

Installation Manual

Schluter®-DITRA-HEAT-E-RS1 Smart Thermostat



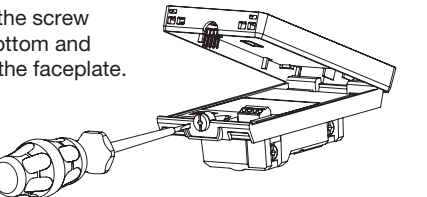
This installation manual is subject to change without notice. Please visit www.schluter.com for the latest version.

⚠️ WARNINGS ⚠️

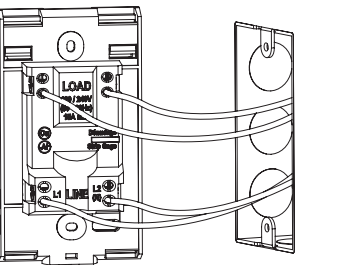
The installation of this thermostat must be performed by qualified personnel and comply with the national and local electrical codes and regulations. To avoid electric shock, disconnect the heating system power supply at the main electrical panel before installation and maintenance of the thermostat.

THERMOSTAT INSTALLATION

1. Loosen the screw at the bottom and remove the faceplate.

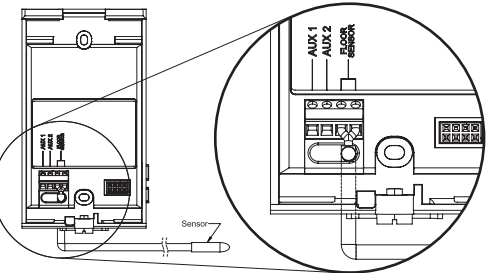


2. Connect the heating cable to the load terminals and the power supply wires to the line terminals located on the back of the thermostat. Connect the heating cable ground wire to the grounding screw in the electrical junction box.

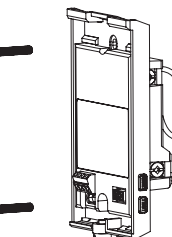


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3. Connect the temperature sensor as shown. Use the floor temperature sensor supplied with the DITRA-HEAT-E-HK heating cable(s). Any other type of sensor used needs to be 300 volt rated and meet the other requirements of the electrical codes in your region.

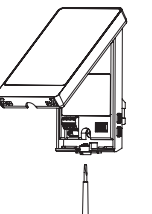


4. Use the screws provided to secure the thermostat to the electrical junction box.



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5. Replace the cover and tighten the screw at the bottom.



6. Power up the thermostat. After performing a test sequence, the thermostat should display the floor temperature. If not, refer to the troubleshooting guide in this manual.



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APPLICATION SETTINGS

(Can also be done with the app)

1. Press the dot soft button and hold for 1 second to access the menu. Press the appropriate arrow to move up and down into the choices and press the dot soft button to make a selection and move to the next parameter, until reaching the end.



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2. Settings Which Can Be Modified with the Device

Setting No.	Name	Parameter and possible settings	Further Explanation
1	Temperature	Temperature unit: °F or °C (default: °F)	
2	Control	Control Mode: Floor or Ambient (default: Floor)	The thermostat offers 2 temperature regulation modes: Floor mode: Regulates floor temperature by means of an external floor temp. sensor. Ambient mode: Regulates ambient temperature by means of an internal temp. sensor.
3	Max Floor Temperature	Max. floor temperature limit when in Floor control mode or in Ambient mode: 41°F to 97°F (OFF option, available only in ambient control mode)*	This function limits the floor temperature when in floor control mode or in ambient control mode. This is ideal for preventing uncomfortable temperatures, or for preserving floor coverings other than ceramic or stone tiles. The recommended max. set point temperature for alternative floor coverings (e.g. LVT flooring, laminate flooring, etc.) is 82°F or 28°C. When reaching 82°F (28°C), "Laminate flooring" will be displayed.
4	Aux Output	Auxiliary output: OFF, EXP, Fast, Long (default: OFF)	An auxiliary output provides one of three functions for an additional heating source: EXP : For connecting one or more Schluter®-DITRA-HEAT-E-RRS power modules Fast and Long : For adding second stage heating when in ambient control mode (Please consult our White Paper on this subject in the "Download" section of this thermostat on our website.)
5	Floor Sensor	Floor temperature sensor: 10K or 12K (default: 10K)	

* In floor control mode, the set point limit is 97°F (36°C).

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MANUAL TEMPERATURE ADJUSTMENTS

To adjust the temperature, press the up ^ or down v arrow to change the set point temperature.



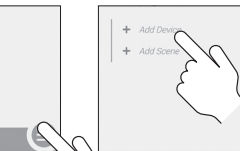
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CONNECT THE THERMOSTAT TO THE SCHLUTER® SMART THERMOSTAT APP

1. If you do not yet have an account, download the Schluter® Smart Thermostat app for iOS or Android™ to create an account and add your device.



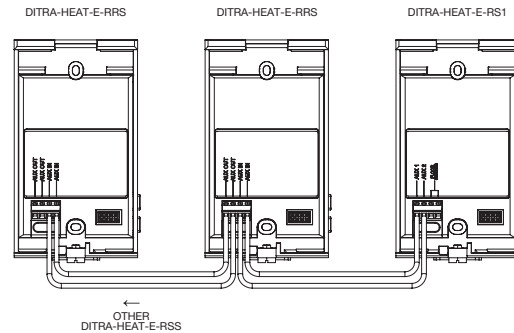
2. Tap the menu icon on your smart phone, then select "Add Device"



3. Follow the steps of the Installation Wizard.

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CONNECTING THE DITRA-HEAT-E-RRS POWER MODULE(S)



When requiring more than 15 amps in a room, the Schluter®-DITRA-HEAT-E-RRS power module is recommended. This power module is the only model which can be used with the Schluter®-DITRA-HEAT-E-RS1 Smart Thermostat.

GROUND FAULT PROTECTION

The thermostat is equipped with a ground fault protection that can detect a current leakage of 5 mA. When a current leakage is detected, the ground fault protection is triggered and quickly interrupts the power supply to prevent any serious injuries.

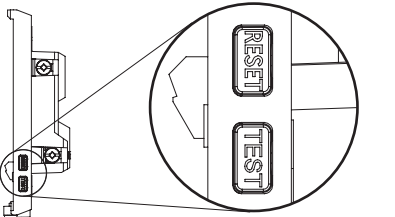
Testing the ground fault protection:

This thermostat has an Auto Test which periodically verifies the correct operation of the protection circuit. You can also do this manually:

- 1) Press the TEST button.

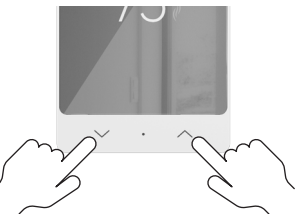
Note: If the RESET button's red warning light does not turn ON, the test has failed. Turn OFF the power to the heating system from the main electrical.

- 2) Press the RESET button to restart the thermostat's base



DISCONNECTING THE THERMOSTAT FROM THE ROUTER OR FROM THE APP

Tap the two arrows (\checkmark \wedge) simultaneously to enter the connection menu. In the connection menu, hold the two arrows until "Disconnected" is displayed.



FACTORY RESET

To perform a reset of all parameters to the factory default: Press the dot soft button for one second and press it again repeatedly until reaching the diagnostic page. From the diagnostic menu, hold the up and down arrow (\checkmark \wedge) simultaneously for 10 seconds. Select "Yes" using the arrows, and confirm by pressing the dot soft button.

LEAVING THE STANDBY MODE

When the thermostat is on standby, press any button to turn back ON the thermostat. The thermostat will resume operation under its last program settings. A thermostat that is placed on standby before a power failure will be on standby by default when power is restored.

TROUBLESHOOTING

CHECK FLOOR SENSOR: Signifies that the thermostat is in floor heating mode and there is no floor temperature sensor connected to it.

GFCI FAULT: Signifies there is a short-circuit above maximum level with at least one conductor.

NETWORK NOT FOUND: Signifies the SSID network can't be found.

INCORRECT PASSWORD: Signifies the password is incorrect.

TECHNICAL SPECIFICATIONS

Operating voltage:

120/208/240 Vac, 50/60 Hz

Maximum load:

1800 W @ 120 V / 15 A, max.

3120 W @ 208 V / 15 A, max.

3600 W @ 240 V / 15 A, max.

Setpoint range:

5° C to 36° C (41° F to 97° F)

Display range:

0° C to 50° C (32° F to 122° F)

Resolution:

± 0.5° C (± 1° F)

Storage:

-20° C to 50° C (-4° F to 122° F)

Auxiliary output:

24 Vac/Vdc 0.1 A

GFCI protection:

Class A (5 mA)

Protocol:

Wi-Fi Standard: IEEE 802.11 b/g/n Frequency: 2.4 GHz

FCC License:

2AC7Z-ESPWROOM32

IC License:

21098-ESPWROOM32

Certifications:

UL under the following safety standards:

UL 60730-1, UL 60730-2-9, UL 943,

CAN/CSA E60730-1, CAN/CSA-E60730-2-9, CSA C22.2 No.144.1

USA - Design patent pending

Canada - Industrial design pending

APPLE HOME

Controlling this HomeKit-enabled accessory automatically and away from home requires a HomePod, HomePod mini, or Apple TV set up as a home hub. It is recommended that you update to the latest software and operating system.

To control this HomeKit-enabled accessory, the latest version of iOS or iPadOS is recommended.

FIRMWARE VERSION

To obtain the version of the firmware installed into the thermostat: Press the dot soft button for one second and press it again repeatedly until reaching the diagnostic page.

IC

This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device does not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

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The Wi-Fi CERTIFIED™ Logo is a certification mark of Wi-Fi Alliance®

NOTES:

Schluter®-DITRA-HEAT Thermostat

3-Year Limited Warranty

Visit www.schluter.com
for warranty information.



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