



Installer note: Please make sure that these instructions are left with the customer.



## REDI-HEAT™ HEAVY DUTY SOIL WARMING CABLE Automatic and Non-Automatic

- WARNING:**  \* Incorrect use and/or improper installation of Redi-Heat™ Soil Warming Cable can cause danger of fire, electric shock, electrocution or damage to planted material.  
\* These cables are NOT to be used with terrariums or aquariums.  
\* Redi-Heat™ Soil Warming cables are to be buried in soil or soil-based mixtures so that no portion of the heated section is visible while in use. They are NOT to be used with flammable materials like peat moss or with insulating materials like vermiculite or sand except as noted below.  
\* Phytotronics, Inc. strongly recommends that a Ground Fault Circuit Interrupter (GFCI) be used in the cable circuit to provide additional safety and protection.

- CAUTION:**  \* Be sure the cable is disconnected when installing, planting, cultivating or harvesting and when not in use.  
\* Use plastic tools whenever possible to avoid damaging the cable.  
\* Do NOT allow the cable to crossover or otherwise touch itself. To do so could result in overheating, failure or other hazardous conditions.  
\* Do NOT attempt to use a single cable in more than one flat, tray or container at the same time. To do so could result in overheating, failure or other hazardous conditions.  
\* Do NOT attempt to modify the cable to lengthen, splice or shorten it. Such modifications may create a hazardous condition and will void the warranty. This product contains no serviceable parts.

**SIZING GUIDE:** Select a cable to fit your planting area from the following chart. The chart is based on providing approximately 14 watts of heat per square foot (150 watts per square meter) of heated area.

Cable Type	Model No.	Electrical Rating Volts/Amps/Watts	Heated Length Feet	Recommended Heated Area sq. feet
Automatic *	8550	120 / 0.85 / 100	20	7
Automatic*	8551	120 / 1.7 / 200	40	14
Non-Automatic**	8552	120 / 2.5 / 300	60	21
Non-Automatic**	8553	120 / 3.3 / 400	80	29
Non-Automatic**	8554	120 / 4.2 / 500	100	36
Non-Automatic**	8556	120 / 5.8 / 700	140	50
Non-Automatic**	8558	120 / 8.3 / 1,000	200	70

\* Automatic Redi-Heat™ soil warming cables contain a built-in thermostat at the junction of the cordset and heated length set to turn ON at approximately 74°F.

\*\* Non-Automatic Redi-Heat™ soil warming cables must be used with a capillary bulb type thermostat such as Redi-Heat™ Model No. RHT-4.


**INSTALLATION:** Cut plastic or metal hardware cloth, with 1/2 in. (1 cm.) openings, to fit the planting area. Arrange the cable on the hardware cloth in a pattern so that it is at least 3 in. (7.5 cm.) from the sides of the flat and at least 4-5 in. (10-13 cm.) away from other portions of the cable. Loosely attach the cable to the hardware cloth using string, tape or plastic ties. The thermostat should be located approximately half way between the center and edge of the pattern.

Use a flat constructed of wood or insulation board. Be sure there are adequate drain openings in the bottom of the flat. Cover the bottom of the flat with a layer of sand or gravel for drainage and then add 1/2-1 in. (1-2 cm.) of soil or non-flammable bedding mixture. Place the hardware cloth and cable assembly in the flat with the warming cable side down. This will protect the cable from being damaged by tools used to cultivate or move plants. Mark the thermostat location with a stick. Add an additional 2-3 in. (5-7 cm.) of soil/mixture over the hardware cloth. Add water to the soil/mixture. It is the moisture that conducts and distributes the heat. Plug the cable into a 110-120 volt power supply. Allow the cable to operate for several hours to reach steady temperatures. Use a soil thermometer to check temperature and uniformity. Adjust the cable placement as required and repeat the preceding steps if necessary.

If potted seeds or plants are to be used, add only one (1) in. (2.5 cm.) of soil/mixture over the hardware cloth. Place the pots on the soil/mixture layer and then add additional soil/mixture around the pots to within 1/2 in. (1 cm.) of the lip of the pots. Without this additional soil/mixture to conduct heat to the sides of the pots, there will be little or no heat transmitted through the bottom of the pots. Add water and check temperatures and uniformity.

For desert type plants which do not require as much moisture, again add only one (1) in. (2.5 cm.) of soil/mixture over the hardware cloth. Add water and check for temperature and uniformity. Then, add 2-3 in. (5-7 cm.) of a sand-soil mixture for planting. Water should be added to keep the bottom soil/mixture moist and conducting heat. The water should simply pass through the sand-soil mixture.

**NOTE:** Sand is basically an insulating material and it will not conduct heat as effectively as soil or sand-soil mixture.

- CAUTION:**  The Redi-Heat™ cable has limited heating capacity. When the air temperature drops below 60°F (16°C), protection should be provided over and around the planting flat to conserve the cable heat. If such protection is not provided, all of the heat generated by the cable will be lost to the surrounding air, and the temperature of the soil and air could drop to the point where the plantings will be damaged. Without protection from cool air, the plant roots may stay warm enough to survive but the leaves and stems may be damaged.

After harvesting, disconnect the cable and remove the upper layers of soil and gently lift out the cable and hardware cloth assembly. Wash the soil off the cable being careful to keep the cord plug dry. Inspect the cable for damage or deterioration. The cable is NOT repairable and must be replaced if damaged.

### LIMITED WARRANTY

Please see reverse side for warranty information.

Manufactured by Wrap-On, Inc. for  
PHYTOTRONICS, INC.

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