

# HM-FS001 Flood Sensor

This Flood Sensor is designed to work with the Homemanageables Starter Kit. The Flood Sensor is a Z-Wave™ enabled device and is fully compatible with any Z-Wave™ enabled network. Z-Wave™ enabled devices displaying the Z-Wave™ logo can also be used with it regardless of the manufacturer, and ours can also be used in other manufacturer's Z-Wave™ enabled networks. Inclusion of this Flood Sensor on other manufacturer's Wireless Controller menu allows remote turn-on of connected modules and their connected lighting when the Sensor is triggered. Z-Wave nodes in the system also act as repeaters if they support that function. Each module in a Homemanageables Network is designed to act as a repeater.

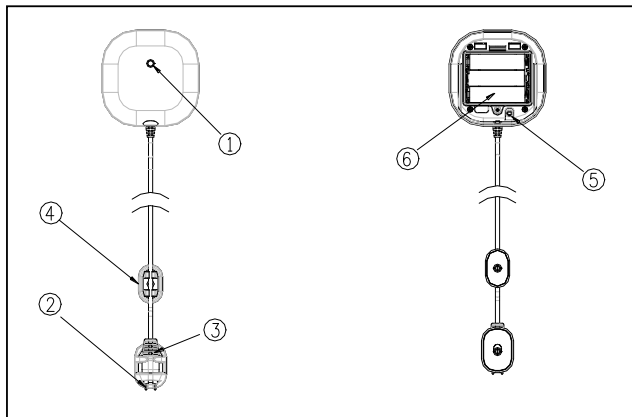
## Adding the Flood Sensor to Homemanageables Network

This procedure is intended only for adding the Flood Sensor to a Homemanageables Network. There is a tamper switch which is used to carry out inclusion, exclusion or association. Put a Z-Wave™ Wireless Controller into inclusion/exclusion mode, tap the tamper switch 3 times in a rapid succession on the sensor to complete the inclusion/exclusion process. HM-FS001 supports one association group with five nodes. This has the effect that when the HM-FS001 trigger, all devices associated with HM-FS001 will be operated.

The Flood Sensor will stay "awake" for ten minutes when power is first applied to allow time for configuration.



## Product Overview

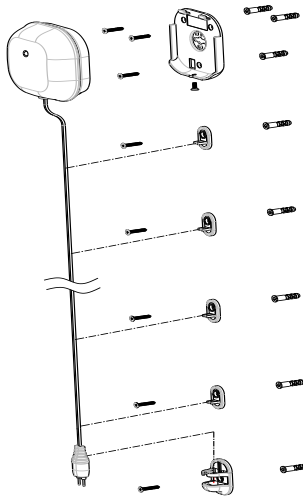


- ① Two-color Indication LED (red & green)
- ② Flood Sensor
- ③ Sensor Rack
- ④ Flood Sensor Cable Rack
- ⑤ Learning Key
- ⑥ Battery Compartment

## Choosing A Mounting Location

A clean smooth surface is required to mount the Flood Sensor securely. The length of flood sensor cable is 3 meters. If a 3-meter cable is too long, roll up the cable and fasten it by twist ties. The transceiver should be placed as high up as possible on the wall to improve communication and to prevent it from coming into contact with water in case of flooding. After completion of battery insertion and set up, follow the below procedures:

1. Attach the flood sensor near the floor.
2. Use the back cover, flood sensor cable rack and sensor rack as a template to mark the position of fixing holes on the wall. Drill the holes and insert the plastic wall plugs supplied respectively.

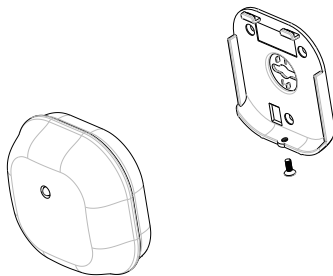


3. Fix the back cover, flood sensor cable rack and sensor rack using the fixing screws provided.
4. Refit the transceiver to the back cover and secure with the fixing screw supplied.
5. Place the flood sensor cable and flood sensor to its rack.

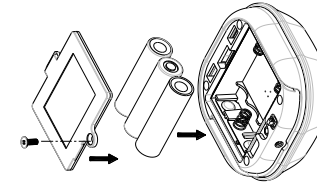
**Note:** The transceiver should never be submerged in water.

## Installation

1. Undo and remove the screw from the bottom edge of the transceiver. Remove the back cover.



2. Unscrew the screw from the battery cover and remove the battery cover.
3. Fit 3 AA size 1.5V batteries to the battery spring.



4. Refit the battery cover by fastening its screw.

## Operation

1. When water is detected, the orange LED of Sensor will flash one second every one minute and beep 30 seconds and transmit radio signal to controller (option) simultaneously. In normal mode, the Sensor is allowed to be activated once in one minute, avoiding false trigger.
2. When water is released, the green LED on the Sensor will illuminate once and emit radio signal to controller (option).
3. When the battery level on the Sensor drops to a certain level, the red LED will flash once every 30 seconds and radio signal will be transmitted to controller (option).

## Low Battery Indication

When the battery is low, the red LED will flash once every 30 seconds and RF emits out the low battery signal to controller

If low battery happened in learning status, RF command will still be sent to controller.

Please follow the **Battery Installation** directions replacing the batteries as soon as red LED appears.

1. When HM-FS001 is in Low Battery, HM-FS001 will send RF command.

**[Command Class Battery, Battery Report, Battery Level = 0xFF].**

2. After receiving the Battery Get Command, it will send the Battery Report command **[Command Class Battery, Battery Report, Battery Level = 0%-100%]**.

**Trigger Event of Flood**

1. When HM-FS001 has a flood Trigger-ON event, HM-FS001 will send command **[Basic Set Command, value = 0xFF]** to the associated nodes.
2. When HM-FS001 has a flood Trigger-OFF event, HM-FS001 will send command **[Basic Set Command, value = 0x00]** to the associated nodes.

**Advanced Operation**

The following information is for someone that has some experience setting up a Z-Wave system or someone that has computer software running a Z-Wave controller.

**Wakeup Command Class**

HM-FS001 will send a Wakeup Notification Command if it has been included into a Z-Wave network. The prerequisite is the connected Z-Wave controller needs to emit a node ID and wakeup time interval to the Sensor.

The HM-FS001 will wake up the time you set from the Command **(Command Class Wake Up, Wake Up Interval Set, Second, Node ID)** and resend the Wakeup Notification Command unless configured for another time interval. The HM-FS001 will stay awake for 10 seconds and then go back to sleep to conserve battery life.

The time interval between Wakeup Notification Commands can be adjusted if you have a device in which that is supported. Refer to that device’s instructions.

**Troubleshooting**

Symptom	Possible Cause	Recommendation
Cannot carry out inclusion and association	<ol style="list-style-type: none"> <li>1. Run out of battery power or does not fit batteries.</li> <li>2. Check if reverse battery polarity</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace a new battery</li> <li>2. Refit the battery with correct polarity</li> </ol>

LED illuminating, but cannot control the connected modules	Not carry out inclusion and association	Carry out inclusion and association
	Frequency interference	Wait for a second to retry

**Specifications**

TYPE	DESCRIPTIONS
Power	1.5V * 3 Alkaline / AA type battery
Battery Life	≥ 1year (at 25°C standby mode)
Range	Up to 100 m line of sight
Frequency Range	908.42 MHz (US) / 868.42 MHz (EU)

*\*Specifications are subject to change without notice*

A501110873R



**Federal Communication Commission Interference Statement**

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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may

cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**WARNING:**

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

When replacing old appliances with new once, the retailer is legally obligated to take back your old appliance for disposal at least for free of charge.

**Limited Warranty**

If within one (1) year from the date of purchase, this product fails due to a defect in material or workmanship under normal use, Homemanageables, Inc. will replace it free of charge. Homemanageables, Inc. does not issue any refunds. This warranty is extended to the original end user purchaser only and is not transferable. This warranty does not apply to: (1) damage to units caused by accident, dropping or abuse in handling, acts of God, or any negligent use; (2) units which have been subject to unauthorized repair, opened, taken apart, or otherwise modified; (3) units not used in accordance with instructions; (4) damages exceeding the cost of the product; (5) sealed lamps and/or lamp bulbs, LED's, and batteries; (6) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; or (7) transit damage, initial installation costs, removal costs, or reinstallation costs.

Because it is impossible for Homemanageables, Inc. to know the purposes for which you acquired this product or the uses to which you will put this product, you assume full responsibility for the selection of the product for its installation and use.

While every reasonable effort has been made to ensure that you will receive a product that you can use and enjoy, Homemanageables, Inc. does not warrant that the functions of the product will meet your requirements or that the operation of the product will be uninterrupted or error-free. HOMEMANAGEABLES IS NOT RESPONSIBLE FOR PROBLEMS OR DAMAGE CAUSED BY THE INTERACTION OF THE PRODUCT WITH ANY OTHER SOFTWARE OR HARDWARE.

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