DECIBELL

Installation Instructions

RINS040-5

EN50131-1
Security Grade 3
Environmental Class 4

Pyronix

CONTENTS

Pyronix Installers Club (PI Club)

Installer Support

The PI Club has been developed with the focus on what you the installer would like to see from one of the world's leading manufactures of security equipment.

The philosophy behind the association is that you will receive tangible benefits, which are applicable to both the work and home environment.

The Loyalty Clubs Reward Scheme

By collecting the PI Club points, which are printed on product packaging you can redeem against vouchers for Argos, Marks and Spencer and Dunnes (ROI only). 35 Points is equal to a £1 voucher.

Dedicated Website

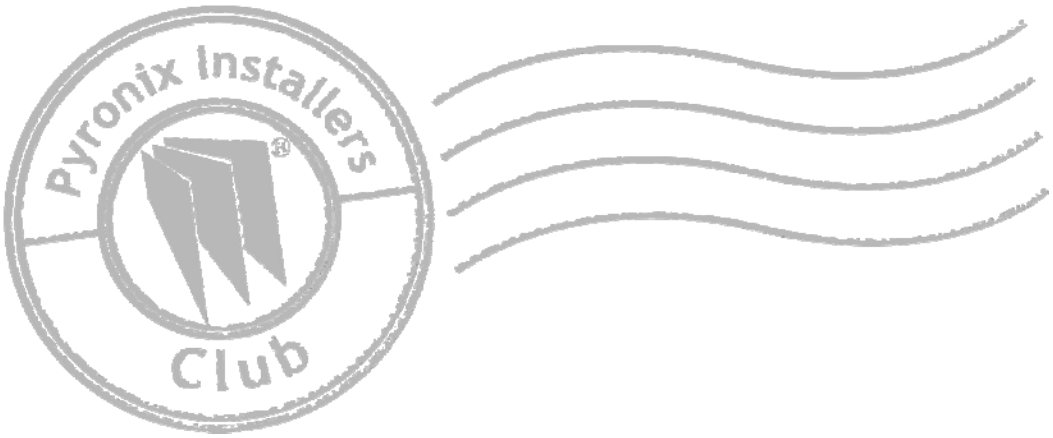
You will have access to a dedicated PI Club section of the Pyronix website which is packed full of features that will keep you updated on Pyronix and industry news.

Product Training

Product training days are run monthly at Pyronix Head Office, and on-site training can also be provided to meet your individual needs.

To Join the PI Club please register at www.pyronix.com, or for further information please contact our marketing department at marketing@pyronix.com.

As a new member of the PI Club a technical help free phone number will be issued to you.



1. IMPORTANT NOTES BEFORE INSTALLATION

POWER

Isolate from the power supply until the installation is complete. The B+ terminal at the control panel should be the last connection made.

200 VOLT

Do not touch the strobe light. There is a danger of electric shock.

BATTERY

Any battery left connected for more than 24 hours, without a power supply connected will go into deep discharge, and may not recover.

SHOCK

Mount the sounder away from the public, especially in enclosed areas such as alleyways and corridors, in order to reduce any shock hazard caused by the start of a sudden loud noise.

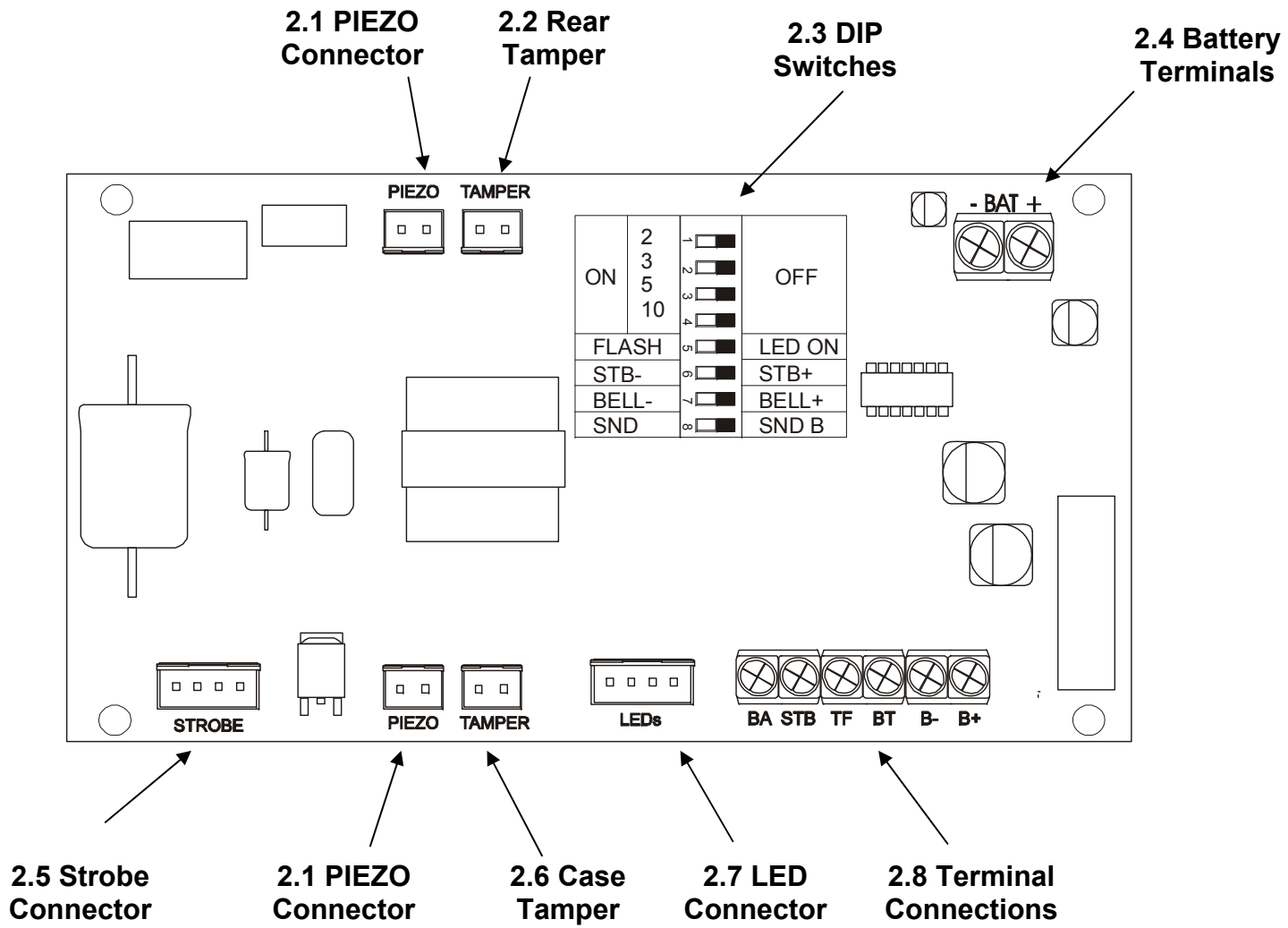
WARRANTY

This product is sold subject to our standard warranty conditions and is warranted against defects in workmanship for a period of one year. In the interest of continuing improvement of quality, customer care and design, Pyronix Ltd reserve the right to amend specifications without giving prior notice

2. THE DECIBELL PRINTED CIRCUIT BOARD

The Decibell printed circuit board looks like the following:

Figure 1:

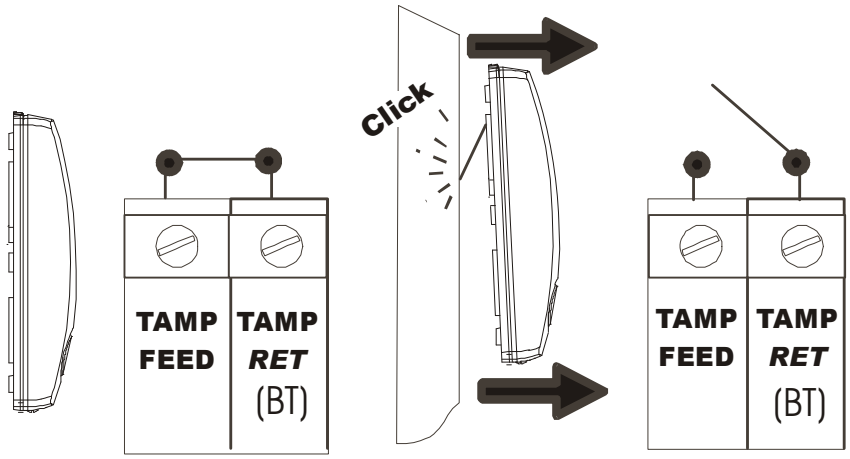


2.1 PIEZO Connector

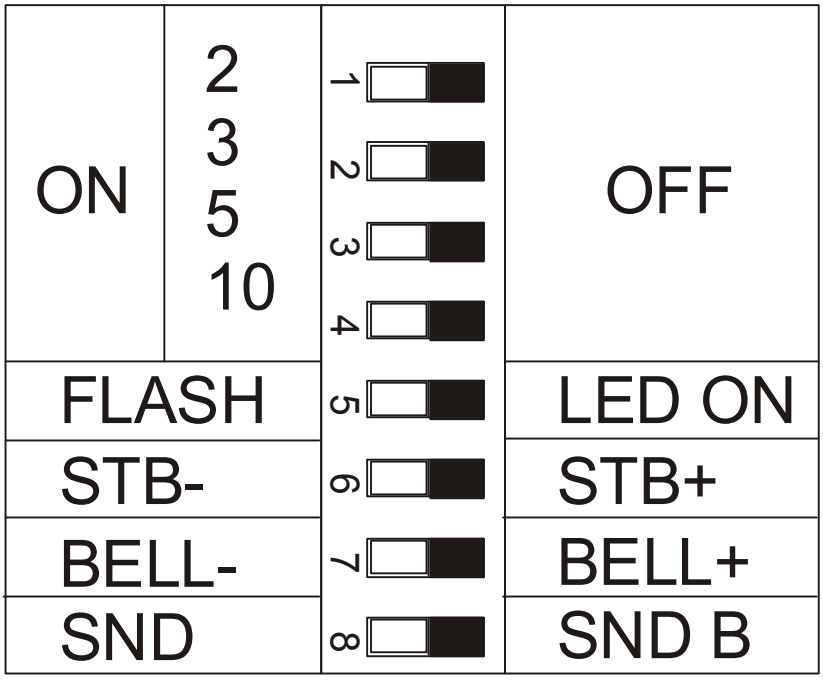
The DECIBELL incorporates 2 x PIEZOs that connect to the PCB. These can be disconnected while installing the system so that the loud noise will not be a distraction, or you can use the test feature – please see page 6. The connectors are shown in Figure 1 on page 4.

2.2 Rear Tamper

The DECIBELL is fitted with a rear tamper switch, operated by removing the DECIBELL from the wall. **The tamper switch can be adjusted by carefully bending the metal spring.**



2.3 Dip Switches



DIP Switches 1, 2, 3 and 4

DIP switches 1, 2, 3 and 4 are used to select the timers for the Decibell sounders.
Please see the following page for the different timings.

Timers	DIP switch 1	DIP switch 2	DIP switch 3	DIP switch 4
2 mins	ON	OFF	OFF	OFF
3 mins	OFF	ON	OFF	OFF
5 mins	OFF	OFF	ON	OFF
DO NOT USE	**ON**	**OFF**	**ON**	**OFF**
8 mins	OFF	ON	ON	OFF
10 mins	OFF	OFF	OFF	ON
12 MINS	ON	OFF	OFF	ON
13 mins	OFF	ON	OFF	ON
15 mins	OFF	OFF	ON	ON
17 MINS	OFF	ON	OFF	OFF
18 mins	OFF	ON	ON	ON
20 mins	ON	ON	ON	ON

Testing the Piezos

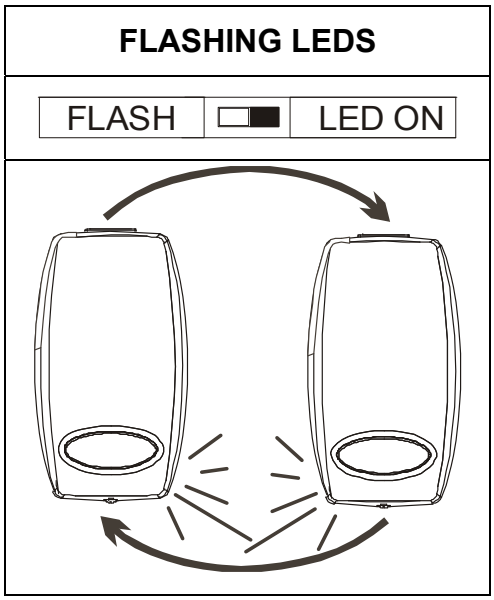
For the 5 second test feature for the PIEZO's – (i.e. the sounders will activate for 5 seconds only), the configuration must be as follows:

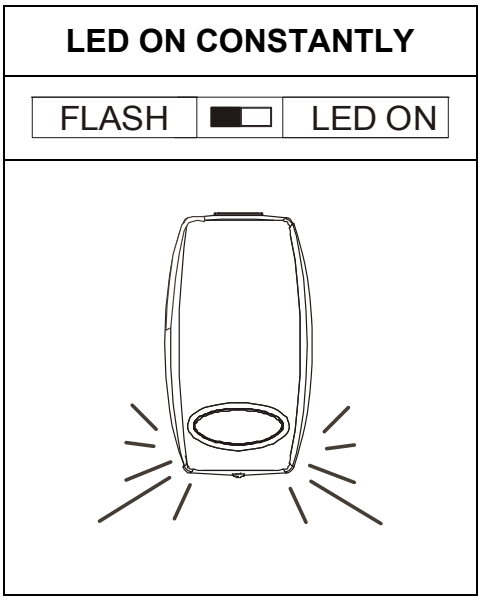
Timers	DIP switch 1	DIP switch 2	DIP switch 3	DIP switch 4
5 secs test	OFF	OFF	OFF	OFF

With this scenario, the Decibell will only sound for 5 seconds on an alarm system regardless what the control panel bell time is programmed as.

DIP Switch 5 – LEDs

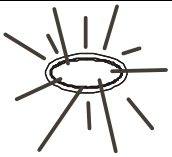
DIP Switch 5 selects how the LEDS will operate, whether they will flash alternatively, or be illuminated all the time.

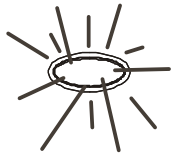




DIP Switch 6 – Strobe

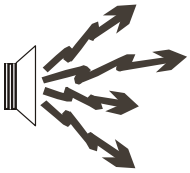
DIP Switch 6 changes the polarity of the Strobe Trigger; this is associated with the STB terminal.

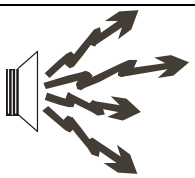
STROBE TRIGGER (STB) (Negative)	
STB- ▭■ STB+	
0V	
12V	

STROBE TRIGGER (STB) (Positive)	
STB- ■▭ STB+	
0V	
12V	

DIP Switch 7 – Bell

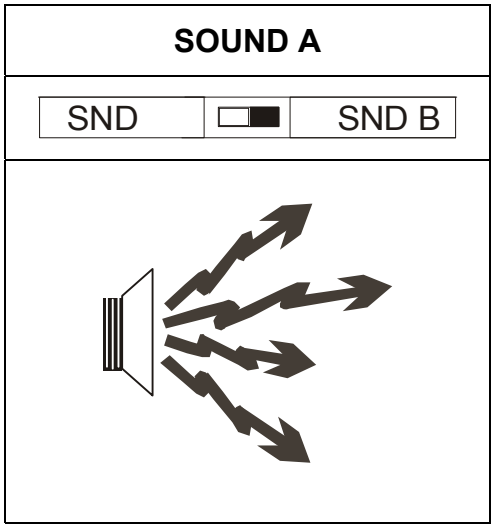
DIP Switch 7 changes the polarity of the Bell Trigger; this is associated with the BA terminal.

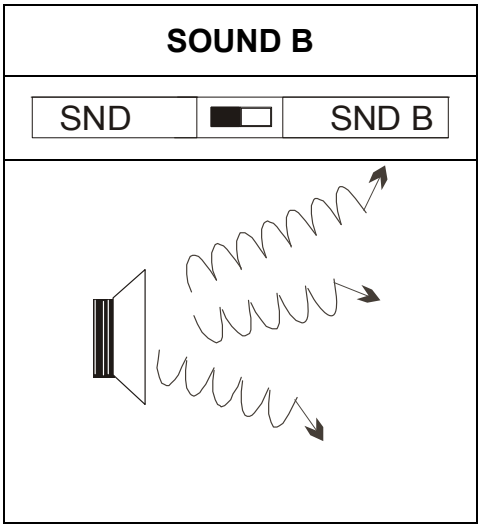
BELL TRIGGER (BA) (Negative)	
BELL- ▭■ BELL+	
0V	
12V	

BELL TRIGGER (BA) (Positive)	
BELL- ■▭ BELL+	
0V	
12V	

DIP Switch 8 – Sound

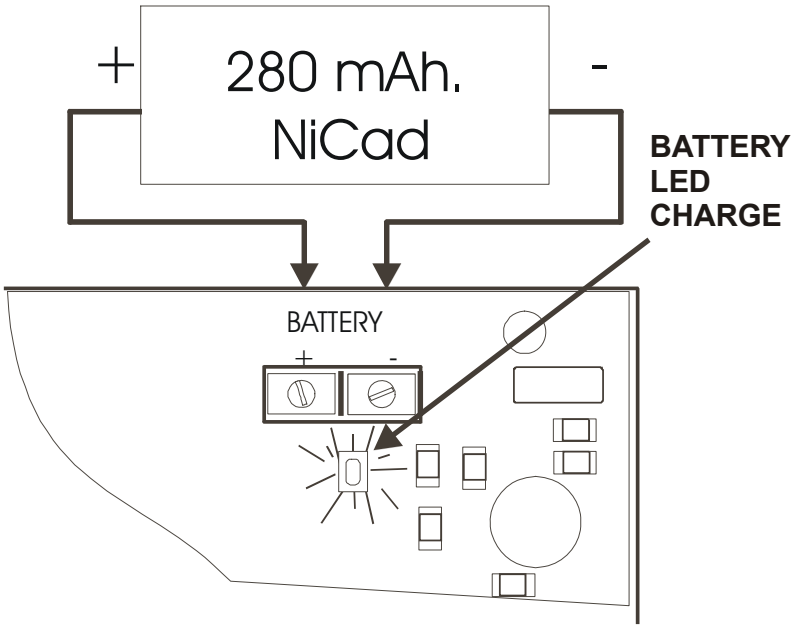
DIP Switch 8 allows the selection of two different sounds for the PIEZO's.





2.4 Battery Terminals

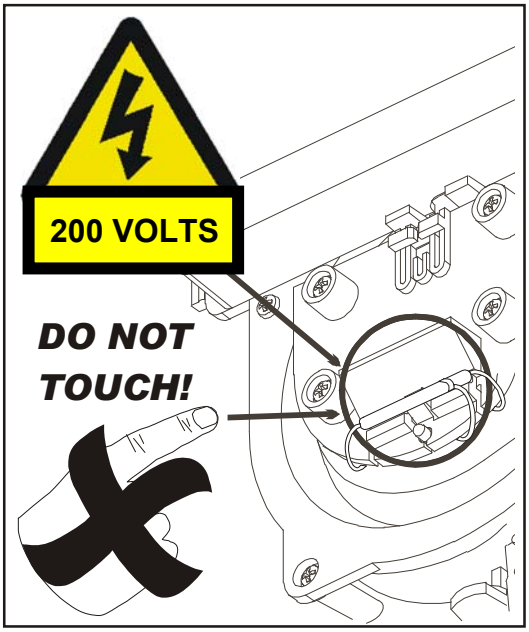
The DECIBELL comes complete with a backup battery (7.2V NICAD Battery) so that even in the event of a intruder sabotage, the bell box will still operate and protect the property. The battery connects to –BAT+



2.5 Strobe Connector

This is where the strobe for the DECIBELL connects; the strobe is powered by a 200V+ signal.

DO NOT TOUCH THE STROBE AS THERE IS A DANGER OF AN ELECTRIC SHOCK.

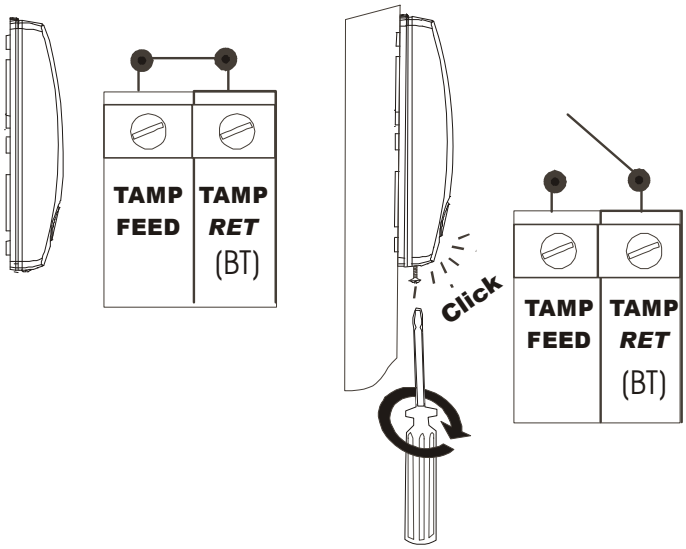


WARNING:

WHEN WORKING IN CLOSE PROXIMITY IN SUBDUED LIGHT OR DARKNESS THE STRONG LIGHT EMITTED MAY CAUSE TEMPORARY VISION FAILURE. TAKE PRECAUTIONS!

2.6 Case Tamper

The DECIBELL is fitted with a case tamper switch, operated by removing the case holder screw. **The tamper switch can be adjusted by carefully bending the metal spring.**

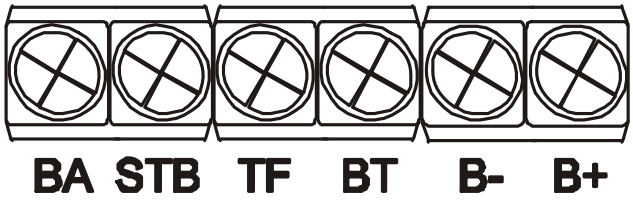


2.7 LED Connector

The DECIBELL has two operating LED's that indicate that the DECIBELL is powered. These are seen through the front lid cover. If it is preferred that these are disabled simply disconnect the harness from the connector, or you can choose to have the LED illuminated all the time, see page 6.

2.8 Terminal Connections

The Terminal Connections for the Decibell are as follows:



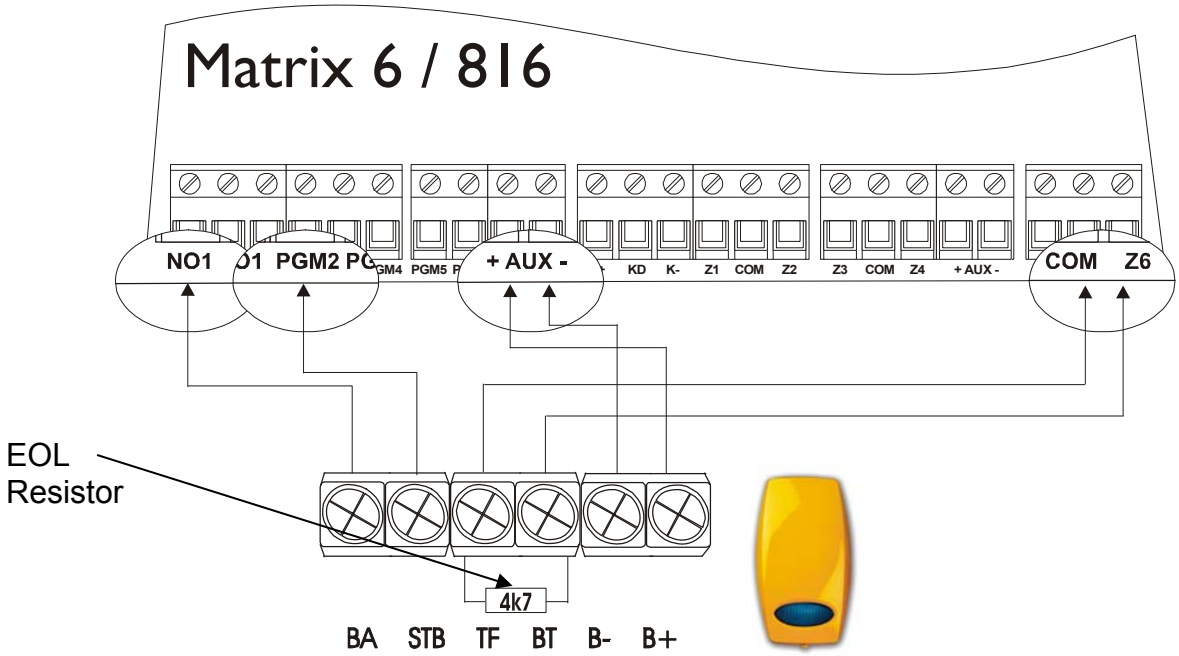
BA……Bell Trigger Terminal
STB……Strobe Trigger Terminal
TF……Bell Tamper Feed
BT……Bell Tamper Return
B+……12V Positive Hold Off (+)
B-……0V Negative Hold Off (-)

3. WIRING BELL TAMPER TO CONTROL PANEL ZONES

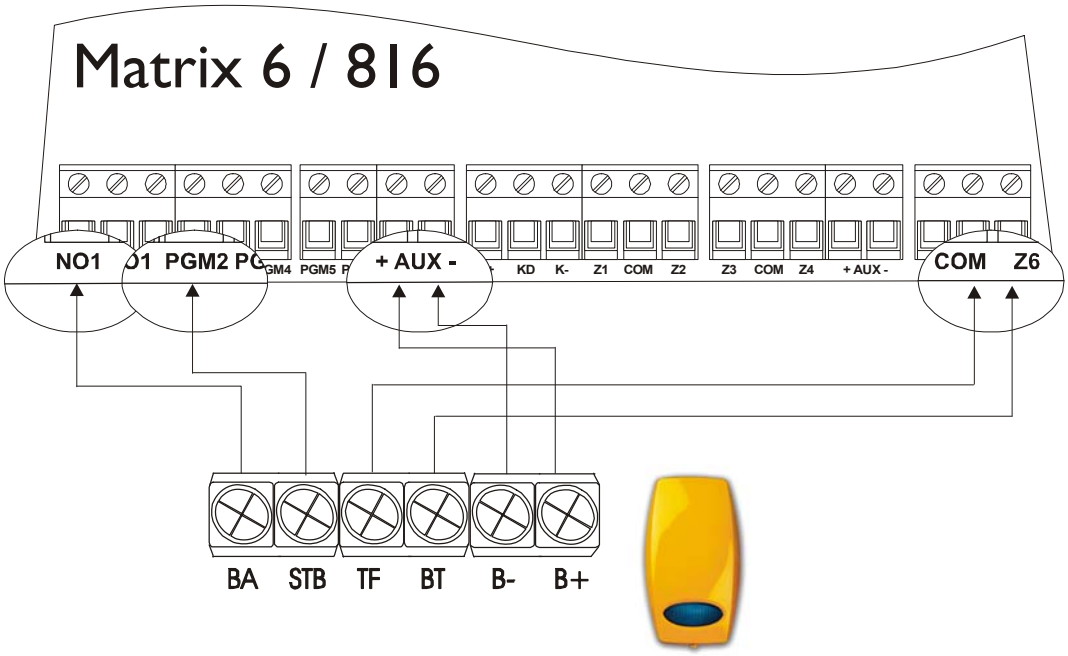
The examples below show how to connect the bell tamper to the Matrix 6 / 816 systems, this system uses a zone as a tamper circuit.

If the alarm panel requires **end of line resistors**, wire the DECIBELL as the below diagram.

Please note that the resistance value will change depending on the alarm panel (please refer to the installation manual of that alarm system).



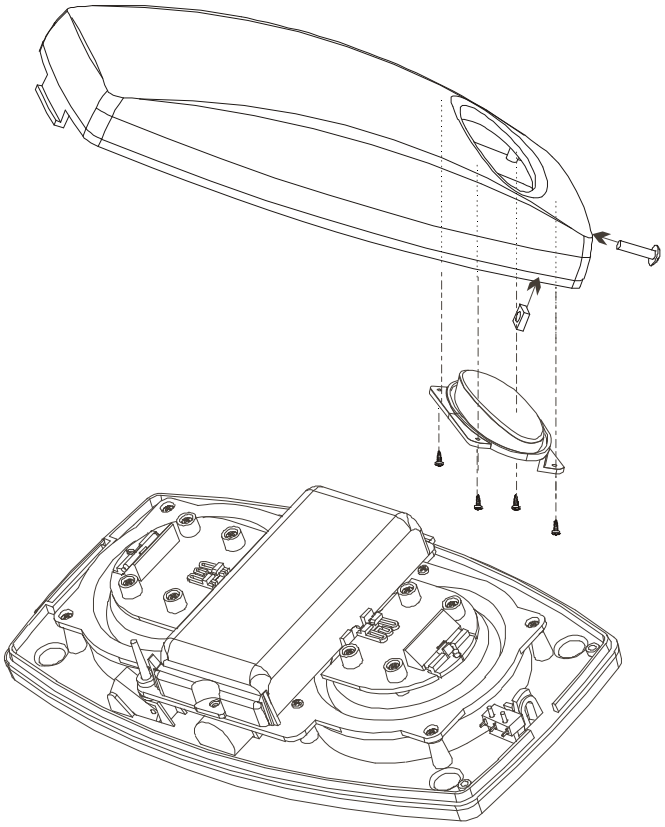
If the alarm panel is wired normally closed, wire the DECIBELL as the following:



4. STEPS TO INSTALL THE DECIBELL

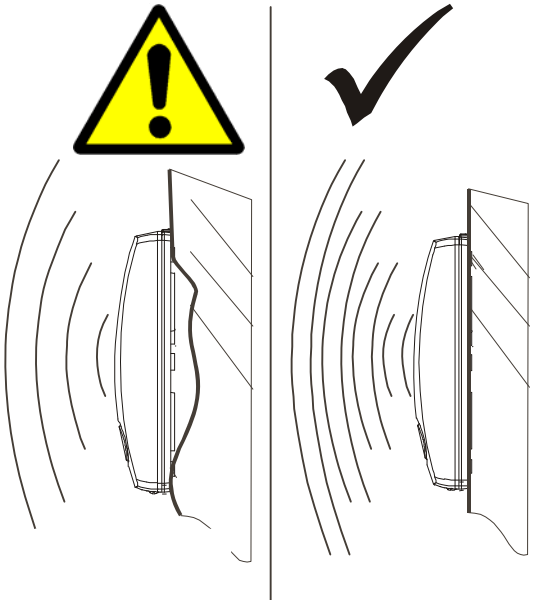
4.1 Installing the Strobe

The first step is to install the strobe cover on to the front casing:

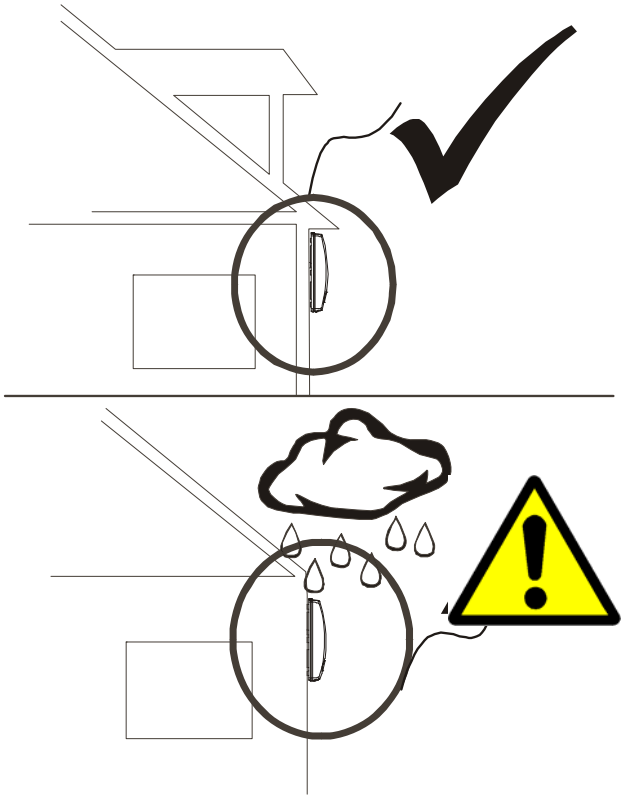


4.2 Choosing the Right Surface

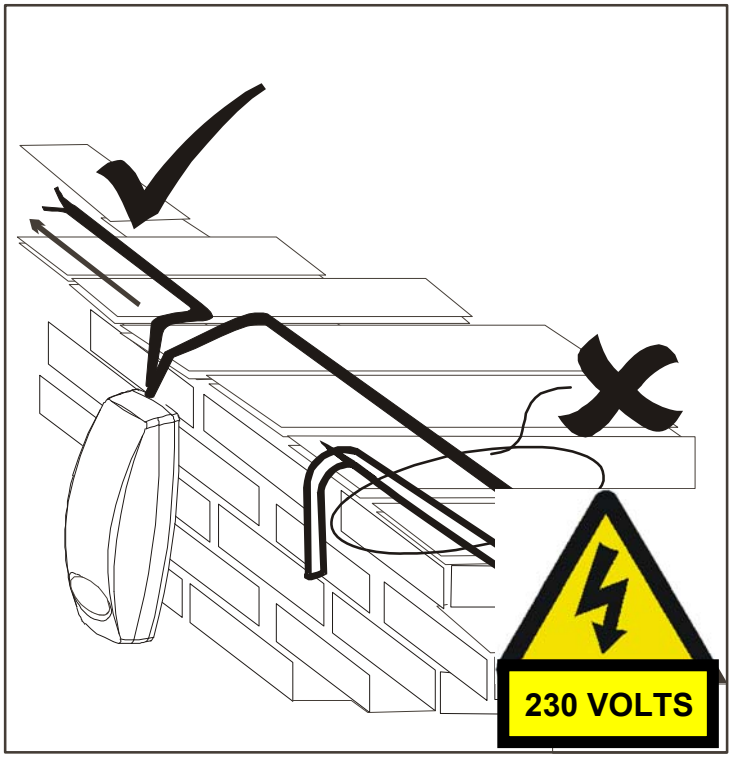
The DECIBELL should be mounted on a flat surface in a high visibility area. If the DECIBELL isn't mounted on the correct surface, it could cause a hazard.



Also make sure the environment is suitable:



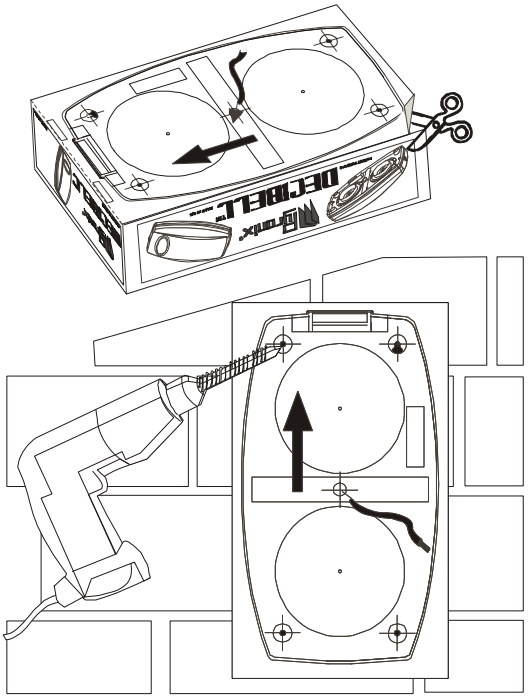
The cables to the DECIBELL should be routed away from the mains supply and telephone cables to avoid any electrical interference.



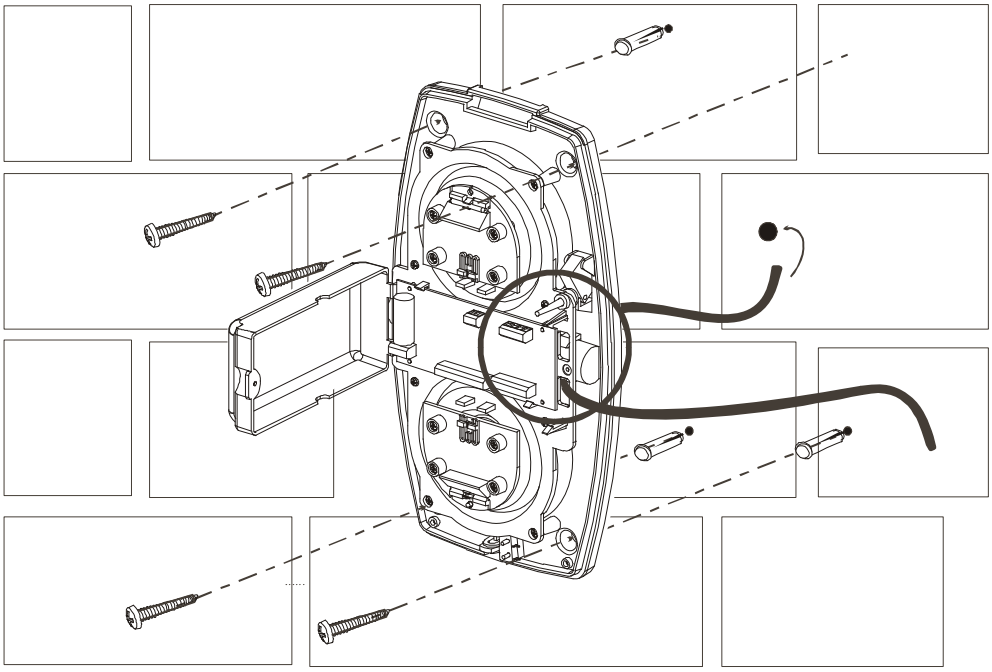
4.3 Mounting the Decibell

STEPS TO MOUNT THE DECIBELL

- Cut the template from the DECIBELL packaging
- Use the template to mark the position of the four mounting holes and the cable hole
- Use a suitable drill to drill the mounting holes



- Insert the wall plugs provided and screw the top left screw into the plug leaving enough screw showing to hang the DECIBELL from
- Route the alarm cable through the wall

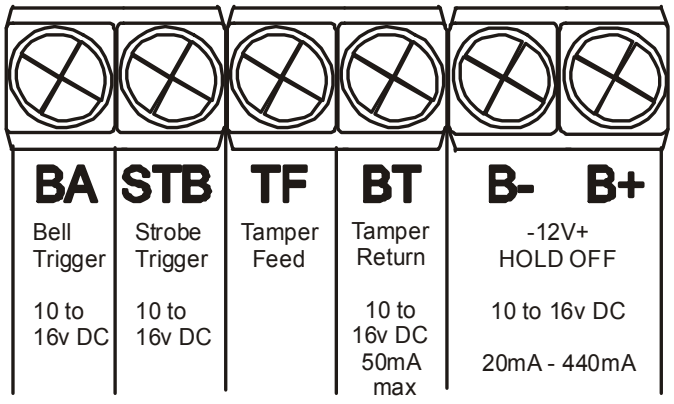


5. TERMINAL CONNECTIONS FOR COMMON PANELS

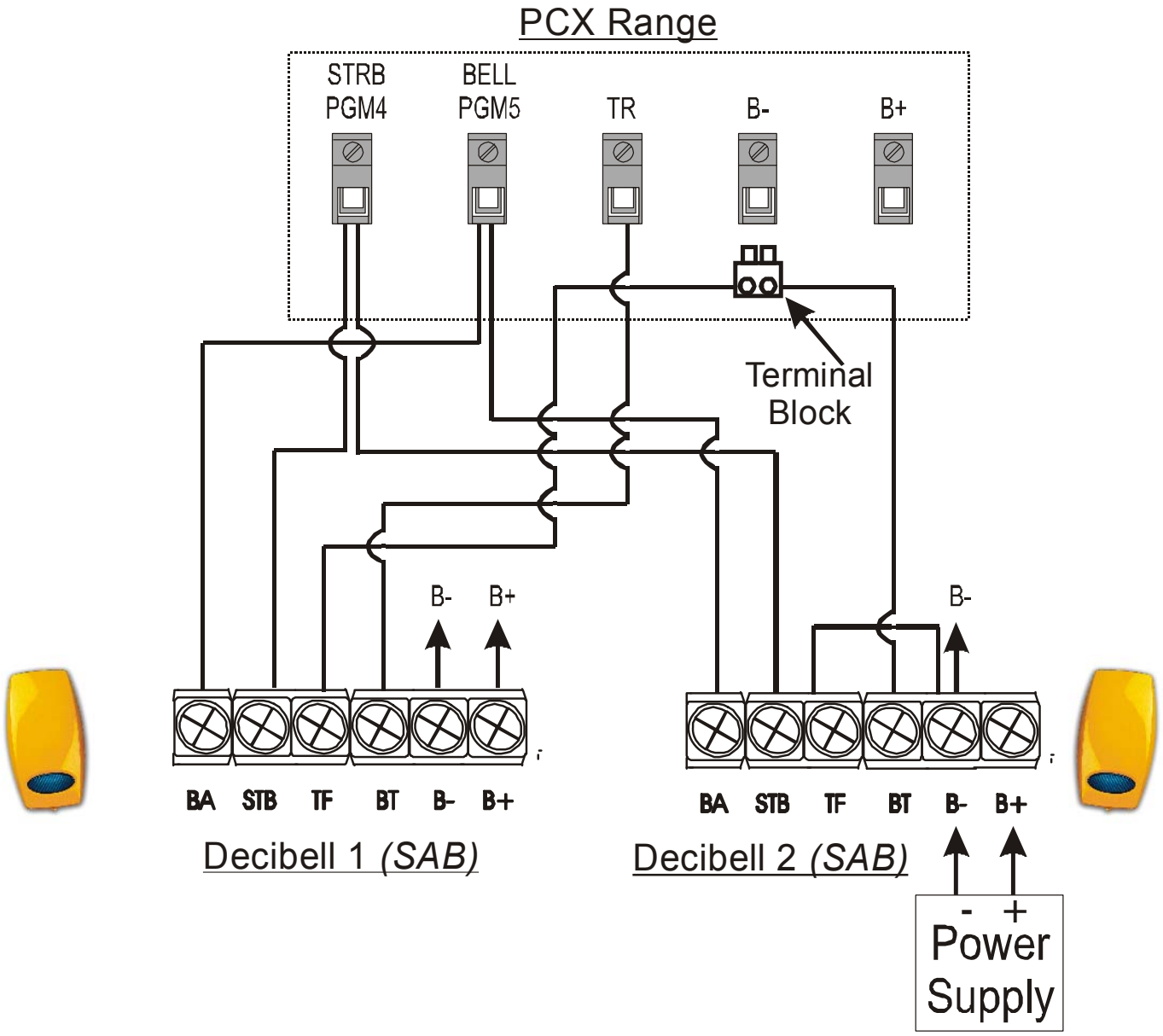
	DECIBELL TERMINALS					
DECIBELL	**BA**	**STB**	**TF**	**BT**	**B-**	**B+**
Conqueror & Paragon E	BA	STB	B/S-	BT	B/S-	+B/S
Paragon Plus	BA	STB	B-	BT	B-	B+
Sterling 10	BELL NO	STB NO	BELL-	BT	BELL-	+BELL
Atlas	BA	STB-	TAMPER ZONE	TAMPER ZONE	BAT-	B+
Paragon Super	BA	STB	-B	BT	-B	S+
Matrix	PGM1 (NO)	PGM2 (NO)	B-	BT	BELL-	BELL+
Scantronic Range	BELL	STROBE-	0V	TR	0V	12V
Texecom	B	S	D	C	D	A
Menvier	BELL TRIG	STB	HOLD OFF	TAMPER RETURN	HOLD OFF	BELL +12V
Aritech	EXT BELL-	STROBE-	HO	270R TR	BHO	BELL 12v
Gardiner Technology	BELL	-STB	SCBA	SCBP	SCBA	BELL+
ADE Range	B	STROBE-	A	T	A	D
PCX	PGM1	PGM2	AUX-	BT	AUX-	AUX+
Castle Care Tech	B2 (Bell Output)	B1 (Strobe Output)	B4 (Bell Hold Off -)	B3 (TR)	B4 (Bell Hold Off -)	B5 (Bell Hold Off +)
DSC	BELL-	PSM1	⏚	ZONE	AUX-	BELL+

Negative Tamper Return: Link between TF and B-

Positive Tamper Return: Link between TF and B+



6. WIRING TWO DECIBELLS IN SERIES



7. QUICK REFERENCE FOR FAULTS

Here is a quick troubleshooting guide to any faults that you may come across.

Possible Faults

- ***THE SIREN IS ONLY SOUNDING FOR 5 SECONDS***
  - The Decibell is in test mode (see 'Testing the Piezo's, page 6)

- ***THE SIREN AND STROBE IS NOT TRIGGERING AT ALL***
  - Check the trigger selection is in the right position (see DIP switch 7 – Bell, page 7)

- ***SIREN WILL NOT TRIGGER EVEN THOUGH TRIGGERED IN TEST MODE***
  - Check the voltage between B+ and B-. You should have 13V
  - Check the tamper switch is closed.
  - Check the BA voltage has returned to normal.

- ***TAMPER***
  - Check the case is secure and the tamper switch connects.
  - Ensure the B- or B+ to TF (tamper loop) is in place for all Pyronix panels.
  - Check the correct Terminal Connections

8. TECHNICAL SPECIFICATIONS

OPERATING VOLTAGE
10 – 16Vdc. (13.8V Nominal)
Reverse polarity protected

CURRENT CONSUMPTION
Stand by (alt. flashing): **30mA typical**
(+10mA for backup battery)
Strobe only: **165mA typical**
Siren only: **245mA typical**
Siren and Strobe: **440mA typical**

DIMENSIONS & WEIGHT
Dimensions: **325mm x 180mm x 75mm**
Weight: **1.4kg**

SIREN AND STROBE OUTPUT
Maximum peak: **118dBA @ 1m (85dBA Spain)**
Flash rate: **120/min typical**
Tube size: **3 Watt**

BACKUP BATTERY
280mAh 7.2 V NiCad (included)
30 min continuous use (Siren and Strobe)

SIREN CUT OFF TIMER
Test: ≤ **5 seconds**
Normal: ≤ **15 minutes**

ENVIRONMENT
Operating Temperature: **-30˚ to 50˚C (-22˚ to 122˚F)**
Storage Temperature: **-40˚ to 60˚C (-40˚ to 140˚F)**

TAMPER PROTECTION

Activation from front or back and power supply cut off

INPUT ACTUATION

Strobe and Siren, switched negative or positive

EN50131-1
Security Grade 3
Environmental Class 4

This product is suitable for use in systems designed to comply with PD 6662:2004 at Security Grade 3 and Environmental Class 4.

Pyronix Limited
Pyronix House
Braithwell Way
Hellaby, Rotherham
S66 8QY, UK

Customer Support:
+44(0)845 6434 999 (local rate)
or +44(0)1709 535225

Hours: Mon to Fri, 8:00am till 6:30pm

Email: customer.support@pyronix.com

Website: www.pyronix.com

This product is approved for use in the
Residential, Commercial and Light Industrial Environment.