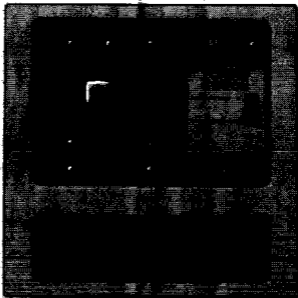


# NEW

## INSTALLATION INSTRUCTIONS

# THE PANELS FOR THE 80's BS80 SUPER CONTROLS



- Provides two double pole loop main circuits each with LED circuit indicators.
- Individual Exit Route/Confidence LED circuit indicator.
- Main Alarm/Confidence LED Indicator.
- Low stand-by battery alarm.
- Fully stabilised power supply for auxiliary output.
- Adjustable entry/exit delay circuit plus instant set.
- Open circuit detectors for pressure mats on main and exit route circuits.

- Self contained bell, power and circuit facilities.
- 24 hour latching anti-tamper with key reset, plus L.E.D. indicator.
- Built-in automatic battery charger.
- Latching 24 hour personal attack facility.
- Two fused bell outputs.
- Full LED circuit walk test facility.
- Bells inhibit key position.
- Zoning switch facility.

**A & G SECURITY ELECTRONICS plc**  
061-633 3033 (5 lines)

Technical Manuals Online! - <http://www.tech-man.com>



## INTRODUCTION

The new BS80 Super range of controls could be described as an upmarket version of the well established BS80 controls, of which there are more than 40,000 currently installed (1-2-83).

In addition to the items mentioned overleaf, the BS80 Super incorporates extra indicators and a new facility that provides GREEN LED illumination for both main circuits, plus the exit route when the alarm is set.

This illumination is to assure the user that the system is fully set and on guard when they are on the premises.

The BS80 Super control also provides facilities for the optional TX40 Auto Reset and Bell Shut off Module.

There is also on this Module, a LED memory indicator circuit to inform the users that the alarm has automatically reset during their absence.

## INSTALLATION INSTRUCTIONS FOR MODEL BS80 SUPER BRITISH STANDARD 4737 CONTROL

### INSTALLATION PROCEDURE

Fix control panel to the wall and connect to fused permanent 24 hour, 240 volt power outlet and fit stand-by battery. The control panels have been extensively tested before leaving our factory and each closed circuit loop has been fitted with jumpers for test purposes.

So that you may test the control panel is operating correctly, insert alarm key and turn to TEST and depress built-in tamper micro on the main printed circuit board, you should then have a GREEN clear main circuit LED indication on the front panel.

To check operation short circuit your closed circuit loops, this will immediately indicate a RED fault on the front panel LED indicator.

The GREEN exit circuit LED will not illuminate until the control key is turned to the ON position and low level exit sounder commences.

After assuring yourself of the operation of the panel, remove the test loops as necessary and connect the newly installed circuit wiring and alarm bells etc.

The alarm terminal connections are as listed:—

### TERMINALS 1 & 2 (Circuit One)

Provide a 24 hour closed circuit Negative loop.

This loop will accept up to 1000 ohms resistance and has a response time of approximately 250 M. Sec.

This loop may be run with any Positive loop on the control panel if 24 hour monitoring protection is required.

With the panel in the OFF Position, the inside bell will operate and latch when the 24 hour circuit is broken.

With the panel in the ON position a full latching alarm will result.

#### **TERMINALS 2 & 3**

Provide an open circuit connection for **PRESSURE MATS**.  
Circuit will accept a resistance in excess of 1000 ohms and has a response time of approximately 250 M. Sec.

#### **TERMINALS 3 & 4**

Provide a closed circuit Positive loop. This loop will accept up to 1000 ohms resistance and has a response time of approximately 250 M. Sec.

#### **TERMINALS 3 & 6**

Provide a closed circuit Positive loop for the connection of door contact etc. on the EXIT route.  
This loop has an adjustable Entry/Exit timer facility, eliminating the need for a shunt switch/lock, minimum setting 10 seconds, maximum setting 2½ minutes, adjustable anticlockwise.  
The loop will accept up to 1000 ohms resistance and has a response time of approximately 500 M. Sec.

#### **TERMINALS 2 & 5**

Provide an open circuit for the connection of Pressure Mats on the EXIT route.  
This loop will accept resistance in excess of 1000 ohms and has a response time of approximately 250 M. Sec.

#### **TERMINAL 7**

This terminal is for the connection of an A & G Self Powered Bell Module.  
The terminal becomes operative when the Self Contained Bell link is cut. (See panel printed circuit board). Terminal 7 then requires a return positive feed from the Bell Box to enable the panel to set.  
This protection loop has a response time of approximately 250 M. Sec. and is monitored 24 hours.

#### **TERMINAL 8**

Outside negative output. Fused at 1 amp.

#### **TERMINAL 9**

Positive for outside bell.  
Positive for inside bell (if required).

#### **TERMINAL 10**

Inside bell negative output (if required).  
Fused at 1 amp.

#### **TERMINALS 11 & 12**

Provide an additional output for entry/exit buzzer (if required).  
Terminal 11 — Positive  
Terminal 12 — Negative  
Current is automatically limited to 200 mA.

#### **AUTO RESET TERMINALS**

The two terminals to the right of terminals 11 and 12 are for the connection of the optional 3 mode, auto reset and bell shut off module TX40, adjustable 4 to 40 minutes.

When the TX40 auto reset module is used, remove jumper and connect these terminals directly to the identical terminals on the TX40 module.

#### **TERMINALS 13 & 14 — PERSONAL ATTACK**

Provide a 24 hour closed circuit positive loop in both the unset and set positions.  
All personal attack buttons should also be wired to these connections.  
This loop will accept up to 1000 ohms resistance and has a response time of approximately 250 M. Sec.  
When an alarm condition is created by this circuit, a full alarm will result and may be reset by switching panel into the TEST position (i.e. bells inhibit).

#### **SECOND SWITCHABLE CIRCUIT (for left). (BS80 Two Zone Model only).**

Provides a Negative and Positive closed circuit loop, plus open circuit pressure mat facilities.

#### **TERMINALS 1 & 2**

Provide a negative 24 hour closed circuit loop and will accept up to 1000 ohms resistance, with a response time of approximately 250 M. Sec.

#### **TERMINALS 2 & 3**

Provide an open circuit connection for pressure mats. The circuit will accept resistance up to 1000 ohms, with a response time of approximately 250 M. Sec.

#### **TERMINALS 3 & 4**

Provide a positive closed circuit loop and will accept up to 1000 ohms resistance, with a response time of approximately 250 M. Sec.

#### **DRY CONTACTS**

The three terminals on the extreme left of the printed circuit board provide single pole changeover dry contact switching facilities when the control is full alarm as per block diagram.

This facility may be used to trigger auxiliary equipment of all types.  
The relay contact having a maximum rating of 1 amp.

#### **AUXILIARY POWER SUPPLY**

The top two terminals on the righthand side of the printed circuit board provide a nominal 12 volt, fully stabilised power supply with maximum output of 1300 mA.

Top Terminal — Positive      Bottom Terminal — Negative  
The output is protected by a fuse adjacent to terminal block.

#### **LOW VOLTAGE AC INPUT**

The lower pair of terminals on the righthand side of the printed circuit board are for the AC input from the transformer.

#### BACK TAMPER SWITCH optional

Connect O/C back tamper switch to circuit one terminals 2 & 14 for 24 hour alarm.

#### OPERATING PROCEDURE

Insert control key and turn to TEST position and obtain GREEN zones clear LED light, which indicates the main circuits are correct.

Switch the control to ON position which will then commence the exit route timer and start the low level exit sounder.

At that time the GREEN LED exit circuit indicator will illuminate indicating that the exit route is also clear.

(It is not necessary to close all exit doors before setting the system).

Leave the premises by the prescribed route closing all exit doors (any deviation from the exit route will trigger the inside sounder and lockout the outside bell and dry contacts. The control will then require resetting.

The low level sounder will silence when the preset adjustable 10 seconds to 2½ minutes has elapsed.

This indicates that the exit route is now protected.

In the set condition, both GREEN clear LED indicators stay illuminated to provide a confidence illumination to the occupier of the premises if only part of the system is being used.

If the interior main sounder operates after the exit time has elapsed this indicates that a door has been left open on the exit route and that it is necessary to return to the panel and reset same, and correct the offending door etc.

#### RE-ENTERING PROTECTED PREMISES

When re-entering, the low level sounder will indicate in a blipping tone and the keyholder should then immediately return to the control panel position, and switch to OFF.

If the control is not switched OFF in the adjustable preset time 10 seconds to 2½ minutes approximately, a full alarm will result. (When re-entering, do not deviate from the entry route, otherwise a full alarm will result).

#### CONNECTION OF SELF CONTAINED BELL — MODEL SC3

SCB Module	TX80 Control Panel
A	2 — Negative hold off (charging)
B	8 — Negative Bell Trigger
C	7 — Return Tamper Positive
D	9 — Positive Hold Off (charging)

#### IMPORTANT

After finalising connections, cut SCB link on main printed circuit board.

#### LOW STAND-BY BATTERY ALARM

The control incorporates a battery level check circuit.

If the stand-by battery falls to below approximately 10 volts, a full alarm is given.

#### CIRCUIT LATCHING FACILITY

To comply with the NSQR Code of Practice, facilities have been provided within the BS80 Super so that the two individual circuit indicators stay latched after the panel has been switched to the OFF position.

If you wish to use this facility, it is necessary for you to install a normally closed button within the control for engineer reset, wire this to the pins provided adjacent to terminals 1 and 2, and cut the link above the pins marked NSQR latch up.

Alternatively, labelling facilities are provided on the face of the control to install the button.

#### EXIT TIMER QUICK-SET

Facilities are provided within the control to reduce the preset exit time to Quick-set, by pressing a normally open button situated outside the protected area.

To obtain this facility, wire from the two pins adjacent to the exit timer adjustment to a remote position as required and fit normally open button.

#### ACCESSORIES AVAILABLE

- 1) Pre-wired back tamper switch.
- 2) Pre-wired panel latch up reset switch.



SHOULD YOU REQUIRE ANY FURTHER TECHNICAL INFORMATION, PLEASE DO NOT HESITATE TO CONTACT US ON OUR TECHNICAL HOTLINE TELEPHONE NUMBER 061-633 6490.

ALTERNATIVELY IF YOU ARE AT YOUR CLIENTS PREMISES CONTACT US ON OUR TECHNICAL FREEPHONE VIA THE OPERATOR FREEPHONE NUMBER 6052