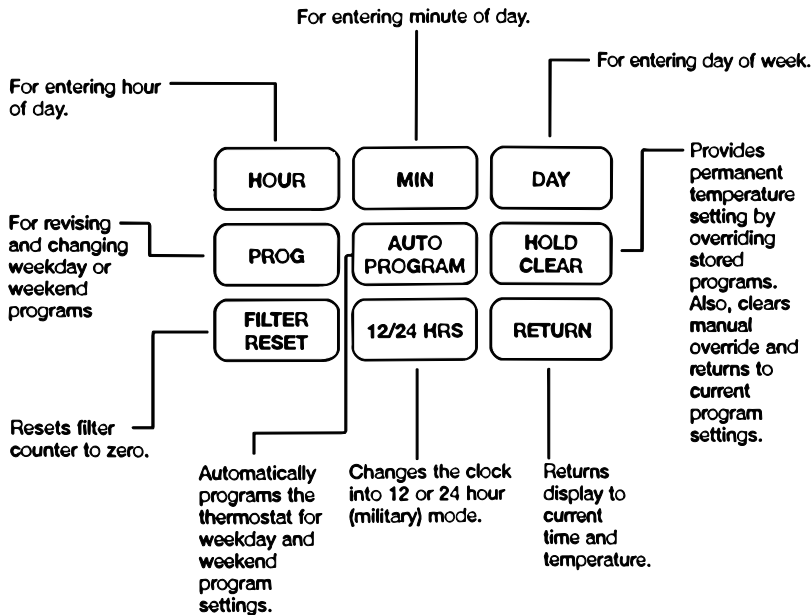
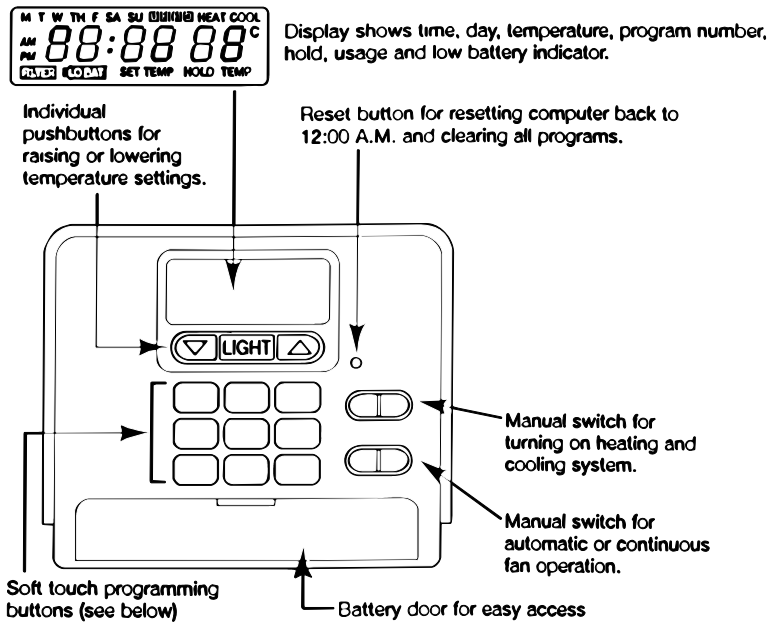


# OPERATION & PROGRAMMING MANUAL FOR MERMAID DIGITAL THERMOSTAT MODEL 43103

## A. INTRODUCTION

When you receive your thermostat you will see a display showing the time of day, current temperature and below that an up key and a down key. There are several other keys that you can access, by flipping the “door” down. To do this, locate the serrated area on the top of the thermostat and pull towards you.

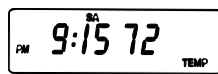


## B. SETTING TIME OF DAY AND DAY OF WEEK

1. To set the time of day, start by depressing the hour key until the current time is displayed. Note that AM or PM will be displayed in the lower left hand portion of the display.
2. Set the minutes by depressing the minutes (min) key until current time is displayed.
3. Set the day by depressing the day key until proper day of week is shown. The display will only show the first letter of each day. (Thursday will display as Th)

### AN EXAMPLE OF HOW THE DISPLAY MIGHT LOOK

#### DAY OF THE WEEK



AM/PM

TIME

TEMPERATURE

## C. USING THE THERMOSTAT IN THE AIR CONDITIONING MODE

1. Slide the lever marked heat-off-cool to the cool position; this will be to the right of the off position. Note the word cool is displayed in the upper right hand corner of the display.
2. Depress either the up or down arrow key, depending on ambient temperature and desired temperature, and hold. After two or three seconds you will see display blink, you then can continue holding the key to rapidly change temperature or depress and release the key repeatedly until the desired temperature is achieved.
3. Once you have set the desired temperature depress the key marked hold/clear and note the word "hold" is now displayed underneath the "current temperature" This means that the thermostat will maintain the set temperature until it is turned to the off position.  
**(Note; if you do not press the hold key the thermostat will bring the cabin down to the set temperature, shut off, and not come back on.)**

## D. USING THE THERMOSTAT IN THE HEAT MODE

1. Slide the lever marked heat-off-cool to the heat position; this will be to the left of the off position. Note that the word "heat" is displayed in the upper right hand corner of the display.
2. Depress either the up or down key, depending on the ambient temperature and the desired temperature, and hold. After two or three seconds you will see the display blink, you then can continue holding the key to rapidly change temperature or depress and release the key repeatedly until the desired temperature is achieved.

## E. FAN CONTROL

The fan switch located beneath the heat-off-cool switch has two positions. You can set it to the auto mode, where the fan will cycle with the compressor, or to the "fan on" mode

where it will run continuously. The “fan on” mode allows the fan to run separately from the air conditioner if you desire to simply move existing cabin air.

## **F. PROGRAMMABLE MODE**

Your thermostat has the capability to be programmed to turn on/off the cool or heat function at times you can preselect. There are two separate programs one for weekdays (m-f) and one for weekends (s-su).

## **G. WEEKDAY PROGRAMMING**

1. The thermostat can be programmed to turn on/off at separate cycles during the day (e.g. Unit turns on at 10:00am and off at 11:30am, on again at 4:00pm and off at 6:00pm)
2. Set the heat-off-cool switch to desired mode.
3. Depress program key (PROG). The display will now show the days of the week in the top left hand corner. The time being displayed shows when the unit will come on and to the right of that the temperature that will be maintained. Also note the number one displayed above the time, this indicates you are on the first of four possible settings.
4. Now depress the hour key until desired time (that is the time the unit will turn on) is displayed.
5. Next depress the minute key (min) until desired time is displayed. (Note: you can only program the minutes in fifteen minute increments :15, :30 and :45)
6. Depress the up or down arrow key until desired temperature is displayed.
7. Depress program key (prog) Note that the number two is now displayed above the time of day, this indicates you are on the second of four possible settings.
8. Depress hour key until desired time is displayed. (that is the time of day the unit will shut off.)
9. Depress minute key (min) until desired time is displayed.
10. Repeat above process if you wish to have a third and fourth on/off program installed. If no additional programming is desired, simply depress the return key and the single programmed feature will remain constant for the week.
11. The thermostat will now come on and off each day at the times you have programmed.
12. The process is the same for weekend settings.

## **H. ADDITIONAL INFORMATION**

1. Batteries - The thermostat is equipped with two double A batteries located behind the small door under the keypad. Caution: The batteries are the only source of power used to operate your thermostat. If you do not replace the batteries, eventually the display will dim and your system will stop operation. When the batteries are low, a “LOW BATT” indicator on the display will flash. The thermostat will continue to function for approximately 3-4 weeks. Use only alkaline batteries; rechargeable batteries have different properties, which may cause the thermostat to not operate properly. Normally, batteries should last one year.

2. Safety Delay - The thermostat provides a four-minute delay after shutting off the compressor before it can be restarted. This feature will prevent damage to your compressor caused by rapid cycling.
3. There is a reset switch on the face of the thermostat, which can be accessed with a paper clip. Depressing this switch will reset everything to factory settings.
4. F/C Selector (Fahrenheit/Centigrade) - Your thermostat is pre-set for Fahrenheit mode. In order to change to Centigrade mode, on the back of the thermostat, slide the switch from F to C. Then with a paper clip, press the reset button on the front of the unit. The reset button is located near the display. Note: Unless the reset button is pressed, the thermostat will not change the mode to Centigrade.
5. Filter Monitor - Your thermostat monitors and stores the amount of time the heating or cooling system is operated. After 500 hours of usage, the word "FILTER" will appear and flash on the display reminding you to check or replace your system filter. Your unit came with a filter attached via Velcro strips to the front of the evaporator. You can either clean this material and use again or visit any local building products supplier and obtain replacement filter material for a very nominal sum. Using the original piece as a template, just use a pair of scissors and cut a replacement. We do, however, strongly recommend a shorter timetable than 500 hours to check your filter. If your filter is accumulating dirt and debris, insure you are changing and cleaning your filter in a timely manner. Failure to maintain a clean filter can have a negative effect on the performance of your air conditioner. Because of dust and debris generated during the installation of your unit, we would suggest a weekly check of the filter for the first 4-6 weeks of operating your air conditioner.
6. Temperature Extremes - Your thermostat is designed to function in temperatures from 32 degrees Fahrenheit to 99 degrees Fahrenheit. In certain situations, the temperature in your boat may be in excess of 99 degrees, when you arrive at the boat to start up the air conditioner. If your thermostat display is showing "HI", then your thermostat may not start your unit. You have two options at this point. The first is to use a paper clip and hit the reset button. This will start the air conditioner, but will remove all of your programming. A different solution is to "fool" the thermostat with a piece of ice. Place the ice next to the thermostat. As soon as the thermostat has been lowered to 95 degrees, then it will operate normally or via your programming and start the air conditioner. This method will not eliminate your programs from the memory banks of the computer.

