

ELMDENE

Protecting People & Property

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INT400/INT400S Internal Sounder

Note: This unit NOT suitable for external installation

EN50131-4: 2009	INT400	INT400S
Power Source	Remote	Self Powered
Security Grade	3	2
Environmental Class	II	II

FEATURES

- 110dB(A) siren output
- 12V dc voltage operation
- Polycarbonate cover and backplate
- 2 way tamper protection: cover, rear
- Negative Tamper return and Ring Line Monitoring (with compatible panel)
- Hold-off supply failure detection
- Selectable sound auto cut-off timer
- Full SAB using internal battery (INT400S)

OPERATION

The *INT400* sounder is used for notification of an alarm condition as generated within an intruder, hold-up or other alarm system. In response to commands from the alarm system control panel, the *INT400* will emit a high intensity sound.

The *INT400* 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 *INT400* is classified as an internal remote powered sounder and is powered via an external power source.

The *INT400S* 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

Tamper state of the *INT400(S)* becomes ACTIVE when front or rear tamper switch is open, or on loss of H+ or H-.

The tamper return output to the control may be configured using link JP1 jumper for either:

- Switched output: Tied to 0V in tamper non-active condition.
HIGH (6.0 - 7.5V) in tamper active condition
- Open collector output: Pulled to 0V when in non-tamper state

MODE SELECTION

- JP1 Negative tamper enable.
Link pins 1 & 2 for switched output (default).
Link pins 2 & 3 for open collector o/p
- JP2 Cut-off timer.
Link = no cut-off (default)
No link = sounder cut-off after 15 minutes

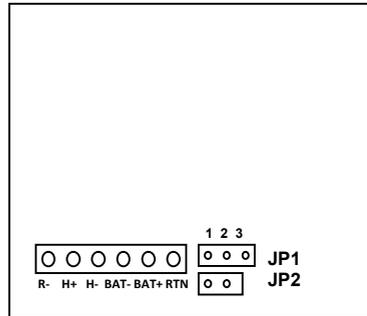


Figure 1.0 Connections and Jumper Link Options

SOUND CUT-OFF TIMER

With the cut-off timer link NOT fitted, the *INT400(S)* sounder will automatically stop sounding after 15 minutes, irrespective of the status of the sound trigger (R-) input.

SAB MODE (INT400S ONLY)

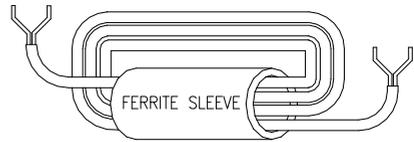
SAB mode is enabled if the internal battery is connected. The siren will self-activate if either of the tamperers are activated. The INT400S will also self-activate if the supply lines are cut.

CONNECTIONS

- R-** Negative siren trigger. Apply 0V to activate sounder
- H+** Permanent positive hold-off supply, +12Vdc nominal
- H-** Permanent negative hold-off supply
- BAT-** SAB Battery negative
- BAT+** SAB Battery positive
- RTN** Negative tamper return.

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 and Tamper Return options using JP1 and JP2.
- 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.
- 8) If Negative Tamper Return is used, connect RTN to Negative Tamper return on the control panel.
- 9) For SAB facility (INT400S only) connect the battery wires to BAT+ and BAT-, ensuring correct polarity.
NOTE: The unit will sound until the cover is replaced.
- 10) Replace cover temporarily. Sounder will silence when cover completely replaced.



TESTING

- 1) Activate bell or ring output from control panel (R- to 0V). Check high volume sound activates.
- 2) Remove cover and check high volume from sounder. (Tamper activation)
- 3) If Negative Tamper Return connection is made to the control panel, check that the panel has detected a tamper condition from step 2)
- 4) If Ring Line Monitoring facility is used on the control panel, check that the panel detects a tamper or bell failure.
- 5) Replace the cover. Check that the sounder switches off and the tamper output has cleared.
- 6) INT400S: Remove H+ supply connection at the control panel. Check high volume from sounder and tamper or bell failure is detected at the control panel.
- 7) INT400S: Replace H+ supply. Check that the sounder switches off and the tamper output has cleared.
- 8) 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 BAT+ and BAT- 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 BAT+ and BAT- and unclip battery from holder. To fit a new battery, clip into holder and reconnect positive (RED) lead to BAT+ and negative (BLACK) lead to BAT-.

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

SPECIFICATION

Siren Output	110dBA peak @ 1m
Power supply	10.0 – 14.0V dc, 12V dc nominal
Current Consumption	45mA standby 260mA maximum when sounding.
Cut-off Timer	Selectable 15 minutes or no cut-off.
SAB Facility	1 x 6V 170mAh NiMH battery, trickle charged from H+ supply
Ring Line Monitoring	R- input connected to H+ via 1K0 resistor. R- pulled to H- when front or rear tamper switch is activated.
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	INT400	Security Grade 3
	INT400S	Security Grade 2
Environmental Class	II	

This product is suitable for use in systems designed to comply with PD6662:2017 at: **Grade 2 (INT400S) or Grade 3 (INT400) and Environmental Class II.**

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