Instruction Manual

A-Series
Indoor Models

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earthscout®

EarthScout Setup Steps

1. Watch EarthScout Welcome Video

Activate your camera on your phone and hold the camera over the QR code to the right. A link to the EarthScout Education Center (www.earthscout.com/education) should appear. Tap the link and watch the "Welcome to EarthScout" video.

**EarthScout
Education Center**

2. Download the EarthScout Mobile App

The EarthScout app is easy to use and install. Activate your camera on your smartphone and hold the camera over one of the QR codes shown on the right to download the EarthScout app for your Apple or Android phone or tablet. It only takes a few minutes.

Available on the iPhone **App Store**

ANDROID APP ON **Google play**
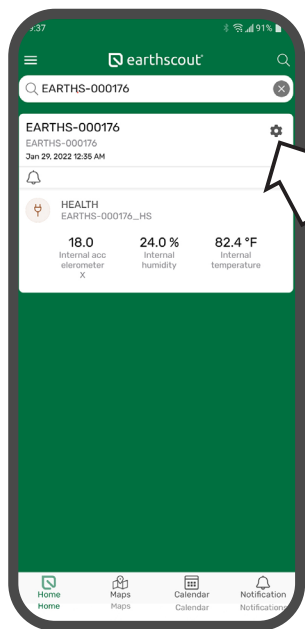
3. Sign In to the EarthScout Mobile App

Go to the EarthScout Education Center and watch the EarthScout "Email Invitation & Sign In" video. The video will walk you through the steps to sign in to the desktop and mobile app. Also check out the other EarthScout App tutorials to learn how to access your field data.
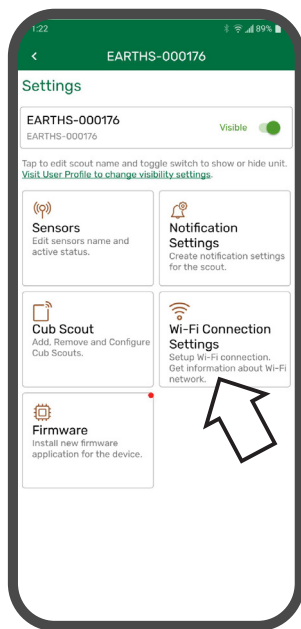
**EarthScout
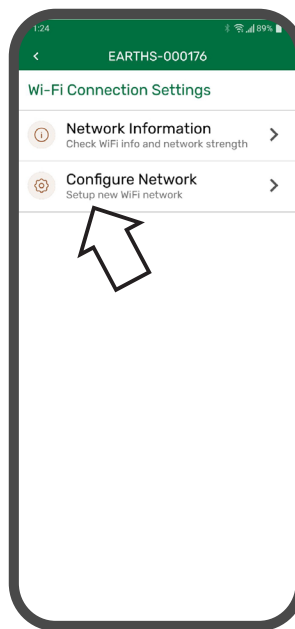Education Center**

4. Setup Wifi

Follow these simple steps if your EarthScout is equipped with Wifi. If it is not, please disregard this step.
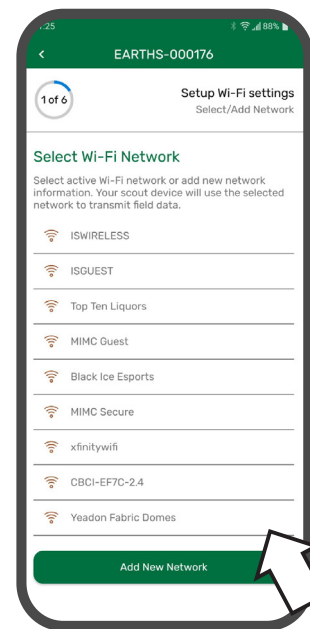
A. From the EarthScout App Dashboard, tap the gray Settings cog.

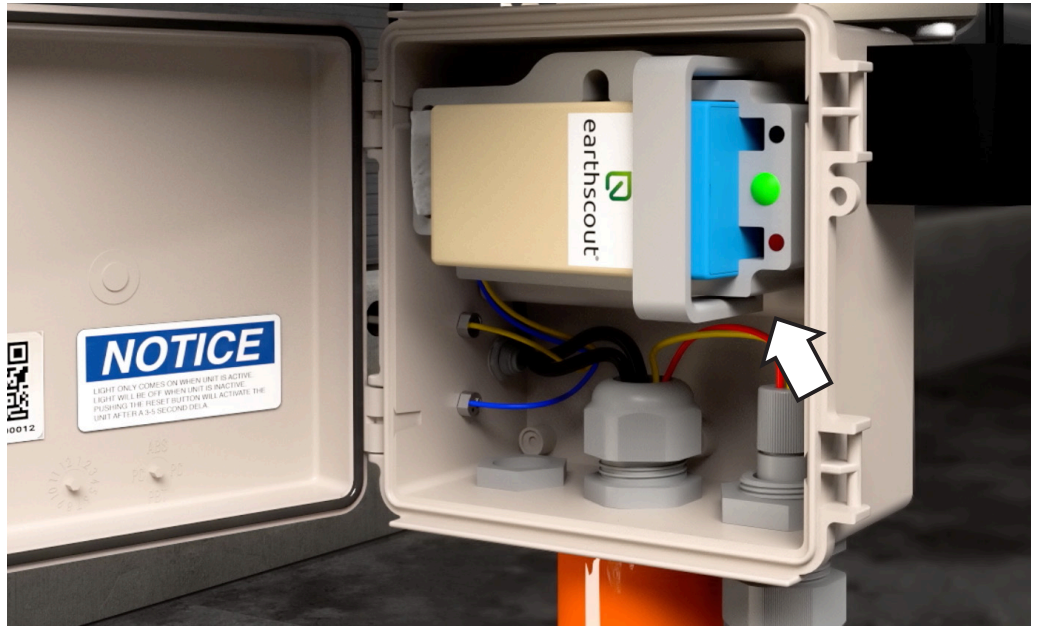B. Click on "WI-FI Connection Settings".

C. Tap on "Configure Network".
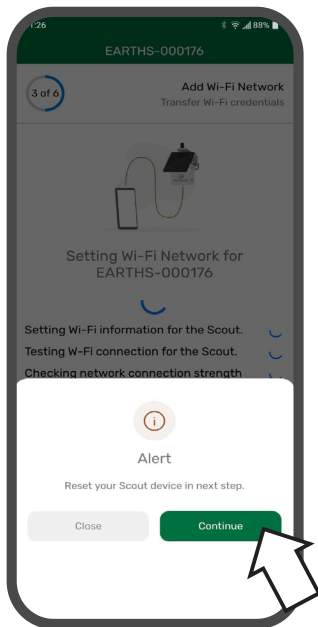
D. Tap on "Add New Network".
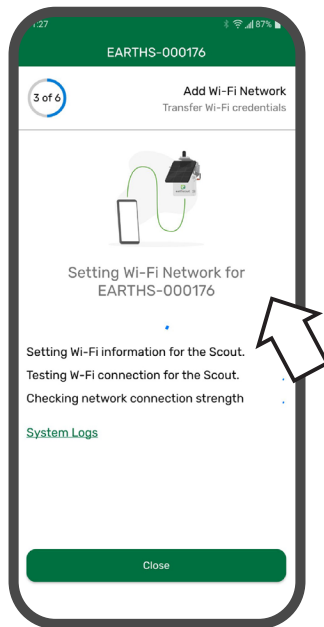
Setup Wifi (Continued)
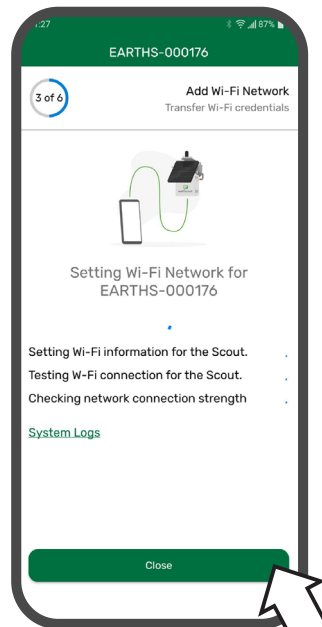

E. Type in the WIFI credentials and tap "Next".

F. Plug in 120V AC Adapter to outlet, then into side of EarthScout. Release clips on side of gray box to open door. Remove plastic tab from battery terminals and ensure metal pins on battery are in contact with housing. Test EarthScout by pressing the black button on outside of gray box (on some units), or button under the battery compartment (shown above), to send data to the app. A light will appear to show data was transferred to the app, and then turn off again.
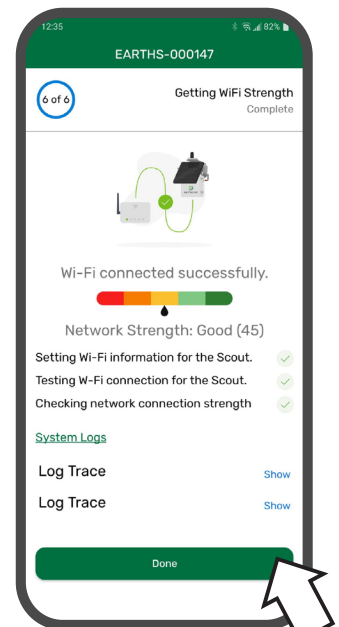

G. Click "Continue" in app after "Reset" button on your EarthScout is pressed.

H. App will attempt to connect to EarthScout via Bluetooth and send WIFI credentials.

I. Wait until connection confirmation and tap "Close".

J. Your EarthScout should now be connected to internet via WIFI.

EarthScout®
Installation Guide

A-Series
Indoor Models

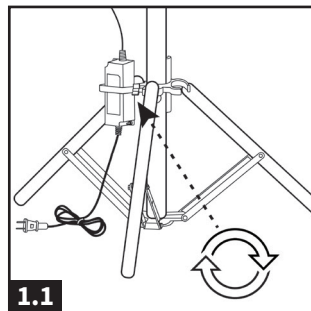## Welcome to a New World of Data Driven Decisions!

Congratulations on your purchase of an EarthScout. Only EarthScout enables growers like you to quickly and easily gather real time data about your soil, crop and growing environment to make more informed decisions. If at anytime you need assistance with the installation or help understanding your data, please call us at 877-443-7632.
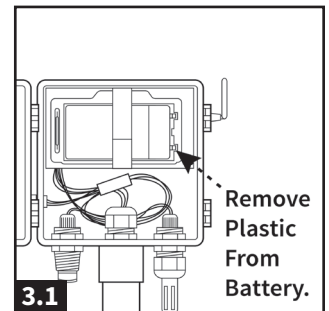
What You'll Need:

- 15-20 Minutes
- Hand Trowel
- Tape Measure
- EarthScout

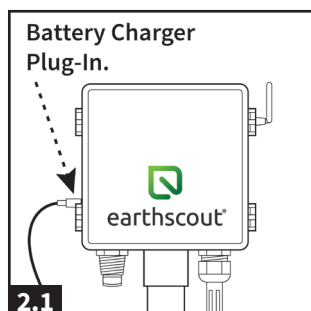## Setup & Install EarthScout In 6 Easy Steps

Step 1: Remove Earth-Scout from protective carry case and set tripod legs in configuration shown right (Diag. 1.1). Tighten black wingnut to lock legs in place. Add 120V AC Adapter to holder.
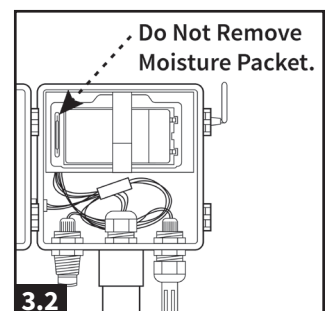

1.1

Step 2: Plug AC Adapter into left side of gray box on EarthScout (Diag. 2.1) and then into outlet. Choose plant to monitor. Then, stand EarthScout next to potted plant or raised bed.

Battery Charger Plug-In.
2.1

Step 3: Unclasp clips on side of gray box to open door. Remove plastic tab from battery terminal and ensure metal pins on the battery are touching the metal tabs in the housing (Diag. 3.1).
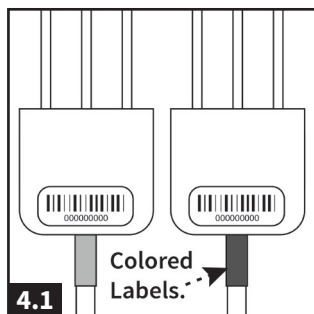

Remove Plastic From Battery.
3.1

Don't remove moisture absorbing packet (Diag. 3.2). Close door by fastening clasps on side of gray box.
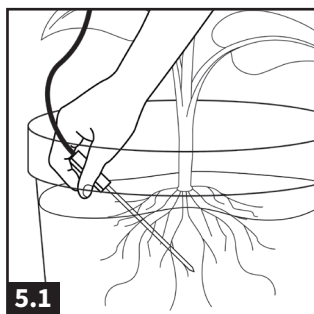

Do Not Remove Moisture Packet.
3.2

Step 4: Remove black cap from sensors. If you have two sensors, hold them as shown and take a photo of the sensor serial numbers with colored orange and green labels (Diag. 4.1). Save image for reference.
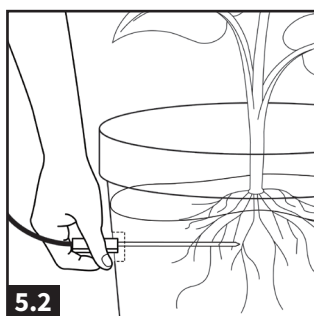
Step 5: TDR Soil Moisture Sensor Install Option A - Potted Plant Top Install to Prevent Drying:
Remove sensor cap. Insert sensor into root zone at 45° angle, careful not to disturb soil. Push plastic sensor head into soil mix or cover with additional mix for more accurate root temperature data (Diag. 5.1).
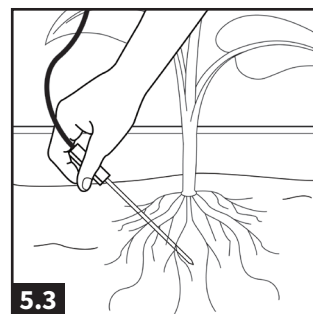
Option B - Potted Plant Side Install to Avoid Over-Watering:
Cut pot with knife 4 to 8-inches below soil. Insert sensor horizontally into root zone until plastic sensor head is flush with soil mix in container. Note: Root zone temperature data will not be as accurate with this method (Diag. 5.2).
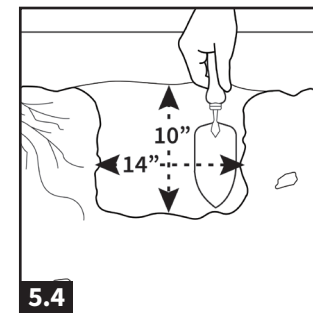
Sensor Placement Considerations:

- **Hydroponic:** Place sensor in the active root zone to monitor current root conditions.

- **Soilless Mix:** Depending on the type of soilless mix, you can monitor like a hydro grow or a soil root zone.

- **Soil Based:** Monitor the active root zone, or just below it depending on preferences for monitoring irrigation/fertigation needs.

Option C - Raised Bed Top Install to Prevent Drying:
Insert soil sensor into root zone at 45° angle, careful not to disturb soil. Push plastic sensor head into soil mix or cover with additional mix for more accurate root temp. data (Diag. 5.3).
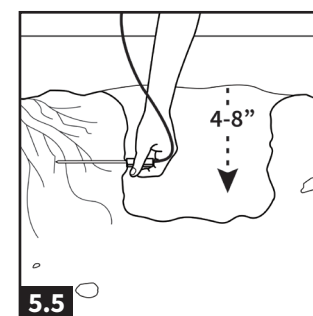
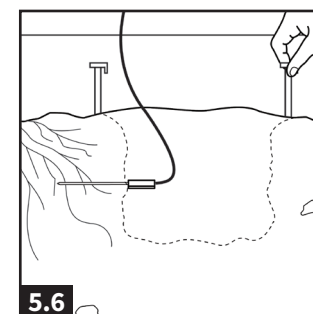**Option D - Raised Bed Side Install to Avoid Over-Watering:**
Find location at edge of active root zone, 6 to 20-inches from plant. Careful not to disturb root zone, use hand trowel to dig 14 x 10-inch hole or just below depth needed to reach lower root zone (Diag. 5.4).

Remove cap from soil sensor. Holding soil sensor level, reach into hole 4 to 8-inches and insert sensor horizontally into root zone, careful not to disturb soil (Diag. 5.5).
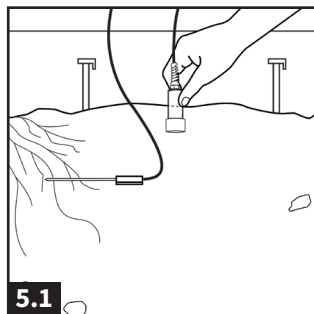
Make cable exit hole closest to plant and above sensor. Fill hole. Press dirt to match other soil to avoid water pools. Use small flags or survey stakes to mark hole location for future reference (Diag. 5.6).
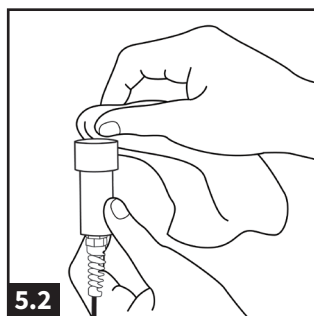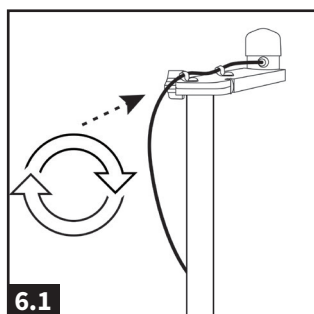
Step 5: If you have an Air/Soil O$_2$ Sensor, either suspend it in air to measure air oxygen, or bury sensor 2+ inches deep (with metal cage down) to measure soil O$_2$ in the active root zone (Diag. 5.1).
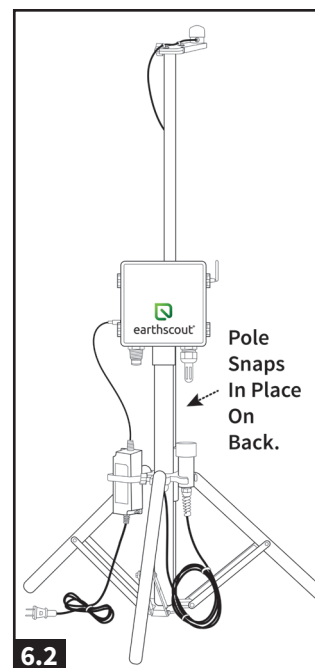
Note: Air/Soil O$_2$ Sensors with frequent watering may need to be removed every 2-3 weeks, wiped clean with dry cloth, and dried completely before reinstall (Diag. 5.2).
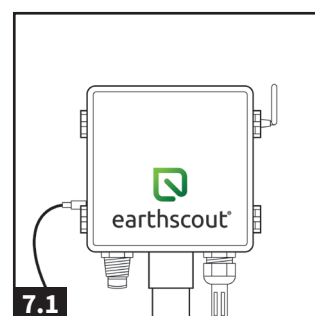
Step 6: If you purchased a Quantum Light Sensor with telescopic pole, attach the sensor bracket to top of the telescope pole and tighten black wingnut (Diag. 6.1).

Insert telescope pole into the clamps on the back of the orange EarthScout pole. The pole will snap into place (Diag.6.2). Plug the Light Sensor cable into port on left side of gray box. Loosen clasps and extend the pole so the Light Sensor remains above the canopy, then tighten clasps. Continue to adjust Light Sensor height as canopy grows taller.

Pole Snaps In Place On Back.

Step 7: Test your EarthScout by either pressing the black button on outside of gray box (on some units), or button inside the box under the battery compartment, to send data to the app. A light will appear briefly to show data was transferred to the app, and then turn off again (Diag. 0.0).

Your EarthScout should be ready to go. Contact customer support at 877-443-7632 if you have any questions or issues!
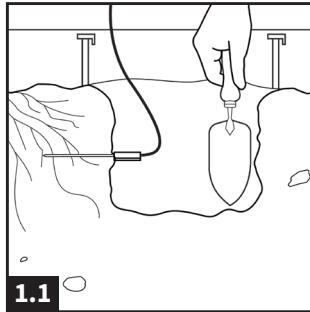
Note: Sensor placement is variable for indoor growers based on crop, container, soil mixtures and even feeding program. The data returned from the soil moisture sensor is an average for the entire length of the sensor so each placement or adjustment will provide a different moisture, EC and temperature profile of the soil or mixture in the container.

If you're unsure about which method is best for your situation, start by placing the soil sensor diagonally through the most active part of the root zone. Monitor the soil moisture and EC data while also continuing your previous manual methods for checking moisture and root health. If the moisture data from the EarthScout is not matching what you're seeing or feeling, try moving the soil sensor so it runs up and down along the side of the active roots (or container). For questions, please call an EarthScout Grow Coach at 877-443-7632.
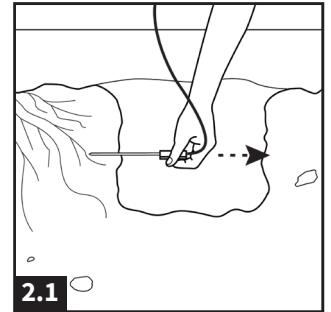
How to Uninstall Your EarthScout

To properly uninstall EarthScout from a raised bed, you will need a hand trowel and towels to clean it before storage.

Step 1: Using hand trowel carefully excavate hole starting at 3 o'clock position and digging straight down 10-inches (see Uninstall Diagram). Continue to excavate dirt working toward the sensor at 9 o'clock position.

Step 2: Remove sensor by pulling horizontally from root zone. **Don't bend metal prongs or pull on cable - may damage sensor.** Clean sensors, coil cords and put in storage case. Store in cool, dry place.

Don't forget to check out all of the great app tutorials
and case studies in our Education Center at
www.earthscout.com/education.

EarthScout
Education Center

We understand the importance of having a strong support
network for our customers. If at anytime you need assistance,
please call 877-443-7632. We want you to be 100% satisfied
with your new EarthScout.

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