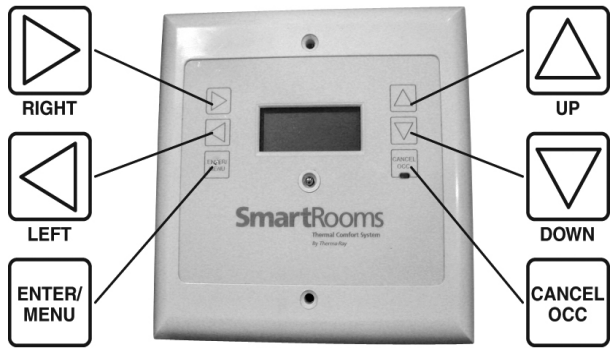


SmartRooms

Thermal Comfort System

By Therma-Ray



Whether you're a contractor, architect, builder or homeowner, creating the perfect indoor environment has always been a challenge. Therma-Ray, the world's #1 name in thermal comfort systems, introduces you to the ultimate solution: SmartRooms. Please take the time to read this operation guide carefully before you begin. A diagram of the menu display system is found at the end of this guide for easy reference.

COMFORT CONTROLLER FOR FLOOR WARMING Owners Manual

SmartRooms Comfort Controller displays the current time and room temperature. It also displays the day of the week and the given temperature set point. It is programmable and operational in both English and French. See the Advanced Features section to set language preference.

The Quick Start/Manual Method: Press **Cancel/Occ**. The light will stay on to indicate it is now in manual mode. You can change the temperature at any time by pressing the **Up** or **Down** arrows. To know more about the controller's programmable features please continue reading.

1. Setting the Date & Time Press the **Enter/Menu** button on the panel to bring you to the 'Menu' screen, 'Date' should be the first available option to select. Press the **Enter/Menu** button once more to enter the date. To change between day, month and year, press the **Left** and **Right** arrows above the **Enter/Menu** button. To set the correct day, month and year, simply press the **Up** and **Down** arrows above the **Cancel/Occ** button. Once you are done, press **Enter/Menu** to accept the changes. See Figure 2. At the 'Menu' screen, go to the next menu item, which is "Time", by pressing the **Down** arrow. Press **Enter/Menu** and configure your time by pressing the **Up**, **Down**, **Left**, **Right** arrows, as necessary. Press **Enter/Menu** to save your time. See Figure 3.

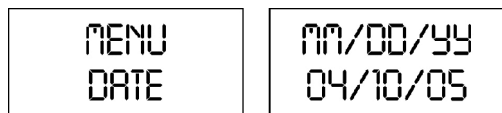


Figure 2



Figure 3

2. Occupied Temperature Setting: After saving your time you should be returned to the 'Menu' screen, scroll down to the next option, 'Occupied'. Press **Enter/Menu**. Here you must set the temperature you desire for when the Occupied Temperature Override is activated. Press the **Up** and **Down** arrows to set desired temperature. Press **Enter/Menu**. The Occupied button is a manual setting. When you push this button the green light will come on and override the current program you have set. See Figure 4.



Figure 4

4. **Schedule**- Setting Up Your Daily Programs: Now you can program each day of the week according to the five programs set for each day. There are one through five periods per day in which you can set your time and temperature. 12:00AM is always the start time. The last program you choose must finish at 11:59PM.

Keeping Track of Your Programs - The following chart is to keep as a reminder for your preferred program schedules. Enter the program end-time and desired temperature in each of the given boxes.

PROGRAMMING CHART

Day	Prog1 time	Prog1 temp	Prog2 time	Prog2 temp	Prog3 time	Prog3 temp	Prog4 time	Prog4 temp	Prog5 time	Prog5 temp
Sun										
Mon										
Tue										
Wed										
Thu										
Fri										
Sat										

a) At 'Schedule' hit **Enter/Menu**. You will see 'Weekday Sunday'. Press **Enter/Menu**, to see 'Sunday Prog 1'. Press **Enter/Menu** again and set the desired time and temperature. The screen will show 'Pgm Always Starts at 12:00AM'. Press **Enter/Menu**. This brings you to the 'Ends At' screen - modify the time, then press **Enter/Menu** which brings you to temperature 'floor...(°C)'. Change to desired temperature using the **Up** or **Down** arrows. Press **Enter/Menu**. See Figure 5. Repeat until 'Program 05' is reached or until you reach 11:59PM. Once you have finished programming, press **Cancel/Occ**. This will return you to 'Menu Schedule'. Press the **Down** arrow to go to 'Menu Copy Days'.

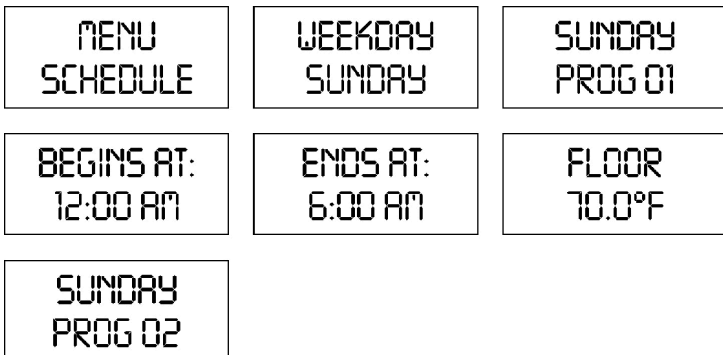


Figure 5

b) At the 'Copy Days' menu, press **Enter/Menu** and it will automatically copy your Sunday program to all the other days. See Figure 6.

NOTE: 'Copy Days' saves you programming time. It copies the Sunday schedule to the other six days of the week. If you prefer your weekday programmed differently from the weekend, program Sunday as if it were Monday. Then go to 'Copy Days', all seven days will be the same. Then change your Saturday and Sunday schedules only.



Figure 6

Ready to Operate

After setting all of your day's programs your SmartRooms Comfort Controller is ready to start operating on its own. If at any time you wish to override your day program temperature settings, you can easily press the **Cancel/Occ** button (manual mode) to activate the Occupied Temperature Override. The light below the button will be on when the override is activated. Pressing the **Cancel/Occ** button again will reactivate the regular schedules. Should you forget to cancel the override, your regular schedules will not activate and the temperature will stay as set in the manual mode. The occupied temperature setting can also be easily changed by pressing the **Up** and **Down** arrows when your time, date and temperature are being displayed. Battery-free backup means no re-programming after a power outage (24 hours).

Advanced Features

Setting Your Language Preference - From the 'Menu' screen scroll down to the 'Language' option and press the **Enter/Menu** button. Next press the **Up** and **Down** arrows to choose between English or French. Press the **Enter/Menu** button once more to accept your language or preference. See Figure 7.

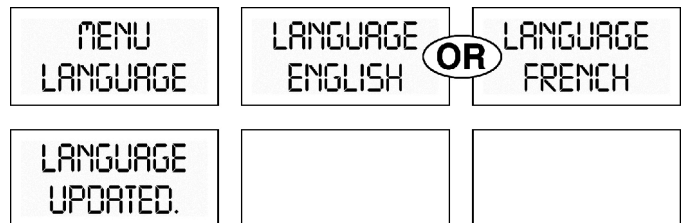


Figure 7

Changing from 12hr Clock to 24hr - Go to 'Menu', then scroll down to the 'Setup' option. Press **Enter/Menu**, then scroll through until you reach the 'Time Fmt' option. Press **Enter/Menu** to enter the option, then press **Up** or **Down** arrows to set your desired time format. Press **Enter/Menu** to accept your changes. Press **Cancel/Occ** to return to the menu screen. See Figure 8.

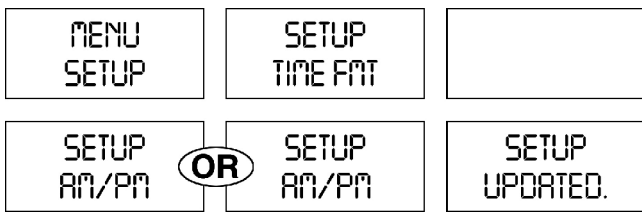


Figure 8

Changing from °F to °C - Press the **Enter/Menu** button to get to the 'Menu' screen, press **Down** until you reach the 'Setup' option, then press **Enter/Menu** again to enter 'Setup' sub-menu. Scroll through the options until you reach the 'Scale ?' option, press **Enter/Menu** and press **Up** and **Down** to change the setting from one scale to another. Press **Enter/Menu** to accept your changes. Press **Cancel/Occ** until you return to the menu screen.

See Figure 9.

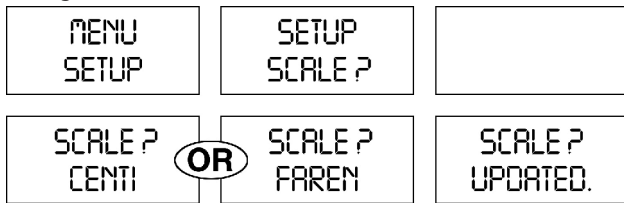


Figure 9

Setting and Activating Your Vacation Temperature -

From the 'Menu' screen, select 'Setup' from the options, then scroll through to 'Vac Temp'. Press **Enter/Menu** to select the option, then, using the **Up** and **Down** arrows, set your desired vacation temperature. Press **Enter/Menu** to accept your changes. When you wish to override your program schedule and activate your Vacation Temperature, go to the 'Menu' screen, and select 'Vacation'. Press the **Up** and **Down** arrows to scroll between 'Off' and 'On'. Turn the setting to 'On', then press the **Enter/Menu** button to accept the Override. Press **Cancel/Occ** to return to the menu screen. See Figures 10 and 11.

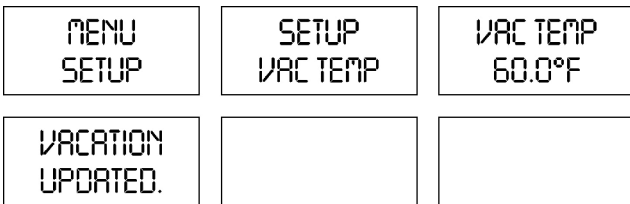


Figure 10

Activating Your Vacation Temperature

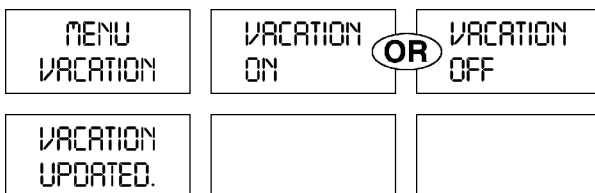


Figure 11

Daylight Savings Time - This is automatically set to 'On'. If your area does not use daylight savings time then this feature should be turned off. From the 'Menu' screen, select 'Setup' from the options then go to 'Setup Install'. Press **Enter/Menu**. Scroll through to the 'Daylight' option. Turn the setting to 'Off', then press the **Enter/Menu** button to accept your changes. Press **Cancel/Occ** to return.

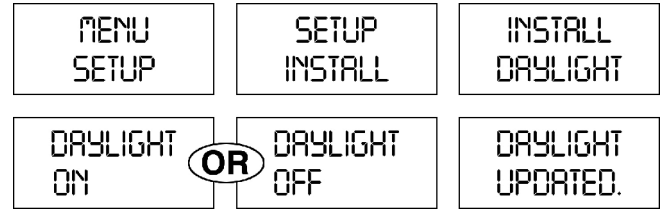


Figure 12

Testing the Ground Fault Interrupter - To test the GFI, go to the 'Menu' screen select 'Setup' then go to 'Setup Install' and scroll through to the 'GFI' option. Press **Enter/Menu**. It will read either pass or bad. See Figure 13.



Figure 13

The GFI should be tested monthly. If the controller screen reads 'Bad GFI', wait 10 seconds and perform the test a second time. If you get the same reading again then the floor warming system must be tested for an electric short and for continuity. This requires disconnecting the power module from both the power supply and the floor warming system. **This procedure should be done by a duly qualified person where required by law.** The testing procedure is in the installation instructions. Repair kits are readily available and in the event the floor warming cable must be repaired, special equipment is available to trace and repair the damage. Please contact your local distributor for further instructions.

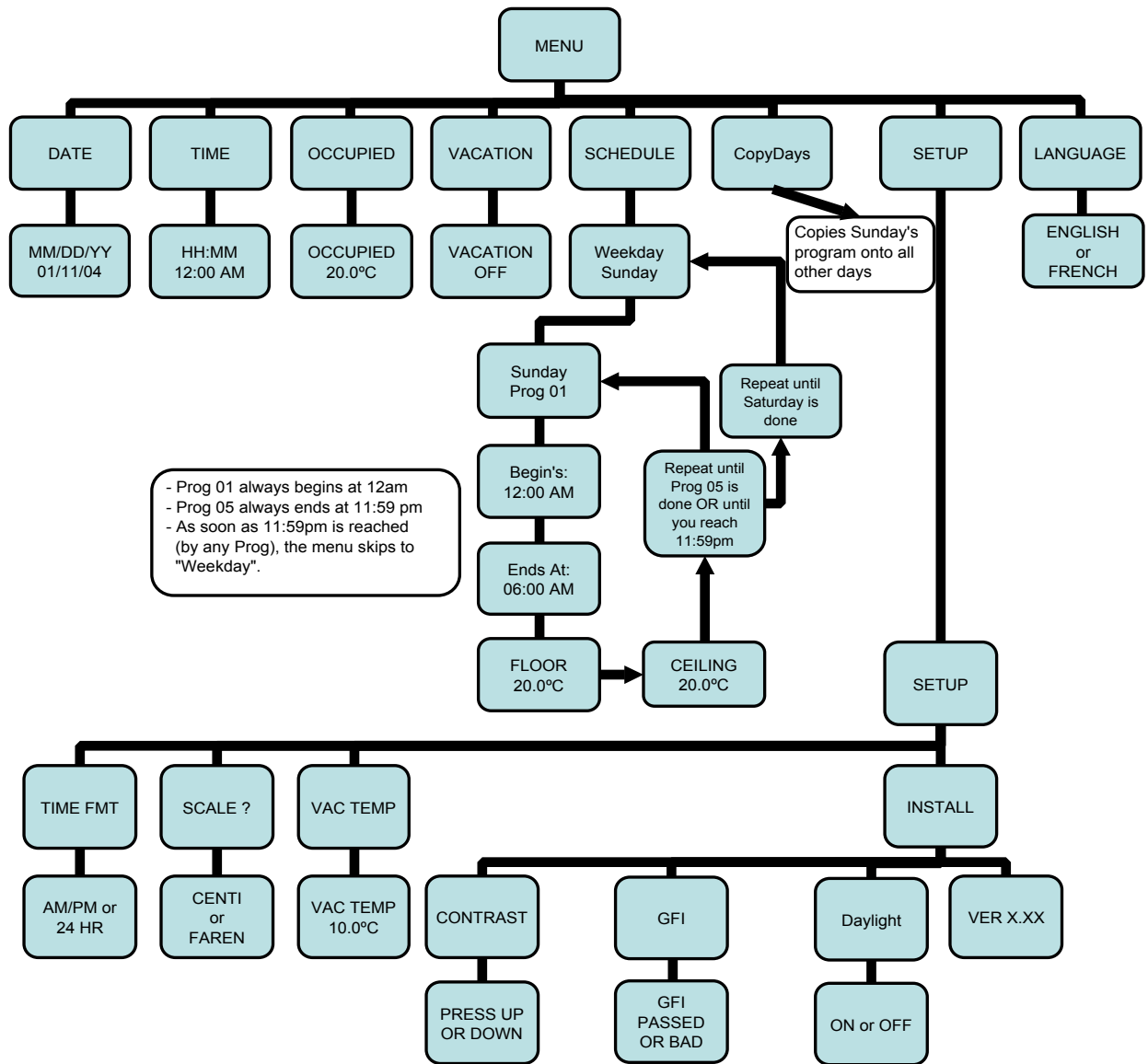
TROUBLE SHOOTING

Error Message - If your controller screen reads 'Error 1 - Sensor is faulty', check to ensure the sensor is firmly connected. If it is, the sensor has been damaged and if possible should be replaced. If it is not possible to change the sensor, the sensor in the faceplate can control the room temperature. Please contact Therma-Ray for further instructions.

Garbled Screen - Press 'Menu', if this does not work, unplug the controller, wait a few minutes and plug it in again.

No Answer - This is a remote function error. Check that the thermostat is firmly plugged in.

Heat Continuously On - Check high and low limit settings. They may be reversed.



Warranty

Therma-Ray Inc. one (1) Year Limited Warranty. Therma-Ray Inc. warrants the controller is free of defects in material and workmanship after proper installation for a one (1) year period from the date of installation. During this period, Therma-Ray Inc. will replace or repair the controller without charge if it has been used under normal conditions. This warranty does not cover delivery costs. The warranty does not apply if poorly installed or damaged after installation. Therma-Ray Inc. will not compensate for consequential damage, direct or indirect, resulting from the failure of the controller. All other representations, warranties and conditions, whether oral or written, express or implied, statutory or otherwise are expressly excluded. The defective controller must be returned to the place of purchase or sent prepaid to Therma-Ray Inc.

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By Therma-Ray