

Soil Scout Installation Tips and Hints

Thank you for choosing Soil Scout. This document is not intended as a replacement for the more detailed installation and other guidance found at www.soilscout.com/documents, but is intended as a list of tips and hints that we and our existing customers have found have made the setup process easier.

We're always interested to hear your experiences, so if you have something you would like to add, please email us at support@soilscout.com

Pre-Installation

Base Station

1. Arrange for a suitable SIM card for the Base Station. The modem takes a standard, sometimes known as Mini (not Micro or Nano), SIM card. The SIM should be data and SMS / text message capable.
2. Ensure that there is no PIN code enabled on the SIM card – either check with your cellular provider, or insert into a phone to check.
3. Insert the SIM card into the modem. The card needs to be pushed in further than you may expect until it clicks: use a flat head screwdriver, credit card corner or similar if you're having trouble. DO NOT use sharp objects.
4. Plug in the Base Station at your office to check that everything is working OK. You can verify that the Base Station is transmitting by checking your Cloud account. Please note that it may take up to 10-15 minutes for the Base Station to initially link. NOTE: do not connect the antenna or antenna cable yet.
5. Ensure you're going to have mains electricity and cellular coverage at the point the Base Station will be installed. Note: the power supply plug must be weather-protected if being used outdoors.
6. Check that you have the necessary equipment to ensure that the Antenna will be able to be securely installed at the recommended height, and that it will be clear of obstacles such as line-of-sight barriers or large metal objects.

ECHO Repeater

The Repeater is solar-powered and therefore, by default, does not come with a main power supply. It has an internal battery that stores energy from the solar panel. The battery requires a certain minimum charge to start transmitting, so in case of period where it has been offline for a long time, we recommend that you place it outside in the sun for a day to charge (with the power switch on, OR use the power supply from the Base Station to charge it for a minimum of 6 hours.

Cloud

Customize the settings in your Cloud "Site", and add all the Devices (Scouts, Base Stations, Repeaters) if this has not already been done for you. If you don't know the GPS locations of all the Devices in advance, you can add these later. This makes it easier to view data as soon as the system is switched on. Ensure you select the correct soil type for your Scouts, as this impacts the calculation of moisture content and salinity,

Note: Scout data will not be recorded into the Cloud until you have added your equipment ID's into your Cloud, and the Base Station / Repeaters are switched on and being received. Check the Cloud User Guide at www.soilscout.com/documents for more information.

General

1. Create a rough plan on paper of where you intend to install each of the Devices (including Base Station and Repeater(s), considering the distances, depths and heights concerned. It's often much easier to plan at your desk than when you're on the Field / Turf. Check the Antenna and Distances Guides at www.soilscout.com/documents for guidance.
2. Write down a list of all the Device ID's on a piece of paper or note in your phone in advance so that you've got somewhere to record GPS information when installing.

On the Field / Turf

1. Install the Base Station and Repeaters, and connect the relevant antenna cables and antennas. Remember that the Antenna should be a minimum of 5 metres / 16 feet above ground level, unless you have received other advice from your Dealer or Soil Scout.
2. Install the SIM card in the Base Station (if you have not already), and plug in the Base Station.
3. Switch on the Repeater (small switch on the bottom).
4. Install the Repeater so that it will catch the maximum amount of sunlight. The Repeater should be installed with the barcode label / power switch facing downwards towards the ground.
5. Remember to switch the Repeater ON at the back: the "I" end of the button should be down.
6. Next, bury the Scouts at your chosen location and depths. The Scout should be flat on the bottom of the hole. **IMPORTANT:** The rounded antenna end of the Scout **MUST** be pointing in the direction of the closest antenna (Base Station or Repeater) – or in complex cases the antenna, where there is the best line of sight. Do not over compress the soil / turf when you fill in the hole (see installation instructions at www.soilscout.com/documents for more information).
7. Remember to record the GPS coordinates and depths of each Scout!

Note: the Repeater relays data from the Scouts back to the Base Station up to 10 km / 6 miles away line-of-sight. It is not a data logger. As such, choose a location to maximize the total area covered, or contact your Soil Scout Dealer for advice.

Post Installation

Once you are back at your computer, add any missing information such as GPS coordinates, depths, descriptive names and / or notifications.

If you have any additional questions after reviewing the support material at www.soilscout.com/documents, please either contact you Soil Scout representative, or email us at support@soilscout.com.

With thanks
The Soil Scout team

SOIL SCOUT: GAIN A DEEPER VIEW!

