

# ELMDENE

Protecting People & Property

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## INT500/INT500S Internal Sounder with Strobe & Hi/Lo Feature

Note: This unit NOT suitable for external installation

EN50131-4: 2009	INT500	INT500S
Power Source	Remote	Self Powered
Security Grade	3	2
Environmental Class	II	II

### FEATURES

- 108dB(A) siren output
- Independent low volume E/E, Keypad output
- LED strobe
- 12V dc voltage operation
- Polycarbonate cover and backplate
- 2 way tamper protection: cover, rear
- Volt Free Tamper Connection
- Hold-off supply failure detection
- Selectable sound auto cut-off timer
- Full SAB using internal battery (INT500S)

### OPERATION

The *INT500* sounder is used for notification of an alarm condition and entry/exit tone as generated within an intruder, hold-up or other alarm system. In response to appropriate commands from the control panel, the *INT500* will emit a high intensity sound and/or operate a visual flash for alarm and an adjustable low level tone for entry/exit/keypad.

The *INT500* will detect any attempt to gain unauthorised access to the sounder by removal of the cover, or any attempt to remove it away from its mounting surface. This will generate a tamper signal which is normally fed back to the alarm control panel

The *INT500* is classified as an internal remote powered sounder and is powered via an external power source.

The *INT500S* is classified as an internal self powered sounder and has an on-board battery which is recharged via the external power source. This battery is used to operate the sounder if the external power to the sounder is removed.

### FUNCTIONAL INFORMATION

#### TAMPER CIRCUIT

Volt free tamper terminals 'TS & TR' open when front or rear tamper switch is open, or on loss of H+ or H-.

## SOUND CUT-OFF TIMER

JP1: Cut-off timer for alarm (R-)

Link = no cut-off (default)

No link = sounder cut-off after 15 minutes

VR1: Volume control for entry/exit/keypad low level tone (M-)

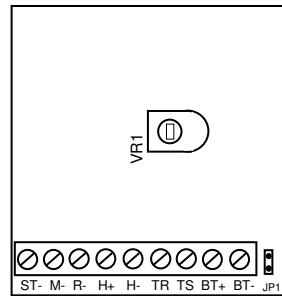


Figure 1. Connections and Timer Selection Jumper

With the cut-off timer link NOT fitted, the *INT500(S)* sounder will automatically stop sounding after 15 minutes, irrespective of the status of the sound trigger (R-) input.

## SAB MODE (INT500S ONLY)

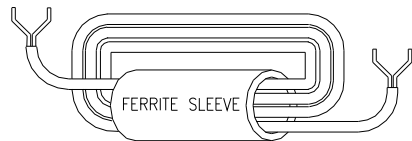
SAB mode is enabled if the internal battery is connected, the unit will then self-activate if the tamper is activated or the supply cut.

## CONNECTIONS

- R-** Negative siren trigger for alarm. Apply 0V to activate sounder
- M-** Negative low volume trigger for entry/exit/keypad. Apply 0V to activate.
- ST-** Negative strobe trigger. Apply 0V to activate strobe.
- H+** Permanent positive hold-off supply, +12Vdc nominal
- H-** Permanent negative hold-off supply
- TR** Volt free tamper connection
- TS** Volt free tamper connection
- BT-** SAB Battery negative
- BT+** SAB Battery positive

## COMMISSIONING

- 1) Remove cover.
  - 2) Offer backplate to desired position on mounting surface and drill holes to match chosen fixing centres.
  - 3) Fix backplate to mounting surface using appropriate fixings for the mounting surface.
  - 4) Set the required Cut-off Timer using JP1.
  - 5) Loop the connection cable three times through the supplied ferrite as shown.
  - 6) Connect +12V dc and 0V supply from the control panel to H+ and H- respectively.
  - 7) Connect R- to Ring or Bell output of the control panel and ST- to Strobe output (if required).
  - 8) Connect TS to H- and TR to tamper return of panel for 0V tamper return, or use TS & TR as volt free contacts without link between TS & H-.
  - 9) If low output tone facility is used, connect M- to control panel 'keypad follow' or a programmable output.
  - 10) For SAB facility (INT500S only) connect the battery wires to BT+ and BT-, ensuring correct polarity.
- NOTE: The unit will sound until the cover is replaced.



**TESTING**

- 1) Activate bell or ring output from control panel (R- to 0V). Check high volume sound activates.
- 2) Activate strobe output from control panel (ST- to 0V). Check the strobe activates.
- 3) If Lo facility is used, activate keypad on control panel and check low volume from sounder. Adjust VR1 for desired Lo volume level (see fig 1).
- 4) Remove cover and check high volume from sounder. (Tamper activation)
- 5) If Tamper connection is made to the control panel, check that the panel has detected a tamper condition from step 4).
- 6) Replace the cover. Check that the sounder switches off and the tamper output has cleared.
- 7) INT500S: Remove H+ supply connection at the control panel. Check high volume from sounder and tamper is detected at the control panel.
- 8) INT500S: Replace H+ supply. Check that the sounder switches off and the tamper output has cleared.
- 9) Fasten the cover to the backplate using the fixing screw supplied.

**MAINTENANCE**

This sounder should be tested for correct operation on a periodic basis. A minimum of one check every 12 months is recommended. The following features should be verified on each maintenance visit:

- 1) Correct operation of sounder from control panel signals
- 2) Correct operation of cover and rear tampers.
- 3) Remove the +ve power supply from the control panel and check internal battery voltage as measured between BT+ and BT- is greater than 4.5V dc. If the battery voltage is less than this value replace internal battery with similar of 6V 170mAh rating.
- 4) Check for signs of significant dust ingress. Clean as necessary.

**SAB BATTERY REMOVAL**

The SAB battery may be removed for disposal at end of product life. To remove the battery, disconnect red and black leads from BT+ and BT- and unclip battery from holder. To fit a new battery, clip into holder and reconnect positive (RED) lead to BT+ and negative (BLACK) lead to BT-.

**IMPORTANT:** Ensure correct polarity of connections and that exposed battery leads DO NOT accidentally touch.

***Dispose of used batteries in accordance with all national and local regulations***

## FAULT FINDING

Symptom	Fault	Action
Sounder activated in non-alarm condition and tamper shows at panel	Cover not closed correctly.	Check cover closed and screw secure.
Cannot SET control panel (due to sounder tamper)	Cover or Rear tamper switch not closed.	Check cover and rear tamper switches fully closed.
	No H+/H- connection	Check power available on H+/H- connections

## DISPOSAL OF PRODUCT AT END OF LIFE

This product falls within the scope of EU Directives 2012/19/EU Waste Electrical and Electronic Equipment (WEEE) and 2013/56/EU (Battery). At the end of life, the product must be separated from the domestic waste stream and disposed via an appropriate approved WEEE disposal route in accordance with all national and local regulations.

Before disposal of the product, the SAB battery must be removed and disposed of separately via an appropriate approved battery disposal route in accordance with all national and local regulations. Package used batteries safely for onward transport to your supplier, collection point or disposal facility.

**Caution risk of fire or explosion if bare battery wires are allowed to touch.**

See Specification for battery type information. The battery is marked with the crossed out wheelee bin symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg).

For more information see: [www.recyclethis.info](http://www.recyclethis.info)

## SPECIFICATION

Siren Output	108dBA peak @ 1m.
Power supply	10.0 – 14.0V dc, 12V dc nominal
Current Consumption	15mA standby 260mA maximum when sounding. 50mA maximum when strobing.
Cut-off Timer	Selectable 15 minutes or no cut-off.
SAB Facility	1 x 6V 170mAh NimH battery, trickle charged from H+ supply
Case Dimensions	160mm x 110mm x 40mm.

## COMPLIANCE

This product meets the essential requirements of the following EU Directives:

EMC:	2014/30/EU
RoHS:	2011/65/EU
WEEE:	2012/19/EU
Battery:	2013/56/EU

EN50131-4:2009	INT500	Security Grade 3
	INT500S	Security Grade 2
Environmental Class II		



This product is suitable for use in systems designed to comply with PD6662:2017 at: **Grade 2 (INT500S) or Grade 3 (INT500) and Environmental Class II.**

*The packaging supplied with this product may be recycled.  
Please dispose of packaging accordingly.*