



Care@Home™

Flood Detector User Guide

ESUGSC005

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1. Overview

The Essence Flood Detector (FL) is a battery-operated, bi-directional wireless sensor for early warning of developing floods, designed for installation in flood-hazardous areas.

The FL consists of two connected units:

- Sensor
- Transmitter

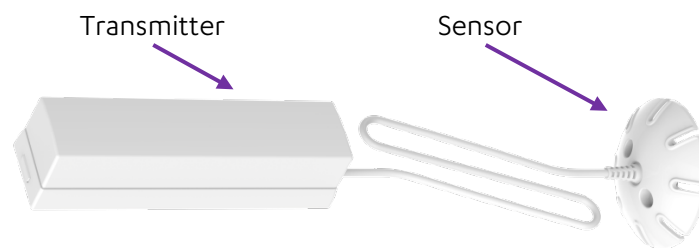


Figure 1: Care@Home™ Flood Detector

2. Installing the FL

To install the FL:

- Ensure you have the required items
- Determine the best location for the FL
- Set up the FL
- Test the FL

2.1. Required Items

Ensure you have the following:

- Flat screwdriver
- Cutter tool, thin pliers, or a similar tool
- One 3 V CR123A lithium battery

2.2. Determining the Best Location

Install the FL in locations where flooding is possible such as:

- In the kitchen, under the sink
- Near the washing machine
- In the bathroom, near the bathtub
- Near the water heater

Consider the following when selecting a mounting position for the FL:

- A flat vertical surface for the transmitter
- A flat horizontal surface for the sensor
- A clean, dry, and smooth surface for both components
- Attach the transmitter onto a nearby wall or furniture item
- Attach the sensor directly onto the flood zone.

2.3. Setting Up the FL

To set up the FL:

1. Insert a screwdriver in the release tab opening at the top of the transmitter, and press the tab to release the mounting base.

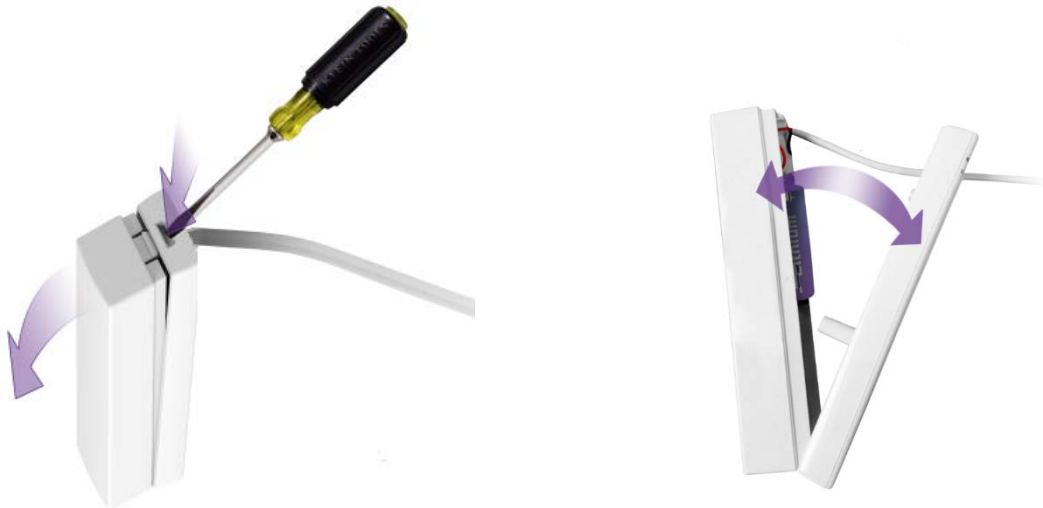


Figure 2: Release the Mounting Base

2. Press the **PAIRING** button, located on the right edge of the front of the CP, for five seconds. The CP beeps, and the ring around the **EMERGENCY** button lights up in blue with a circular movement effect.
3. Move the FL at least 2 m (~6 ft. 7 in.) from the CP.
4. Insert the battery, observing the correct polarity.

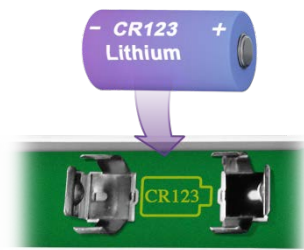


Figure 3: Battery Insertion



WARNING! A new battery can cause damage if it is incorrectly installed.

5. Ensure that the pairing process is successful. The process can have the following results:
 - Success The CP beeps and the CP **ring** blinks blue three times.
 - Failure The CP beeps and the CP **ring** lights up red for two seconds. Try to pair the FL again.
 - Already paired The CP beeps, the CP **ring** lights up blue, and the **EMERGENCY** button lights up red.



NOTE: If no additional peripheral devices can be integrated, as when the CP memory is full, the CP beeps and the **EMERGENCY** button ring lights up red.

6. Attach the transmitter to the mounting base.



Figure 4 : Attach Transmitter to Mounting Base

The red LED lights up, indicating that the FL is operational.

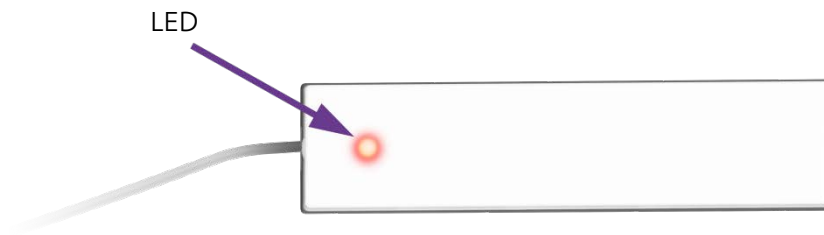


Figure 5: LED

7. Test the FL:
 - a. Place the flood sensor in water.
 - b. Verify that the LED lights up red.
 - c. Verify that the CP and monitoring station receive notification of a possible flood event by checking the **Events History** page of the **Care** web application. Refer to ESUG05051 Care@Home™ Administrator User Guide.
 - d. Remove the flood sensor from the water and make sure it is dry.
 - e. Verify that the LED lights up green.
 - f. Verify that the CP and monitoring station receive notification of the end of the flood threat by checking the **Events History** page of the **Care** web application.
8. If the FL does not pass the test:
 - a. Open the FL
 - b. Take out and check the battery
 - c. Set up the FL again by starting at step number 2
9. Once the FL has passed the test, clean the surfaces of the mounting locations thoroughly. Make sure the locations are dry.



NOTE: Refer to Using Screws on page 15 for information about installing the FL using screws.

10. Using a cutter tool, remove one of the tabs on the back of the mounting base according to where you want to put the cable.



Figure 6: Remove One Tab

11. Peel off the protective strip from the mounting tape on the transmitter.
12. Ensuring that the cable is in the appropriate slot and does not prevent the mounting base from being fully attached to the mounting location, press the transmitter into place.



Figure 7: Ensure Cable is in the Slot

13. Peel off the protective strip from the mounting tape on the flood sensor.
14. Press the flood sensor into place.

3. Operating the FL

The FL monitors certain events, and reports them by:

- LED indications
- Sending notifications to the CP

3.1. LED Indications

The FL LED lights up for the following events:

- Red – Flood occurring, or tamper alert
- Green – Flood event ends

3.2. Notifications

The FL sends notifications to the CP for the following events:

- A flood event
- The room temperature exceeds the configured temperature threshold
- The FL battery charge is low
- The FL tamper switch is disturbed

3.3. Supervision

The FL is a supervised device. The FL periodically transmits its status to the CP. If after a pre-defined time the CP does not receive a status message, the CP sends a **Supervision lost** message to the monitoring station.

3.4. Configuring the FL

You can configure parameters for the FL using Care@Home™ CMS. For example, you can define how and when the FL issues notifications to the CP. Refer to the Care@Home™ CMS Reference for the version of Care@Home™ system installed on your resident's premises.

4. Replacing the Battery

When the battery charge is low, the battery must be replaced.

To replace the battery:

1. Insert a screwdriver in the release tab opening of the transmitter, and press the tab to release the mounting base.

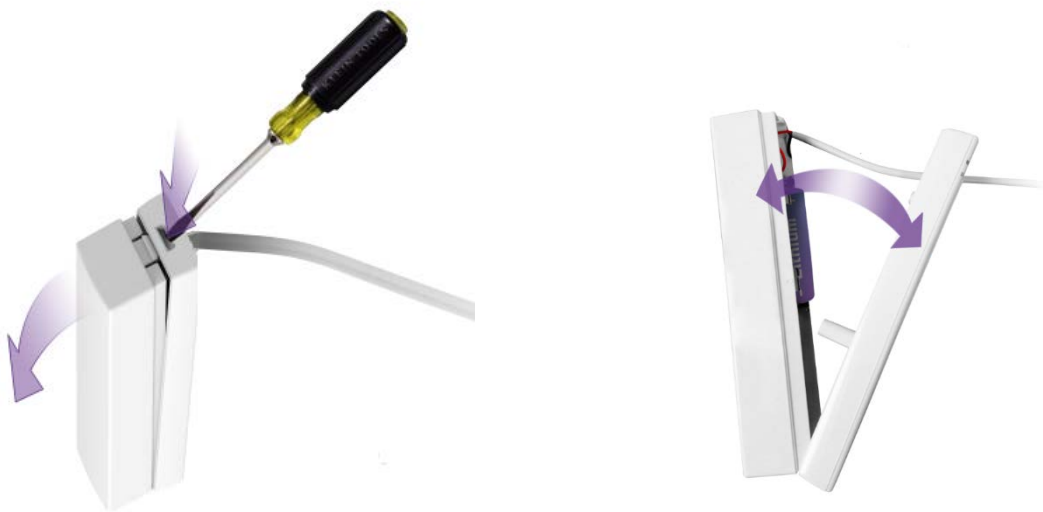


Figure 8: Release Mounting Base

2. Remove the old battery.
3. Press the tamper switch several times, to release any residual static electricity.

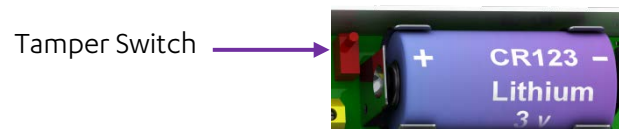


Figure 9: FL Tamper Switch

4. Insert the new battery, observing the correct polarity.

Replacing the Battery

5. When the battery is installed, the LED lights up red, indicating that the FL has powered up successfully.
6. Attach the transmitter to the mounting base.






Figure 10: Attach Transmitter to Mounting Base

5. Specifications

The following table lists the technical aspects and data about the FL.

Table 1: Device Technical Specifications

Category	Details	
Essence	Part number	ES700FL
Power Supply	Battery	One 3 V CR123A lithium
	Approved manufacturers	GP, Energizer, Duracell
	Nominal battery life	Up to three years
	Battery power test	Upon power-up and periodically
Wireless	Bi-directional	End-to-end bi-directional ESI protocol Advanced radio supervision algorithm
	Frequency	FSK modulation: <ul style="list-style-type: none"> ■ 869.225 MHz, 868.3 MHz (Europe and China) ■ 916.5 MHz (North America and Australia) ■ 800 MHz (Israel)
	RF coverage	400 m (1,312 ft.) – open air
	Encoding	32-bit ID, over 4 billion combinations
Functional	Visual indications	Green LED – default state Red LED for flood event or tamper
	Tamper mechanism	Double triggered tamper – cover open and tearing from wall
Environmental	Humidity	85% non-condensing
	Operating temperatures	0°C to 49°C (32°F to 120.2°F)
	Storage temperatures	-20°C to 60°C (-4°F to 140°F)

Category	Details	
Physical	Dimensions	Transmitter (L x W x H): 98 x 25 x 25 mm - 3.86 x 0.98 x 0.98 in. Flood Sensor (H x D): 22.4 x 49.9 mm - 0.88 x 1.96 in.
	Weight	Transmitter: 45 g (including battery) / 0.1 lb. Sensor: 25 g / 0.06 lb.
	Color	RAL 9003 - glossy white
Compliance with Standards	CE, UL, cUL, FCC, IC	EMC Radio Safety   

Appendix A Installation Method Alternatives

The back cover of the sensor serves as both the mounting base and the battery cover.

There are two ways to install the FL mounting base:

- Using double-sided adhesive mounting tape
- Using screws

Before choosing the installation method, consider the following:

- Installation with mounting tape is more common.
- Using screws can reinforce tape-based installation.

Using Mounting Tape

Mounting tape is approved for the following surfaces:

- ABS
- Polycarbonate (PC)
- Aluminum
- Galvanized steel
- Enameled steel
- Stainless steel
- Nickel coated ABS
- PVC
- Glass/Epoxy
- Ceramic
- PBT
- Glass (with and without silane coating)
- Acrylic or polyurethane paint
- Polyester Paint

Using Screws

You have the option of installing one or both units using screws.

Required Equipment

Before beginning, prepare the following equipment:

- A drill with a standard appropriate bit
- Four 3 X 35 DIN 7982 C screws and wall anchors for the screws - The screws and wall anchors are not provided.
- A standard Philips screwdriver

Installing the FL with Screws

To install the transmitter using screws:

1. Using a screwdriver, clear the two holes in the mounting base for the screws.

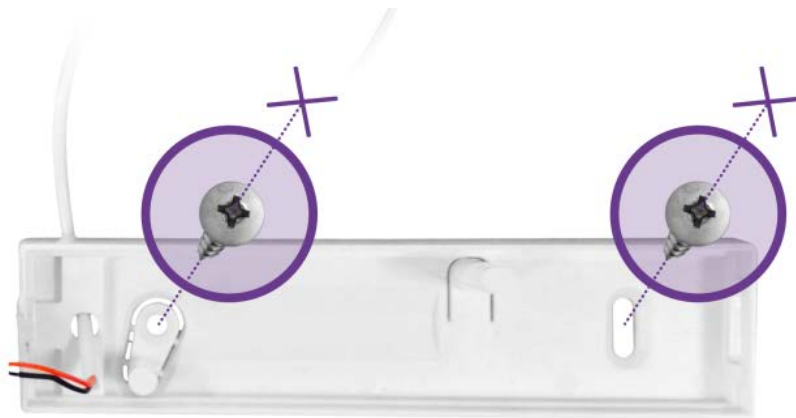


Figure 11: Mounting Base with Screws

2. Place and hold the mounting base on the desired mounting location.
3. Mark the drilling spots through the screw holes.
4. Drill the holes.
5. Insert two wall anchors in the drilled holes, if needed.
6. Place the mounting base over the wall anchors in the drilled holes.

7. Screw in the two screws.

To install the flood sensor using screws:

1. Place and hold the flood sensor on the desired location.
2. Mark the drilling spots through the holes for the screws in the flood sensor.

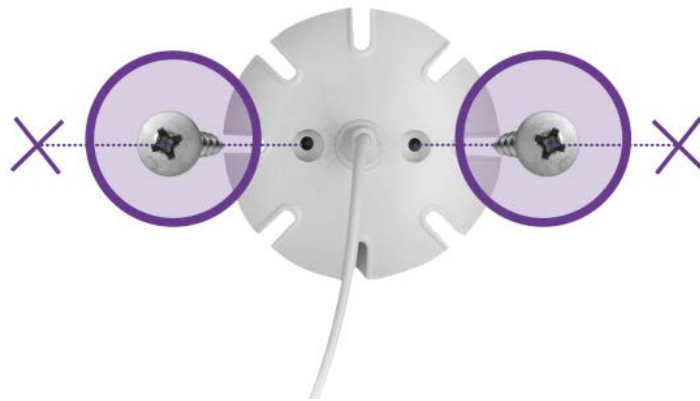


Figure 12: Flood Sensor with Screws

3. Drill the holes.
4. Insert two wall anchors in the drilled holes, if needed.
5. Place the flood sensor over the wall anchors in the drilled holes.
6. Screw in the two screws.

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