

TWS-1815

Wireless Fire Siren and Flasher Installation & User Manual



Release Date: 19/04/2021
Rev:00

Critical 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 humidity.

Service

Do not attempt to repair the device on your own, you may be exposed to electric shock in case you open the device housing.

Contact your dealer or authorized service in case of a failure. Technical interventions to the device must be carried out by qualified personnel of authorized service.

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

Failures That Require Service Intervention

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

- ✓ If the power line or plug is damaged,
 - ✓ If any liquid has leaked or a substance has fallen into the device,
 - ✓ If the device is exposed to water or rain,
 - ✓ If the device is dropped or the housing is damaged,
 - ✓ If there is significant performance change in the device,
 - ✓ If the device is not operating normally according to the operating instructions in the user manual
- Call the service since erroneous operations may cause further failures.

What You Can Do On Your Own

Do not attempt to repair the device on your own since you may be exposed to electric shock in case you open the device housing. Contact your dealer or authorized service in case of a failure. Technical interventions to the device must be carried out by qualified 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 must be handled with care in manner that it does not get exposed to impacts and liquid influx. The damages that may occur during improper handling are out of guarantee.

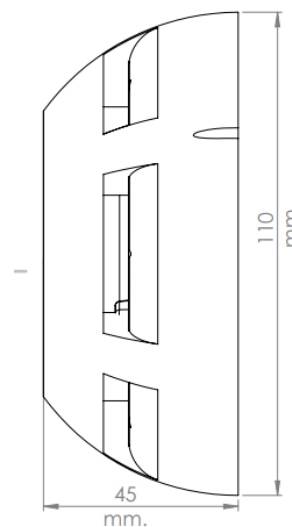
Human and Environment Health

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

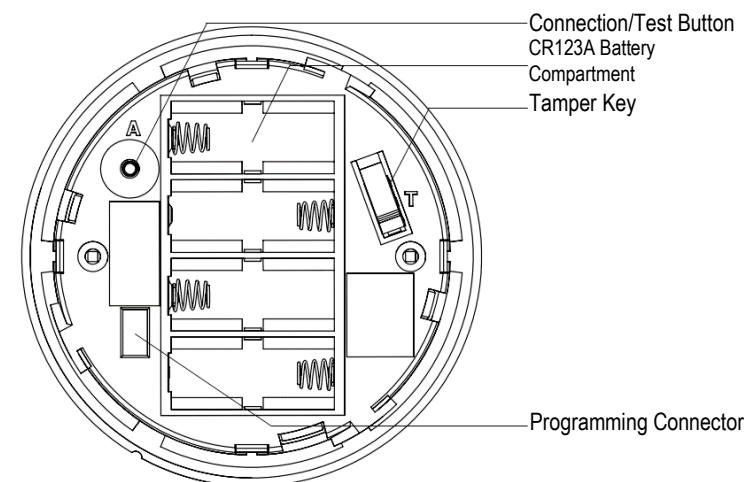
*The consumer may apply to the Consumer Arbitration Board or Consumer Court of the place of residence or of the consumer transactions in case of disputes arising from exercising the rights granted by the guarantee.









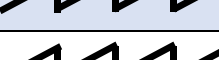


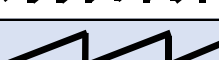









Technical Specifications







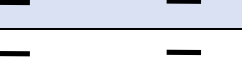


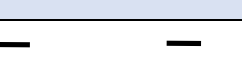





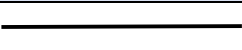
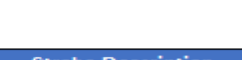

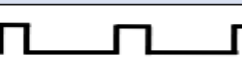
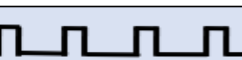
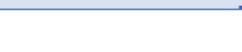
Communication Distance (via Coordinator or Router)	500 m (open area)	
Operating Frequency	868 MHz	
Operating Frequency Channels	10	
Output Power	14 dBm (25 mW)	
Average (Quiescent) Current Consumption	20uA (@12V)	
Battery	4xCR123A (3 Vdc)	
Battery Life	6 years	
Area of Use	Closed Area	
Operating Temperature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



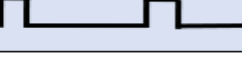

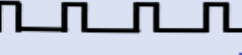
Supported Flasher Modes and Descriptions



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 Tone Types 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
- ✓ 6 years battery life thanks to advanced communication protocol
- ✓ EN54-3, EN54-23, EN54-25

Indicator LEDs

LED Signal Meaning	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 operation	Heart Led blinks twice in every 2 seconds Positive, Heart Led on for 3 seconds Negative, Heart Led off
Result of operation	Negative, Heart Led off
Connection quality	Good connection; Heart LED blinks 3 times Moderate connection; Heart LED blinks 2 times Poor connection; Heart LED blinks once No connectiob; Heart Led off

Link Testi

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

Changing/Testing 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

Warning: If no LED lights at the end of the Link Test, this means the device is not connected to any coordinator or router.

Network Connection Procedure

For a device to connect a network, such device must not be connected to any network. The connection status of a device can be found out by means of the link test. Follow the steps below for connecting the device to a network.

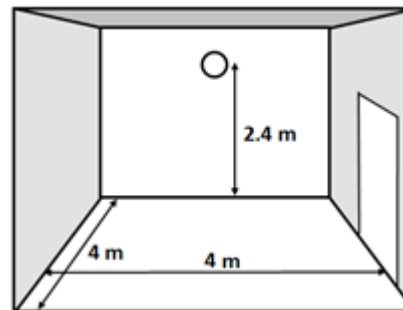
1. The connection permission on the coordinator or on the router must be on before the device is connected to a network. Turn on the connection permission on the coordinator or on the router.
2. Press long (for 5 minutes) on the "Connection/Link" button under the device.
3. The device will start the connection procedure automatically. This procedure takes a 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: Once the device is connected to the network, carry out the link test from the point where the device will operate. The system will not operate properly if there is no connection at the link test. Change the device's location in such case.

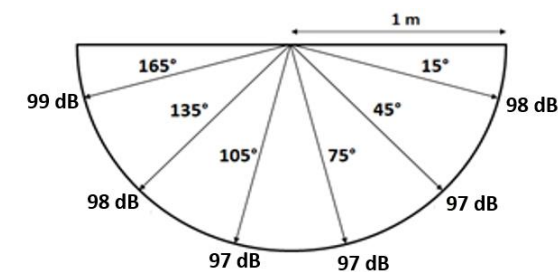
Disconnection procedure

1. Press long (for 5 seconds) on the "Connection/Link" button 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.

EN 54-23 Visual Alarm Devices



A – Intensive Volume Level Figure (max.)



Warning: The products works only with Teknim TFP-121x, TFP-122x and TFP-123x Analogue Addressed Fire Alarm panels.

Manufacturer Company and Main Service

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*In compliance with AEEE regulations. This product is manufactured from recyclable and reusable high quality parts and materials. Therefore, 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.