

## GENERAL DESCRIPTION

The EK-WL8-SND is a wireless wall sounder.

This device is activated when a fire condition has been detected by the Fire Alarm Control Panel. The alarm signal is relayed to the wireless wall sounder via the connected translator/expander modules.

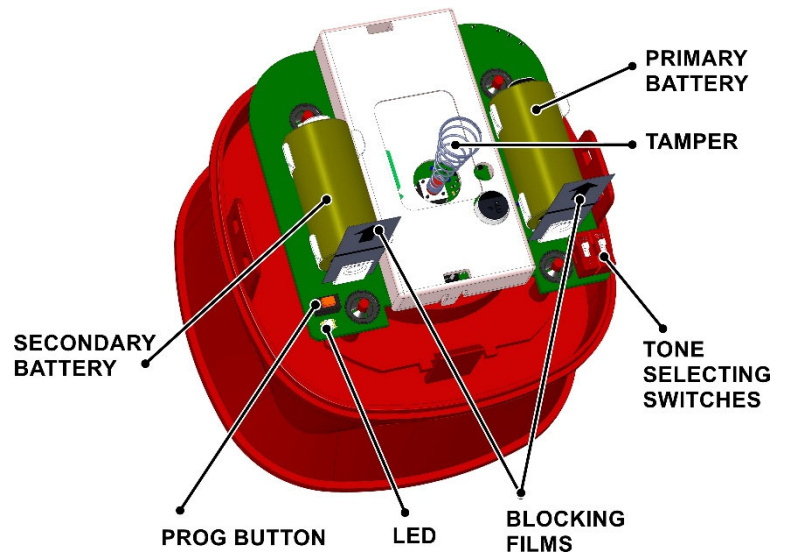
This wall sounder has 4 selectable tones and the volume can be adjusted.

The device is supplied with a mounting kit.

The product complies with the requirements of the EN54-3:2001+A1:2002+A2:2006 (CPR), EN54-3:2014+A1:2019 (LPCB) and EN54-25:2008 standards.

## FEATURES

- Onboard switches for tone selection
- Bi-directional wireless communication
- Intelligent algorithms
- Tamper switch
- 10-year battery life
- Self-optimizing wireless frequency and amplitude algorithms





## EK-WL8-SND WIRELESS SOUNDER

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### TECHNICAL SPECIFICATIONS

Communication range with a translator or expander*	1200 m
Radio frequency	866 – 869.85 MHz
Modulation type	GFSK
Operating frequency channels	6
Radiated power	Not more than 25 mW
Receiver category (EN300-220-1)	1.5
Sound pressure level at 1 m	93 dB(A) for all modes*
Battery life:	
Primary battery (type CR123A, 2.75-3.2V)	8-10 years
Secondary battery (type CR123A, 2.75-3.2V)	> 3 months (after primary battery low fault)
IP rating	IP21C
Dimensions (with the base)	108 mm x 108 mm x97 mm
Max tolerated humidity (no condensing)	95% RH
Operating temperature range	From –10 °C to +55 °C

\*see full table at the end of the document

NOTE Check the latest version of the product specification document STFV.425412.001-E-PS for further data, obtainable from the manufacturer.

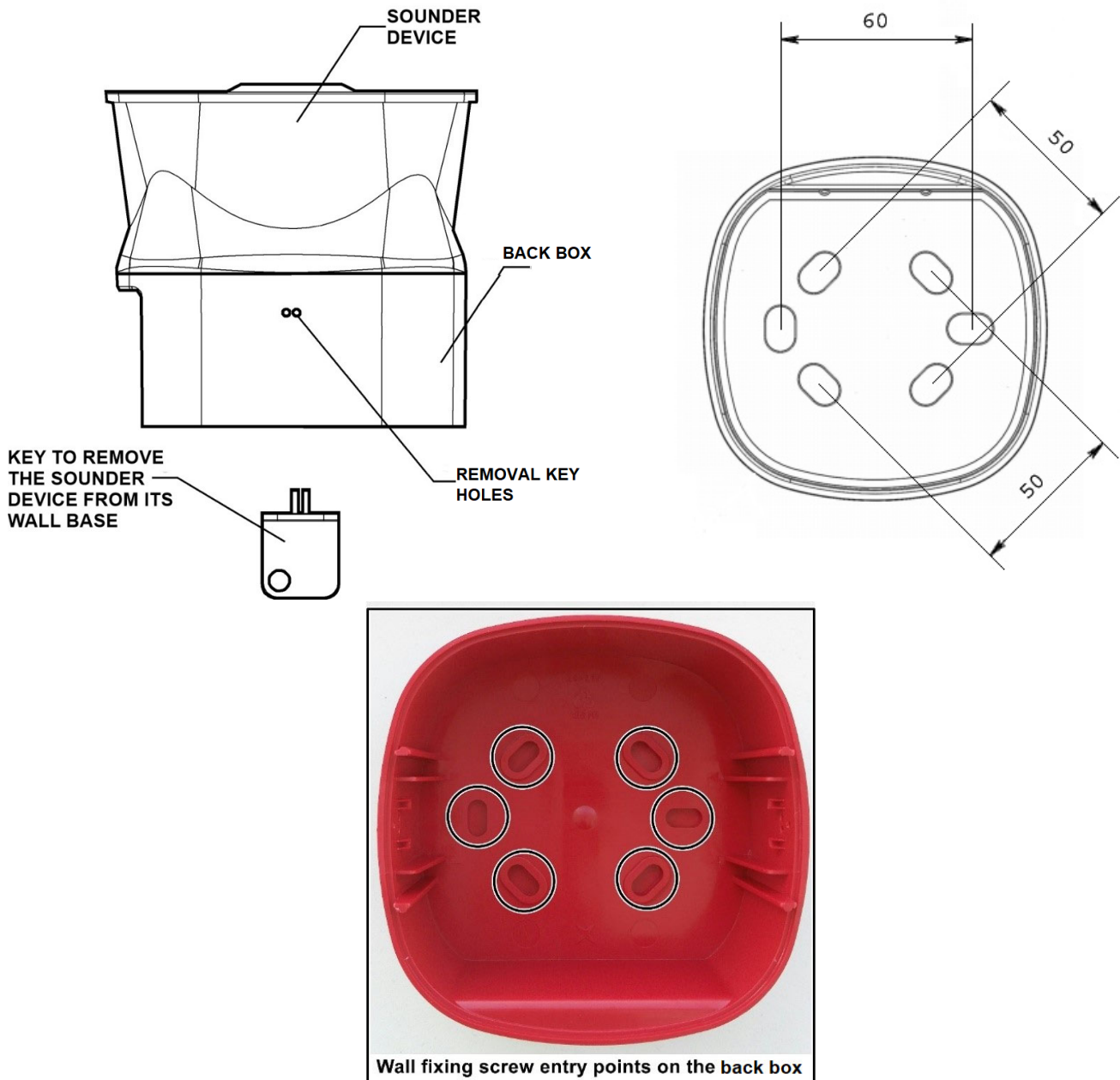
### PROGRAMMING

The “Prog.” button on the device is used for initializing the device onto the system. Please refer to the translator manual for full instructions on how to add a device to the system. The device can also be initialized using the “Ekho Configurator” software.

### INSTALLATION

For specific information regarding sounders spacing, placement and special applications refer to your specific national standards.

In order to install the device, mount the back box to the wall using screws, the sounder can then be clipped onto the back box.



Preferably, the device should be installed away from metallic objects, doors, and power lines, as they can cause the communication distance to drop. It is also important to avoid installing the device near electronic and computer equipment in order to protect it from potential electromagnetic interference.

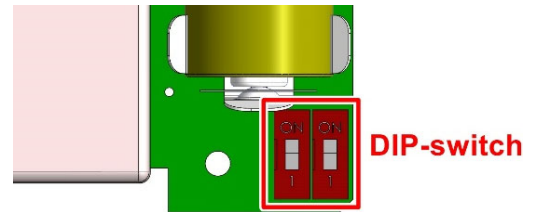
Before clipping the sounder onto the back box set the sounder tone and volume (using the DIP-switches).

In order to select tone, change the position of the switches according to the table below.

Switches position (LEFT-RIGHT)	Pattern	Comment
ON - ON	Pulsed tone	990Hz (500ms On/500ms Off)
ON - 1	Dual tone	990Hz&650Hz (250ms~250ms)
1 - ON	Continuous tone	990Hz
1 - 1	Pulsed tone (synchronized)	Depend on EK-WL8-TRH option

**NOTE** Please refer to picture showing the DIP switch orientation.

For correct tone selection the PCB must be oriented as in the picture above.



“ON” and “1” switch indications are actually present on the switches.

Sound synchronization with other sounders in the system is not worse than 50ms and is able to one switches' position only.

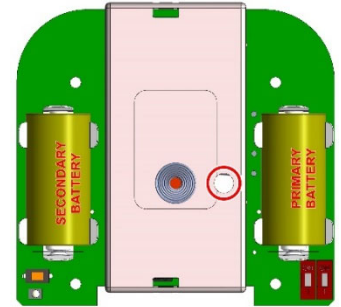
Tones also depend on the "sound alarm" parameter of the EK-WL8-TRH:

"Alarm sound" parameter	Switches condition on EK-WL8-SND PCB (LEFT-RIGHT)			
	1(OFF)-1(OFF)	1(OFF) - ON	ON – 1 (OFF)	ON - ON
Cont. tone	Continuous tone 990Hz	Continuous tone 990Hz	Unsynchronized Dual tone 990Hz&650Hz (250ms~250ms)	Unsynchronized Pulsed tone 990Hz (0.5s ON / 0.5s OFF)
Pulse 1s/1s	Pulsed tone (synchronized) 990Hz (1s ON/1s OFF)			
Pulse 2s/2s				
Dual 1s/1s				
Dual .4s/.4s				
Pulse .2s/1.3s				
ISO8201*	3x0.5s – 990Hz ON, 1.5s – OFF, then repeat (synchronized)			
Cont. 1 kHz	Continuous tone 990Hz			
Pulse 1 kHz	Pulsed tone (synchronized) 990Hz (1s ON/1s OFF)			

\* not certificated

The sounder volume can be adjusted by turning the potentiometer clockwise or anti-clockwise please refer to the picture.

To remove the sounder from its back box, insert the removal key into the two holes in the back box and push the key until the device unlocks.



## INDICATION

The device has a LED which indicates its state according to the following:

LED indication	Device's state
No indication or green flashes	Standby mode
Yellow flashes every 4 seconds	Fault state – low battery
Frequent red flickering	Device is activated

## TESTING

To test the device, activate an alarm condition on the system via a call-point or fire sensor. The sounder should activate with the selected tone and volume.

To stop the test silence and reset the control panel.

## ANALOG DATA

The device provides the translator module with analog data about air temperature and voltage levels on its batteries. This information can be viewed in the “Ekho Configurator” software.



Sensor	Partition	Standby s...	Primar...	Temper...	Case
73 WL8-SND	002: Partition...	3.2 V (6)	3.1 V (5)	20 °C (12)	Closed

By analyzing the voltage levels, you can manage maintenance procedures and predict when you will have to replace the batteries.

## WARNINGS & LIMITATIONS

Devices use high quality electronic components and plastic materials that are highly resistant to environmental deterioration. However, after 10 years continuous operation it is advisable to replace them to reduce the risk of reduced performance caused by external factors. Ensure the devices are only used with compatible control panels. Detection systems must be checked, serviced and maintained on a regular basis to confirm correct operation.

Refer to and follow National Codes of Practice and other internationally recognized fire engineering standards. Appropriate Risk Assessment should be carried out initially to determine correct design criteria and updated periodically.

## WARRANTY

All devices are covered by a 3-year limited warranty (does not apply to batteries). The warranty is voided by mechanical or electrical damage caused by incorrect handling or usage. Product must be returned via an authorized supplier for repair or replacement along with full information on the identified problem.

## BATTERY REPLACEMENT

**When a battery requires replacement, both batteries must be changed together.**

- a. Open the case of the device.
- b. Remove the batteries.
- c. Insert the new batteries as detailed in the installation manual above – take care to observe + / - polarity.
- d. Close the case of the device.
- e. Test the device in accordance with the manufacturer's instructions.

It is recommended to change both batteries after 10 years of operation regardless of their indicated discharge level.

To replace the batteries, use Panasonic CR123A (primary and secondary batteries) or other with similar characteristics. The batteries must meet the following standards: UL 1642 lithium batteries, UL certified at [www.ul.com](http://www.ul.com) or IEC 60086-4 Primary batteries, Part 4: Safety of lithium batteries.

The remaining shelf time of the new batteries must be not less than 8 years.

Failure to observe these instructions will void the device warranty and any liabilities.

## CAUTION

- Replacement of a batteries must be of the same type.
- Do not expose used batteries to fire, hot ovens, or mechanical crushing/ cutting as this can result in an explosion.
- Exposing batteries to extremely high environmental temperatures can result in explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure may result in an explosion or the leakage of flammable liquid or gas.

## DISPOSAL

- Follow local regulations regarding disposal of the batteries



**EK-WL8-SND  
WIRELESS SOUNDER**

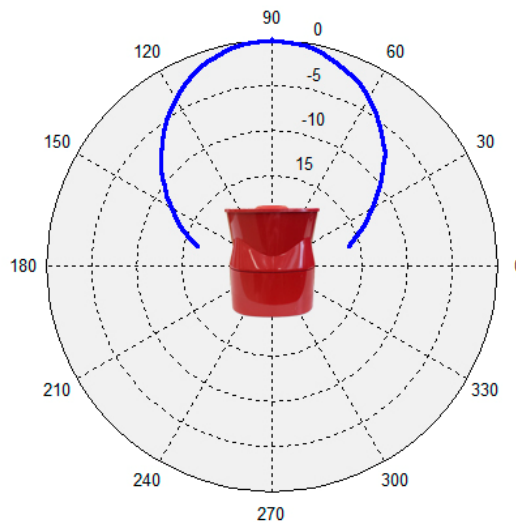
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Angle	Minimal sound pressure, dB(A) for all supply voltages at 1 m
	Horizontal and vertical orientation
15°	80
45°	88
75°	93
105°	93
135°	88
165°	80

Directional diagram:



**FOR TECHNICAL SUPPORT & PRODUCT RETURNS  
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## APPROVALS



1571f/01



2831-CPR-F4386



0832-UKCA-CPR-F1482

## MANUFACTURING

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