

STEAMIST®

Temperature Alert

Model: TA-100

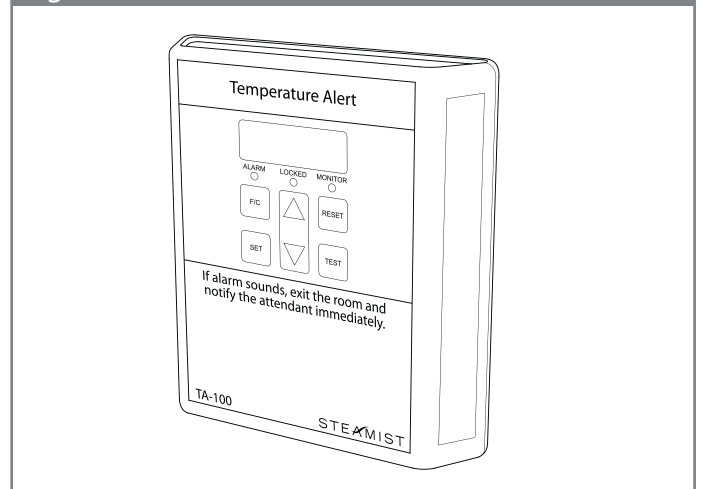
Alert Features:

1. Digital Temperature Display
2. Built-in audible alarm
3. Secondary auxiliary alarm available
4. Selectable Fahrenheit / Celsius
5. Adjustable alarm temperature from 100 to 194F / 37-90C with a tamper-proof lock feature.
6. 12 volt UL Class II power supply
7. 5A output relay to interrupt heater when the alarm sounds
8. Temperature must cool below the maximum allowed temperature before the reset button will disarm the alarm.

Figure 1 -Front of Control

1. Locked indicator either when lit or when blinking indicates the alert is locked and no adjustments can be made to the set temperature.
2. Monitor indicator will be lit when not in an alarm condition and will blink when setting the temperature.
3. Reset button cancels an alarm condition. If the room is still over temperature the alarm will sound again. To stop the alarm the room must be cooled down below the set temperature.
4. Test button triggers an alarm condition when the control is not locked. It is used to test the alarm and make sure the heater turns off. The test condition is easily reset with the reset button.
5. Set button displays the set temperature and allows it to be adjusted when not locked.

Figure 1 - TA-100



6. Up/Down buttons are used to adjust the temperature when not locked.
7. F/C button will toggle the display from Fahrenheit and Celsius.
8. Alarm indicator will blink anytime the alert is activated by an over temperature condition.

Figure 2 - Rear of Control

1. Lock switch. Is locked when slid to the left and unlocked when slid to the right.
2. Terminal connections.
3. Mounting Holes.

Figure 2 - Front of Control

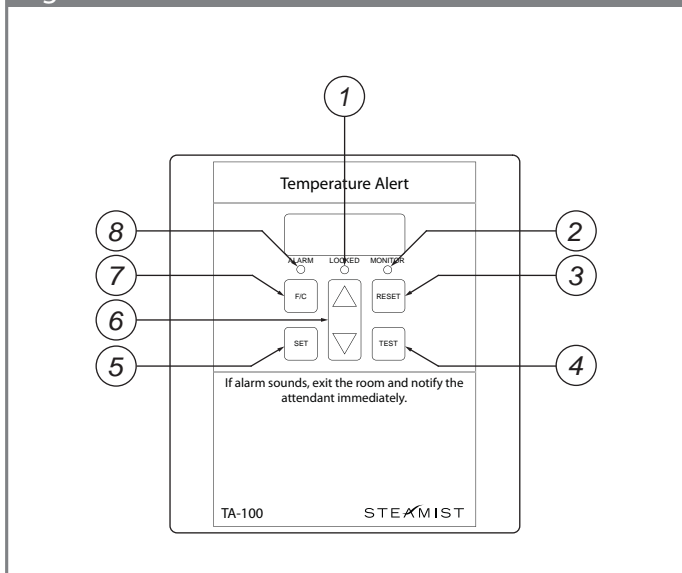
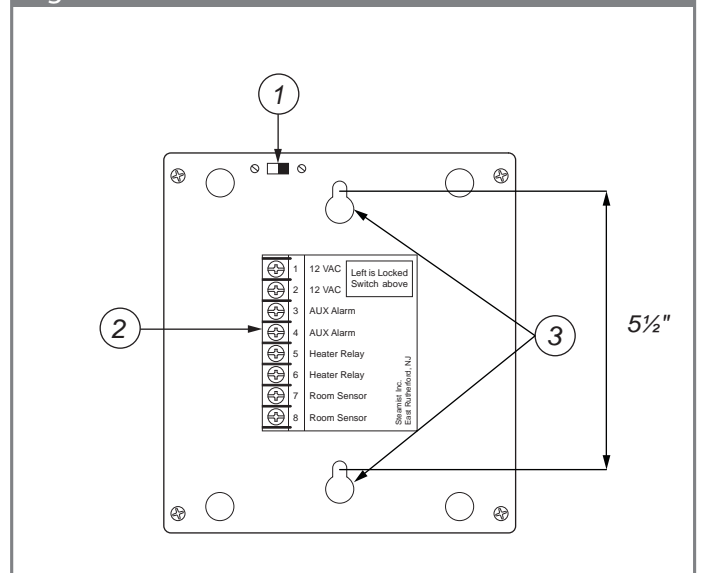


Figure 3 - Rear of Control



Select a location to mount the alarm.

1. It is recommended the TA-100 is mounted outside the door of the room to be monitored. The TA-100 has a built in audible alarm and digital temperature display. It is required by some codes to be located just outside the room.

WARNING: The TA-100 must never be mounted inside the steam room or sauna. To do so would result in failure and void warranty.



2. The location should be approximately 6-1/2 feet off the floor. High enough to be out of the way and low enough for testing or service access.
3. The TA-100 is designed to monitor one room. If multiple rooms are serviced by a single steam generator, each room requires its own TA-100.

Pre-wiring

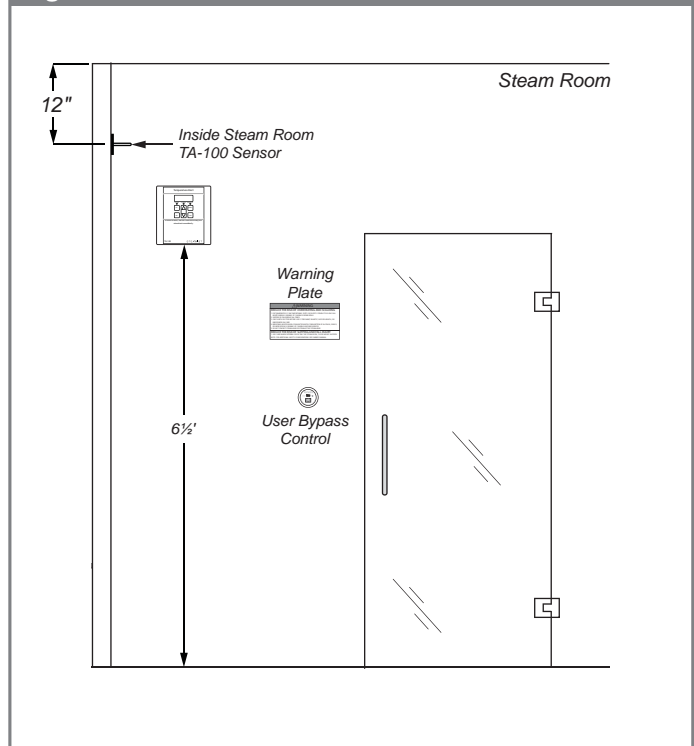
1. There are up to four cable connections to the TA-100.
 - a. 12 volt AC power - The HC model generators shipped with DCCP control since 2013 are prewired to accept the TA-100 and provides the 12 volt power required.
 - b. Heater interrupt relay – The HC model generators mentioned above are also prewired to accept the heater interrupt relay. These two wires and the two 12 volt wires above can be wired with a 4 conductor, 22AWG low voltage cable from the TA-100 to the steam generator.
 - c. Temperature Sensor – The room temperature sensor is mounted onto the wall inside of the room to be monitored and wired to the TA-100 with a 2 conductor low voltage 22AWG cable. The sensor should be located 1 foot down from the ceiling and a minimum of 1 foot away from any corners of the room.
 - d. Auxiliary Alarm – The optional auxiliary alarm is connected with a 22 AWG 2 conductor cable from the TA-100 to the location of the auxiliary alarm.

Installing the Interrupt Relay

Note: Steamist HC series steam generators manufactured since 2013 have been pre-wired and pre-drilled to accept up to two interrupt relays for a two room generator. Reference figure 7 for the following instructions.

1. Mount the relay to the generator control panel just above the circuit board with the two screws provided. There are 4 holes predrilled for mounting 2 relays horizontally above the circuit board. If two TA-100 alerts are being used mount the second relay in the other location.
2. Connect the coil of the relay (the two smaller terminals) to the terminal block to the right of the relay selecting two of the terminals marked –NC with the wires provided. If the two TA-100 alerts are being used connect the second relay coil to the second set of terminals marked –NC. There is no polarity to this connection
3. Find the orange wire connected to the heater relay on the circuit board and disconnect it. Reconnect it to the newly installed interrupt relay. Either of the two larger terminals on the relay is fine, there is no polarity on this connection.

Figure 4 - Steam Room



4. Connect a new jumper wire provide with the TA-100 from the other larger terminal on the interrupt relay to the connector on the heater relay on the circuit board where the orange wire was removed from in the previous step . Note if two TA-100 alerts are being used for two rooms do not connect this jumper wire to the heater relay as stated but rather connect it to the second relay and connect the second relay to the heater relay on the circuit board. This is a series connection, allowing either of the two alerts to disable the heater in the generator.

Installing the TA-100 Control

1. Installing the TA-100 control. Reference Figure 6 for the following instructions.
 - a. Route a four wire 22AWG cable (not provided) from the generator to the Location of the TA-100 control.
 - b. At the generator end of the cable, connect two wires in this cable to the terminals marked 12VAC in the generator control compartment. Polarity of these two wires is not important. Connect the other two wires to a relay coil at the nearby terminals marked –NC. Again polarity of these two wires is not important.
 - c. At the control, end of the cable, connect the 12VAC wires to the 12 VAC terminals and the other two wires to the terminals marked Heater Relay at the TA-100 control.
 - d. Mount the control to the wall using the screws and anchors provided. If it is necessary to lock the control to the wall you can install a third screw above the control preventing it from being slid up and off the mounting screws.

Steps to Install Sensor Inside Steam Room

1. Route a two wire 22AWG cable (not provided) from the room sensor location to the TA-100 control.
2. At the sensor end, attach the sensor to the cable with the two wire crimps provided.
3. Mount the sensor as shown in figure 4, sealing the sensor to the wall with the silicone provided.
4. At the control or at the generator end attach the sensor wires to the terminals marked room sensor, polarity does not matter.

Installing Auxiliary Alarm

1. Installing the auxiliary alarm, if an additional alarm is needed. It may be mounted in the manager's office or other dry area and not the steam room.
 - a. The auxiliary alarm is designed to be mounted into a single gang electrical box or low voltage wall bracket.
 - b. Route a two wire 24AWG cable (not provided) from the alarm location to the TA-100 control location.
 - c. At the alarm end, connect the two wires to the alarm, polarity is not important. Mount the alarm to the wall.
 - d. At the control end, connect the two alarm wires to the terminals marked AUX Alarm.

Testing the Temperature Alert

1. Slide the lock switch (shown in figure 2) to the unlock position. The lock indicator will go off.
2. Press the test button the alarm will sound and the heater will disengage.

NOTE: The alert must be tested when the heater is on in order to ensure the alert interrupts the heater. This is best done when the room is cold and heating up.

3. When the test is finished press the reset button and lock the alert.

Figure 5 - Sensor

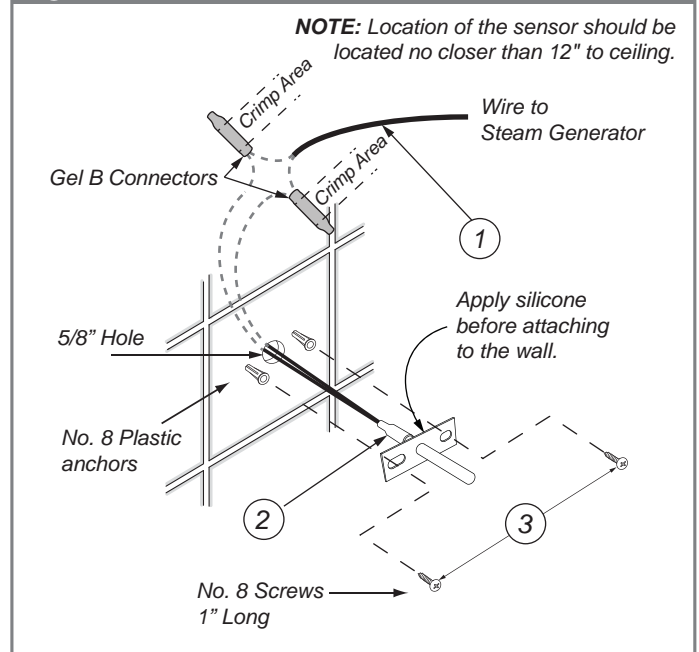


Figure 6 - Auxiliary Alarm

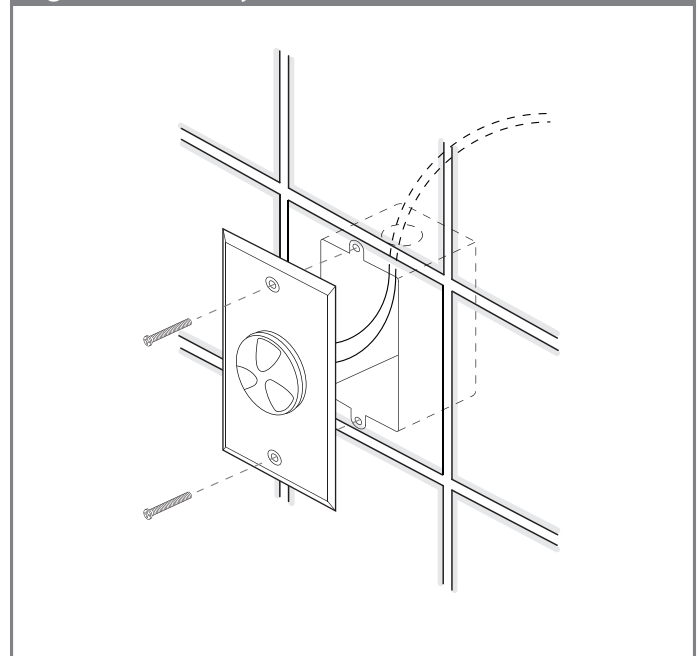


Figure 7 - Wiring Diagram

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