TWS-1815

Wireless Sounder And Flasher
Installation & User Manual

teknim®

Release Date: 13/12/2021
Rev:01

Warnings

General

- ✓ Read this manual with care before operating the device and keep it for further reference.
- ✓ Comply with all warnings and measures provided in the manual. Follow all respective operation and usage instructions.
- ✓ Keep the devices away from water and moisture.

Service

Do not attempt to repair the device on your own, you may be exposed to electric shock in case you open the device enclosure.
Contact your dealer or authorized service provider in case of a malfunction. Technical interventions to the device must be carried out by a qualified technician from an authorized service provider.

Warning: Do not attempt to take the board out of its enclosure protection. It is sealed for your safety. Users must avoid intervention.

Failures That Require Service Intervention

Contact your authorized service provider or installer in case of a failure or in following cases.

- ✓ If the power line or power plug is damaged,
- ✓ Any liquid leaking or a foreign substance entering the device,
- ✓ Any exposure to water or rain,
- ✓ Dropping the device or damaging the enclosure,
- ✓ If there is significant performance change in the device,
- ✓ If the device is not operating normally according to the operating instructions in this user manual

Please call your service provider as incorrect operations may cause further malfunctions.

What You Can Do On Your Own

Do not attempt to repair the device on your own, you may be exposed to electric shock in case you open the device enclosure. Contact your dealer or authorized service provider in case of a malfunction. Technical interventions to the device must be carried out by trained technical personnel of authorized service. The device must be cleaned with a dry cloth. No chemical substances must be used for cleaning purposes.

Handling and Transportation

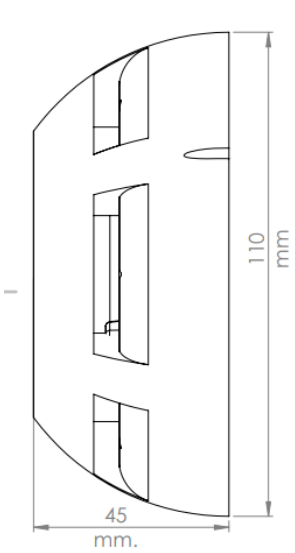
The device should be handled carefully so that it is not exposed to shocks and liquid ingress. Damages that may occur during incorrect transportation are not covered by the warranty.

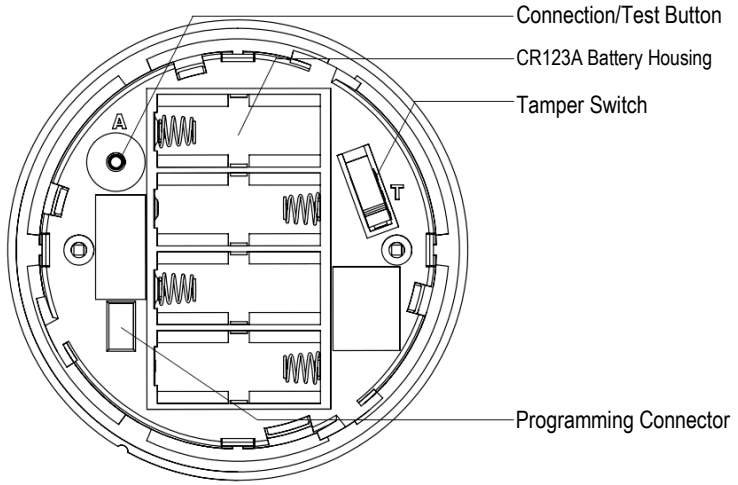
Human and Environment Health

This device does not contain any chemical or biological substance that may harm human health

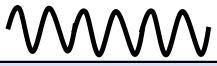
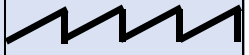
Technical Specifications

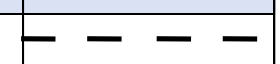
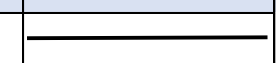
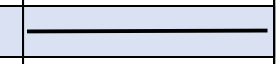
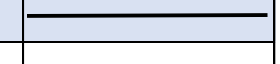
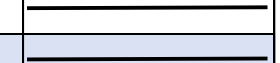
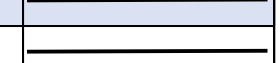
Communication Distance (via Coordinator or Router)	Up to 500 m (open space)	
Operating Frequency	868 MHz	
Operating Frequency Channels	10	
Output Power	14 dBm (25 mW)	
Average Consumption	20uA (@12V)	
Battery	4xCR123A (3 Vdc)	
Battery Life	6 years	
Usage	Indoor	
Operating Temperature Range	-10°C ~ 55°C (14°F ~ 131°F)	
Humidity	@ +40°C between 0% and 95%	
Alarm Consumption	~Min.=6.74mA, Nom.=11.06Ma, Max.=15.1mA.(12VDC)	
Volume	88.4 / 90.3 / 95 dB±2 dB (@12VDC, @1 meter)	
Number of Siren Tones	42 tone (Default tone : Nr1)	
Flash Mode	3 (Slow, Normal, Fast)	
Protection Class	IP21C	
Indication Led	White, flashes with 20 sec periods	Red, flashes with 20 sec periods
Size (mm)	Ø:110mm, h:55mm (Incl. Base)	
Material	Red, UL94 non-flammable Polycarbonate	
Weight (Incl. base / Excl. base)	190 gr / 147 gr (Batteries not included)	
Leds	Wide Angle 8 pcs bright LED	
Heart Led	1815R=Red 1815W=White flashes with 20s periods	
Piezo	Piezzo w/ Leakproof	
Coverage Area	W-2,4-4	
Siren Type	Type A device	





Sound Modes and Descriptions

Tone Modes	Tone Type	Tone Description
TONE 1 (default)	Default tone 1754Hz ~ 2380Hz sinus signal 11 HZ 600 us	
TONE 2	Specific tone 1754Hz ~ 2380Hz sinus signal 5 HZ 1333 us	
TONE 3	Specific tone 1754Hz ~ 2380Hz sinus signal 1 HZ 6666 us	
TONE 4	Specific tone 500Hz ~ 1200Hz sinus signal 0.33 HZ 2594 us	
TONE 5	Specific tone 2400Hz ~ 2850Hz sawtooth signal 7 HZ 2197 us	
TONE 6	Specific tone 2400Hz ~ 2850Hz sawtooth signal 1 HZ 15384 us	
TONE 7	Specific tone 2400Hz ~ 2850Hz sawtooth signal 50 HZ 307 us	
TONE 8	Specific tone 300Hz ~ 1200Hz sawtooth signal 1 HZ 400 us	
TONE 9	Specific tone 500Hz ~ 1200Hz sawtooths signal 1 HZ 856 us	
TONE 10	Specific tone 800Hz ~ 970Hz sawtooth signal 7 HZ 646 us	
TONE 11	Specific tone 800Hz ~ 970Hz sawtooth signal 1 HZ 4524 us	
TONE12	Specific tone 800Hz ~ 970Hz sawtooth signal 50 HZ 90 us	
TONE 13	Specific tone 800Hz ~ 970Hz sawtooth signal 2 HZ 2262 us	
TONE14	Specific tone 800Hz ~ 970Hz sawtooth signal 9 HZ 502 us	
TONE 15	Specific tone 800Hz ~ 970Hz sawtooth signal 100 HZ 45 us	
TONE 16	Specific tone 500Hz ~ 988Hz sawtooths-square signal 321 us 250000 us	
TONE 17	Specific tone 500Hz ~ 1200Hz sawtooths-square signal 299 us 500000 us	
TONE 18	Specific tone 500Hz ~ 1200Hz sawtooths-square signal 600 us 500000 us	
TONE 19	Specific tone 1200Hz ~ 500Hz sawtooths-square signal 600 us 500000 us	
TONE 20	Specific tone 2850Hz - 2400Hz square signal (ISO8201) 250000 us 250000 us	
TONE 21	Specific tone 1200Hz - 500Hz square signal 500000 us 500000 us	

TONE 21	Specific tone 1200Hz - 500Hz square signal 500000 us 500000 us	
TONE 22	Specific tone 800Hz ~ 970Hz square signal 500000 us 500000 us	
TONE 23	Specific tone 628Hz - 925Hz square signal 250000 us 250000 us	
TONE 24	Specific tone 554Hz - 440 square signal 100000 us 400000 us	
TONE 25	Specific tone 670Hz - 845Hz square signal 250000 us 350000 us	
TONE 26	Specific tone 440Hz - 554Hz square signal (French) 100000 us 400000 us	
TONE 27	Specific tone 2850Hz - 0 square signal 500000 us 500000 us	
TONE 28	Specific tone 970Hz - 0 square signal (ISO8201) 250000 us 250000 us	
TONE 29	Specific tone 925Hz - 0 square signal 150000 us 600000 us	
TONE 30	Specific tone 925Hz - 0 square signal 250000 us 1000000 us	
TONE 31	Specific tone 800Hz - 0 square signal (ISO8201) 250000 us 1000000 us	
TONE 32	Specific tone 660Hz - 0 square signal (Swedish) 150000 us 150000 us	
TONE 33	Specific tone 660Hz - 0 square signal 6500000 us 13000000 us	
TONE 34	Specific tone 554Hz - 0 square signal 100000 us 400000 us	
TONE 35	Specific tone 400Hz continuous signal	
TONE 36	Specific tone 628HZ continuous signal	
TONE 37	Specific tone 660HZ continuous signal	
TONE 38	Specific tone 750HZ continuous signal	
TONE 39	Specific tone 925HZ continuous signal	
TONE 40	Specific tone 970HZ continuous signal	
TONE 41	Specific tone 2400HZ continuous signal	
TONE 42	Specific tone 2850HZ continuous signal	

Supported Flasher Modes and Descriptions

Strobe Mode	Strobe Type	Strobe Description
MODE 1	Slow Mode 0.5 Hz pwm signal on delay 200 ms off delay 1500 ms	
MODE 2	Normal Mode 1 Hz pwm signal on delay 200 ms off delay 800 ms	
MODE 3	Fast Mode 2 Hz pwm signal on delay 100 ms off delay 400 ms	

General Features

- ✓ TLPWAN low power consumption, two-way safe and stable wireless communication protocol
- ✓ Standard, low cost lithium battery
- ✓ Up to 6 years battery life
- ✓ EN54-3, EN54-23, EN54-25 Certified

Indicator LEDs

Condition	LED Signal Pattern
Any error situation (Tamper etc.)	Heart LED blinks once in every 10 seconds
Device in normal operation mode	Heart LED blinks once in every 20 seconds
Low battery warning	Heart Led blinks once in every 10 seconds
Network connection-disconnection Result of operation	Green LED blinks twice in every 2 seconds Affirmative, green LED lights for 3 seconds Not Affirmative, red LED lights for 3 seconds
Connection quality	Connection Quality is Good; Green LED blinks 3 times Connection Quality is Medium; Green LED blinks 2 times Connection Quality is Poor; Green LED blinks once No Connection; Red LED blinks once

Changing Siren and Flasher Modes

Connection /Test Button	Flasher Turns On/Off when pressed long
Connection /Test Button	Flasher Mode changes when pressed shortly
Tamper + Connection /Test Button	Siren Turns On/Off when both of them pressed simultaneously
Tamper Key	Siren mode changes when pressed shortly

Network Connection Procedure

In order for a device to join the network, that device must not have been included in any network before. Whether the device has joined any network or not can be determined by the link test. Follow the steps below for connecting the device to a network.

1. The connection permission on the coordinator or on the router must be on before the device is connected to a network. Turn on the connection permission on the coordinator or on the router.
2. Press long (for 5 seconds) on the "Connection/Test" button located under the device.
3. The device will start the connection procedure automatically. This procedure takes about 20 to 60 seconds. The green LED will blink twice every 2 seconds during the procedure.
4. At the end of the procedure, the green LED will light for 3 seconds if the connection procedure is successful, and the red LED will light for 3 seconds if the connection procedure is not successful.

Warning: After adding the device to the network, proceed the link test at the location of the device will work. If there is no connection in the link test, the system will not work properly. In this case, change the location of the device.

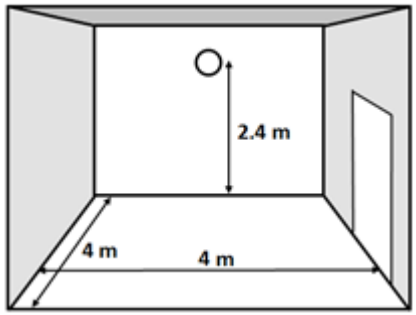
Disconnection procedure

1. Press long (for 5 seconds) on the "Connection/Test" button located under the device.
2. The device will start the disconnection procedure automatically. The green LED will light for 3 seconds at the end of the procedure.

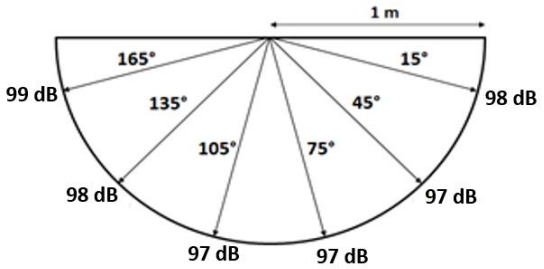
Link Test

It is possible to measure the link quality between the device and the connected coordinator or router. For this, press shortly on the "Connection/Test" button located under the device. If the device is connected to a network, the LEDs will light as noted below at the end of the procedure:

EN 54-23 Visual Alarm Devices



A – Intensive Volume Level Figure (max.)



Manufacturer

Bilgi Elektronik San. ve Tic. A.Ş.
Dudullu Organize Sanayi Bölgesi 1. Cadde İsmet Tarman İş Merkezi
No:1 Kat:2 No:32 Ümraniye / İstanbul / Türkiye

Phone Number: +90 216 455 88 46 **Fax:** +90 216 455 99 06
www.teknim.com
sales@bilgielektronik.com.tr
destek1@bilgielektronik.com.tr

*In compliance with AEEE regulations. This product is manufactured with recyclable and reusable high quality parts and materials. Do not dispose of the product together with domestic or other wastes at the end of its service lifetime. Take it to a drop-off point for the recycling of electrical and electronic devices.