

Automatic Roof De-Icing Cable Control Installation & Operation Instructions

READ CAREFULLY

GENERAL

This product has been designed and manufactured for the sole intended use of controlling roof de-icing cables. The sole intended use of a roof de-icing cable is preventing ice dams from forming on inclined roofs, in gutters and downspouts. Improper installation, use, operation and/or maintenance of electrical roof de-icing cables can cause fire, electrical shock and/or allow ice dams to form.

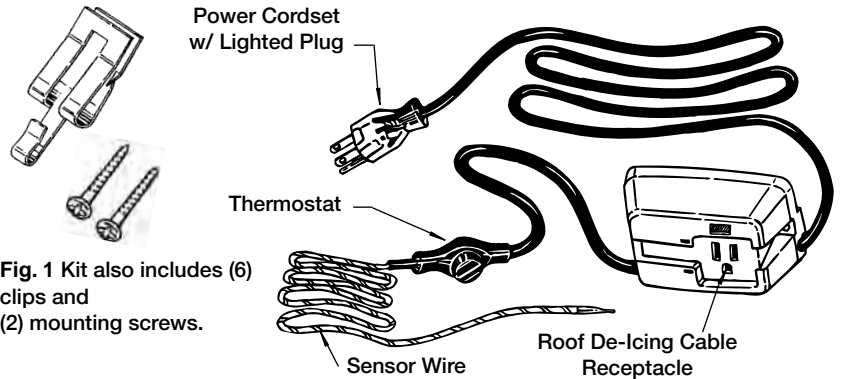


Fig. 1 Kit also includes (6) clips and (2) mounting screws.

WARNING

1. If after carefully reading these instructions you still have questions regarding installation or operation of this product, contact support for assistance.
2. The unit must be connected to a ground fault circuit inter-rupter (GFCI) outlet. If a GFCI trips and cannot be reset, then a fault in the unit or in the roof de-icing cable exists. Do not attempt to bypass the GFCI. Bypassing the GFCI may result in the risk of fire or electrical shock.
3. The unit must be kept dry; the unit is not water resistant and will fail if directly exposed to the weather.
4. All roof de-icing cables must be installed in compliance with the latest editions of: the National Electric Code; Canadian Electrical Code; State or Provincial Codes; and Local Codes.
5. These instructions must be saved and made available to owners or users of this product and/or transferred to future owners.
6. Any roof de-icing cable that is to be connected to this unit must be installed according to the manufacturer's instructions.
7. Do not connect more than one roof cable to the unit. The maximum cable size that can be connected to this unit is 1200 Watts. Risk of fire, electric shock or the formation of ice dams can result from a larger cable or from multiple cables being connected.

LIMITED WARRANTY

This product is warranted to the original purchaser that it will operate as intended, when installed and used properly, for a period of one year from date of purchase. Any inoperative product or component must be returned with proof of purchase. Buyer is responsible for all costs incurred in removal and re-installation of the product, and must prepay return shipment. The product will be repaired or replaced at no charge and return shipping cost paid.

The warranty set forth above is exclusive and makes no other warranties with respect to description or quality of the product including, but without limitation, no warranties or merchant-ability or fitness for a particular purpose. The warranty set forth above does not extend to, and the manufacturer shall not be responsible for, incidental, consequential, special or indirect damages. The manufacturer shall not be liable for penalties or any liquidated damages. The manufacturer shall not be liable for any injury or damage re-sulting from failure to follow and comply with the instructions that accompany the product. Some states/provinces do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty is expressly in lieu of all other written or oral warranties. It gives you specific legal rights and you may have other rights that vary from state to state or province to province.

INSTALLATION INSTRUCTIONS

1. Mount the RS2 under the soffit, or equivalent location protected from the weather, using the screws provided. Refer to Fig. 2. Ensure that the mounting location is close enough to the receptacle supplying power to the unit to allow the cord on the control to be plugged in. The connection should be located for the best protection from the weather and a drip loop used as appropriate. Drip loops should be used between the control box and both the sensor wire and power connection to the heater wire as appropriate for maximum protection. If desired, this receptacle can be controlled by a switch (with a pilot light) located inside the house. See Fig. 2.
2. Lay the thermostat block and sensor wire along the bottom of the gutter within two inches of the roof de-icer cable. Route the sensor wire over at least one gutter support strap or nail in order to sense the full depth of the gutter, then route along one triangular weave of the heating cable on the roof as per diagram. At the peak of the second triangle, attach the sensor wire up the roof, at least 2 feet past the heater wire as illustrated. Use the clips provided to secure the sensor wire to the roof. Gently squeeze the coated end of the clip around the sensor wire. See Fig. 3.
3. Connect the cord from the roof cable to the Roof Sentry Control box. Cables up to a maximum of 1200 Watts can be used.
4. Plug the Roof Sentry cord-set into the receptacle. Ensure that this connection remains dry.
5. If using a pilot light, turn the pilot light switch to the "ON" position. The pilot light on the plug of the unit will be lit.
6. Your Roof Sentry is now ready to control the cable on your roof.
7. The power light indicator (next to the receptacle on the control box) will only be lit, when the roof de-icing cable is energized. Fig. 4.

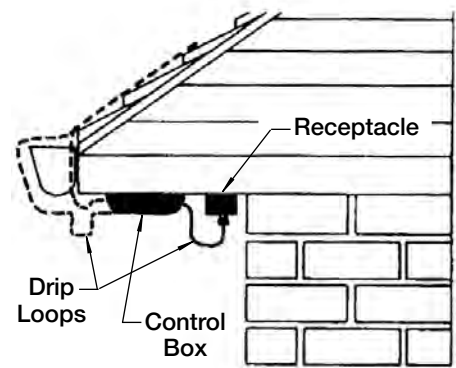


Fig. 2

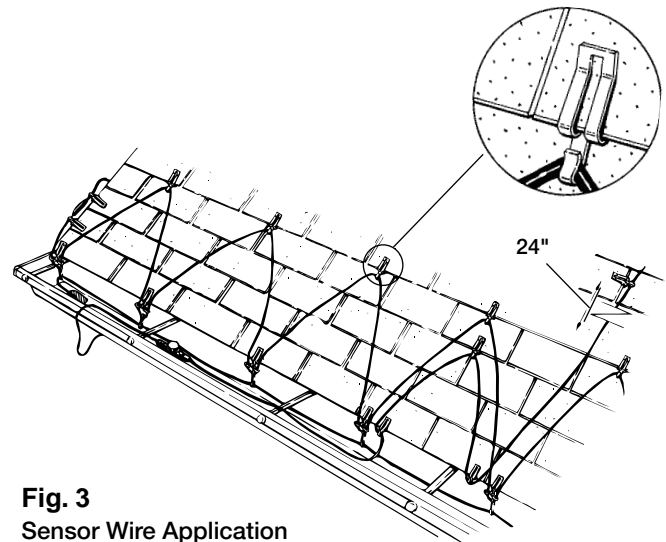


Fig. 3
Sensor Wire Application

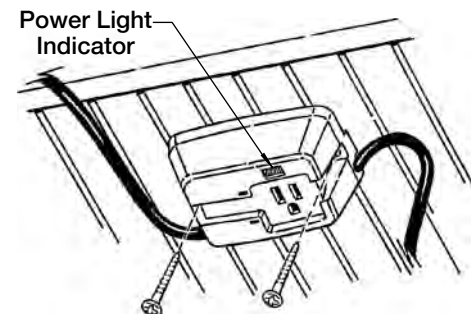


Fig. 4

OPERATION INSTRUCTIONS

The RS2 roof control is designed to energize the roof de-icing cables **ONLY** when roof snow/ice melting conditions exist **AND** there is a risk of this melt water refreezing at the roof edge to form an ice dam. This ensures that ice dams will not form and that energy consumption is minimized.

The thermostat (in the thermostat block on the RS2) senses the ambient temperature. The sensor wire senses the presence of water. If the temperature is below about 4°C (40°F) **AND** at least 10 inches of the sensor is laying in (or on) water, then the RS2 will apply power to the roof cable. Note that snow or ice surrounding the sensor wire **WILL NOT** result in activation of the RS2 to energize the cables.

The RS2 can be tested for functionality by submerging the thermostat block and 10 inches of sensor wire in ice water for 10 minutes; the power indicator light will turn on.

Disconnect the power to the RS2 during summer months.

At the beginning of the heating season and monthly during operation, inspect the RS2 control and its connection to the electric power source. Discontinue use and remove any unit that has been cut, damaged, or has deteriorated for any reason. Other conditions to look for are chewing by animals or any physical abuse. This unit does not contain any serviceable parts. Inspect for and remove all leaves and combustible debris from roof, gutters and downspouts.

Installation Instructions Addendum

The recommended installation location of the thermostat block as described in Step No. 2 of the RS-2 installation instructions is revised with this addendum

Revised Location Instruction:

Do not lay the thermostat block on the bottom of the gutter, keep the thermostat block secured below the eave of the roof. Use one of the black twist ties supplied with product to bundle the wire from the RS-2 housing to the thermostat block. See figure A1 and A2 for further installation detail.

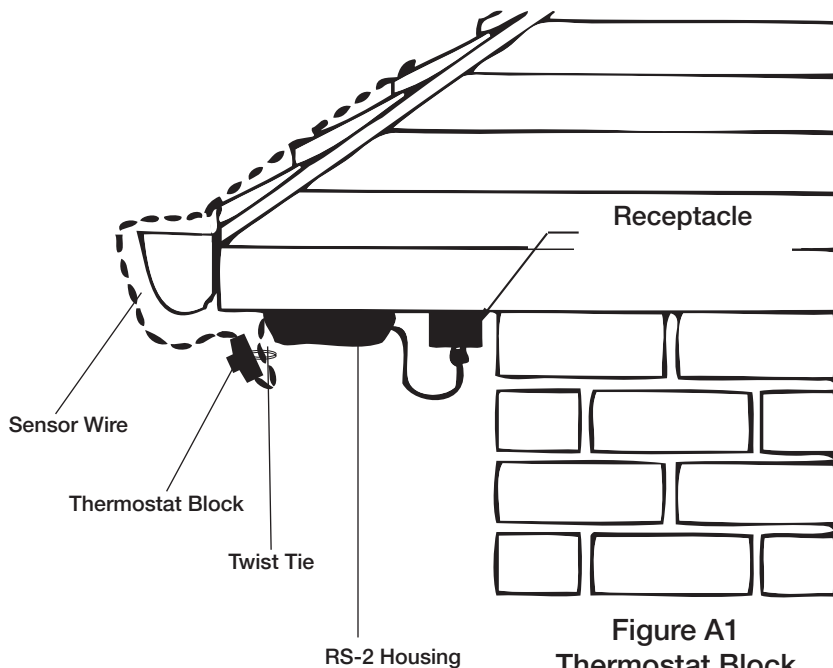


Figure A1
Thermostat Block
Location

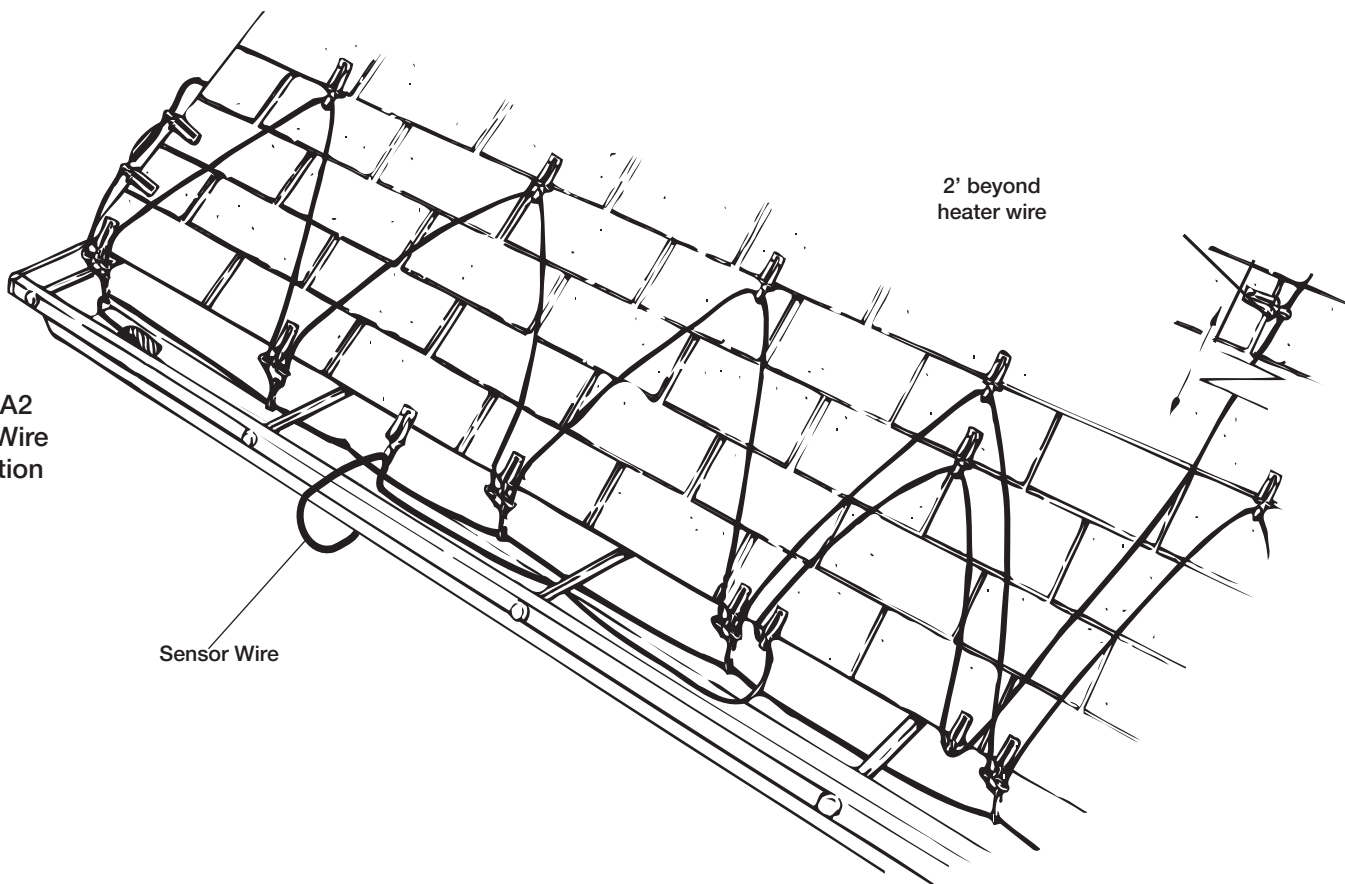


Figure A2
Sensor Wire
Application