

EARTHLIGHT™ INSTRUCTIONS

*Please read and become familiar with these instructions before installing your device. Retain these instructions for reference. They also contain a coupon code.**

Congratulations on your Earthlight™ purchase! The Earthlight™ is a novel device for the long-term monitoring of the moisture level of your indoor potted plant's soil. It is also a soil quality indicator and *only works in rich, living soils loaded with beneficial microbes.*

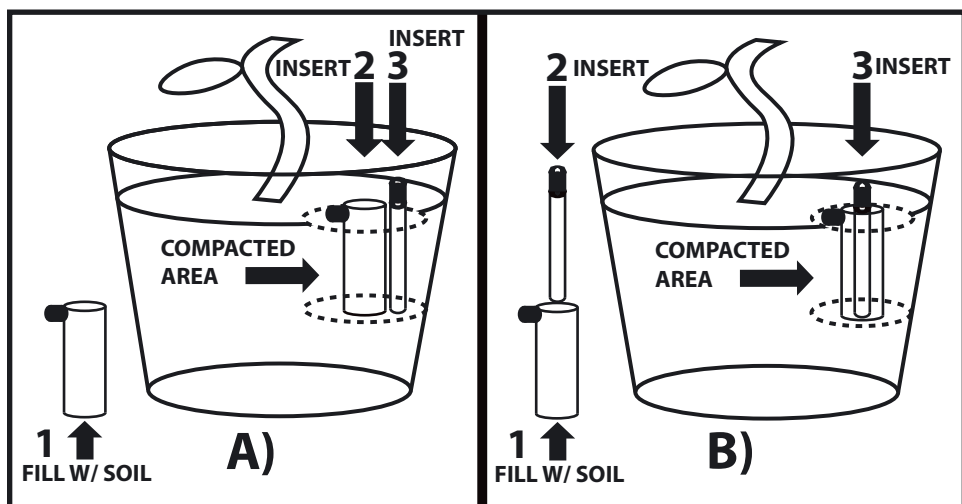
You can install it as a long-term moisture meter for your indoor potted plants, a means to monitor new potted plantings, a means to test the effectiveness of soil amendments, as well as a portable soil quality detector.

The device utilizes no power source other than soil to generate a small amount of electricity to light the green LED indicator light. Good living soils will produce a charge when the plant is properly watered. *If your soil needs to be amended, recommended amendments are listed under "Amendments" after the installation and usage instructions.*

The Earthlight™ is only intended for long-term installation in indoor plants in containers, but can be used briefly in open soil or outdoors for field testing or to monitor amendments while you add them to an area. Please do not use in very acidic soil (PH 5.5 or lower) long-term or in evergreen plants such as junipers, pines or spruce. It may rapidly degrade the metal rod. Visit eohm.io/shop or your local vendor for replacement rods. If the metal rod degrades, test and correct the soil PH before reinstalling with a new rod.

SETUP AND INSTALLATION

Insert the top of the stake into the cylinder attached to the housing *with the wires facing downward*. To release the copper cylinder and rod from their stowaway position, pull the rod out by pulling down on it from the plastic cap. The rod and cylinder will release.



A) Long-term Installation (indoor potted plants only)

The Earthlight™ can be setup in your indoor potted plant for many months or permanently with proper care and maintenance.

Use the cylinder as a scoop and fill it with soil from the surface of your potted plant. Avoid debris (rocks, etc.). Compact the soil in the cylinder so that it is nice and firm. Repeat until the cylinder is full and compact. Add a little moisture to the soil if it's too dry to stay in.

About an inch from the edge of the pot, or within the outer 1/3 of the soil, dig a small hole in the soil with your finger about the depth and width of of the cylinder.

Insert the soil-filled copper cylinder into the hole so that it's top and the plastic cap is flush with the top of the soil.

With your hand, compact a very small area of soil directly next to the copper cylinder on any one side. The depth of the compacted soil should mirror the depth of the copper cylinder and should not be a wide area. An inch or less out from the side of the copper cylinder will suffice.

Once the soil directly against the copper cylinder is firm on one side and without air pockets, insert the metal rod into the compacted area directly next to the copper cylinder. Insert the rod nice and straight so that the plastic cap is touching the copper, but the metal part is not. Re-compact the soil directly around the rod if necessary.

The Earthlight™ should now illuminate. If it does not, proceed to water your plant as normally. Make sure to wet the entire soil area evenly, including the area of the copper cylinder and metal rod. Make sure that the rod is not contacting the copper cylinder.

Insert the plastic stake toward the edge of the pot so that the housing is overhanging and visible with the wires on the bottom and angle the LED as desired.

If the Earthlight™ still does not light, there is likely a soil quality issue. Consult section "Amendments" below.

B) Temporary Setup and Field Testing

If a quick soil quality/moisture test of a plant or area is all that is necessary, use this setup in a potted plant or open soil. This setup may also be used for short-term setup to test the effectiveness of living soil amendments.

Use the cylinder as a scoop and fill it with soil from the sample area. Avoid debris (rocks, sticks, etc.). Compact the soil in the cylinder so that it is nice and firm. Repeat until the cylinder is full and compact. Add a little moisture to the soil if its too dry to stay in.

Insert the metal rod into the middle of the soil within the cylinder. *You may have to push it firmly.* Make sure that the rod is straight and not contacting the copper cylinder. Insert it up to the plastic cap on the same side of the cylinder as the other plastic cap. Press more soil into the cylinder around the rod so that there is no empty space, only soil.

EARTHLIGHT™ INSTRUCTIONS

*Please read and become familiar with these instructions before installing your device. Retain these instructions for reference. They also contain a coupon code.**

Congratulations on your Earthlight™ purchase! The Earthlight™ is a novel device for the long-term monitoring of the moisture level of your indoor potted plant's soil. It is also a soil quality indicator and *only works in rich, living soils loaded with beneficial microbes.*

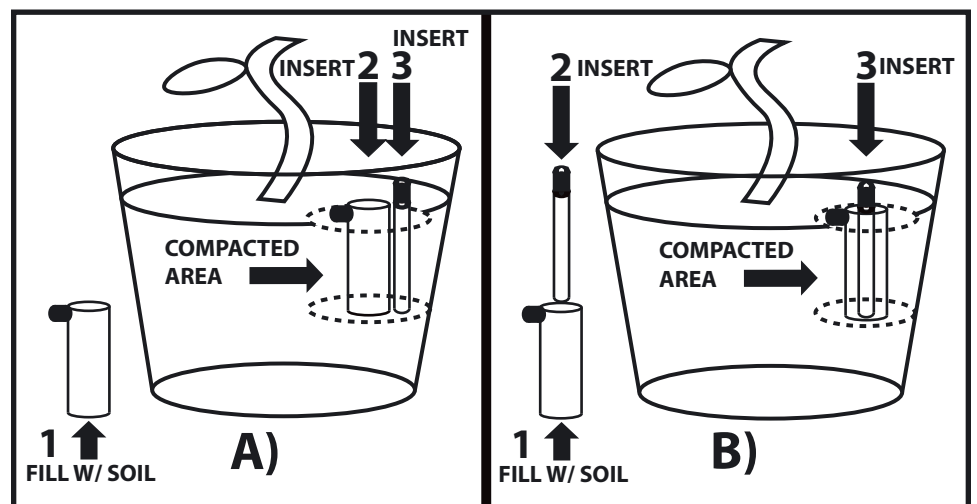
You can install it as a long-term moisture meter for your indoor potted plants, a means to monitor new potted plantings, a means to test the effectiveness of soil amendments, as well as a portable soil quality detector.

The device utilizes no power source other than soil to generate a small amount of electricity to light the green LED indicator light. Good living soils will produce a charge when the plant is properly watered. *If your soil needs to be amended, recommended amendments are listed under "Amendments" after the installation and usage instructions.*

The Earthlight™ is only intended for long-term installation in indoor plants in containers, but can be used briefly in open soil or outdoors for field testing or to monitor amendments while you add them to an area. Please do not use in very acidic soil (PH 5.5 or lower) long-term or in evergreen plants such as junipers, pines or spruce. It may rapidly degrade the metal rod. Visit eohm.io/shop or your local vendor for replacement rods. If the metal rod degrades, test and correct the soil PH before reinstalling with a new rod.

SETUP AND INSTALLATION

Insert the top of the stake into the cylinder attached to the housing *with the wires facing downward*. To release the copper cylinder and rod from their stowaway position, pull the rod out by pulling down on it from the plastic cap. The rod and cylinder will release.



A) Long-term Installation (indoor potted plants only)

The Earthlight™ can be setup in your indoor potted plant for many months or permanently with proper care and maintenance.

Use the cylinder as a scoop and fill it with soil from the surface of your potted plant. Avoid debris (rocks, etc.). Compact the soil in the cylinder so that it is nice and firm. Repeat until the cylinder is full and compact. Add a little moisture to the soil if it's too dry to stay in.

About an inch from the edge of the pot, or within the outer 1/3 of the soil, dig a small hole in the soil with your finger about the depth and width of of the cylinder.

Insert the soil-filled copper cylinder into the hole so that it's top and the plastic cap is flush with the top of the soil.

With your hand, compact a very small area of soil directly next to the copper cylinder on any one side. The depth of the compacted soil should mirror the depth of the copper cylinder and should not be a wide area. An inch or less out from the side of the copper cylinder will suffice.

Once the soil directly against the copper cylinder is firm on one side and without air pockets, insert the metal rod into the compacted area directly next to the copper cylinder. Insert the rod nice and straight so that the plastic cap is touching the copper, but the metal part is not. Re-compact the soil directly around the rod if necessary.

The Earthlight™ should now illuminate. If it does not, proceed to water your plant as normally. Make sure to wet the entire soil area evenly, including the area of the copper cylinder and metal rod. Make sure that the rod is not contacting the copper cylinder.

Insert the plastic stake toward the edge of the pot so that the housing is overhanging and visible with the wires on the bottom and angle the LED as desired.

If the Earthlight™ still does not light, there is likely a soil quality issue. Consult section "Amendments" below.

B) Temporary Setup and Field Testing

If a quick soil quality/moisture test of a plant or area is all that is necessary, use this setup in a potted plant or open soil. This setup may also be used for short-term setup to test the effectiveness of living soil amendments.

Use the cylinder as a scoop and fill it with soil from the sample area. Avoid debris (rocks, sticks, etc.). Compact the soil in the cylinder so that it is nice and firm. Repeat until the cylinder is full and compact. Add a little moisture to the soil if its too dry to stay in.

Insert the metal rod into the middle of the soil within the cylinder. *You may have to push it firmly.* Make sure that the rod is straight and not contacting the copper cylinder. Insert it up to the plastic cap on the same side of the cylinder as the other plastic cap. Press more soil into the cylinder around the rod so that there is no empty space, only soil.

The Earthlight™ should now be illuminated in wet, microbially active soil.

Anywhere in the soil, dig a small hole with your finger about the depth and width of the cylinder.

Insert the soil-filled copper cylinder and rod combo into the hole with the plastic cap facing upward and the top flush with the top of the soil. Compact the soil directly around the cylinder if it is loose. The cylinder should sit in the soil snugly.

Insert the plastic stake so that the housing is visible and angle the LED as desired.

Add Amendments, then water and watch the green LED. Make sure to wet the entire soil area evenly, including the area of the copper cylinder and metal rod combo. Make sure that the rod is not contacting the copper cylinder. A lit LED means microbially active soil.

The Earthlight™ can be used out in the field to test various soil samples for quality/microbial activity. Use the above method but do not install into the soil. Wet if necessary. It can be used as a standalone test cell for short periods of time. *Do not leave unknown soils in this configuration as it may damage the rod.*

For easy transportation, slide the cylinder over the stake and insert the rod into the bottom between the cylinder and the stake. The rod and cylinder will now stay in position.

USING THE EARTHLIGHT™

Once the device is setup and installed properly and the soil is watered as normal for your plant, the bright green LED of the Earthlight™ will gradually start to dim as your soil dries and turn off when the top 2.5” of your soil has dried completely. *An off LED indicates that it is time to water your plant again.* A dimmed LED can also indicate cold temperature which is temporarily slowing the microbial activity of your soil or a larger microbial deficit in your soil. *Wait until the soil is at room temperature before reading.*

Repeat and water each time the LED turns off. Not all plants require the same watering.

Reduce LED brightness by pulling the rod out of the soil slightly until the desired brightness is reached.

For rooms that need to stay dark at night like bedrooms, use ‘soft glow mode’ at night-time. Remove the rod, take off the plastic cap and place it over the rounded LED housing. *Return the rod to the soil and the plastic cap to its position before watering again.*

AMENDMENTS

In order for The Earthlight™ to function, beneficial microbes must be present in the soil. Certain microbes known as “*exoelectrogens*” will actually emit small amounts of electricity and are almost always present in a healthy soil biome. Selected amendments contain these microbes as well as many others which will greatly benefit your plant.

Many amendments are possible such as compost teas and homemade bokashi, but we have selected the following which can be bought at any plant supply or garden store and are recommended in most soils to maintain a healthy biome. If your Earthlight™ does not work due to soil quality, amending the soil and using the Earthlight™ as a tool to monitor the soil will have a lasting positive impact on your plant. Try one or all 3 chosen amendments. *The blood meal only enhances the other two amendments and cannot be used alone:*

Mycorrhizae: Provides abundance of healthy microbes.

Biochar: Provides abundance of healthy microbes and carbon which helps soil conductivity.

Blood Meal: Provides iron which helps soil conductivity.

Please follow manufacturer instructions individually for each amendment.

MAINTENANCE AND CONSIDERATIONS

Upkeep and rod replacement is key to long-term operation. Please uninstall and clean off your rod every 2-3 months or when the device accuracy declines. You may use the edge of the cylinder, a file or steel wool to scrape the magnesium oxide off. Make sure the rod is moist when cleaning to avoid airborne dust. Replace the rod after 3-4 months or when the device function is impaired. Please uninstall and scrub any residue from your copper cylinder with steel wool or a wire brush inside and out every 2-3 months while wet as well.

New rods can be purchased at your local retailer or eohm.io/shop.

***Use code “EARTH25” for 25% off on your first 3-pack of rods.**

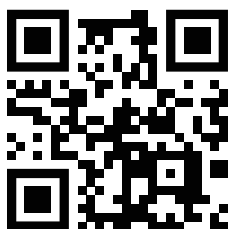
The Earthlight™ puts out very small amounts of magnesium oxide over a long period of time. This form is commonly found in widely available fertilizers and magnesium is a vital nutrient for photosynthesis to occur. If your plant is very sensitive to magnesium, or a noticeable yellowing of leaves occurs, discontinue use.

The housing of the device is water-resistant but not waterproof. *Please don’t submerge.*

If the device ceases to work, check the soil compactness between the rod and cylinder. Make sure the area is moist. Move the rod to a new spot around the cylinder. Remove both plastic caps and check the wire connections. Make sure that the nuts are tight. Make sure that the screws in both the rod and cylinder are tight as well. Return both plastic caps to their positions. Double check your amendments. If the device still will not work, send an email with the subject “replacement” to info@eohm.io to start a replacement or “return” to start a return. You may also call (541) 841-9455 for technical or installation support.

Enjoy your Earthlight™ and let it bring health and happiness to your plant.

Scan the QR code for additional resources, tips and videos on our website, eohm.io.



The Earthlight™ should now be illuminated in wet, microbially active soil.

Anywhere in the soil, dig a small hole with your finger about the depth and width of the cylinder.

Insert the soil-filled copper cylinder and rod combo into the hole with the plastic cap facing upward and the top flush with the top of the soil. Compact the soil directly around the cylinder if it is loose. The cylinder should sit in the soil snugly.

Insert the plastic stake so that the housing is visible and angle the LED as desired.

Add Amendments, then water and watch the green LED. Make sure to wet the entire soil area evenly, including the area of the copper cylinder and metal rod combo. Make sure that the rod is not contacting the copper cylinder. A lit LED means microbially active soil.

The Earthlight™ can be used out in the field to test various soil samples for quality/microbial activity. Use the above method but do not install into the soil. Wet if necessary. It can be used as a standalone test cell for short periods of time. *Do not leave unknown soils in this configuration as it may damage the rod.*

For easy transportation, slide the cylinder over the stake and insert the rod into the bottom between the cylinder and the stake. The rod and cylinder will now stay in position.

USING THE EARTHLIGHT™

Once the device is setup and installed properly and the soil is watered as normal for your plant, the bright green LED of the Earthlight™ will gradually start to dim as your soil dries and turn off when the top 2.5” of your soil has dried completely. *An off LED indicates that it is time to water your plant again.* A dimmed LED can also indicate cold temperature which is temporarily slowing the microbial activity of your soil or a larger microbial deficit in your soil. *Wait until the soil is at room temperature before reading.*

Repeat and water each time the LED turns off. Not all plants require the same watering.

Reduce LED brightness by pulling the rod out of the soil slightly until the desired brightness is reached.

For rooms that need to stay dark at night like bedrooms, use ‘soft glow mode’ at night-time. Remove the rod, take off the plastic cap and place it over the rounded LED housing. *Return the rod to the soil and the plastic cap to its position before watering again.*

AMENDMENTS

In order for The Earthlight™ to function, beneficial microbes must be present in the soil. Certain microbes known as “*exoelectrogens*” will actually emit small amounts of electricity and are almost always present in a healthy soil biome. Selected amendments contain these microbes as well as many others which will greatly benefit your plant.

Many amendments are possible such as compost teas and homemade bokashi, but we have selected the following which can be bought at any plant supply or garden store and are recommended in most soils to maintain a healthy biome. If your Earthlight™ does not work due to soil quality, amending the soil and using the Earthlight™ as a tool to monitor the soil will have a lasting positive impact on your plant. Try one or all 3 chosen amendments. *The blood meal only enhances the other two amendments and cannot be used alone:*

Mycorrhizae: Provides abundance of healthy microbes.

Biochar: Provides abundance of healthy microbes and carbon which helps soil conductivity.

Blood Meal: Provides iron which helps soil conductivity.

Please follow manufacturer instructions individually for each amendment.

MAINTENANCE AND CONSIDERATIONS

Upkeep and rod replacement is key to long-term operation. Please uninstall and clean off your rod every 2-3 months or when the device accuracy declines. You may use the edge of the cylinder, a file or steel wool to scrape the magnesium oxide off. Make sure the rod is moist when cleaning to avoid airborne dust. Replace the rod after 3-4 months or when the device function is impaired. Please uninstall and scrub any residue from your copper cylinder with steel wool or a wire brush inside and out every 2-3 months while wet as well.

New rods can be purchased at your local retailer or eohm.io/shop.

***Use code “EARTH25” for 25% off on your first 3-pack of rods.**

The Earthlight™ puts out very small amounts of magnesium oxide over a long period of time. This form is commonly found in widely available fertilizers and magnesium is a vital nutrient for photosynthesis to occur. If your plant is very sensitive to magnesium, or a noticeable yellowing of leaves occurs, discontinue use.

The housing of the device is water-resistant but not waterproof. *Please don’t submerge.*

If the device ceases to work, check the soil compactness between the rod and cylinder. Make sure the area is moist. Move the rod to a new spot around the cylinder. Remove both plastic caps and check the wire connections. Make sure that the nuts are tight. Make sure that the screws in both the rod and cylinder are tight as well. Return both plastic caps to their positions. Double check your amendments. If the device still will not work, send an email with the subject “replacement” to info@eohm.io to start a replacement or “return” to start a return. You may also call (541) 841-9455 for technical or installation support.

Enjoy your Earthlight™ and let it bring health and happiness to your plant.

Scan the QR code for additional resources, tips and videos on our website, eohm.io.

