROP 4-WIRE SGD ALARM TRANSMITTER 1924-1****1. INTRODUCTION**

The Vigilant 1924-1 4-wire SGD transmits the Fire, Defect, Isolate and Test signals from a Fire Alarm Panel or FBA/DBA to the NZ Fire Service via an alarm transport system. It operates in either single line or multidrop mode.

**2. CONNECTION OF SGD TO ASE (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 ASE RS485 PORT A/B "A" Terminal

Connect SGD J3-B to ASE RS485 PORT A/B "B" Terminal

Connect SGD J3-"+" to ASE RS485 PORT A/B "+12V" Terminal

Connect SGD J3-"-" to ASE RS485 PORT A/B "0V" Terminal

**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**

Link selectable. For Multidrop Mode fit ADDRESS 16 link and one or more of ADDRESS 1, 2, 4, 8 links to select valid addresses 1-8 and 9-15 for software versions 4.00 and later. To select multidrop mode address 16 remove all ADDRESS links (software V4.00 and later).

For non-multidrop mode valid addresses are 1-16: either fit ADDRESS 16 link or one or more of ADDRESS 1, 2, 4, 8 links to select address 1-15.

**5. OPERATION**

The 5 indicators and buzzer indicate the current status of the PFA, test progress and acknowledgement, and polling by the ASE.

**5.1 "POLLED" INDICATOR**

OFF - SGD is not being polled (or no power).

SLOW FLASH - SGD is being polled by ASE.

ON - Faulty SGD, replace it.

**5.2 "NORMAL" INDICATOR**

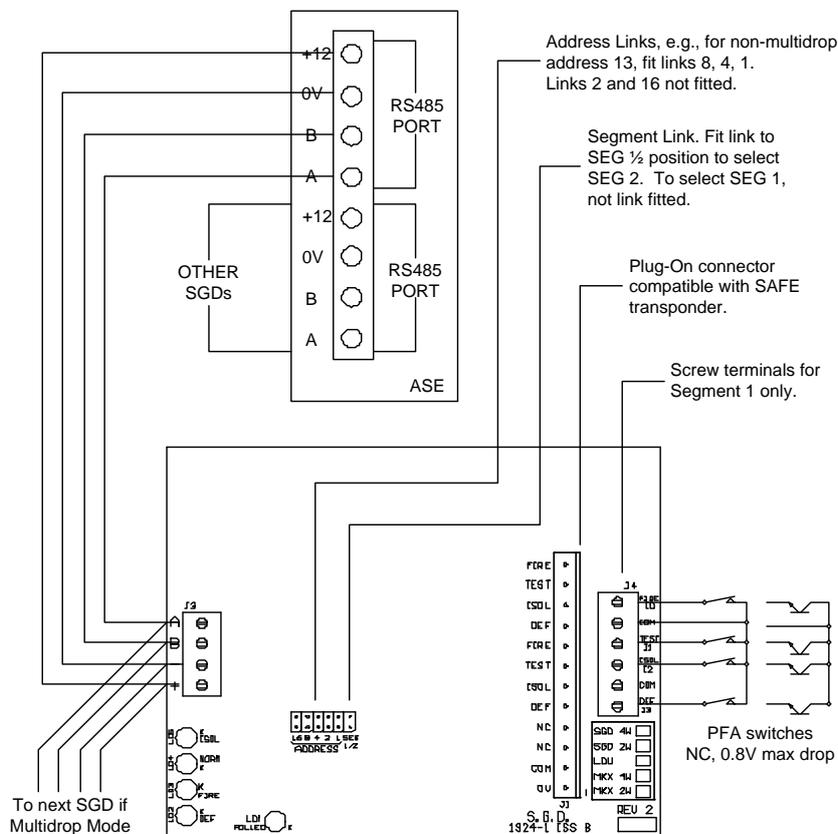
OFF - Invalid address selected, no power or in D, F or I.

SLOW FLASH - in Test Normal mode.

FAST FLASH - waiting for a test acknowledge.

ON - PFA is in Normal state.

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



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