## **Noah Quick Set-up Guide**

## **Before Starting**

Be sure that you have set-up your KAIROS account at app. kairoswater.io and that you have a K1 Gateway set-up to receive data from Noah devices.

# **Preparing the Hardware**

Each Noah Multifunction Leak Sensor is comprised of:

- One (1) Noah Multifunction Leak Sensor Module
- One (1) Connecting Cable
- One (1) Noah membrane (available in a variety of formats)
- Two (2) cable retaining clips
- Two (2) squares of mounting tape
- One (1) small piece of gaffer's tape

### **Set-up the Noah Wireless Module**

- 1. Ensure the device is added to your account
- 2. Press the button on the bottom of the module while checking the LED in the nose for a flash of green.





- 3. If the LED does not flash green, the module is off. Push and hold the button for three (3) seconds until the LED begins to flash red-green-blue.
- 4. Check <u>app.kairoswater.io</u> to see if the module is showing as online now. (NOTE: you must be within range of a K1 gateway.)
- 5. More detailed information, including troubleshooting steps, is available in the Noah User Manual.

# **Preparing for Installation**

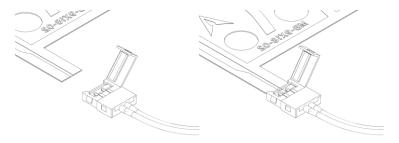
For the best sensitivity, the membranes should be installed over a flat surface, free of debris, deep gaps, or dirt/sand/dust. It is a good practice to sweep or vacuum the space onto which the membrane will be applied. In addition, for the "Tee" sensors and some water heater installations, it will be important to ensure the surfaces on which adhesive will be applied are cleaned before adhering the membrane to the surface.

# **Installing Membranes**

1.

- 1. Ensure that the membrane you are preparing to install is appropriately sized for the area it will be monitoring. There are a variety of membrane formats available for installation. Choosing the correct one for the area you want to monitor is important. More on membrane selection in the Installing Membranes section.
- 2. Membranes should cover the maximum area under the monitored space without bending or buckling. Ideally, the membrane should not stick out in highly trafficked areas where they would be stepped on or kicked out of position.
- 3. Some membranes come with extra tabs, if the cable is attached to one tab, and the other becomes unnecessary or interferes with the installation, you may cut it off so that the edge if flush with the bulk of the membrane.
- 4. There is a protective film covering the black conductive traces. THIS PLASTIC FILM MUST BE REMOVED BEFORE INSTALLATION. Simply peel it away from the heavier plastic and traces.
- 5. Connect the membranes to the wireless modules using the supplied cable.
- 6. If the cable is not already attached to the membrane,
  - 1. Slide one of the tabs sticking out from the membrane into the slot of the ribbon connector making sure the dull black strips are touching the silver

contacts in the white connector.

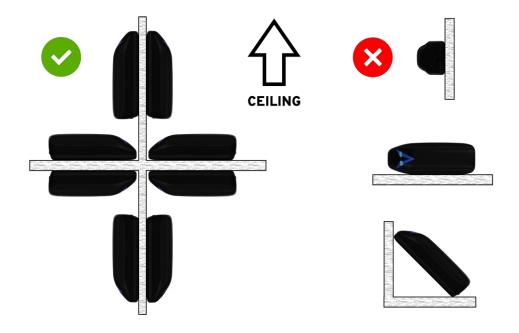


- 2. Clamp the cover over the tab so that the dull black contacts on the membrane touch the contacts inside the ribbon connector.
- 3. Insert the small plug into one of the wireless module's ports.



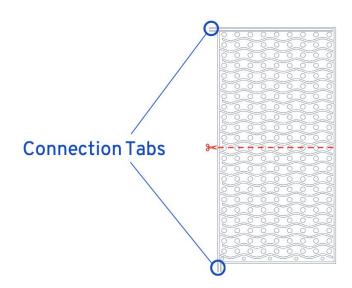
6. In the spaces where the membranes will be slid under the thin gap for an appliance (dishwasher, refrigerator, washing machine, etc), the wireless module can be tucked under the cabinet overhang using the 3M adhesive on its bottom. Cords can be tucked underneath and retained using the provided wire clips, or in a space under or next to the appliance. Additionally, the small strip of gaffer's tape can be used to hold the membrane connector to the floor.

TIP: Place the module in either a vertically or horizontally level orientations as shown in the following illustrations to ensure the tamper sensor is not triggered by ambient vibrations.



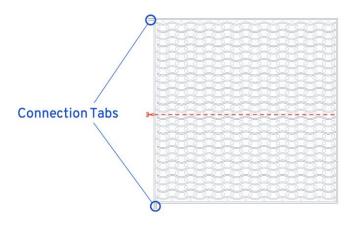
### 9"x18" Format

This format is recommended for Ice Machines and smaller coverage areas where the larger format will not fit. This format can be shortened by cutting it along the horizontal between the black traces an through a row of perforations leaving a connection tab for both halves — depicted below. The remaining halves can be connected to separate wireless modules or two ports on one wireless module.



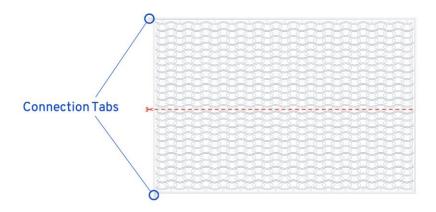
#### 20"20" Format

This format is recommended for Clothes and Dish Washing Machines. As with the 9" x18" membrane, this format can be shortened by cutting it along the horizontal between the black traces an through a row of perforations leaving a connection tab for both halves — depicted below. The remaining halves can be connected to separate wireless modules or two ports on one wireless module.



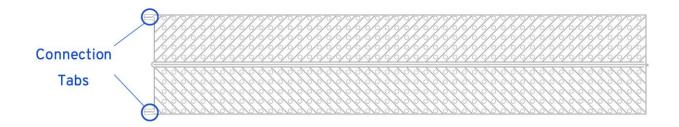
### 20"x30" Format

This format is recommended for refrigerators and the largest areas. Once again, this format can be shortened by cutting it along the horizontal between the black traces an through a row of perforations leaving a connection tab for both halves - depicted below. The remaining halves can be connected to separate wireless modules or two ports on one wireless module.

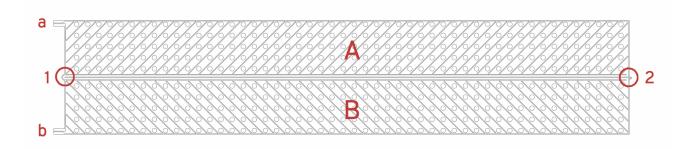


### Water Heater & PTAC (6"x30") Format

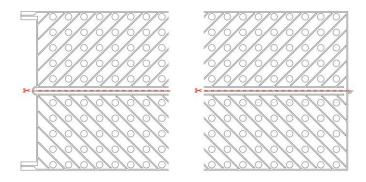
This format is designed to fit under most PTAC (Portable Terminal Air Conditioning) units and wrap around water heaters when cut in half.

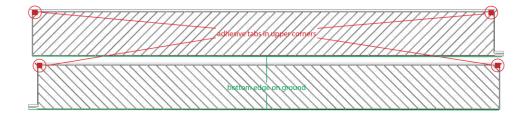


After cutting "bridges" 1 and 2, regions "A" and "B" can be monitored separately by connecting the leads from "a" and "b" connection bridges into separate wireless modules. In this way, the amount of fluid covering the membrane can be determined by the number of regions that are alarming.

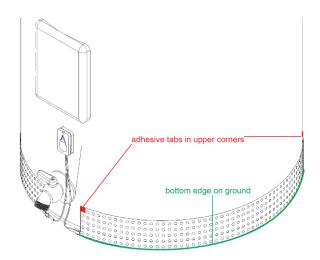


The design can be cut in half to create two  $3" \times 30"$  membranes to wrap around opposing sides of a water heater. Each half should be connected to a wireless module.



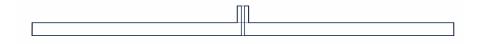


Small adhesive tabs should be placed at the top corners of the membrane to keep the plastic attached to the side of the water heater. The connection tab and the plastic edge should touch the floor around the water heater.

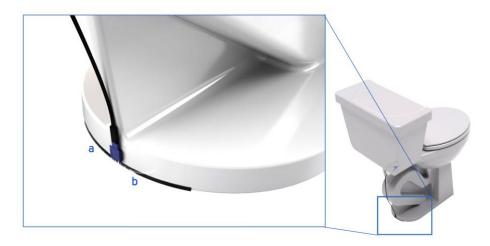


### 1"x12" (Tee) Format

This format is recommended for tight spaces and around the base of toilets or inside overflow/condensation pans.

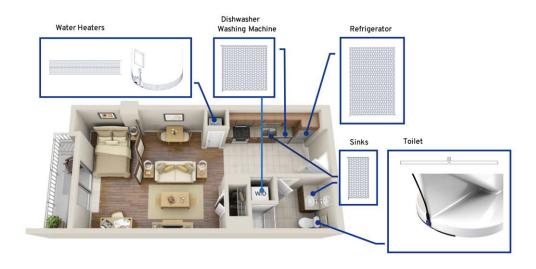


"Tee" design of the Noah Membrane primarily for monitoring toilet bowl overflow and leaks where a wide, flat sheet is inconvenient



Tee membrane installed on the back of a toilet base where anode (a) and cathode (b) are bridged by a leak on the floor

#### **Common Installation Areas**



# **Tips**

Installing the membrane upside—down — with the conductive side facing up — desensitizes the sensor to leaks. If the leak sensor is triggered by accidental exposure to small amounts of liquid (ice cubes falling on the floor and melting under the membrane), this orientation ensures that there must be a significant amount of water to trigger while avoiding the false alarms.

#### **FCC Warning**

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 interferenceto 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 or more of the following measures:

- Reorient or relocate the receiving antenna.
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- Consult the dealer or an experienced radio/TV technician for help important announcemen

#### **Radiation Exposure Statement**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.