



# HOYLES ELECTRONIC DEVELOPMENTS Ltd

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## EXITGUARD Specification

EX400 is a low voltage (9-15v d.c.) version. It has a very low quiescent current consumption and is supplied with a PP3 alkaline battery. It can be powered from the battery which will give a life in excess of 12 months under non-alarm conditions. It features a double pole 4 wire input ie. door switch and tamper loop, integral sounder and a four position keyswitch (Off, Test, Manual and Auto). There are also facilities for remote control. The EXITGUARD can be silenced from a remote momentary negative signal. The EXITGUARD incorporates audible feedback bleeps to confirm the keyswitch or set positions. One bleep for OFF (O) two bleeps for ON (II or III) and a continuous tone for the TEST (I) position. An integral battery fault monitor is fitted to give an audible warning of an impending exhausted battery. Alternatively the unit can be powered from 12 volts dc systems. It has an output for remote monitoring by a H.E.D. Ltd Multiguard indicator. The sounder can be automatically reset by an integral 0 - 2 minute timer when the keyswitch set to Auto. An integral delayed action timer is also incorporated to delay the action of the sounder for a period which is adjustable up to 2 minutes.

EX500 is a low voltage (11-15vdc) version. It cannot be operated from batteries. In addition to the EX400 features the EX500 is fitted with separate voltage free changeover contacts for alarm, tamper and keyswitch ON/OFF monitoring. A front panel LED (Green indicates that the EXITGUARD is set and a red LED indicates alarm condition).

EX500SF is a flush mounting version and is electrically identical to the EX500. The fascia is engraved stainless steel. A galvanised stainless steel mounting box is provided.

EX600 is a mains powered version of the EX400 but fitted with an alarm output relay.

All versions are supplied with a surface mounting magnetic door contact with cable and fixing clips, a warning label and fixing screws. The EX400 and EX600 are supplied with an Alkaline PP3 battery

## KEY SUITING, TRAPPING and BLEEP IN OFF

Keys can be suited. Wherever possible EXITGUARDS are supplied as keyed alike when ordered in batches. Additional EXITGUARDS can be keymatched but this may result in a delayed delivery.

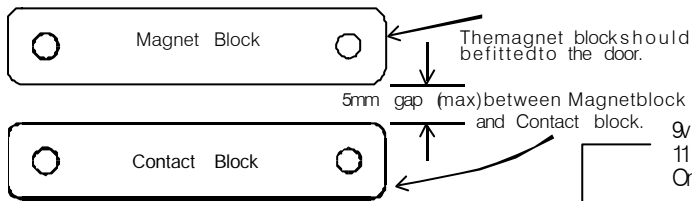
EXITGUARDS can be ordered with keys trapped in the O (Off) position. Such units are to special order and are not generally held in stock. Add the suffix /T. e.g. EX400/T

All EXITGUARDS have facilities for BLEEP IN OFF. When invoked the sounder bleeps every 30seconds if the EXITGUARD is switched to O (Off)

## INSTALLATION

1. Fit the magnetic door contact to the door to be protected. The two blocks should be positioned so as not to collide or impede the opening of the door.
2. Run the four core cable from the door contact to the position where the EXITGUARD is to be fitted. Fixing clips are supplied. If the cable is not long enough it may be extended by additional four core cable of the same or a similar type.
3. The EXITGUARD back box should be drilled with two fixing holes and a cable entry hole(s). In the case of an EX400 which is to be powered from its own battery and requiring no other connections only one cable entry hole (5mm dia) is needed. If a connection to an external source of power or a signalling system is to be used then an extra hole is required.
4. The EXITGUARD should be sited near to the door to be protected at a height of about 1.5m. Drill and plug the wall and fix the EXITGUARD with the screws provided.
5. Feed the four core cable from the contact into the back-box. Strip back the outer sheath of the cable to reveal four cores. Cut to a suitable length sufficient to enable the connections to be made. Strip each of the cores to reveal about 5mm of stranded wire.
6. Remove the two U links from the terminals marked A & T. Connect the blue and yellow cores to the two terminals marked A and the red and black cores to the terminals marked T.
7. You must now decide how the EXITGUARD is to be used. If the automatic reset facility (Key position III) is to be used then set the adjuster marked R on the circuit board to the required position. Fully clockwise gives a reset delay of about 2 mins. Fully anti-clockwise will re-arm the EXITGUARD almost immediately. Do you want the action of the sounder to be delayed by a short period of time? If so adjust D on the circuit board. Clockwise increases the delay to a maximum of about 2 mins.
8. Carefully fit the spring to the tamper switch. The spring should be rotated in an anti-clockwise direction whilst pressing down slightly.

Note: For reliable operation it is important that connections to door contacts are well insulated to prevent ingress of moisture. This is particularly important if the contact is substituted by a flush mount type in a wooden door frame. The EXITGUARD may fail to operate if dampness causes the contact to become low resistance.



9v PP3 battery or 8-15vdc supply for EX400 (min 50µA max 65ma)  
 11 - 15vdc supply for EX500 (min 20ma max 80ma)  
 On EX600 these terminals can be used as a 12 volt d.c supply 100ma max

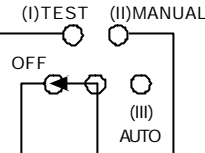
Four core cable.  
 Colour Code:  
 Blue/Yellow = Switch  
 Red/Black = Tamper loop

Twist the spring onto the tamper switch in an anti clockwise direction taking care to avoid damaging the switch.

Remove the two test links before connecting the door contact.

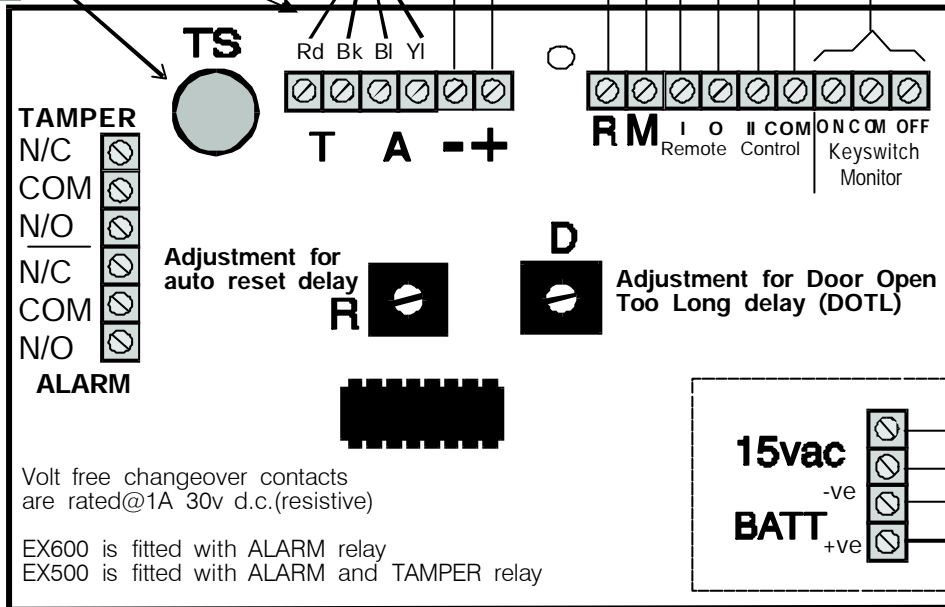
Remote reset input. Apply momentary negative to silence the EXITGUARD & reset it after the door is closed. Also used to invoke BLEEP IN OFF

CMOS output to MULTIGUARD. This is normally hi and becomes lo on alarm

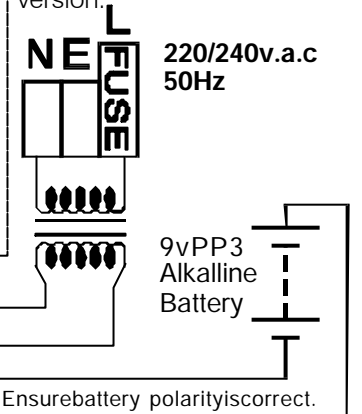


The EXITGUARD can be controlled from a remote switch. The keyswitch on the front panel must be switched to III (ie AUTO) and the remote keyswitch wired as shown.

These output terminals are only fitted on the EX500 and EX500SF. They are voltage free and follow the front panel keyswitch to enable remote reporting of ON/OFF status. The contacts are rated at 500ma 30vdc.



These transformer and battery terminals are only available on the EX600 version.



### INSTALLATION Cont'd

- To invoke the BLEEP IN OFF facility turn the keyswitch to the O (Off) position. Connect the power, either a battery or 12 vdc not both. Close both the door contact and the tamper switch. Momentarily connect the remote reset terminal R to negative. The BLEEP IN OFF can be toggled on and off by successively connecting the R terminal to negative. One short bleep for off, two short bleeps for on. When invoked a short bleep is given every 30 seconds.
- If Bleep In Off is not to be invoked then a quiet set up mode is available. Insert the key and turn it to the O (Off) position. Ensure that both the door contact and the tamper switch are open. Power the EXITGUARD. It will bleep four times and then remain silent. (Under no circumstances should terminal R be connected to negative as this will put the unit into manufacturers test mode and it will be necessary to de-power and start again)
- Fit the EXITGUARD into its back box and screw the lid in position in order to close the tamper switch. The EXITGUARD is now functioning correctly. Test by switching on and opening the door. If the door is open when the unit is switched on a periodic bleep is heard for up to 30 secs whilst the door is open. This is the safe set facility and enables the EXITGUARD to be used on exit routes without an alarm condition being generated. The door must be closed for at least 10 secs for the EXITGUARD to set.

