

Sonade[®]2000

Self Contained Sounder/Strobe Unit - Engineering Information

1. Introduction

Sonade 2000 is a range of attractively designed self contained sounder units complete with integral strobe. Essentially they are for external use in intruder alarm control systems.

The Sonade may be used with any control panel which operates a negative sounder trigger and either a positive or negative tamper return.

Features Include:

- **Self contained sounder/strobe unit - complete with nicad battery**
- **High volume piezo driven sounder element**
- **Adjustable sounder cut-off timer**
- **Face fixing cover for absolute ease of installation**
- **3mm polycarbonate housing available in Red, White and Yellow**
- **Clear prismatic strobe lens also available in blue**

2. Fixing


Slacken the four cover screws and remove the cover. Mount the back plate to the wall, using screws or fixings that are appropriate for the construction of the building. It is recommended that at least 4 of the fixing points are used. Keyhole slots and a slide mount are provided to assist with positioning.

Cable entry holes are available in the back plate including a 'secure' shrouded hole to the centre left of the back plate assembly.

During installation do not allow the Printed Circuit Board (PCB) or the piezo sounder to become contaminated with brick dust or debris.

3. Terminals

The Sonade PCB has two terminal block connectors located at the top of the PCB. These are summarised below:

BATT	Connect to the nicad battery (on completion of the wiring)
	Connect to the piezo sounder
STROBE	Connect to the strobe terminals in the control panel observing the correct polarity.

T	Tamper return
E	Tamper feed
A	-Ve supply (0V)
D	+Ve Supply (12V)
B	-Ve applied sounder trigger (0V)

For ease of wiring, terminals T,A,D,B directly correspond to the bell/sounder output terminals in all ADE control panels. For clarity, only this connection principle is described in these instructions.

Where a control panel from another manufacturer is in use, it is highly likely that it will still operate, in what has by convention become a standard i.e. using a negative sounder trigger and a negative tamper return.

If this is the case, then you should continue to follow the instructions below but consult the control panel manufacturers literature. Alternative use a multi meter to identify the hold off supplies, negative sounder trigger terminal and tamper return connection.

+Ve Tamper Return Control Panels

Terminals T and E are a voltage free tamper protection loop incorporating the Sonade front and back tamper switches. For control panels which use a positive tamper return, terminal E which is the tamper 'feed' should be connected to the +Ve supply.

4. Wiring

To avoid operational difficulties, it is strongly recommended that the appropriate connection method described below is carefully followed.

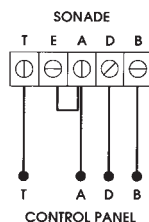
Where a single Sonade is used on less than 50 metres of standard 0.2 mm² cable, use connection Method A.

Where two Sonades are to be used or the sounder cable is longer than 50 metres, use connection Method B.

Method A

Using a six core cable between the Sonade and the control panel, wire the Sonade as follows.

T	Connect to control panel terminal T
E	Link to the adjacent terminal A
A	Connect to control panel terminal A
D	Connect to control panel terminal D
B	Connect to control panel terminal B



Method B

Using an 8 core cable between each Sonade and the control panel, wire as follows.

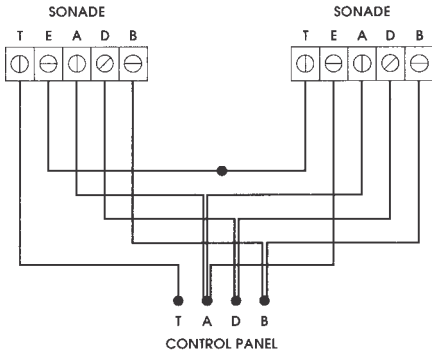
Connect a wire to terminals T and E in each Sonade and terminate them in a series loop at the control panel.

This arrangement should finish with a Sonade T connection to control panel T and a Sonade E connection to control panel A.

A's Connect to control panel terminal A

D's Connect to control panel terminal D

B's Connect to control panel terminal B



5. Timer

The Sounder will operate in normal alarm activations as directed by the control panel.

However if the Sonade goes into self contained mode due to power loss or cable damage then the sounder will operate from the nicad battery for the time period set by the TIMER control, located at the top right of the PCB.

The minimum setting (fully anti-clockwise) is 6 seconds which may be used to test the operation of the timer.

After testing, ensure that the timer is correctly re-set to the desired position. Typically 20 minutes.

6. Strobe Operation

The STROBE + and - terminals should be connected directly to the strobe output terminals at the control panel, observing the correct polarity.

In some control panels the strobe output may be a single terminal, usually a negative trigger. This should be connected to the STROBE - terminal. STROBE + should be linked to terminal D.

The strobe will operate totally independently of any sounder operations and is directly controlled by the operation of the control panel strobe output.

WARNING

Do not touch the PCB components when the strobe is in operation as a high voltage shock could result.

7. Final Testing

When the installation is complete the RED charge indicator at the bottom right of the PCB should be illuminated. This may be carefully positioned to allow the best viewing angle through the strobe lens.

We would recommend that the following tests are then carried out.

- 1) Test the operation of the sounder and the timer in self contained mode by removing power.
- 2) Test the operation of the front cover tamper.
- 3) Test the operation of the strobe and the sounder by generating an alarm condition (or test) at the control panel.

8. Specifications

Hold Off Supply Voltage	12V dc
Sounder Output	113dB at 1 metre
Strobe Supply	9-14V
Strobe Output	Tube wattage 1W 1 flash per second
Timer	Operates in self contained mode adjustable 6 seconds to 20 minutes
Battery Capacity	8.4V - 280mAh
Current Consumption	Stand by 50mA Sounder 650mA Strobe 75mA
Housing Material	3mm polycarbonate
Dimensions	H 360mm W 210mm D 85mm
Model Numbers	Sonade(white) 2020 Dummy (white) 2120 Sonade(red) 2040 Dummy (red) 2140 Sonade(yellow) 2060 Dummy (yellow) 2160 Blue strobe lens 2808

Due to continuous product development, ADE reserve the right to change specifications as and when required without prior notice.



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