ECO 800

EXTERNAL SOUNDER

SYLCO

the sound of security

INSTALLATION MANUAL

SELF-SUPPLIED SOUNDER MODEL FOR OUTDOOR USE

models ECO 800 X FULL STAINLESS STEEL, ECO 800 LSX FULL STAINLESS STEEL

ECO 800 X FULL STAINLESS STEEL description: self-supplied outdoor sounder with high-brightness low-consumption LED flashing unit – tamper against sounder opening and against any attempts of removing the sounder from the wall – programmable sounds and timings – alarms counting – microprocessor self-check of battery and speaker with corresponding negative anomaly output – possibility to manage sound and flash independently – flash reset input – momentary and permanent signaling of system ON/OFF (arming/disarming) – electronic circuit protected against polarity inversion and tropicalized through a special resin-immersion process to resist even in very humid installation locations and in case of bad weather conditions – external cover in stainless steel – base and internal cover in stainless steel – removal, opening, foam and shock tamper devices are series-connected and, in case of tampering attempt, they provide the corresponding notice by opening the contact between the two TAMPER terminals.

ECO 800 LSX STAINLESS STEEL description: technical features as per ECO 800 X model, with double micro anti-foam anti-stock device against hard hits.

TECHNICAL FEATURES

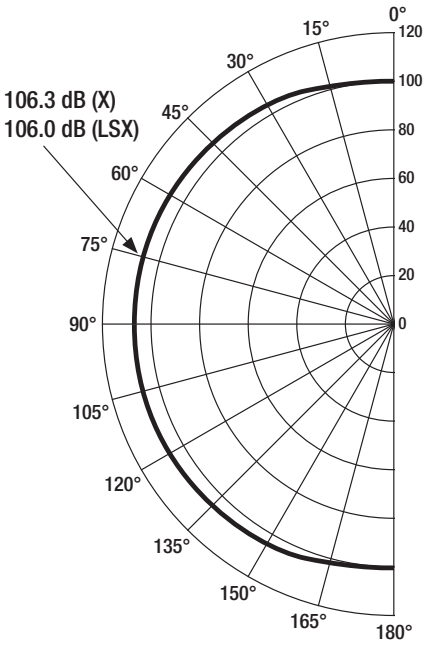
Voltage	Nominal voltage of battery recharge	13.0 ÷ 13.8 V
	Minimum power supply	10 V
	Maximum power supply	15 V
	Sound and flash alarm voltage	< 2.0 e > 3.5 V (MAX 13.8V)
	Sound and flash block voltage	> 2.0 e < 3.5 V (MAX 13.8V)
Current	Max consumption from control panel (during recharge and/or sound)	500mA ± 100mA
	Battery consumption when the sounder is in alarm	1.3A +100/-300mA
	Flashing unit consumption	90mA ± 10mA
	Consumption in stand-by	15mA
	Consumption from control inputs	+0,5mA @Vc=12V; -0,3mA @Vc=0V
	Open collector	-10mA Max
Sounds frequency	See CHART 9	
Sound pressure	See DIAGRAM 1	
LED flashing unit life	1,000,000 flashes	
Sounder timing	3 minutes/8 minutes	
Batteries	Housing capacity	12 V – 1.2 Ah or 2.2 Ah
	Duration in stand-by	120 hours with 12V 2.2 Ah
Tamper-switch	N.C. 0.2 A max.; cover opening/sounder removal from wall	

Mechanics	Base	Stainless steel
	External cover	Stainless steel
	Internal cover	Stainless steel
Flashing unit cover	Polycarbonate	
Colour	Stainless steel colour	
Working temperature	From - 25 °C to +70 °C	
Environmental class	Class IV	
IP degree	IP 34	
Relative working humidity	20 at 100% of relative humidity	
Size	mm 245x250x80 (HxLxD)	
	ECO 800 X	3,000 gr
	ECO 800 LSX	2,990 gr
Standards compliance	INCERT	T031:2014
		EN50131-4:2009

DIAGRAM 1 – MAXIMUM ACOUSTIC PRESSURE AT 1 M

	ECO 800 LSX DIP8 IN ON POSITION
Angle	**dB (A) @ 1 m**
15°	102.6
45°	103.2
75°	106.0
105°	105.2
135°	104.4
165°	99.2

	ECO 800 X DIP8 IN OFF POSITION
Angle	**dB (A) @ 1 m**
15°	104.1
45°	102.9
75°	106.3
105°	110.2
135°	107.3
165°	97.3

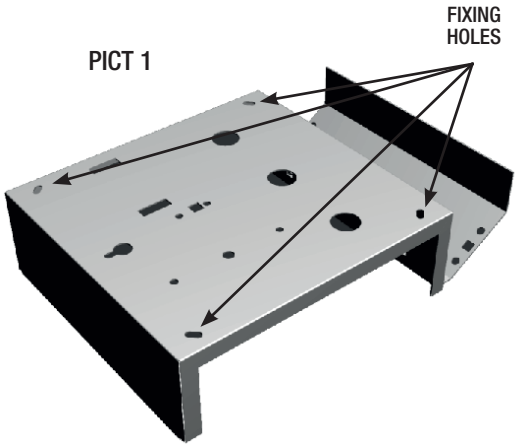


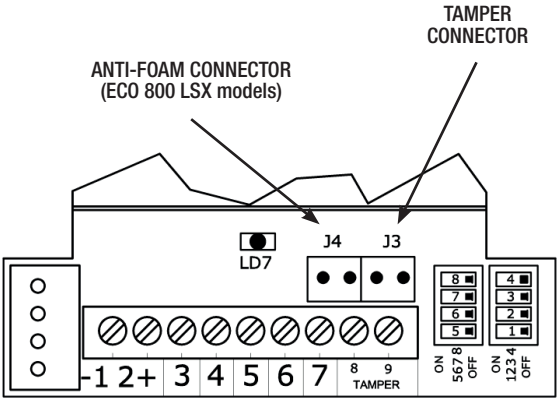
MOUNTING

1. Screw the sounder on the wall and check if the tamper works properly;
2. Insert the connecting cables through the holes located on the sounder base;
3. If necessary, modify the default settings by acting on the DIP Switches as shown in the charts;
4. Connect the sounder to the alarm control panel as shown in picture 2;
5. Connect the power supply and the battery to the alarm control panel;
6. Close both internal and external covers using the screws provided.
7. Battery must have UL94-HB flammability rate;
8. **Power supply must be of SELV type.**

Attention: *not to have condensation in the sounder, it is important to avoid any air flow inside the duct. To such purpose, once the sounder is connected, seal the hole using some silicon or any other plaster. This operation prevents condensation from forming inside the sounder; condensation mostly appears in winter and it is usually caused by warm and humid air coming out of the wall where the sounder is installed and passing through the holes located on the sounder base.*

PICT 1

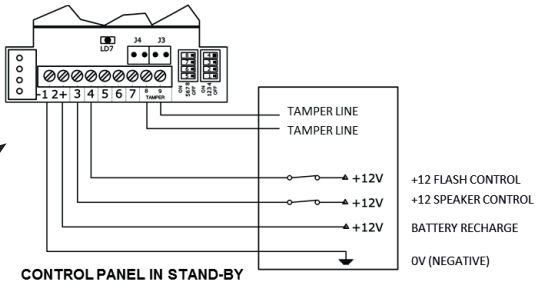




PICT 2

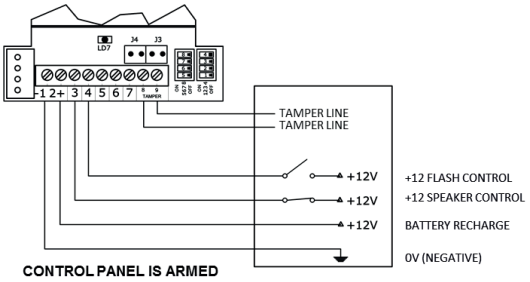
CONNECTION WITH 2 CONTACTS IN TENSION

PICT 3



CONTROL PANEL IN STAND-BY

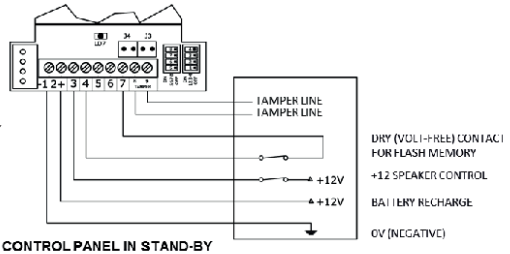
PICT 4



CONTROL PANEL IS ARMED

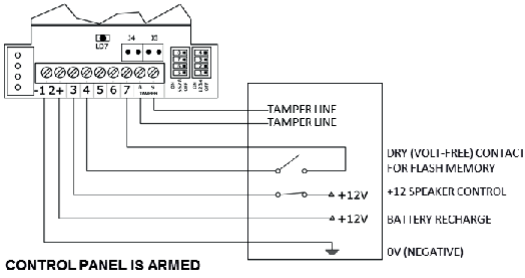
CONNECTION WITH 1 CONTACT IN TENSION

PICT 5



CONTROL PANEL IN STAND-BY

PICT 6



CONTROL PANEL IS ARMED

SITTING

Chart 1: DIP SWITCHES

DIP 1	Alarm timing
DIP 2	Polarity of alarm input
DIP 3	Polarity of flash input
DIP 4	Control panel ON/OFF indication
DIP 5	Sounder and Flash activation mode
DIP 6	Sounder and Flash activation mode
DIP 7	Max number of alarms per day
DIP 8	Tone selection

Chart 3: WIRING

TERMINALS	CONNECTION
1	Negative power supply 0V GND
2	Positive power supply +13.8V
3	Sounder control (Chart 4)
4	Flash control (Chart 5)
5	ON/OFF indication
6	Anomaly output. Open collector, 0V = anomaly
7	Output for connection of the flash memory input with a dry contact (volt-free)
8	N.C. self-protection
9	N.C. self-protection

Chart 2: ALARM DURATION

DIP 1	ALARM TIMING
ON (default sitting)	3 minutes
OFF	8 minutes

Chart 4: SOUNDER INPUT POLARITY

DIP 2	TERMINAL 3	SOUNDER STATE
ON (default setting)	+12V	Silence
	Not connected or 0V (Positive-missing)	Alarm
OFF	+0V	Silence
	Not connected or +12V (Negative-missing)	Alarm

Chart 5: FLASH INPUT POLARITY

DIP 3	TERMINAL 4	FLASHING BEHAVIOUR
ON (default setting)	Not connected or 0V	Flashing
	12V	Blocked
OFF	Not connected or 12V	Flashing
	0V	Blocked

Chart 6: CONTROL PANEL ON/OFF INDICATION

DIP 4	TERMINAL 5	FLASHING BEHAVIOUR (ON/OFF)
ON (default setting)	+12V	All LEDs flash 3 times
	Not connected or 0V	All LEDs stay for 4 seconds, then switch off
OFF	+12V	All LEDs flash 3 times and 1 LED keeps on flashing
	Not connected or oV	All LEDs stay for 4 seconds and then switch off

Chart 7: SOUNDER AND FLASH ACTIVATION

DIP 5	DIP 6	SOUNDER CONDITION	FLASH CONDITION
ON (default setting)	ON (default setting)	Controlled by Terminal 3	T. 4 arms – T. 3 starts – T.4 disarms and stops
OFF	ON	Controlled by Terminal 3	Starts with T. 3 and stops with 1 pulse to T. 4 flash reset
ON	OFF	Controlled by Terminal 3	Controlled by T. 3
OFF	OFF	Controlled by Terminal 3	Starts with T. 4 and stop with T. 4 (indipendents)

Chart 8: MAX NUMBER OF ALARMS

DIP 7	NUMBER OF ALARMS DURING 24 HOURS OFTER FIRST ALARM
ON (default setting)	Infinite alarms
OFF	Limitation to 4 daily (24 hours) alarms of sounder activation (T. 5 reset the counter to zero)

Chart 9: SOUNDER TONES

DIP 8	SOUND	FREQUENCY LIMITS (Hz)	dB (A) at 1m
ON (default setting)	Increasing-Continuous-Decreasing	1.200–1.750	116
OFF	Increasing-Decreasing (NFC 48-265)	1.400–1.600	115

Chart 10: ANOMALIES

ANOMALY	RED LED LD7	OUTPUT T.6
Speaker interruption (test performed every 10s)	1 FLASH	0V
No recharge current (V recharge < 12V) (test performed every 10s)	2 FLASHES	0V
Battery not connected (test performed every 12 hours)	3 FLASHES	0V
Low battery voltage (V battery < 10.5V) (test performed every 10s)	4 FLASHES	0V
Faulty battery – Internal resistor higher than 2.5 Ohm (test performed every 12 hours)	5 FLASHES	0V
No anomaly	OFF	OPEN

To reset an anomaly, remove its cause first, wait 10 seconds and then give an input to terminal no.3 or no.5.

Installation: when supplied, the sounder is in stand-by condition until input 3 “sounder control” is turned out and turned on again. This prevents the sounder from sounding during installation.

Attention: if battery is out of charge (voltage is lower than 10.5V), in case of alarm, the sounder operates for 3 seconds only, in order to avoid a deeper discharge.

Usual sounder working: the microprocessor continuously tests the battery voltage. If the battery is out of charge (voltage is lower than 10.5V), the sounder sounds for 3 seconds only. Vice versa, the flash keeps on working as usual. If voltage decreases under 9.5V, the sounder produces no acoustic alarm and the flash does not work to avoid a deeper battery discharge.

Maintenance:

During battery replacement, it is advisable to disconnect the recharge too (Terminal no.2). By proceeding so, the complete sounder test will start immediately.

After 30 seconds from power supply reception, the microcontroller performs the battery test. Such test is then repeated every 2 hours. If an alarm occurs during the first 30 seconds, the battery anomaly notice stays until the following test (which will be performed after 2 hours). If the flashing light activates when an anomaly is detected, it will flash fast.

If battery voltage decreases under 10.5V, the LED flashes fast when the sounder is in alarm status or the Alarm System ON/OFF mode is enabled.

Certified for Belgium
Compliant to T031 standards

MADE IN ITALY

DISPOSAL:
This product must be disposed of using the appropriate bins for electrical and electronic products. This product must not be placed in bins for collection of other waste types.

WARRANTY: All Sylco products are granted against factory or material defects. In order to improve design and quality of the products, Sylco reserves the right to modify the products without prior notice. All faulty or defective products must be returned to the supplier.

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SYLCO
the sound of security

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