

# For Residential and Commercial Applications

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

## Radiant Thermostat 519

**Dimensions: 3-11/16" H x 3" W x 15/16" D  
(94 x 76 x 24 mm)**

The Watts Radiant Thermostat 519 accurately controls the room and/or floor temperature for a hydronic heating zone using Pulse Width Modulation (PWM) technology. Simple up and down buttons and a display with large type make this thermostat easy to read and use. A Floor Sensor is included to measure floor temperature to protect the floor from overheating and enhance comfort.



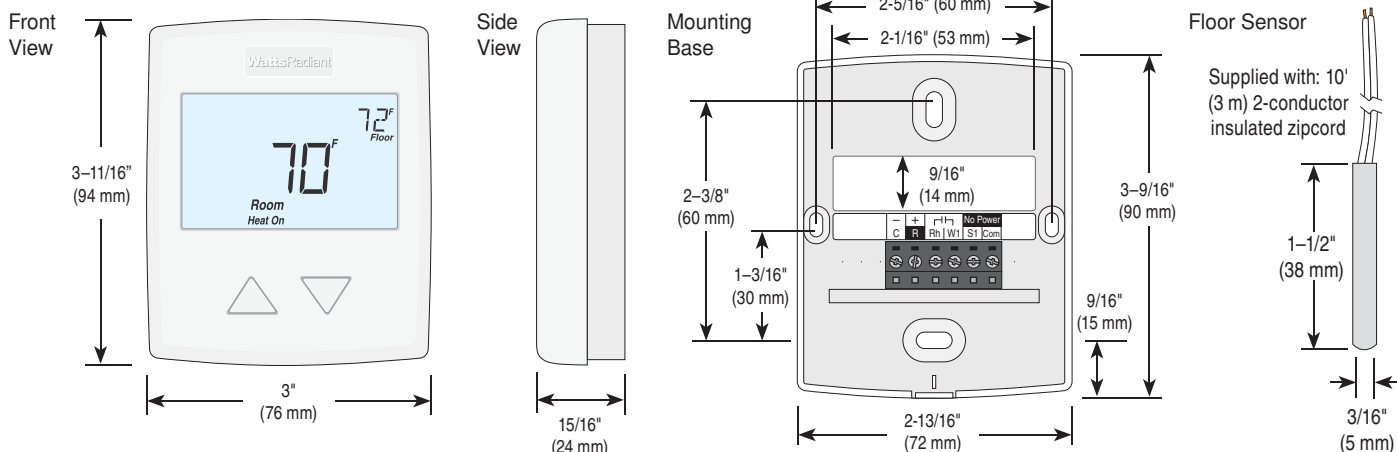
Radiant Thermostat 519 with Floor Sensor 079

### Radiant Thermostat 519

DESCRIPTION	PROPERTY
Packaged weight	0.6 lb. (270 g)
Dimensions	3-11/16" H x 3" W x 15/16" D (94 x 76 x 24 mm)
Enclosure	White PVC plastic, NEMA type 1
Approvals	Meets Class B: ICES & FCC Part 15
Ambient conditions	Indoor use only, 32 to 122°F (0 to 50°C), RH ≤90% non-condensing
Power supply	10 to 30 V (ac/dc), 50/60 Hz, 1.8 VA standby, 56 VA max fully loaded, Class 2
Relay	30 V (ac/dc) 2 A, Class 2 circuits
Sensor	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892

### Features

- Auto Heating Cycle
- Radiant Floor Heating
- Pulse Width Modulation
- Floor & Air Temperature Control
- Outdoor & Floor Temperature Display
- Backlight
- Freeze Protection
- Includes Floor Sensor



### Floor Sensor 079

DESCRIPTION	PROPERTY
Dimensions	3/16" OD x 1-1/2" (5 mm OD x 38 mm)
Sensor Material	316 stainless steel, 10' (3 m) 24 AWG, 300 volt PVC insulated Zipcord
Approvals	CSA C US
Operating range	-58 to 221°F (-50 to 105°C)
Sensor	NTC thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892

### Product Options

Qty	Description	Model#	Order#
	Radiant Thermostat 519	300152	81016550
	Floor Sensor 079	300153	81016551




Watts Radiant product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Radiant Technical Service. Watts Radiant reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts Radiant products previously or subsequently sold.

## CONTROL SETTINGS AND PARAMETERS

The following settings are essential to the successful operation of the heating system.

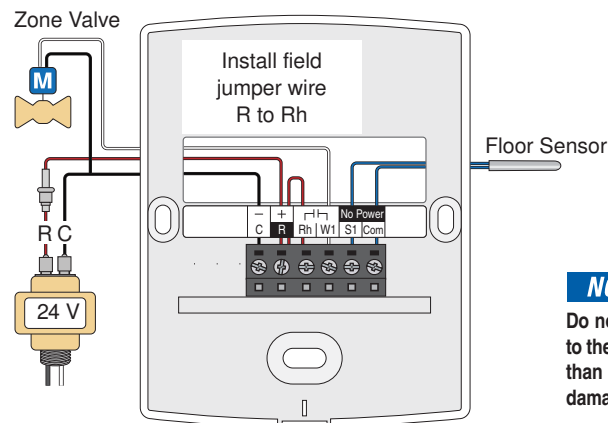
Press



Together

- Press and hold down both the  $\Delta$  and  $\nabla$  buttons for 3 seconds to change from one step to the next.
- Release both buttons once the step has been reached.
- Press the  $\Delta$  or the  $\nabla$  button to change the setting, if available.
- Press and hold down both the  $\Delta$  and  $\nabla$  buttons for 3 seconds to go to the next step, OR
- After 15 seconds of no button activity, the display goes back to normal operation.

DISPLAY	SETTING
<b>User settings.</b>	
MODE HEAT	<b>MODE</b> Select heat or off.
UNITS F	<b>UNITS</b> Select the temperature units in degree Fahrenheit or Celsius.
LIGHT AUTO	<b>BACK LIGHT</b> Select when the display back light should operate. Options are Off, Auto, and On. Auto operates the backlight for 30 seconds after a keystroke.
SET FLOOR 72	<b>SET FLOOR</b> Set the floor minimum temperature. Available when an auxiliary floor sensor is connected and the built-in room temperature sensor is on.
TYPE 5 19	<b>TYPE</b> Device Type number. Hold the $\Delta$ button to view the software version.
ESCAPE	<b>ESCAPE</b> Release the $\Delta$ and $\nabla$ buttons to return to the home screen.
<b>Installer settings. Press the <math>\Delta</math> and <math>\nabla</math> buttons together for 5 more seconds.</b>	
AUX SENSR NONE	<b>AUXILIARY SENSOR</b> Select the type of auxiliary sensor. Available when an auxiliary sensor is automatically detected. <b>NONE</b> = no auxiliary sensor, <b>ROOM</b> = Indoor Sensor, <b>OUT</b> = Outdoor Sensor, <b>FLOR</b> = Floor Sensor
SENSOR ON <small>Room</small>	<b>ROOM SENSOR</b> Select if the built-in room temperature sensor is on or off. The built-in room sensor can only be disabled when an auxiliary room or slab sensor is connected.
SET FLOOR MAX 85	<b>FLOOR MAXIMUM</b> Set the floor maximum temperature in order to protect the floor covering. Suggested settings: Tile = 90°F (32°C), Wood Floor = 85°F (29°C)
ESCAPE	<b>ESCAPE</b> Release the $\Delta$ and $\nabla$ buttons to return to the home screen.



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A Watts Water Technologies Company

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