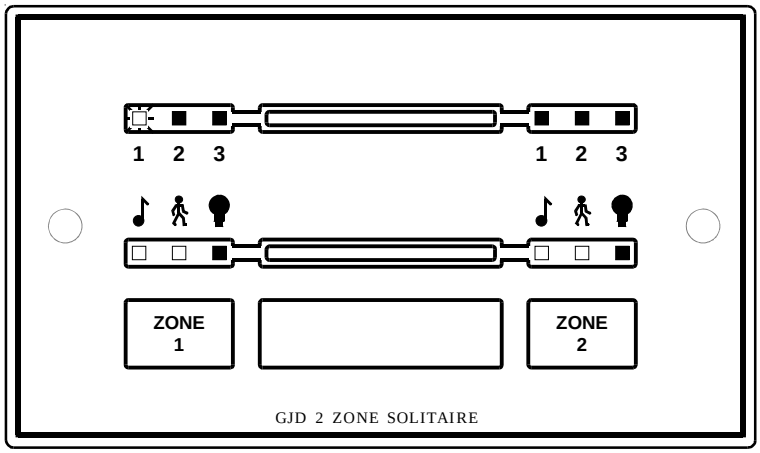



INSTALLATION MANUAL

THE LOW VOLTAGE 2 ZONE SOLITAIRE CONTROLLER ENABLES THE ACCURATE MONITORING OF TWO SEPARATE AREAS OF SECURITY LIGHITNG. ADDITIONAL CONTROLLERS CAN BE ADDED TO THE SYSTEM TO GIVE CONTROL POINTS IN MORE THAN ONE LOCATION.

ONE SOLITAIRE EXPANSION UNIT IS REQUIRED TO PROVIDE UPTO 3,000 WATTS OF LIGHTING WHICH ARE ACTIVATED ON DETECTION FOR A PRE-SET PERIOD AND CAN BE MANUALLY OVERRIDDEN WHEN REQUIRED. THE CONTROLLER INCORPORATES AN AUDIBLE WARNING TONE AND FEATURES SIX DETECTOR INDICATORS WHICH ILLUMINATE WHEN ACTIVATED BY DETECTION DAY AND NIGHT.

## SPECIFICATION

| | |
|---|---|
| SUPPLY: | 12VDC @ 30mA supplied from Expansion Unit<br>One Solitaire Expansion Unit is required : 2 x 1500 watts |
| INDICATION: | Three 24 hour indicators per zone which pulse during detection and are steady after detection for the duration of the light on timer setting. |
| AUDIBLE: | Internal warning tone which sounds on detection day and night, and is button selectable. It has a varied pulsed tone for both areas.<br>Additional sounder output available. |
| CONTROL: | Two individual zone buttons for selecting:<br>manual override, engineer walk test or programming the light on time, pulse count or 5mA 'T' timer output. |
| OPTIONS: | Ability to link lighting areas together.<br>Ability to have two additional Touch Controls<br>Ability to activate all lighting by push button or when linked to an intruder alarm panel |
| DIMENSIONS: | 146(W) x 86(H) x 20(D) mm Weight 118gm |
| MOUNTING: | Indoor use only.<br>Mount in a clean dry location on a secure flat surface |
| TEMPERATURE: | -10 TO + 55 Centigrade |

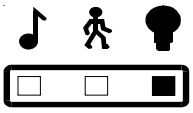
CE

**Operating Instructions**

When a detector is activated day or night the relevant red detector indicator flickers and will remain on for the length of the timer setting.

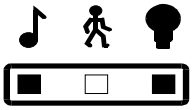
During darkness the lighting will be switched on automatically while the detector is receiving activation signals, and will automatically turn off after the preset timer period.

The green indicator has to be selected on the required zone for automatically controlled lighting on detection during darkness.

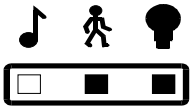


1. Standard operation. (Red + Green illuminated).
   Lighting will activate on detection at night.
   Audible beep on detection day and night.

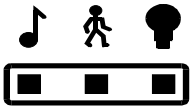

Each press of the Zone button will sequence onto the next operation.



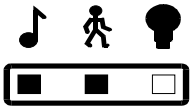
2. Lighting will activate on detection at night -
   (Green indicator illuminated only)
   Audible beep is 'off' for this zone.



3. Sounds on detection day and night - External lighting off.
   (Red indicator illuminated only)



4. Zone off - only detector indicators will activate on detection.
   (All indicators switched off)



5. Manual override - Sounder off.(Yellow indicator selected)

**Engineer System Test. (Walk-Test)**

This 'walk test mode' gives the controller a night-time signal. It is used to test the system and align the detectors at any time. As each detector beam is activated the beep will sound on the controller the relevant detector indicator will light and the external lighting for that 'Zone' will trigger for 4 seconds each time a beam is crossed. Each zone has to be tested independently.

To enter the unit into 'walk test mode', toggle the zone button of the area being tested until only the 'Green' indicator is lit - then press down the button for 8 seconds - a beep will sound - release the button. The red & green zone indicators light.

The area can then be tested to ensure that the detector has the correct alignment and range settings. It is important that the detection area does not exceed the required coverage area.

To cancel this mode - press the 'Zone' button that you have been testing until all the indicators are off.

**Adjustment to existing settings:(master unit only)**

1) To enter program mode turn all the indicators 'OFF' then hold down the selected 'Zone' button. After 8 seconds a beep will sound - keeping the button held down, the 'green' led will start to sequence through the 'selections' of **one** flash for Time, **two** for Pulse count, **three** for Mode and **four** for 'T' output as shown in the table below.
2) When the required 'selection' is reached, release the button.
3) The 'red' led then flashes for the number representing the present 'option' setting.
4) If you want to change the present option setting - hold down the button again within 3 seconds. The red flashes will then sequence through the options available for that selection. Release when the number of red flashes corresponds to your option.
5) The Program mode exits after 3 seconds - all amendments are stored in the non-volatile memory.

**Example 1: Altering the light on time from two minutes to four minutes.**
Hold down the selected 'Zone' button for 8 seconds - keep held until green led flashes once then release - the red led flashes twice - hold again until four red flashes - release**.**

**Example 2: Altering the factory setting from one pulse count to two.**
Hold down the selected 'Zone' button for 8 seconds - keep held until green led flashes twice then release - the red led flashes once - hold again until two red flashes - release.

## 2 ZONE SOLITAIRE PROGRAMMING TABLE
## (highlighted areas show factory setting)

| GREEN SELECTIONS | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1x | TIME (MINUTES) | **1** | 2 | 3 | 4 | 5 | 8 | 12 | 16 | 24 |
| | 2x | PULSE COUNT | **1** | 2 | 3 | | | | | | |
| | 3x | MODE | **24 HR** | **LINK** | **24+L** | **STD** | | | | | |
| | 4x | 'T' OUTPUT (SECONDS) | **OFF** | 1 | **5** | 10 | 20 | 30 | | | |
| | | **RED OPTIONS** | **1x** | **2x** | **3x** | **4x** | **5x** | **6x** | **7x** | **8x** | **9x** |

'T' common to both zones program - Zone 1 only

**Selections :**

1) TIME - 1 to 24 minutes. The length of the light on time after last detection during darkness. The red detector indicator will stay on for this time after the last detection day or night.
2) PULSE COUNT - After completing the 'walk test', set the pulse count to the required level. The pulse count is the number of detector beams that have to be crossed to trigger the system.
   '1' will give a fast response. '2' gives better immunity with good response
   '3' gives high immunity to false activations in poor environments but is less responsive.
3) MODE
   24 HR - Outside lights will operate day and night with detection
   LINK (Zone 1) - Detectors on this zone also activate lights on Zone 2
   LINK (Zone 2) - Detectors on this zone also activate lights on Zone 1
   24+L - Outside lights will operate day and night with link as above
   STD - GJD factory setting - outside lights will operate at night with detection.
4) 'T' Output: The number of seconds the 24hr output will activate, if the sounder is selected.

**Installation guide**
The 2 Zone Solitaire Touch Control works in conjunction with the Solitaire Expansion Unit. These provide the two individual switching zones of 1500W each. If the application requires more than 3000W of lighting additional Solitaire Expansion units can be used up to a maximum switching capacity of 30,000W.

Additional Touch Controls can also be added in other locations to increase the functionality of the system. To accommodate this requirement the internal 6 core cable from controllers to expansion units can be upto 200 metres.

The lighting can also be activated, from a remote push button or from an intruder alarm panel. The relay or push button normally open closed when active.
See the Solitaire Expansion Unit wiring diagram:
'D' to '-' is the data line that activates the Expansion Unit for Zones 1 and Zone 2

**Wiring checklist:** Initial checks prior to applying power to the system.
Check that the '-' is linked between all units
Check that the 'C' is linked between all units
Check that the '+' is not linked between all Expansion Units used
When using one Touch Control only - check that there is no connection to the 'R' terminal.
When using more than one Touch Controls - check there are no connections to the 'D' terminals on the slave controllers.

**Applying power**
When power is applied to the Touch Control all the red and green indicators above the Zone buttons light and detector indicators '1' & '6' flash for 1 minute.The unit self- tests the wiring.

**Wiring or power faults:**
If all red detector indicators on Zone 1 & 2 flash continuously - check the 'D' wire is connected to Expansion Unit No. 1.
Check that power is supplied to all the Expansion Units.

The voltage between the '+' and '-' on all Expansion Units should be 12 volts. If it is not 12V remove all wires from the '+' and '-' connections then check the mains supply. If the mains supply is correct the fault is with the wiring or connections.

The voltage between '+' and 'C' should be 6 volts on all units. If incorrect check the wiring for short or open circuit.

**Reset to factory settings:**
Remove power from the master Touch Control press and hold down Zone 1 and Zone 2 buttons. While the buttons are held down - apply the power and release the buttons.