

IMPORTANT:
LEAVE THIS MANUAL WITH THE
OWNER/OPERATOR OR ATTENDANT



Over Temperature Alarm and Shut Off Device

For CT Day Spa & Commercial Steam Rooms

Model CU-HTC

Installation and Operation Manual

mr.steam® | Feel Good Inc.®

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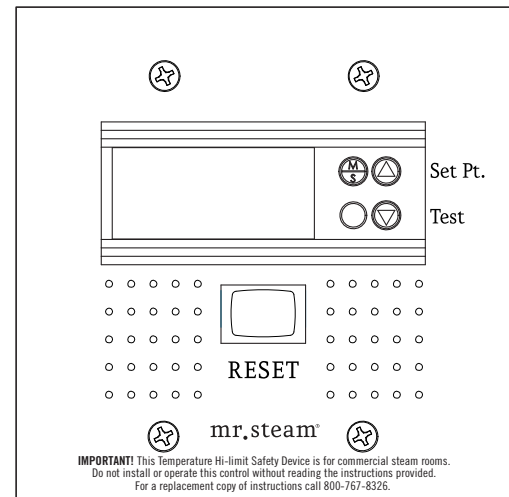
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Over Temperature Alarm & Shut Off Device

IMPORTANT NOTE: As you follow these instructions, you will notice warning and caution symbols. This information is important for the safe and efficient installation and operation of this control. These are types of potential hazards that may occur during installation and operation:

⚠ WARNING signals a situation where minor injury or product damage may occur if you do not follow instructions.

⚠ CAUTION states a hazard may cause serious injury or death if precautions are not followed.

All diagrams for illustrative purposes only.

GENERAL INFORMATION

The Over Temperature Alarm and Shut Off Device will be referred to as the "Device" in this Installation and Operation Manual. The Device is recommended for use with any MrSteam CT Day Spa or CU Commercial Steam Generator System to provide over temperature shut off and alarm function. The Device is required where indicated by code.

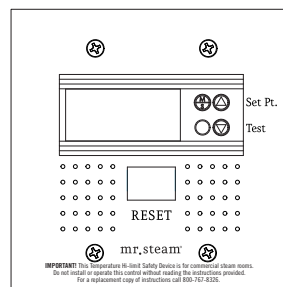
IMPORTANT: Read these instructions and the CT Day Spa Installation and Operation Manual or the CU Steambath Generator Installation and Operation Manual thoroughly before installing or servicing the Device. If these materials are not available go to the "Downloads" section of the MrSteam website or contact MrSteam for free replacements.

IMPORTANT INFORMATION ABOUT MRSTEAM CU COMMERCIAL STEAM GENERATORS AND CT DAY SPA STEAM GENERATORS.

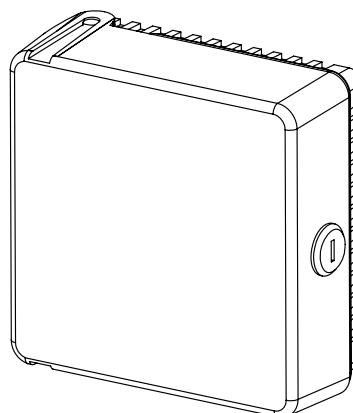
- Each CU Steambath Generator requires one D1 control. For typical installation see the CU Installation, Operation & Maintenance Manual or the diagram on page 5. Set the D1 Control at a maximum of 118° F to prevent nuisance tripping of the Device.
- For CT Day Spa Steambath Generator's typical installation, see the CT Installation, Operation & Maintenance Manual or diagram on page 7.
- Each room requires one Device when required by code.

DEVICE KIT CONTENTS:

- Device
- Clear Tamper Proof Cover
- Sensor
- Sensor Guard
- 30 ft. Cable
- #6 x 1" Tapping Screw
- #6 x 1" Anchors
- Silicone
- Instruction Manual



Device



Clear Tamper Proof Cover



30 ft. Cable



#6 x 1" Screws



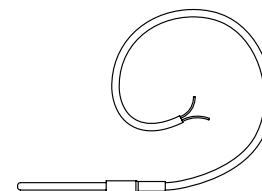
#6 x 1" Anchors



Silicone



Sensor Guard

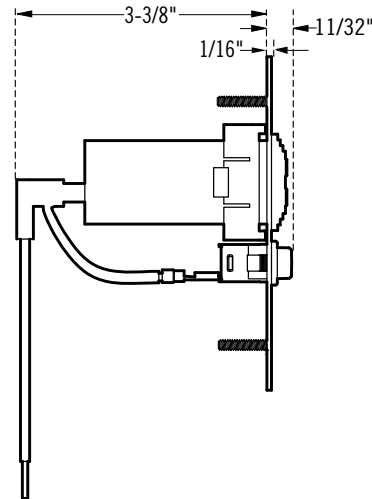
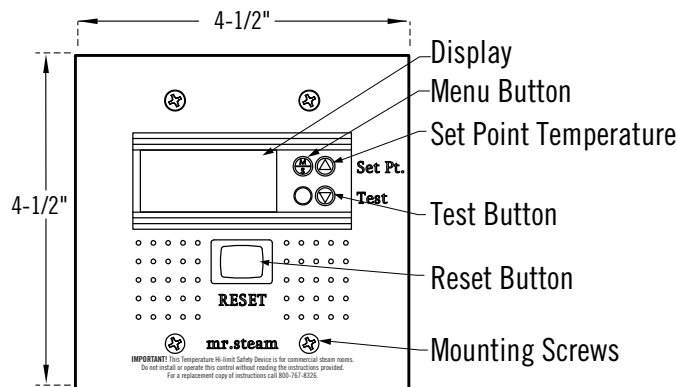


Sensor

All diagrams for illustrative purposes only.

All diagrams for illustrative purposes only.

DIMENSIONS



DEVICE OPERATION

- The Device is to be used in conjunction with a steam generator being used to heat a steam room.
- The Device is factory set at 120° F (49° C) set point, however always check local codes for the maximum allowable operating temperature. If the temperature rises above the set point, the Device will sound and disconnect the heating source.
- The Device and the steam generator can only be reset by the attendant after the steam room cools to a point below the Device's set point.
- The cause of overheating must be determined and corrected before resetting the Device or operating the steam room.
- Use only for MrSteam CT Day Spa and CU Commercial Steam Systems. Do Not use for spas, saunas or any other equipment.
- Device is powered by 120 VAC.

⚠ WARNING The cause of overheating must be determined and corrected before resetting the device or operating the steam room. Never operate the steam room at temperatures above 120° F or above temperatures required by local codes. Operating the steam room at excessive temperature may result in overheating and scalding.

For additional safety considerations see the CU/ CT Installation, Operation and Maintenance Manuals and the safety signage that are supplied with the steam generator. If these materials are not available go to the "Downloads" section of the MrSteam website or contact MrSteam for free replacements.

- Device shut-off is fixed at 120° F (49° C). When the Device sensor detects temperature in excess of

120° F (49° C), the Device activates an internal 90db alarm, and shuts down the steam generator. The display will flash STOP.

- The Device can be reset after the steam room temperature falls below 120 °F (49 °C) by pressing the RESET button. This will shut off the alarm and display the current room temperature.
- The Device display remains ON if the steam bath generator switch is in the OFF position, however, power to the solenoids will be OFF.
- The Device meets New York City Code Section 165.63: Sauna and Steam Room requirements.

TESTING THE SYSTEM

- Press the down arrow button to shut off the system. This shuts off power to the steam generator, sounds the alarm, and displays STOP. Push the RESET button to reset.
- Press and hold the up arrow button to display the set point temperature (120° F).
- Test monthly to insure proper operation.

⚠ CAUTION To prevent shock hazard, DO NOT install the Device in the steam room.

⚠ CAUTION Use only for MrSteam CT Day Spa and CU Commercial Steam Systems. Do Not use for spas, saunas or any other equipment. The use of the Device with any equipment other than a MrSteam CT Day Spa or CU Commercial Steam System may result in an inoperable device and cause overheating or scalding.

All diagrams for illustrative purposes only.

CX STEAMBATH SYSTEM: DEVICE INSTALLATION

- Locate the Device outside of the steam room, in a location that's visible and accessible to the steam room attendant.
- Select a gang box and a gang box cover that are appropriate for installation. Install gang box at chosen Device location.
- Install the Device Sensor in the steam room, see Device Sensor Installation on page 11.
- Run the 30 ft cable from the Device Sensor's location to Device's location. If the 30 ft cable is not long enough, run 20 AWG type CL2 insulated solid copper wire in the appropriated length (100 ft max).
- Connect purple and yellow wire from pin 3 and pin 4 of Device to the 2 pole terminal block in the Generator, with 16 AWG stranded insulated wire, see CX WIRING DIAGRAM on page 5.
- Connect black and white wire from pin 10 and pin 11 of Device to 120 VAC power supply, with 16 AWG stranded insulated wire.
- Connect 30 ft cable on Device Sensor to its matching connector on supplied 30 ft. cable, see Figure 2.
- Connect Device Sensor to the other end of supplied 30 ft cable.
- Fasten Device onto gang box cover with 4 mounting screws, see Figure 1.

CAUTION To prevent shock hazard, DO NOT install the Device in the steam room.

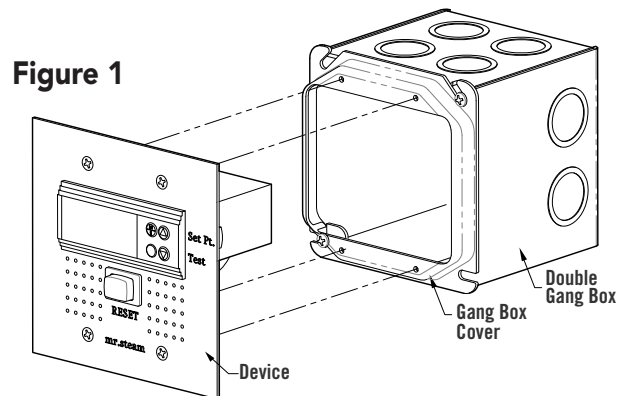


Figure 1

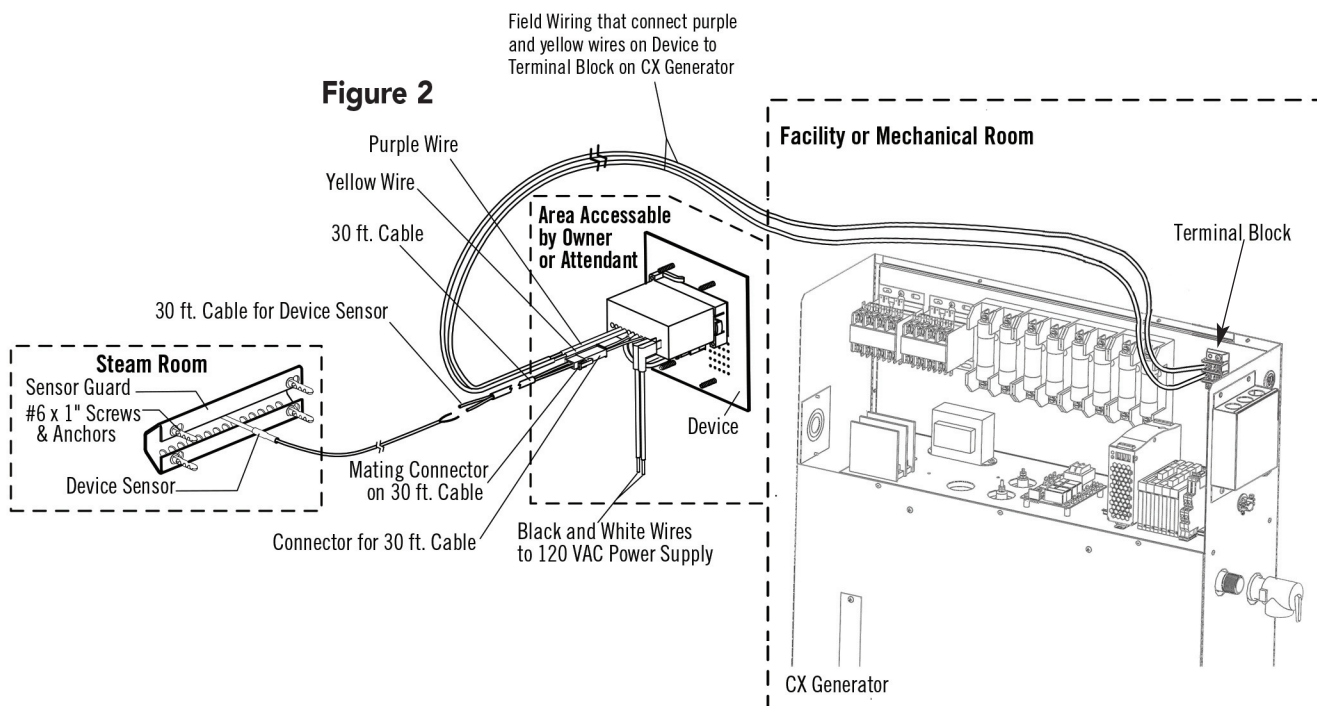
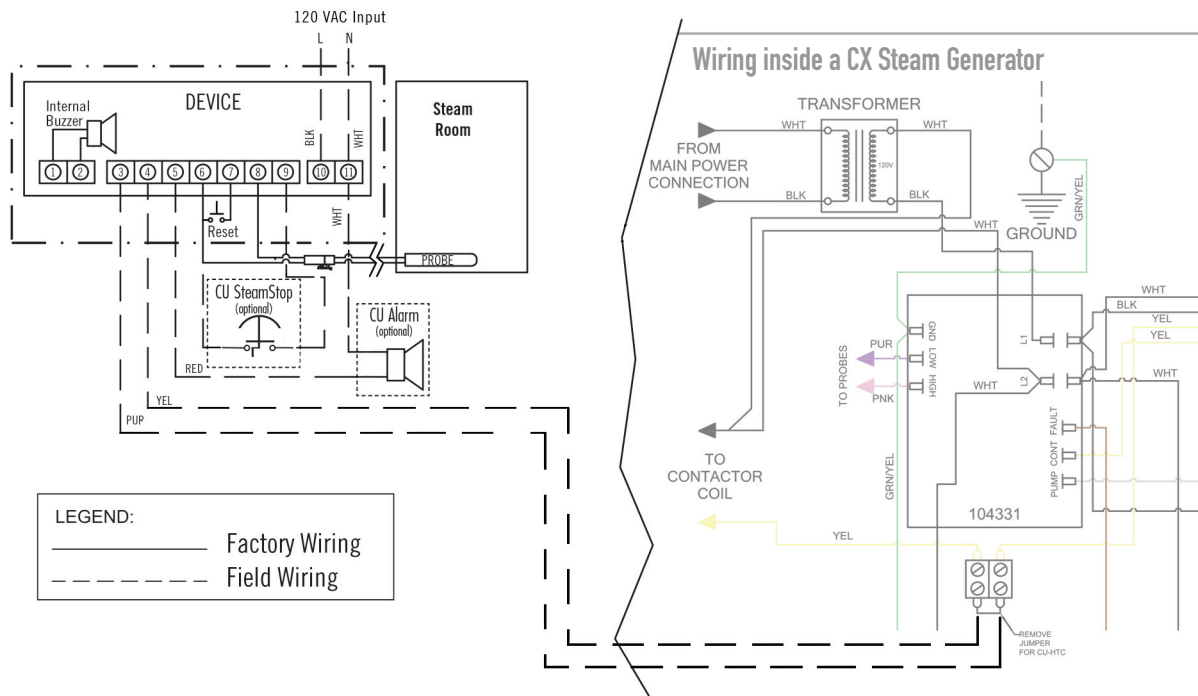


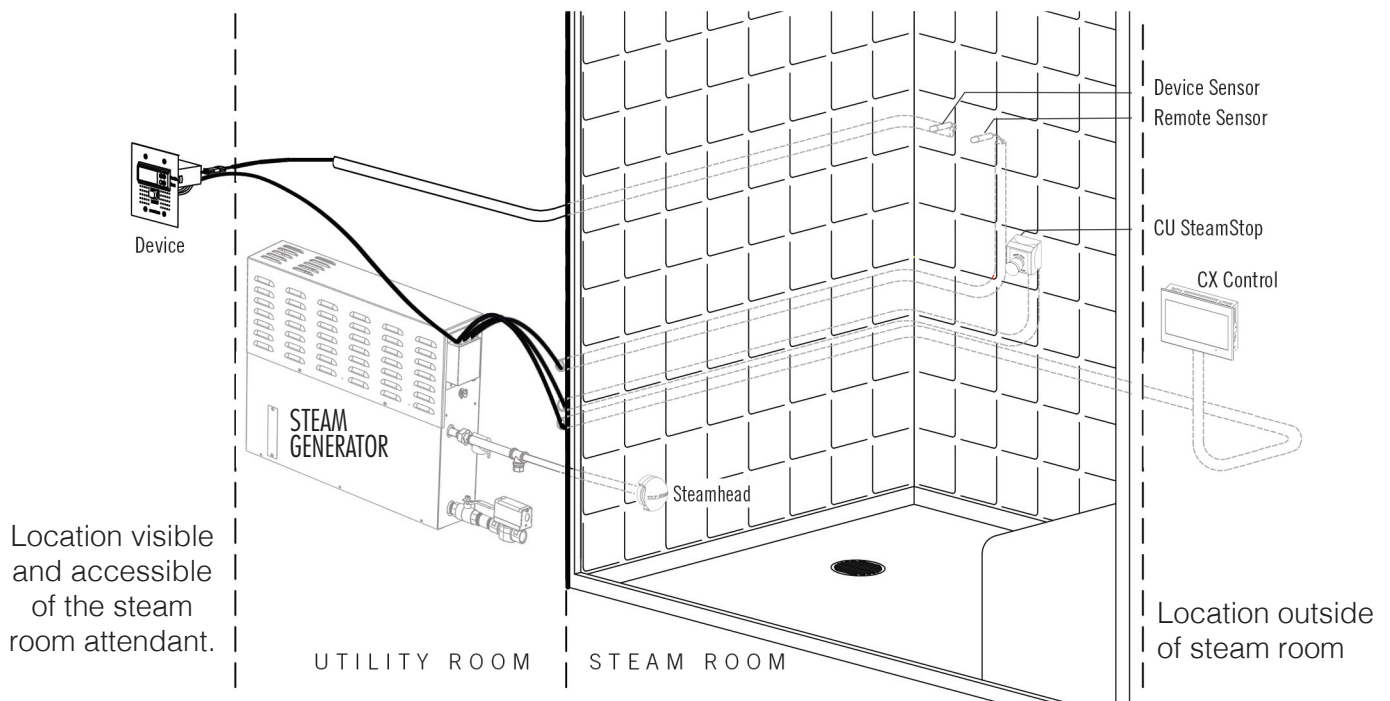
Figure 2

All diagrams for illustrative purposes only.

CX WIRING DIAGRAM



TYPICAL INSTALLATION OF CX GENERATOR, STEAMHEAD AND DEVICE



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY. Some components may be omitted or altered for clarity. Do not use for wiring, repair or other purposes not related to component identification.

! CAUTION To prevent shock hazard, DO NOT install the Device in the steam room.

All diagrams for illustrative purposes only.

CU STEAMBATH SYSTEM: DEVICE INSTALLATION

- Locate the Device outside of the steam room, in a location that's visible and accessible to the steam room attendant.
- Select a gang box and a gang box cover that are appropriate for installation. Install gang box at chosen Device location.
- Install the Device Sensor in the steam room, see Device Sensor Installation on page 11.
- Run the 30 ft cable from the Device Sensor's location to Device's location. If the 30 ft cable is not long enough, run 20 AWG type CL2 insulated solid copper wire in the appropriated length (100 ft max).
- Connect purple and yellow wire from pin 3 and pin 4 of Device to the terminal block in the Generator, with 16 AWG stranded insulated wire, see WIRING DIAGRAM on page 7.
- Connect black and white wire from pin 10 and pin 11 of Device to 120 VAC input terminals in generator (see wiring diagram on page 5), with 16 AWG stranded insulated wire.
- Connect 30 ft cable on Device Sensor to its matching connector on supplied 30 ft. cable, see Figure 2.
- Connect Device Sensor to the other end of supplied 30 ft cable.
- Fasten Device onto gang box cover with 4 mounting screws, see Figure 1.

CAUTION To prevent shock hazard, DO NOT install the Device in the steam room.

Figure 1

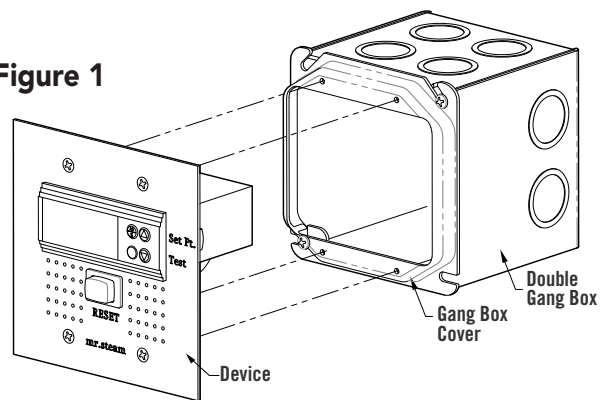
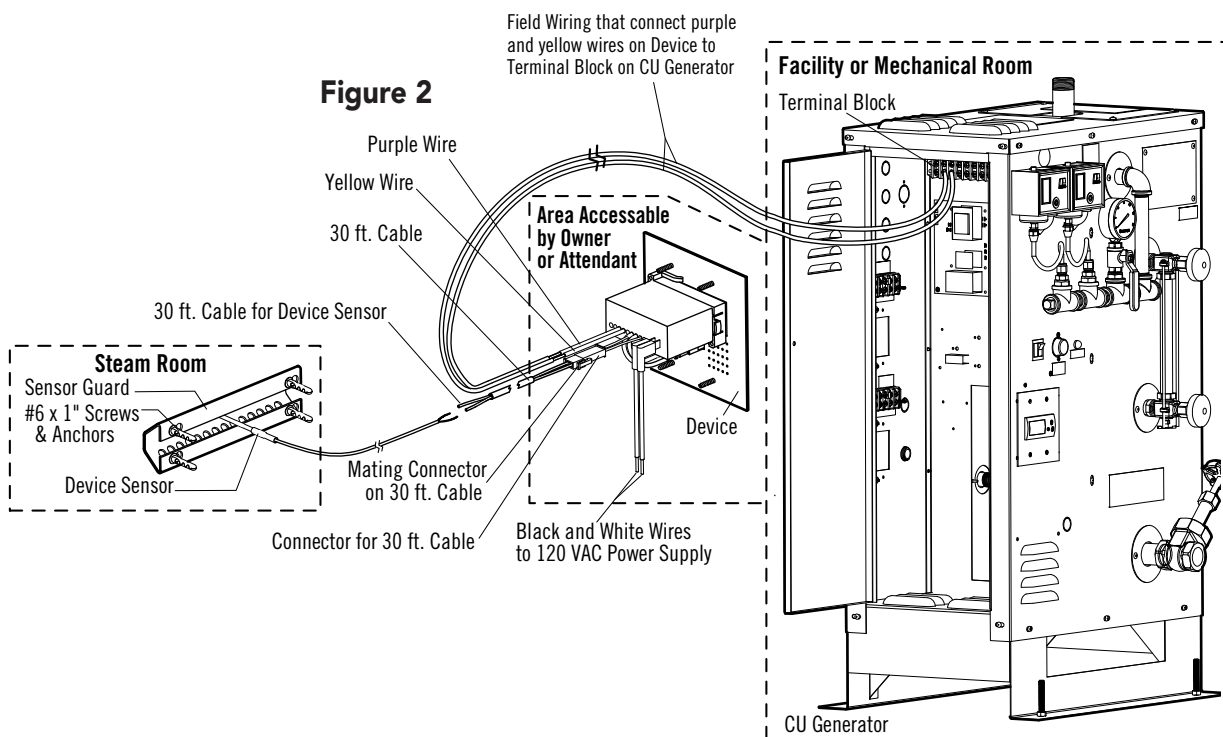
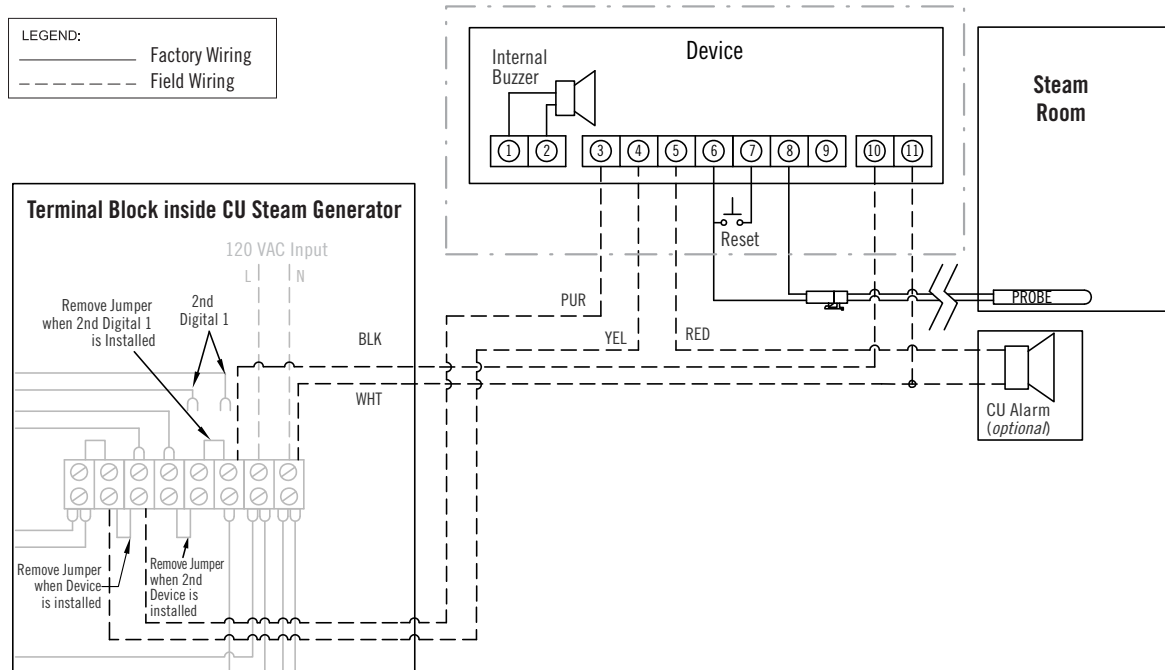


Figure 2

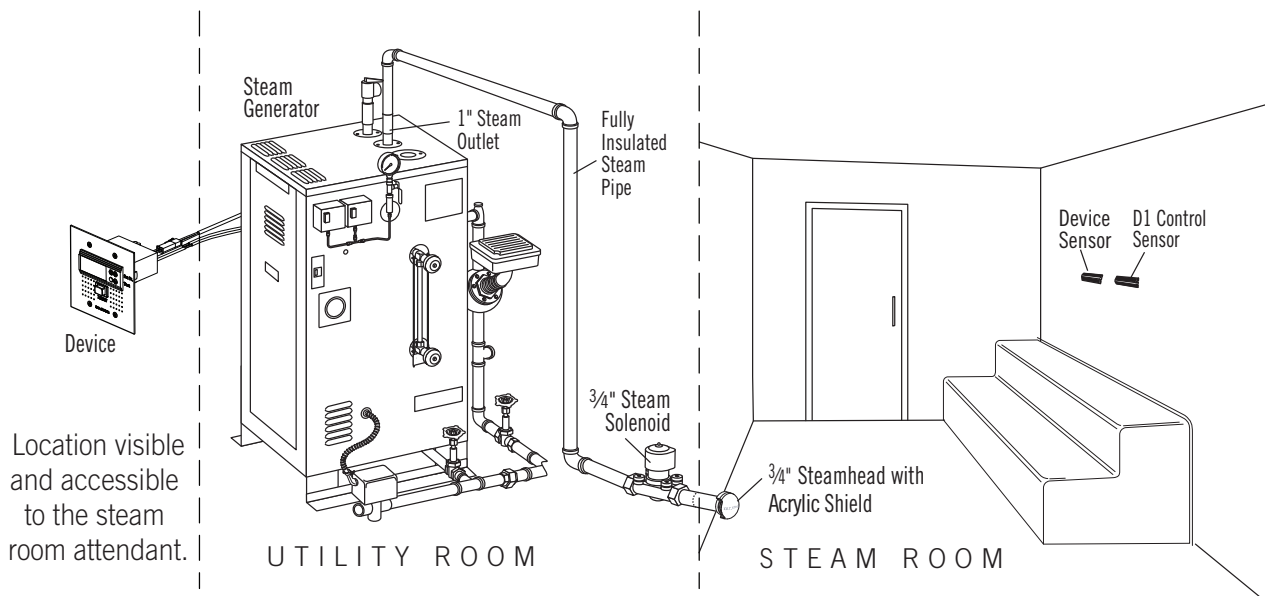


All diagrams for illustrative purposes only.

CU WIRING DIAGRAM



TYPICAL INSTALLATION OF CU GENERATOR, STEAMHEAD AND DEVICE



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY. Optional equipment shown. Consult with qualified designer, architect or contractor for steam room construction details, including location of steam-head(s) and sensors.

CAUTION To prevent shock hazard, DO NOT install the Device in the steam room.

All diagrams for illustrative purposes only.

CT DAY SPA SYSTEM: DEVICE INSTALLATION

- Locate the Device outside of the steam room, in a location that's visible and accessible to the steam room attendant.
- Select a gang box and a gang box cover that are appropriate for installation. Install gang box at chosen Device location.
- Install the Device Sensor in the steam room, see Device Sensor Installation on page 11.
- Run the 30 ft cable from the Device Sensor's location to Device's location. If the 30 ft cable is not long enough, run 20 AWG type CL2 insulated solid copper wire in the appropriated length (100 ft max).
- Connect purple and yellow wire from pin 3 and pin 4 of Device to the terminal block in the Generator, with 16 AWG stranded insulated wire, see CT WIRING DIAGRAM on page 9.
- Connect black and white wire from pin 10 and pin 11 of Device to 120 VAC power supply, with 16 AWG stranded insulated wire.
- Connect 30 ft cable on Device Sensor to its matching connector on supplied 30 ft. cable, see Figure 2.
- Connect Device Sensor to the other end of supplied 30 ft cable.
- Fasten Device onto gang box cover with 4 mounting screws, see Figure 1.

CAUTION To prevent shock hazard, DO NOT install the Device in the steam room.

Figure 1

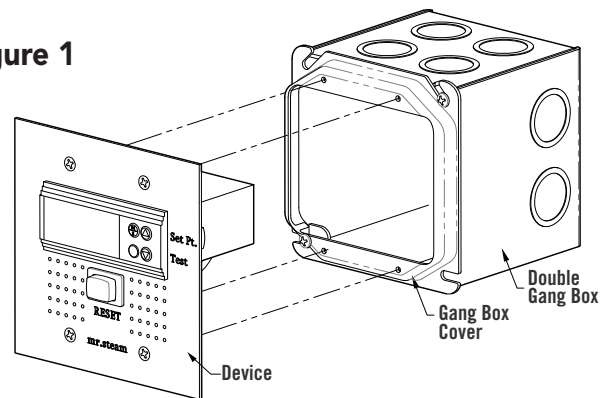
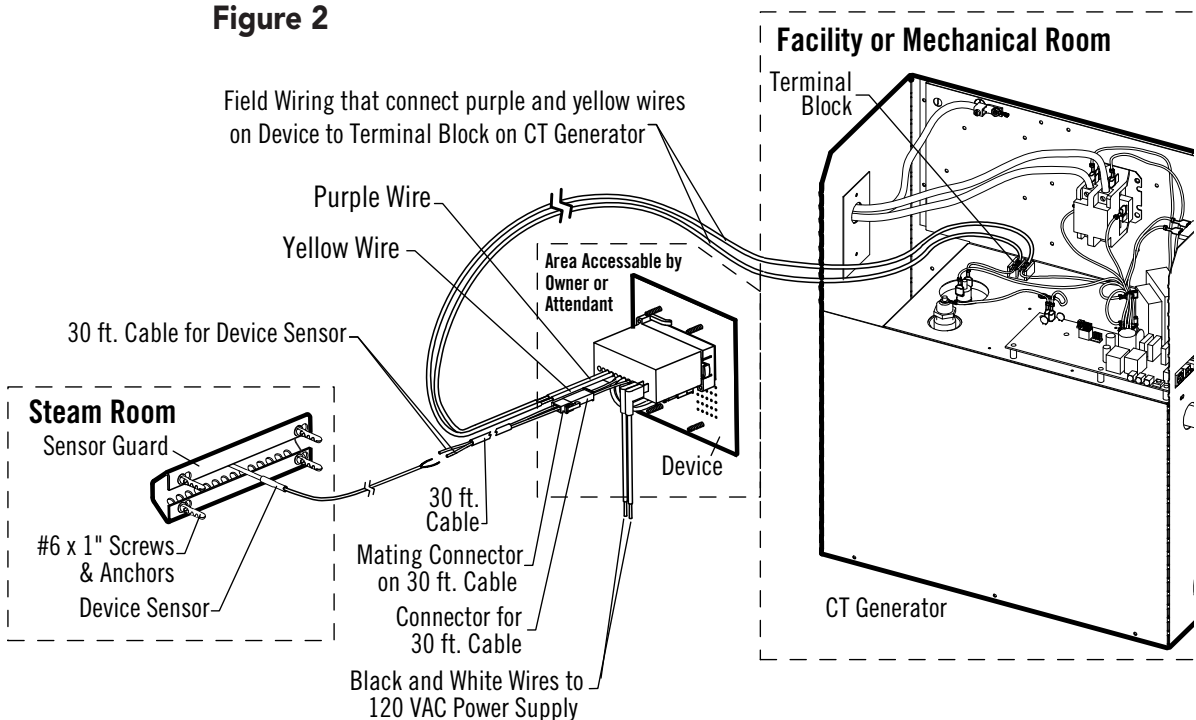
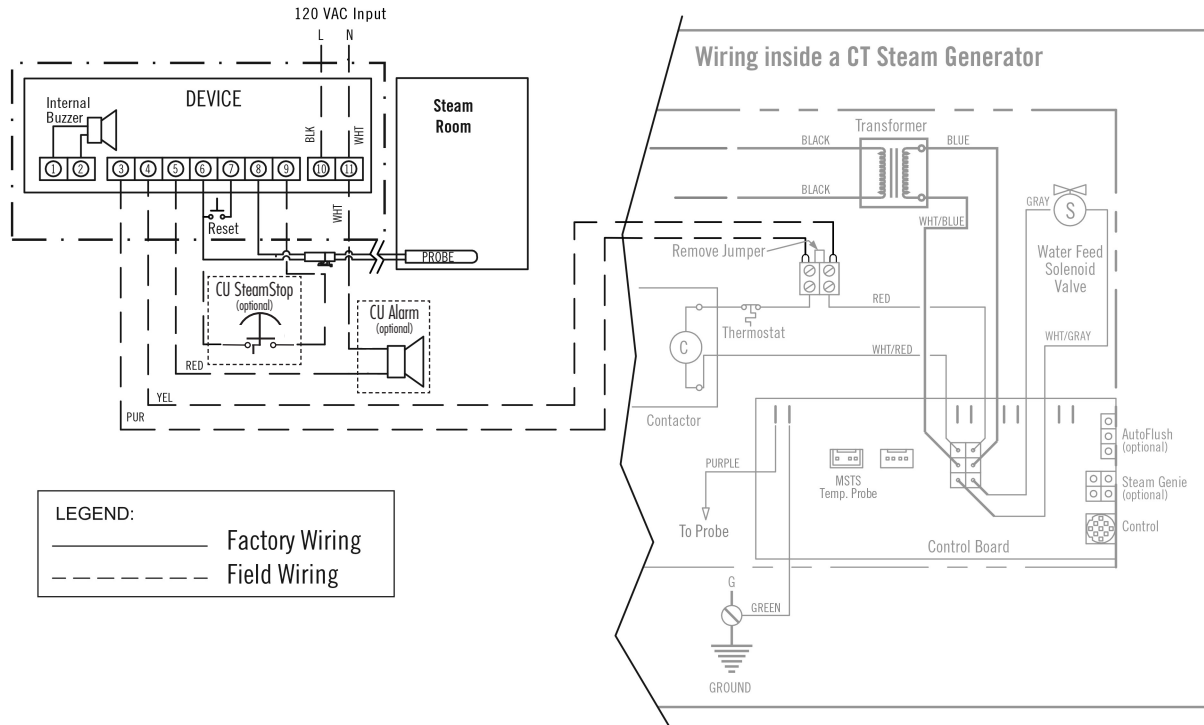


Figure 2

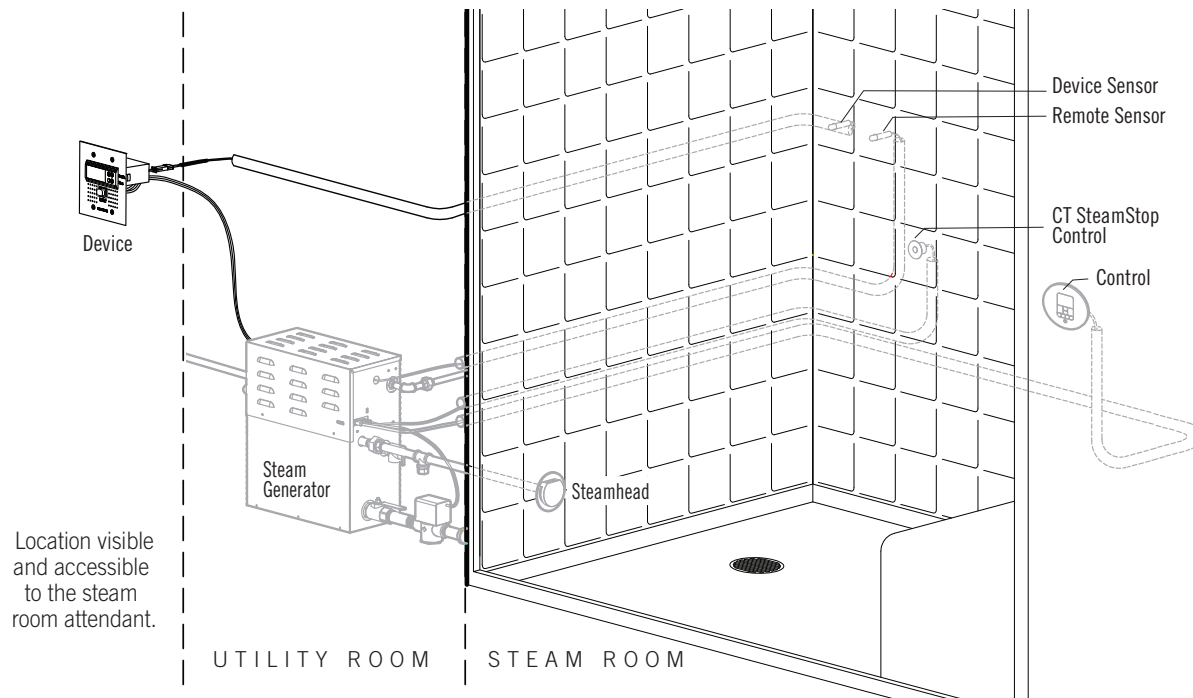


All diagrams for illustrative purposes only.

CT WIRING DIAGRAM



TYPICAL INSTALLATION OF CT GENERATOR, STEAMHEAD AND DEVICE



NOTE: FOR ILLUSTRATIVE PURPOSES ONLY. Some components may be omitted or altered for clarity. Do not use for wiring, repair or other purposes not related to component identification.

CAUTION To prevent shock hazard, DO NOT install the Device in the steam room.

All diagrams for illustrative purposes only.

CLEAR TEMPER PROOF COVER INSTALLATION

- Remove cover for easy installation, by pulling the Hinge Tabs, see fig 1.
- Place Base Ring over the Device, align Base Ring with the Device and use a level to level Base Ring. Mark locations of 4 mountings holes for Base Ring, see fig 2.
- Drill 4 pilot holes for anchors (*included*).
- Mount Base Ring to wall with 4 anchors (*included*) and 4 x 1-1/4" long screws (*included*), see fig 3.
- Snap Cover back onto Base Ring and lock with key (*included*), see fig 4.

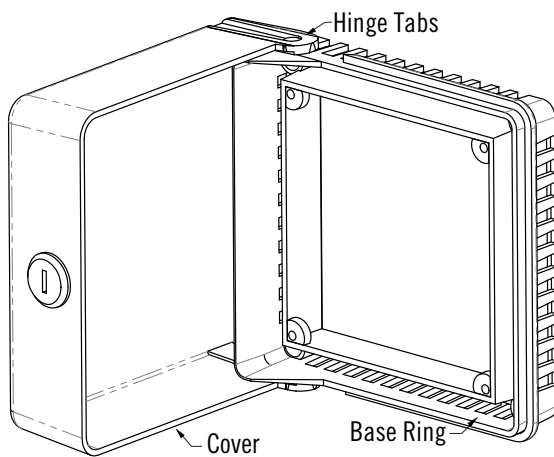


Fig. 1

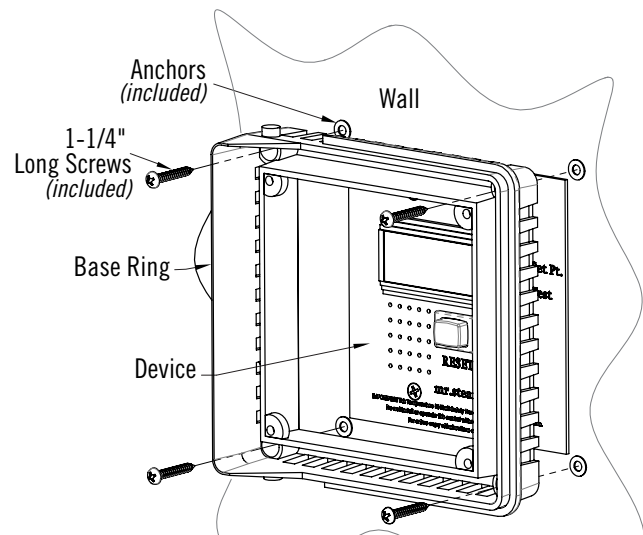


Fig. 3

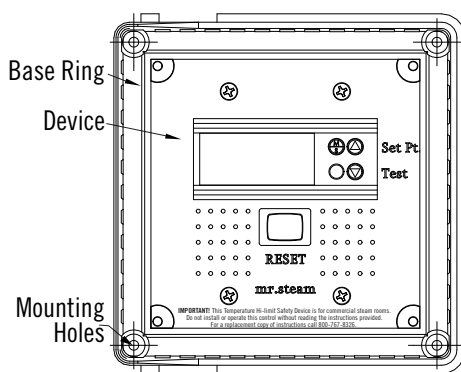


Fig. 2

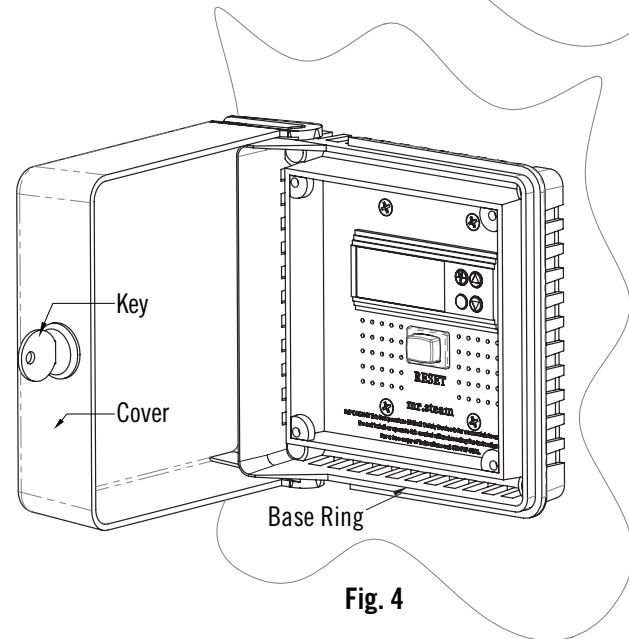


Fig. 4

All diagrams for illustrative purposes only.

DEVICE SENSOR INSTALLATION

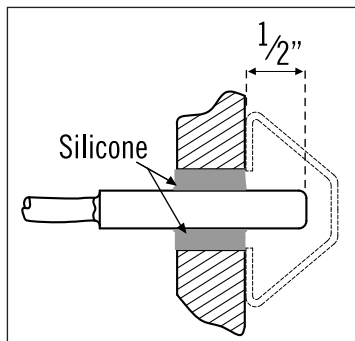
Install the sensor:

- On a vertical surface.
- 4-5 feet above the floor in a location representative of the desired steam bathing temperatures.
- Do not locate the Sensor above or near the steam head or direct steam emissions.

!CAUTION DO NOT LOCATE THE DEVICE SENSORS NEAR OR ABOVE THE STEAMHEAD(S) WHERE DIRECT STEAM EMISSION CAN INTERFERE WITH STEAM ROOM TEMPERATURE MONITORING. IMPROPER LOCATION OF THE SENSOR MAY INTERFERE WITH TEMPERATURE MONITORING AND MAY CAUSE OVERHEATING OR SCALDING.

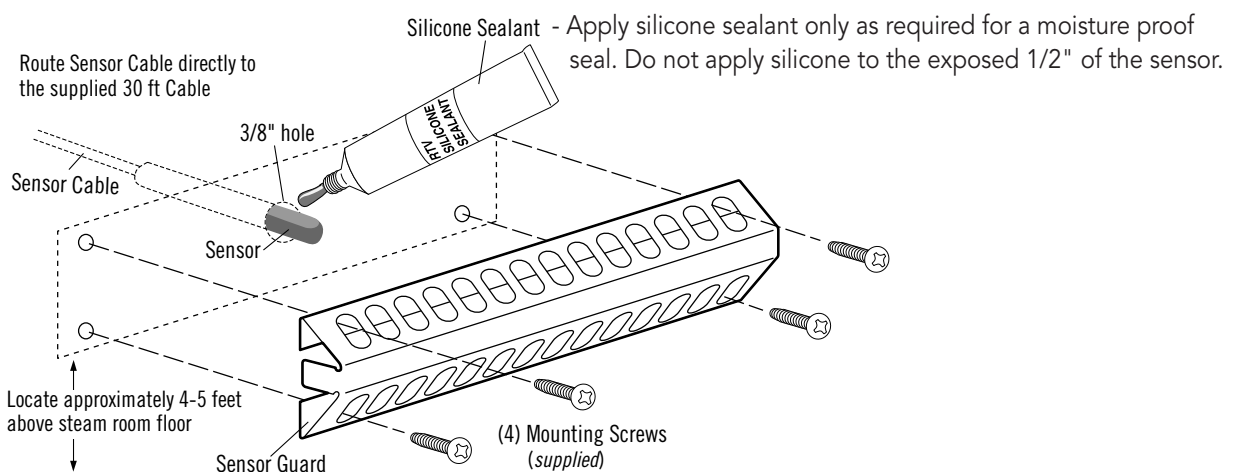
- Route Sensor cable directly to Device.
- Do not route Sensor Cable with power wiring, next to electric motors or any other location subject to electrical noise. Subjecting the wiring to electrical noise may cause improper Device operation.
- Ensure that the Sensor protrudes a minimum of 1/2" from the wall surface.
- Seal 3/8" hole with silicone provided.
- Protect Sensor with Sensor Guard provided.

!CAUTION Ensure all splices in the Sensor Cable are securely crimped or soldered and sealed with heat shrink tubing as required for a secure electrical connection.



Cross-section view
of sensor for reference

!CAUTION Ensure that 1/2" of the Sensor tip is in "free air" and clear of silicone or any material. Failure to keep the Sensor tip free of silicone sealant may interfere with steam room temperature monitoring and may cause overheating or scalding.

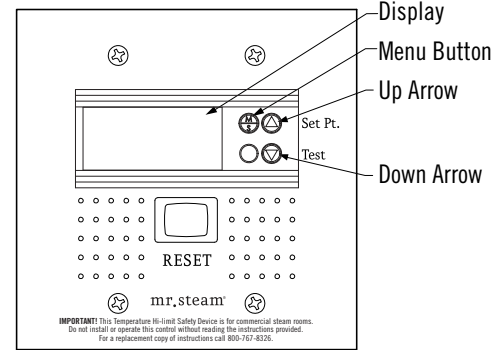


All diagrams for illustrative purposes only.

CALIBRATION OF DEVICE SENSOR

Calibration is necessary after Device and Device Sensor installation to ensure an accurate steam room temperature reading. At this point, Device and Device Sensor should be installed, tested, and functioning properly.

- Press and hold Menu Button for 3 seconds to enter I configuration mode.
- Device will show a blank display with only the left most digit flashing "0". Use the Up and Down Arrow buttons to enter pass code "5913" one digit at a time. Press the Menu Button after entering each digit.
- After entering the four-digit pass code, press Menu Button to enter input parameter "InPt". Press Menu Button again to enter parameter "I.CAL" for calibration of Device Sensor.
- Press Menu Button to confirm entering calibration of Device Sensor, then use the Up and Down Arrow button to enter offset value for Device Sensor of a maximum of +25° F and a minimum of -25° F. Press Menu Button to confirm offset value.
- Press and hold Menu Button to exit input parameter. Press and hold Menu Button again to exit configuration mode.
- Device should now display Device Sensor reading with offset value.



Message Table

Message	Description
oPEn	Opened Device Sensor connection. Shut off power to Device and check Device Sensor connection.
Shrt	Shorted Device Sensor connection. Shut off power to Device and check Device Sensor connection.
StoP	Device in Stop mode. See "Device Operation" on page 3.
FAct	Device reset to factory defaults by pressing and holding MENU button and UP arrow button for 5 seconds or longer. Shut off power to Device to complete factory reset. This will remove calibrated offset value of Device Sensor.

Monthly Check List

Date of Test	Did Set Point Temperature display when pressing and holding the Up Arrow button?	Did the Device shut off power to the steam generator, sound the alarm, and display STOP when the Down Arrow Button is pressed?	Did the Device reset the system when the Reset button is pressed?	Name of tester & signature

WARRANTY: To view or download the MrSteam Residential Device Warranty and register your product go to: blog.mrsteam.com/wr

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