



### Description

The CHVI-RTS-1G-N and CHVI-RTS-1G-SM are wall-mounted remote temperature sensors designed for use with Crestron thermostats. Using CAT5 or similar low-capacitance wire, the remote sensor may be mounted up to 500 feet (152 meters) from the thermostat.

### Additional Resources

Visit the product page on the Crestron website ([www.crestron.com](http://www.crestron.com)) for additional information and the latest firmware updates. Use a QR reader application on your mobile device to scan the QR image.



### Installation

The CHVI-RTS-1G-N mounts to a round or square electrical box; the CHVI-RTS-1G-SM mounts to a round or square electrical box or any flat surface.

**NOTE:** Ensure the installation location is not close to a heat or humidity source and is away from direct sunlight, skylights, and windows. Do not place in direct sunlight. The sensors are suitable for mounting in dry or damp locations as defined by the National Electrical Code.

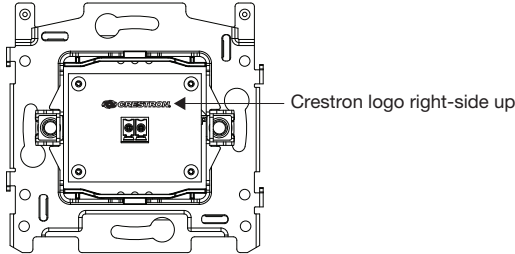
**NOTE:** Installation next to controls (keypads, touchscreens, etc.) or in shared gang boxes may affect accuracy.

**NOTE:** When mounting to an electrical box, insulate the box to prevent the temperature of the wall cavity from affecting the temperature reading.

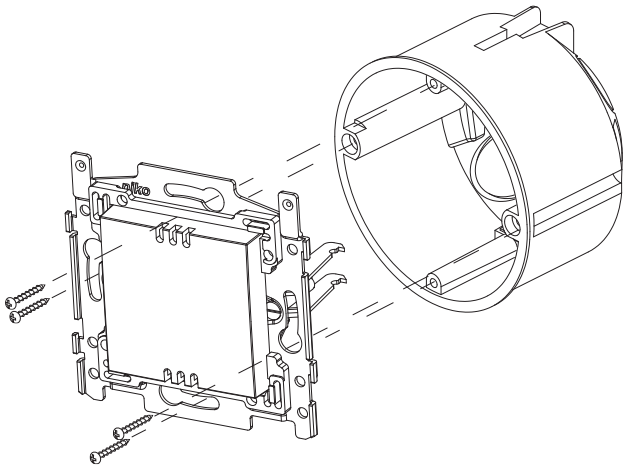
#### Mount the CHVI-RTS-1G-N to an Electrical Box

To mount the CHVI-RTS-1G-N to a round or square electrical box.

1. Make the connections to the device. Refer to the "Wiring" section for details.
2. Align the CHVI-RTS-1G-N to the electrical box. When installed, ensure that the Crestron logo is right-side up.



3. Push the wires into the electrical box, and then fasten the device to the electrical box with four screws (not included).

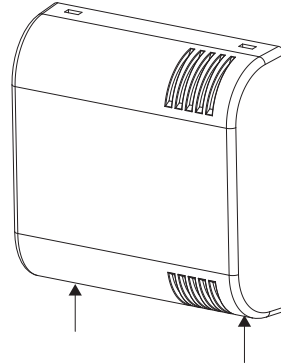


4. Attach the faceplate (not included).

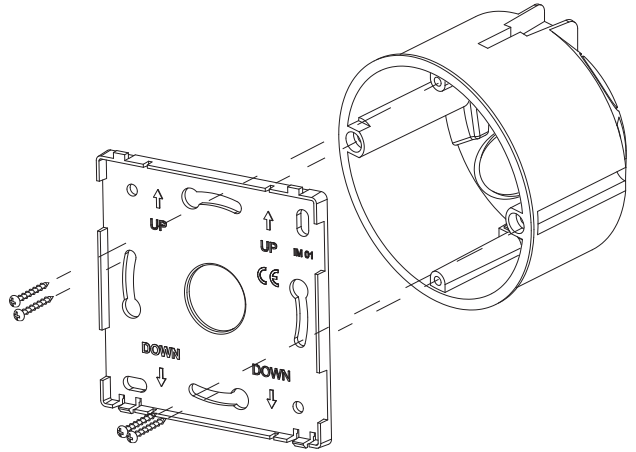
#### Mount the CHVI-RTS-1G-SM to an Electrical Box

To mount the CHVI-RTS-1G-SM to a round or square electrical box.

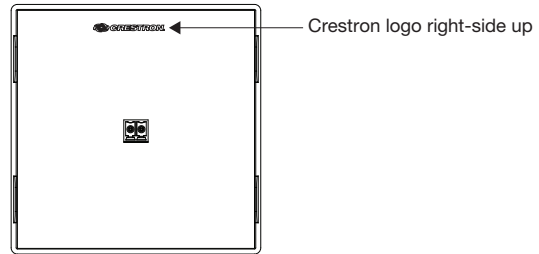
1. Insert a small screwdriver into the slots on the bottom of the CHVI-RTS-1G-SM to separate the cover from the back plate.



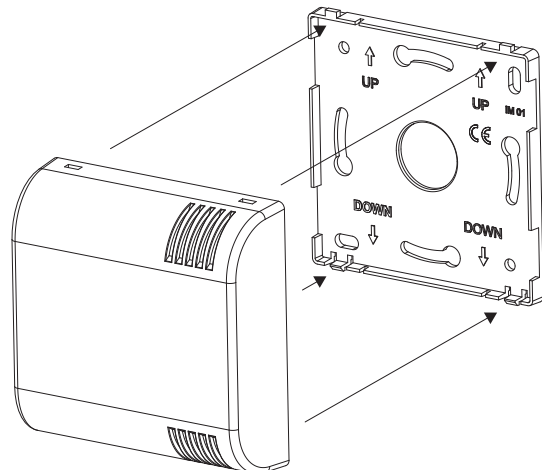
2. Route the wires for the sensor through the hole in the back plate.
3. Use four screws (not included) to secure the back plate to the electrical box.



4. Make the connections to the device. Refer to the "Wiring" section for details.
5. Align the CHVI-RTS-1G-SM to the back plate. When installed, ensure that the Crestron logo is right-side up.



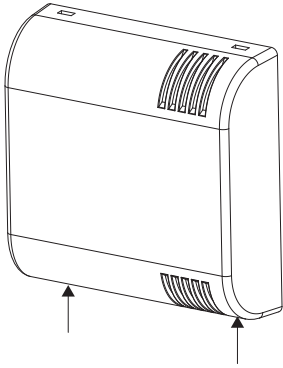
6. Press the sensor onto the back plate. Ensure that the vents are on the right.



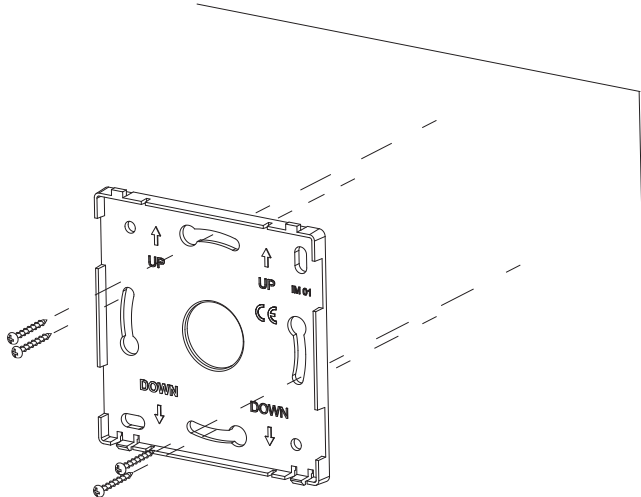
## Mount the CHVI-RTS-1G-SM to a Flat Surface

To mount the CHVI-RTS-1G-SM to any flat surface.

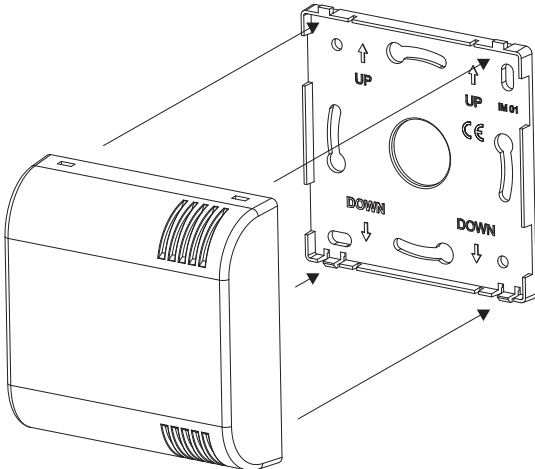
1. Locate an area on the wall that is free of wiring and studs. Make a small hole near the center of the desired area to verify the location is suitable.
2. Drill or cut a 1 inch (25 mm) diameter circular hole in the wall at the desired position.
3. Insert a small screwdriver into the slots on the bottom of the CHVI-RTS-1G-SM to separate the cover from the back plate.



4. Route the wires for the sensor through the hole in the back plate.
5. Use four screws (not included) to secure the back plate to the wall.



6. Make the connections to the device. Refer to the "Wiring" section for details.
7. Align the CHVI-RTS-1G-SM to the back plate. When installed, ensure that the Crestron logo is right-side up. Refer to the illustration in Step 5 in "Mount the CHVI-RTS-1G-SM to an Electrical Box" for details
8. Press the sensor onto the back plate. Ensure that the vents are on the right.



## Wiring

The CHVI-RTS-1G-N and CHVI-RTS-1G-SM sensors connect to Crestron thermostats.

**NOTE:** In situations where ordinary two-conductor thermostat wire (18 to 20 gauge) has been installed, it may be used for runs up to 100 feet (30 meters). This is not a preferred method of installation.

**NOTE:** Use a separate run of wire for each sensor.

**NOTE:** Sensor lines should not be run parallel to any other wiring. Lines should cross other cables at right angles.

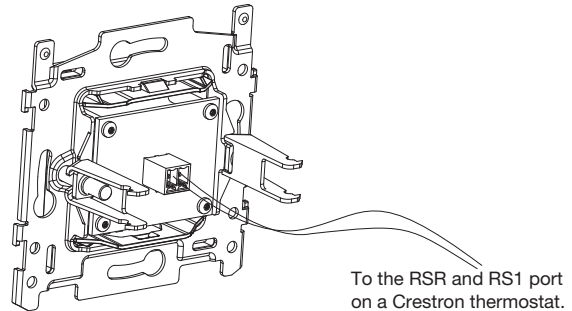
**NOTE:** Crestron strongly recommends low-capacitance twisted pair wire such as CAT3 (up to 250 feet (76 meters)) or CAT5 (up to 500 feet (152 meters)) network cable when using remote sensors. Other cable types are satisfactory, provided the total capacitance is less than 7000 pF. Maximum distance from sensor to thermostat is 500 feet (152 meters).

**NOTE:** If multiconductor cables are used, the unused conductors must not be used for other purposes and must be left unconnected at both ends. Unused connectors must be capped.

Connect the temperature sensor to the thermostat.

1. Turn off the power to the thermostat.
2. Connect the cable to the included connector, then plug the connector into the sensor.

**NOTE:** Sensor wiring is non-polarized.



3. Connect the wires to the RSR and RS1 port on the thermostat (CHVI-RTS-1G shown).
4. Restore power to the thermostat.

## Troubleshooting

The following table provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron customer service representative.

### CHVI-RTS-1G Troubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
The thermostat is not receiving a signal.	There is an improper connection between the sensor and the thermostat.	Check the connection between the sensor and thermostat.
	An incomplete (open) circuit exists in the wiring.	Check the connection between the sensor and the thermostat.

As of the date of manufacture, the product has been tested and found to comply with specifications for CE marking.



The product warranty can be found at [www.crestron.com/warranty](http://www.crestron.com/warranty).

The specific patents that cover Crestron products are listed at [www.crestron.com/legal/patents](http://www.crestron.com/legal/patents).

Certain Crestron products contain open source software. For specific information, please visit [www.crestron.com/opensource](http://www.crestron.com/opensource).

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Specifications subject to change without notice.