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External Wireless Sounder

Model: WL S52

Installation and Programming Instructions

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Introduction

RISCO Group's two-way External Wireless Sounder is designed to extend the signaling capabilities of RISCO Group's WisDom and Agility wireless systems. The wireless sounder offers an easy and flexible solution for quick installation. The sounder is powered by its own batteries and communicates wirelessly with the security panel.

Up to 3 wireless sounders can be assigned to a system.

Operational Functions

Alarm / Tamper Indication

Upon an alarm condition, the sounder will be activated for a period of time defined by the system (***Bell Time Out*** parameter).

Low Battery Indication

Upon a low battery condition a trouble indication is sent to the panel.
There are 2 types of low battery indications:

✦ Radio low battery
✦ Speaker low battery

Supervision

Each sounder can be defined to be supervised by the panel. The system generates a local fault signal identifying the sounder whose signal is not received during a predefined time, followed by a report to the Alarm Receiving Center (if defined).

Pre Alarm Indication

When an entry time starts, the system transmits a pre-alarm signal to the sounder. If the system is unset before the entry delay time expires, a cancellation signal is sent to the sounder.
If the sounder does not receive a cancellation signal within the entry delay time, the sounder will be activated.

Sounder Self Testing

Once placing all batteries in the battery holders or pressing on the reset switch located on the PCB (with the tamper switch open), the sounder performs a functional self test indicated by a strobe flash squawk sound.

LED display

The wireless sounder has 2 LEDs located on the PCB. These LEDs are enabled when the tamper is open and 10 minutes after the tamper is closed.

Red: Indicates transmission

Yellow: Indicates a low battery
Red and Yellow (3 seconds): Confirms successful learning

Mounting the Sounder

To mount the sounder follow this procedure:

Step 1:

Remove the Cover Screw Assembly. The screw cover is opened by asserting thumb pressure on it and pushing outward to reveal the cover screw.
Unscrew the cover screw and hinge the lid open to approximately 45 degrees, lift the cover away until the tongue of the hinge engages. Squeeze the two halves of the tongue together and remove the cover.
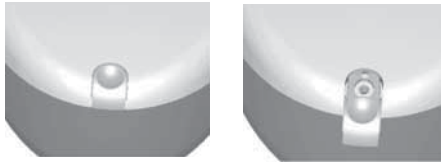See figure 1:

Figure 1

Step 2:

Once the cover has been removed it may be placed in the Cover Holder Clip. This is done by placing the cover hinge into the second hinge slot just inboard of the outer hinge slot.
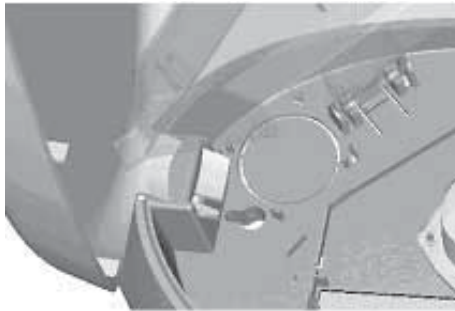See figure 2:

Figure 2

Step 3:

Using the base plate as a drilling template, mark the drill holes on the wall. Drill the holes and insert the wall plugs.

Step 4:

Fix the sounder to the wall.

Step 5:

Access to the PCB is gained by releasing the inner cover retaining the clip and lifting the cover upward until it locks into the raised position.
See figure 3:

Wireless Sounder Instructions
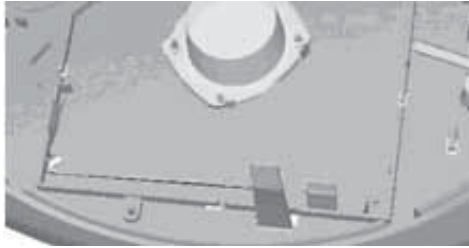
Figure 3

Step 6:

Insert the supplied batteries. The sounder is ready for communication set up with the system.

Step 7:

The single Tamper switch may be fitted in two positions:
    a) to provide screw cover and rear tamper.
      -or-
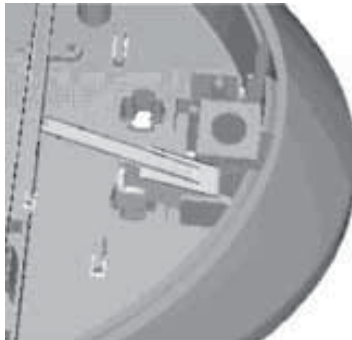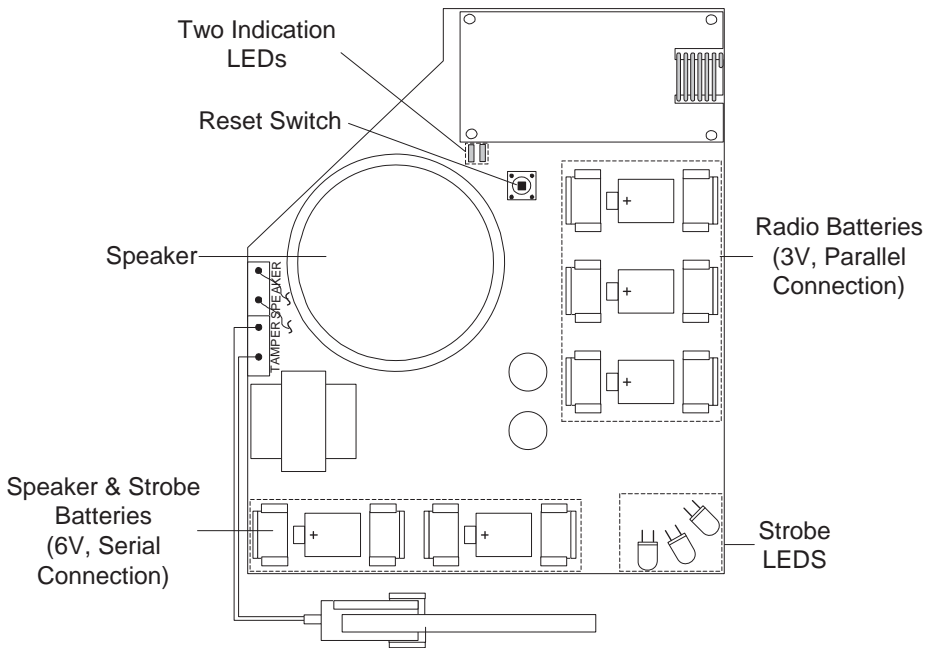   b) to provide front cover and rear tamper.
See figure 4:

Figure 4

Step 8:

Re-attach the outer cover.

Step 9:

After the sounder is trained, close the lid and lock the Cover Screw Assembly.

External Sounder - PCB Diagram

Programming the sounder

Programming the wireless sounder consists of the following 3 steps:
1. Setting communication between the receiver and the sounder
2. Setting sounder parameters
3. Testing the sounder

Step 1: Sounder/Receiver Communication Set up

The sounder must identify itself to the system's receiver by writing its ID into the system. Perform according to the following steps:
1. Set the receiver to the Write mode.

> **NOTE:**
> In the WisDom , as a first step, you need to allocate the sounder in the following programming location:
> **Main Engineer menu> 9)Devices > 2)Sounder > 1) Allocation > Select sounder> Choose ODWS1**

2. Select the sounder's ID.
3. Unpack the supplied batteries.
4. Insert two speaker batteries and three Radio batteries into the batteries holders.
5. After a squawk is heard and the sounder's strobe flashes you have 10 seconds to press on the tamper switch for at least 3 seconds. If the sounder is successfully recognized, the system will sound a confirmation beep and the sounder will initiate a second squawk sound and the 2 LEDs on the sounder will flash for 3 seconds.
6. Repeat the process for other sounders in the system.

Wireless Sounder Instructions

Step 2: Setting the Sounder Parameters

Each sounder can be defined with different sets of parameters. The following table describes the list of parameters of the sounder.

> **NOTE:**
> For the specific programming location of each parameter refer to the system manuals.

Strobe Control

Defines the Strobe operation mode:
- ➢ **Always Off**: The strobe is deactivated
- ➢ **Follow Bell (Default):** The strobe is activated when the sounder bell is triggered
- ➢ **Follow Alarm**: The strobe is activated when an alarm event occurs in the system

Strobe Blink

Defines the number of times the strobe will flash per minute (Default 40 times per minute). Strobe Blink options:

[1] 20 times per minute	[4] 50 times per minute
[2] 30 times per minute	[5] 60 times per minute
[3] 40 times per minute (Default)	

Strobe Arm Squawk

The time that strobe blinking will continue when set is performed (Default: 05)

> **NOTE:**
> If the sounder's squawk strobe is defined as NO (Refer to the Allocation section) this parameter will be ignored.

Adjusting the Volume

Defines the sounder sound volume for the following system modes:
- ➢ **Exit / Entry**: The sound produced during Exit/Entry time (Default: 0)
- ➢ **Alarm**: The sound produced during alarm (Default: 9)
- ➢ **Squawk**: The sound produced during squawk sounds (Default: 9)

The sound volume range is between 0 (silent) to 5 (maximum volume).

Muting Tamper

This feature disables a tamper alarm from the sounder and it is recommended to be used when replacing the sounder's batteries.

> **NOTES:**
> 1. An ongoing tamper alarm will not be disabled.
> 2. **WisDom**: This feature is controlled under the Engineer Menu (Quick key **[9][2][5]**). Tamper alarm will be disabled during the current installation programming period.
> 3. **Agility**: This feature is controlled under the Grand Master menu. Tamper alarm will be disabled for 20 minutes.

Setting Supervision Time

Specifies how often the system generates a supervision request to the sounder.
If any of the sounders does not respond to the request at least once during the
receiver supervision time, the system will regard the accessory as lost.

> **NOTE:**
> The receiver supervision time should be higher than the sounder supervision time in order to
> eliminate false lost event.

Range: 00-255 minutes

Default: 58 minutes

> **NOTE:**
> **WisDom**: Engineer menu**: 1) System > 1) Timers > 9) Accessory supervision time**
> **Agility**: Engineer menu: **1) System > 1) Timers > TX supervision**

Pre Alarm indication

This wireless sounder incorporates a pre-alarm feature that enhances the security of
the system by producing a local alarm in case of sabotage.

If defined, the system sends a pre-alarm signal to the sounder at the beginning of the
entry delay. If the sounder does not receive a cancellation signal from the system at
the end of the entry time, the sounder goes into alarm mode.

> **NOTE:**
> **WisDom** (Ver 4.25): Engineer menu Quick key **1) System> 2)Parameters> 35)Sounder Pre alarm**
> **Agility**: Engineer menu **[1][2] > Advanced > Sounder Pre alarm**

Step 3: Testing the Sounder

Communication Test

The sounder communication test performs a communication test between the sounder
receiver and the system.

➢ **To perform a communication test:**

1. Access the communication test option.

> **NOTE:**
> **WisDom**: Engineer menu > **9) Devices > 2) Sounders > 3) Communication test**
> **Agility**: Engineer menu > **2) Testing > 5) Sounder > 1) Communication test**

2. The system sends a test signal to the sounders. A number between 00-99 indicates
   the strength of the communication signal between the system and the sounder.

> **NOTE:**
> For successful communication, the strength of the signal should be higher that the sounder receiver
> noise threshold level.
> (**WisDom**: Engineer menu quick key **[9][2][4]**, **Agility**: Engineer menu> **2)Testing > 1)Main unit >
> 1)Calibration**).

Diagnostics

The Diagnostics menu enables to test parameters reflecting the operation of the
sounder:

✦ **Speaker batteries voltage**: Tests the selected sounder's speaker batteries voltage
✦ **Radio batteries voltage:** Tests the selected sounder's radio's batteries voltage
✦ **Sounder version:** Displays information regarding the sounder's version

Replacing Batteries

1. Before opening the sounder it is advised to silence the tamper alarm using the Tamper Mute option.
2. Remove the screws on both sides of the external wireless sounder and open the cover of the sounder upwards.
3. Insert the supplied batteries.
4. Remove the old batteries from the metal clips and replace them with the new ones. Pay attention to the polarity.
5. Replace the cover and lock the screws.

Technical Information

Electrical

Power supply	5 x CR123, 3V Lithium batteries 3 batteries for the wireless system 2 batteries for signalling
Battery lifetime	3 years (typical)
Sounder volume	105 dB @ 1 meter (3.3") - adjustable
Strobe lens	Polycarbonate
Flash frequency	60 times per minute (max.)
Dimensions (HxWxD)	300x 325x70 mm (11.8 x 12.8 x 2.8 inch)
Weight (including batteries)	1 Kg (2.2lbs)

Wireless

Wireless technology	Bidirectional narrow band
Frequency	868 MHz or 433MHz
Range	150m (492') Line of sight
Monitoring	YES
Modulation Type	ASK

Environment

Temperature range	- 25°C to 60°C
IP class	IP 44
Environment class	Class IV

RTTE Compliance Statement

Hereby RISCO Group declares that this wireless sounder is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For the CE Declaration of Conformity please refer to our website: www.riscogroup.com.

CE

FCC Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

a) Reorient or relocate the receiving antenna.

b) Increase the separation between the equipment and receiver.

c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

d) Consult the dealer or an experienced radio/TV technician.

FCC ID: JE4RWRT433

IC: 6564A-RWRT433

FCC Warning

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

RISCO Group Limited Warranty

RISCO Group Ltd. and its subsidiaries and affiliates ("Seller") warrants its products to be free from defects in materials and workmanship under normal use for 24 months from the date of production. Because Seller does not install or connect the product and because the product may be used in conjunction with products not manufactured by the Seller, Seller cannot guarantee the performance of the security system which uses this product. Seller's obligation and liability under this warranty is expressly limited to repairing and replacing, at Seller's option, within a reasonable time after the date of delivery, any product not meeting the specifications. Seller makes no other warranty, expressed or implied, and makes no warranty of merchantability or of fitness for any particular purpose.

In no case shall seller be liable for any consequential or incidental damages for breach of this or any other warranty, expressed or implied, or upon any other basis of liability whatsoever.

Seller's obligation under this warranty shall not include any transportation charges or costs of installation or any liability for direct, indirect, or consequential damages or delay.

Seller does not represent that its product may not be compromised or circumvented; that the product will prevent any personal injury or property loss by burglary, robbery, fire or otherwise; or that the product will in all cases provide adequate warning or protection. Buyer understands that a properly installed and maintained alarm may only reduce the risk of burglary, robbery or fire without warning, but is not insurance or a guaranty that such will not occur or that there will be no personal injury or property loss as a result.

Consequently seller shall have no liability for any personal injury, property damage or loss based on a claim that the product fails to give warning. However, if seller is held liable, whether directly or indirectly, for any loss or damage arising from under this limited warranty or otherwise, regardless of cause or origin, sellers maximum liability shall not exceed the purchase price of the product, which shall be complete and exclusive remedy against seller.

No employee or representative of Seller is authorized to change this warranty in any way or grant any other warranty.

WARNING: This product should be tested at least once a week.

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