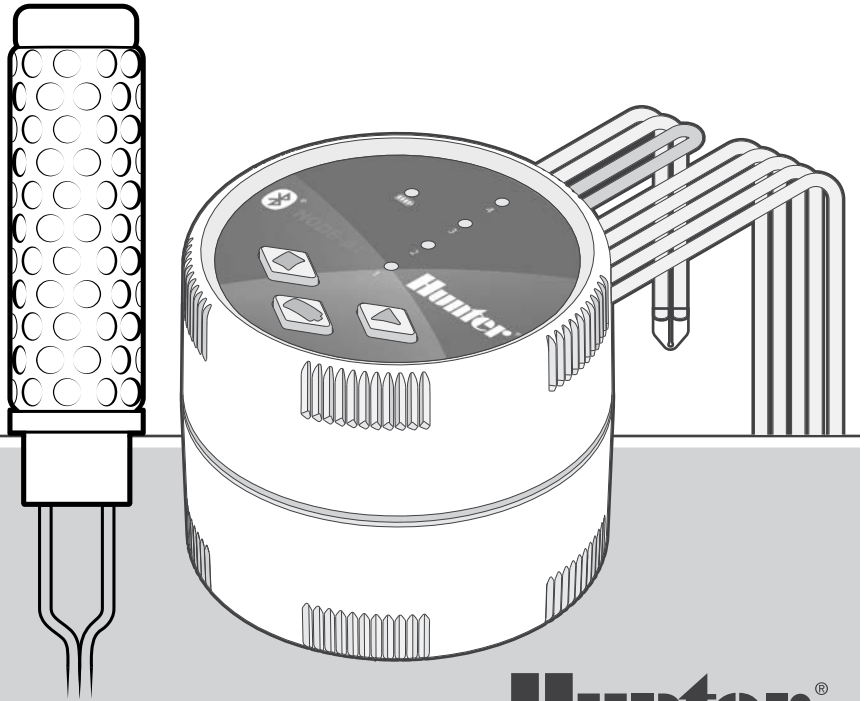
SC-PROBE

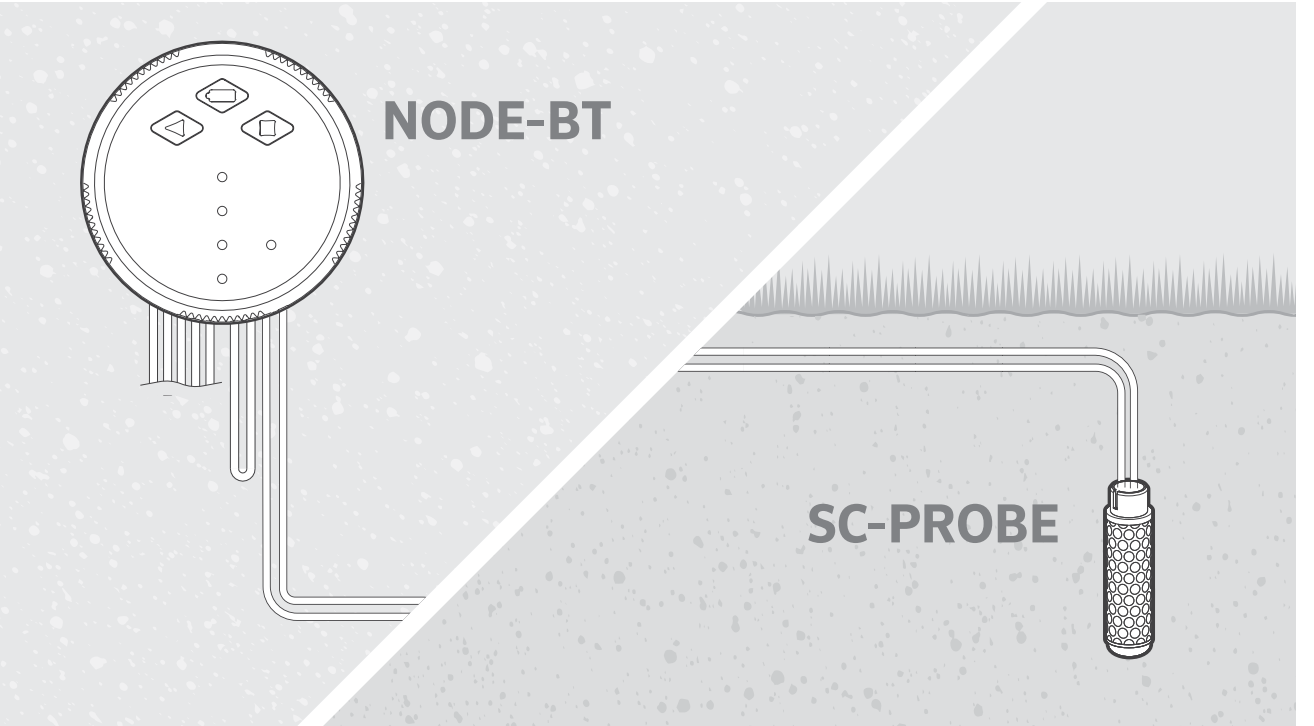
OWNER'S MANUAL



SC-PROBE
For use with NODE-BT Controllers

Hunter®

The SC-PROBE is a soil moisture sensor accessory that transforms the battery-operated NODE-BT controller into a smart solution that detects dry soil conditions at the root level and signals approval for the next scheduled watering cycle to run. If the soil moisture level is above the threshold indicated for watering, the irrigation cycle is suspended.



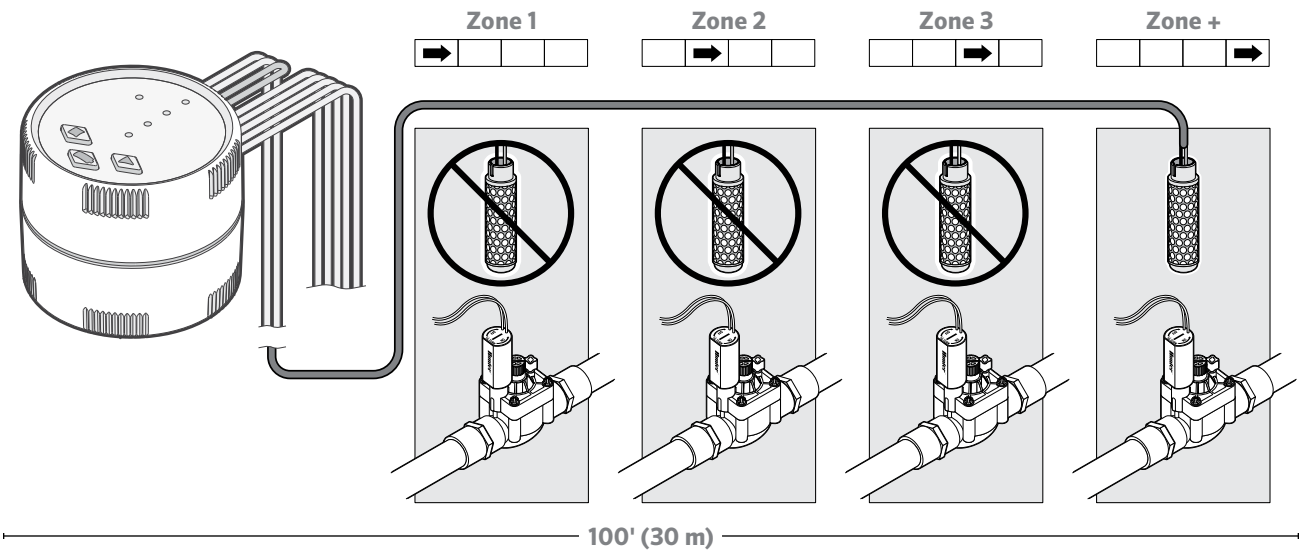
Choosing the Probe Location

The SC-PROBE moisture sensor must be installed within 100' (30 m) of the NODE-BT controller using 18 AWG (1 mm^2) direct-burial (UF) wire.

Choose a zone with full sun exposure that is in the fastest-drying area of the landscape. If necessary, move valve wires so that this is the last (highest-numbered) station to water.

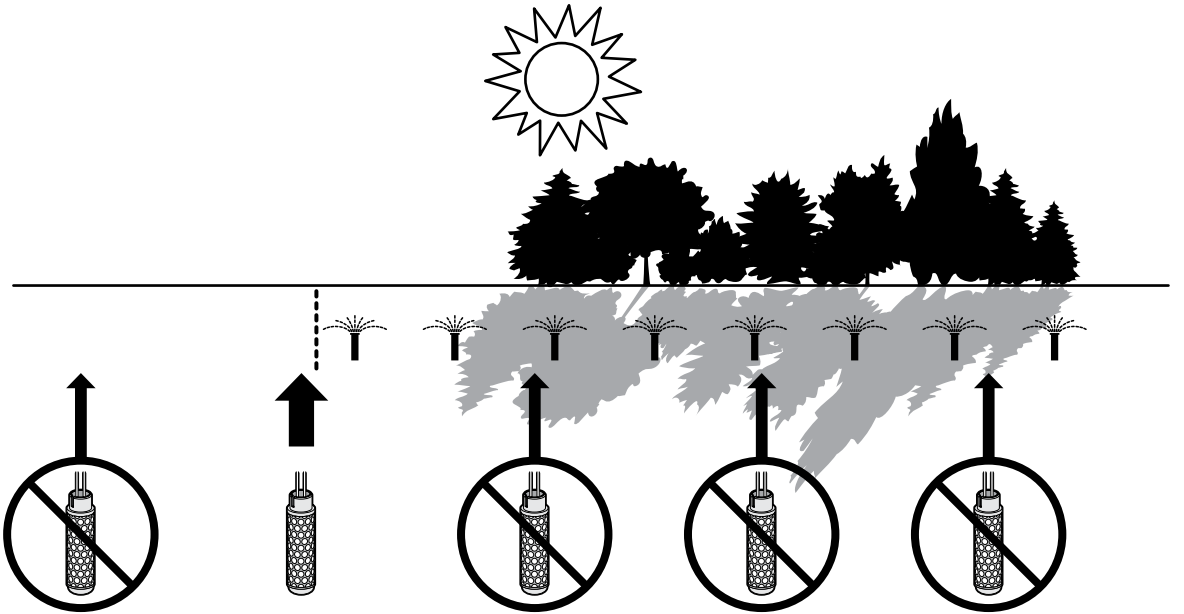
Choosing the Zone

Install the probe within the last scheduled zone to irrigate, so that normal irrigation will not interrupt watering or trigger the sensor prematurely.



Choosing the Right Spot

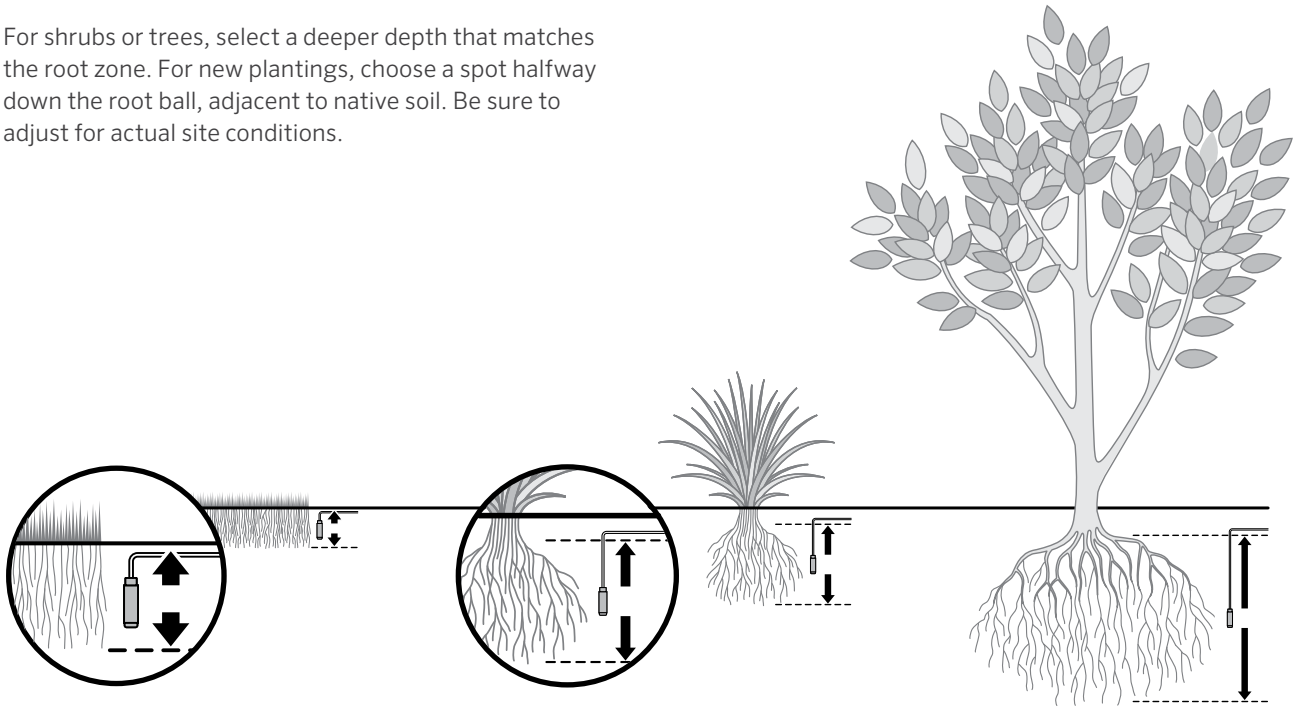
Select an area with full sun exposure that represents the fastest-drying irrigated area.



Place in the Root Zone

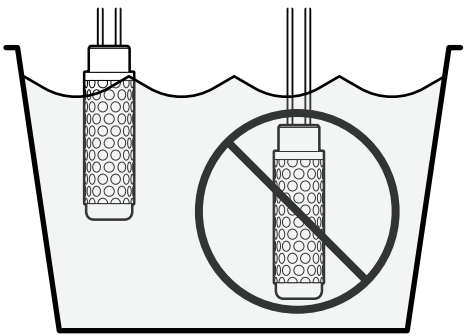
In turf applications, the probe should be placed in the root zone, approximately 6" (15 cm) deep. Adjust if necessary for actual turf conditions.

For shrubs or trees, select a deeper depth that matches the root zone. For new plantings, choose a spot halfway down the root ball, adjacent to native soil. Be sure to adjust for actual site conditions.

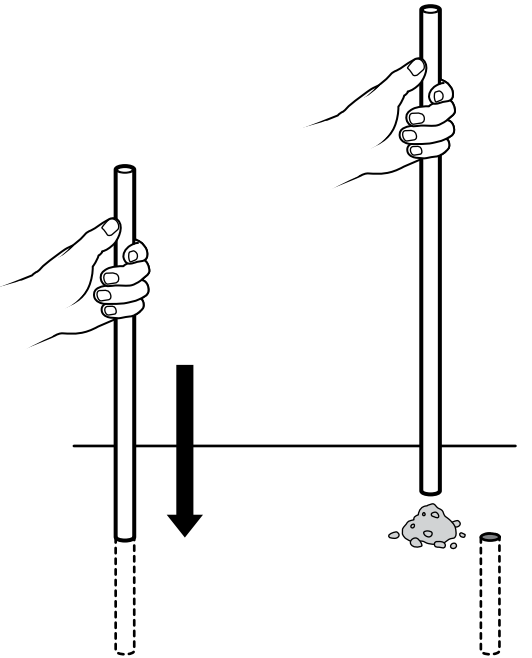


Installing the Probe

1. Soak the lower two-thirds of the probe for 30 minutes before installing. Do not allow water to cover the top cap where the wires are connected.

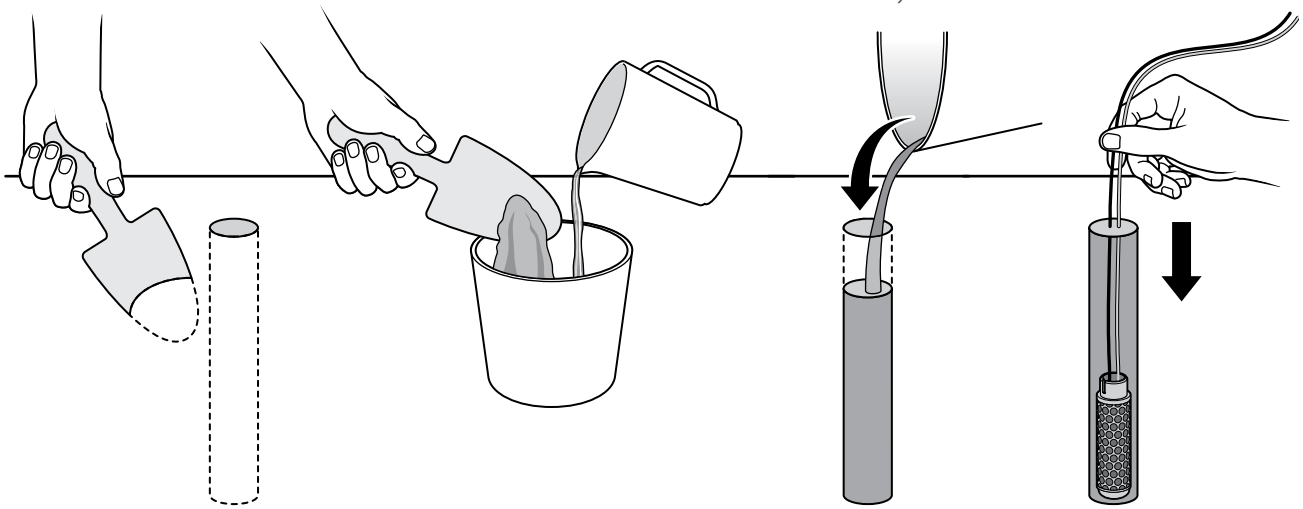


2. Use ½" (12 mm) PVC pipe to make a vertical hole to the desired depth in the soil. The outside diameter should be approximately ⅞" (22 mm).

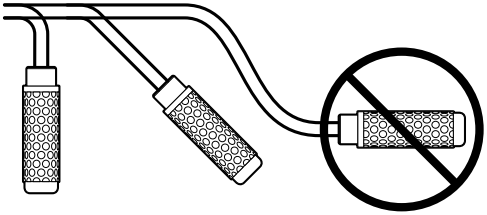


Installing the Probe (continued)

1. Mix a slurry of native soil and water. Then pour the mixture into the hole.
2. Place the sensor in a vertical position (do not tilt it more than 45°) at the bottom of the hole.

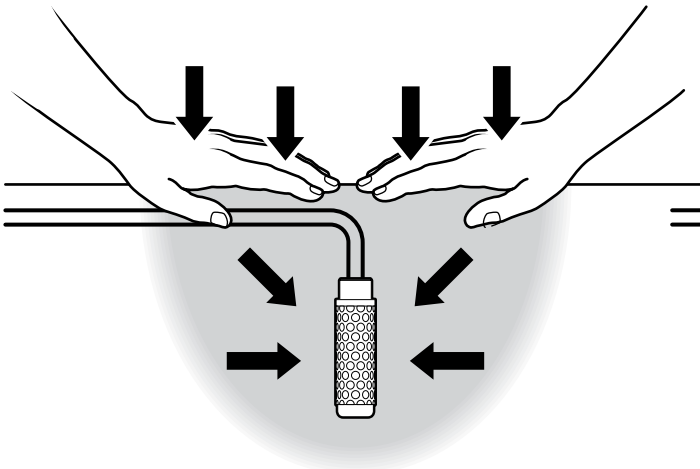


Do not install the probe horizontally!

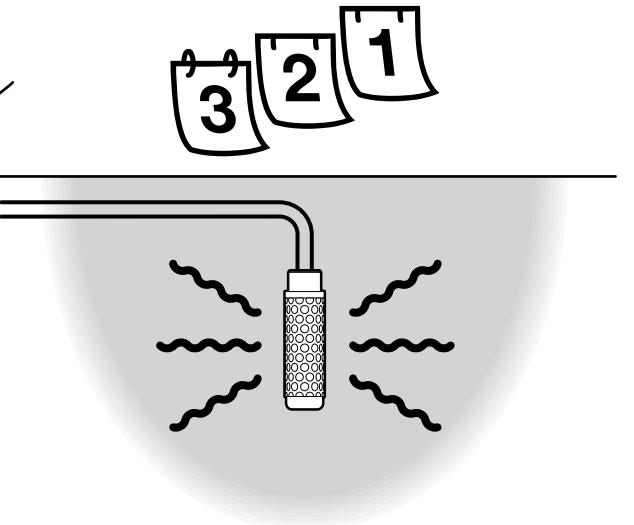


Installing the Probe (continued)

3. Pack native soil tightly around the probe. Soil must be in full contact with the probe.



4. Allow the probe to acclimate to the site for two to three days. Water normally before proceeding to sensor-based irrigation.



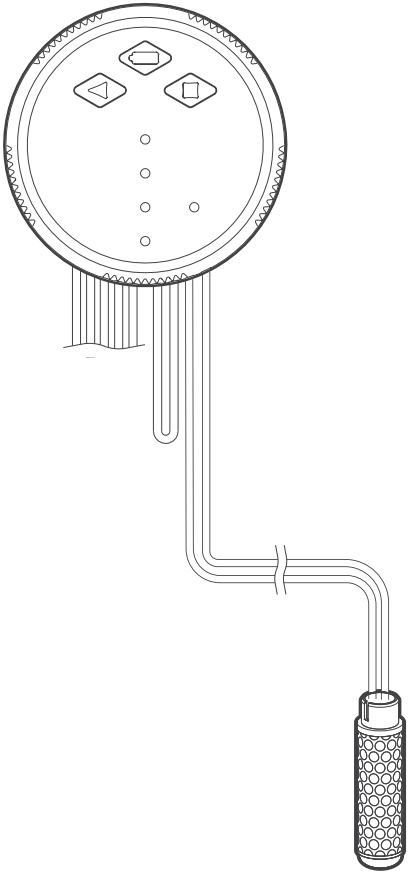
To locate the probe in the future, install a small valve box near the probe location, and run the cable through the enclosure.

Connecting the Probe to the NODE-BT

Cut the clear, waterproof seal on the two gray wires connected to the controller. Connect the gray/black probe wires to the two gray NODE-BT wires with waterproof connections. Note that polarity is not important in this system.

The probe can be placed up to 100' (30 m) away from the NODE-BT controller using 18 AWG (1 mm²) direct-burial wire secured with waterproof connectors. The probe can be extended further using thicker gauge wire; however, communication must be tested.

The Soil-Clik® module is not used with NODE-BT installations.



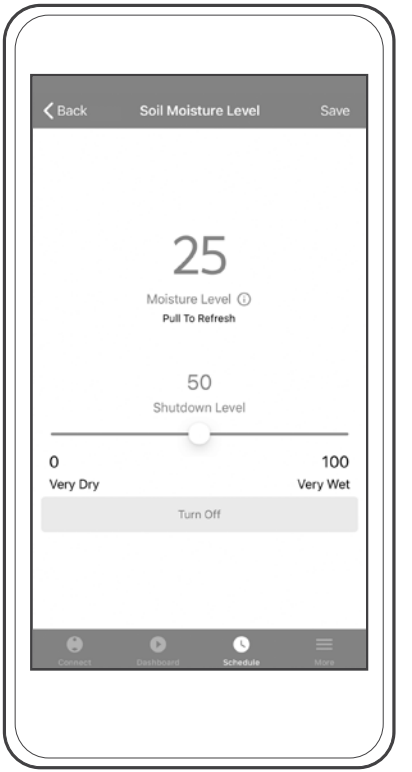
App Programming Overview

Connect to your NODE-BT controller using the NODE-BT app.

1. Navigate to the More tab.
2. Click Controller Settings.
3. Select Soil Moisture Sensor.

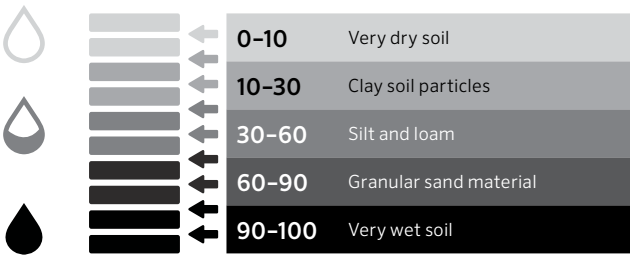
The soil moisture sensor is enabled via the NODE-BT app. The app automatically displays the current soil measurement as a numeric value.

When the desired moisture is reached, SC-PROBE will interrupt irrigation either through the controller's sensor input, or by "breaking" the common wire to the field.



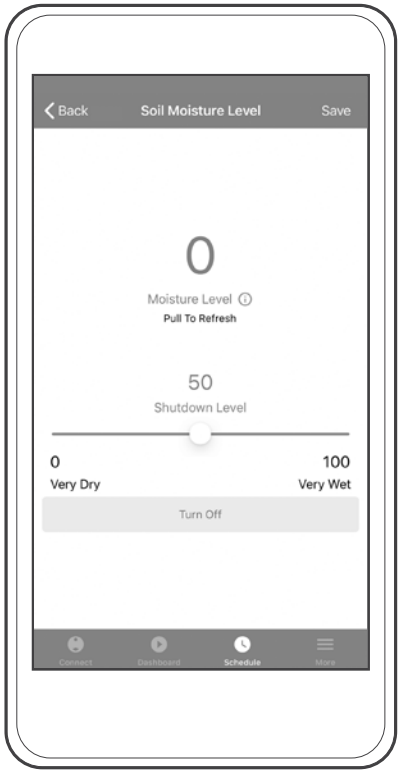
Programming Moisture Levels

A number slider represents the set point where irrigation is suspended. The set point is a number between 0 and 100 representing centibars of soil water tension. Low numbers indicate dry soil, or soil from which it is very difficult for plants to extract moisture.



0–10	Very dry soil
10–30	Clay soil particles
30–60	Silt and loam
60–90	Granular sand material
90–100	Very wet soil

Start with a midrange setting based on the table or local experience. Monitor the site's soil moisture level over several days to find the right balance. To check the current moisture level, press and slide the app page down to refresh.

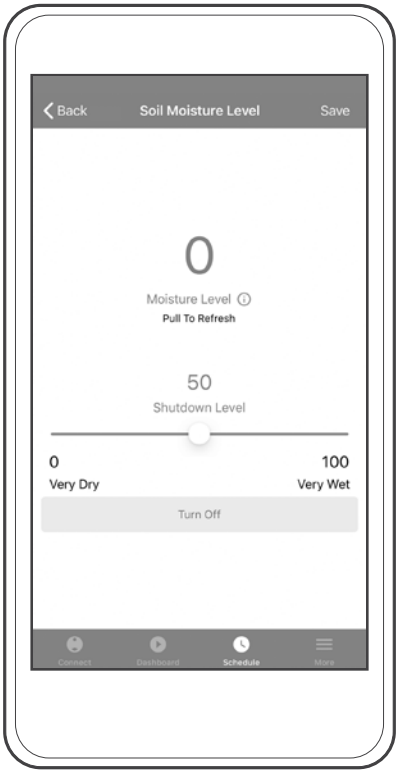


Pausing Operation

Press the Turn Off button to pause the soil sensor in app settings. This will allow the controller to water normally, even if the soil moisture level has been reached.

When in Pause mode, the sensor status is shown as “disabled” on the schedule screen and “OFF” in the settings screen. Press Turn On to resume normal operation.

Pause does not pause watering. It overrides the SC-PROBE and allows watering.



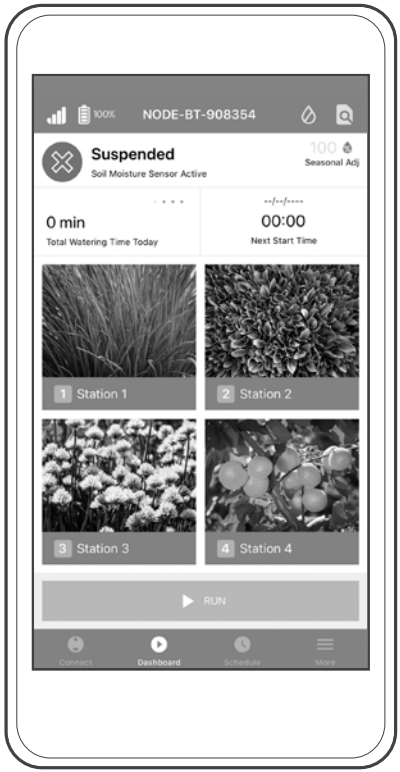
Alarms

The SC-PROBE checks the soil moisture level right before scheduled irrigation. When the sensor is active (i.e., the set point has been reached or the threshold is exceeded), the app's dashboard screen displays the controller status as "Suspended" with "Soil Moisture Sensor" as the cause in the status description

When the soil dries below the set point, the controller automatically switches to auto status and normal irrigation resumes. To override irrigation, press the Turn Off button in soil moisture sensor settings. This allows irrigation to run without soil moisture shutdown.

Thank You

The SC-PROBE is an effective and proven device for NODE-BT controllers that increases water savings when used with the in-app Monthly Seasonal Adjustment feature. NODE-BT and SC-PROBE can be used in conjunction with Rain-Clik®, Mini-Clik®, Freeze-Clik®, or Wind-Clik® wired weather sensors for maximum water savings.



Problems, Causes, and Solutions

PROBLEM	CAUSE	SOLUTION
Plants are too dry	• Moisture level setting too low • Sensor in wrong location	• Increase slider (NODE-BT app) • Move sensor or valve wires; sensor must be in last zone to water
Plants are too wet	• Moisture level setting too high • Sensor in wrong location • Pause mode has been set	• Decrease slider (NODE-BT app) • Move sensor to a sunnier location • Turn off Pause
Moisture level seems incorrect	• Incorrect sensor installation/placement	• Ensure full soil contact with sensor • Check sensor wiring
Moisture always at maximum or minimum	• Failed sensor	• Use handheld sensor meter to verify proper operation • Replace sensor probe (P/N. SC-PROBE)

For more detailed information, application notes, or assistance, visit **hunterindustries.com**.

Find more helpful information about your product, including installation tips, controller programming, and more.

hunter.direct/nodebthelp

Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.

Gregory R. Hunter, CEO of Hunter Industries

Gene Smith, President, Landscape Irrigation and Outdoor Lighting

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