

# EarthScout® Set Up & Installation Guide

A200, A400 And A600 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's Included:

- EarthScout (w/built in air temp & humidity sensor)
- Soil Sensor (measures moisture, EC & temp)
- Rechargable Batteries (2)
- Battery Charger (1 per order)
- Survey Stakes (2)
- Air CO<sub>2</sub> Sensor (built in A400 & A600 models only)
- Air/Soil O<sub>2</sub> Sensor (A400 & A600 models only)

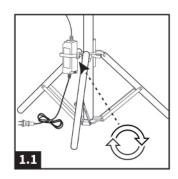
- Quantum Light Sensor (A600 model only)
- Canopy Pole (A600 model only)

### What You'll Need:

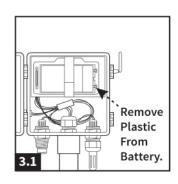
- 15-20 Minutes
- Hand Trowel
- Tape Measure

# Setup & Install EarthScout In 6 Easy Steps

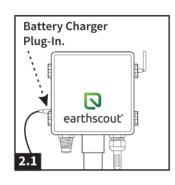
Step 1: Remove Earth-Scout from protective carry case and set tripod legs in configuration shown right (Diag. 1.1). Tighten black wingnut to lock legs in place. Add battery charger to holder.



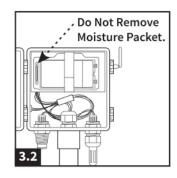
**Step 3:** Unclasp clips on side of gray box to open door. Remove plastic tab from battery terminal and ensure metal pins on the battery are touching the metal tabs in the housing (Diag. 3.1).



**Step 2:** Plug battery charger into left side of gray box on EarthScout (Diag. 2.1). Choose plant to monitor. Stand EarthScout next to potted plant or raised bed and plug into outlet.

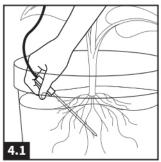


Tighten velcro battery strap. Don't remove moisture absorbing packet (Diag. 3.2). Close door by fastening clasps on side of gray box.



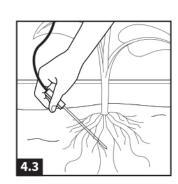
### Step 4: Option A -Potted Plant Top Install to Prevent Drying:

Remove sensor cap. Insert sensor into root zone at 45° angle, careful not to disturb soil. Push plastic end into soil mix or cover with additional mix for more accurate root temperature data (Diag. 4.1).



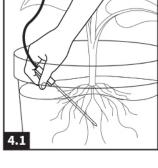
## Option B - Potted Plant Side Install to Avoid Over-Watering:

Cut pot with knife 4 to 8-inches below soil (see Depth Chart). Insert sensor horizontally into root zone until plastic cap is flush with soil mix in container. Root zone temperature data will not be as accurate with this method (Diag. 4.2).



### Option C - Raised Bed Top Install to Prevent Drying:

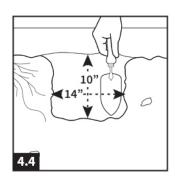
Remove cap and insert soil sensor into root zone at 45° angle, careful not to disturb soil. Push plastic end into soil mix or cover with additional mix for more accurate root temperature data (Diag. 4.3).



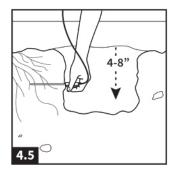
# 4.2

## Option D - Raised Bed Side Install to Avoid **Over-Watering:**

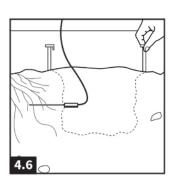
Find location at edge of active root zone, 6 to 20-inches from plant. Careful not to cut or disturb root zone, use hand trowel to dig 14 x 10 inch hole or just below depth needed to reach lower root zone (Diag. 4.4).



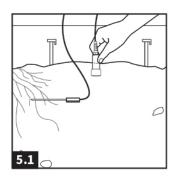
Remove cap from soil sensor. Holding soil sensor level, reach into hole 4 to 8-inches and insert sensor horizontally into root zone, careful not to disturb soil (Diag. 4.5).



Make cable exit hole closest to plant and above sensor. Fill hole. Press dirt to match other soil to avoid water pools. Place 1st survey stake above sensor and 2nd on opposite edge of hole to mark location (Diag. 4.6).

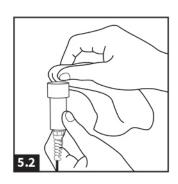


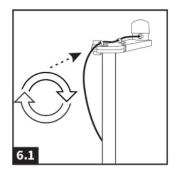
Step 5: If you have an Air/ Soil O<sub>2</sub> Sensor (A400 & A600 models), suspend in air to measure air oxygen, or bury sensor 2+ inches deep (with metal cage down) to measure soil O2 in the active root zone (Diag. 5.1).



Air/Soil O<sub>2</sub> Sensors with frequent watering may need to be removed every 2-3 weeks, wiped clean with dry cloth, and dried completely before reinstalling (Diag. 5.2).

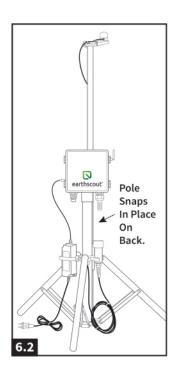
**Step 6:** For A600 models with black telescope pole and Quantum Light Sensor, attach sensor bracket to top of black telescope pole and tighten black wingnut (Diag. 6.1).





Attach black telescope pole to the back of the orange EarthScout pole. The pole will snap into place. Plug Light Sensor cable into port on left side of gray box.

Loosen clasps and raise telescope so Light Sensor remains above the canopy, then tighten clasps (Diag.6.2). Continue to adjust Light Sensor height as canopy grows taller.



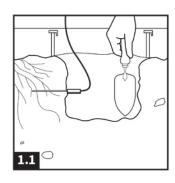
**Note:** Sensor placement is variable for indoor growers based on crop, container, soil mixtures and even feeding program. The data returned from the moisture sensor is an average for the entire length of the probe so each placement or adjustment will provide a different moisture, EC and temperature 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.



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. Welcome aboard!

