DIGITAL PROGRAMMABLE THERMOSTAT FOR INDIVIDUAL WEEKDAY/WEEKEND SETTING



USER'S MANUAL

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This thermostat can replace most common residential thermostat and is designed to be used with electric, gas or oil heating 240VAC control and relay current up to 8 ampere.

Several useful functions and operating modes have been incorporated to adapt a variety of customer needs besides all the features associated with the state of the art programmable thermostat, you'll find on 093.

- a 7 day timer to set the ECONO mode during a prolonged absence of user.
- a protection against freezing.
- a filter supervision.
- a programmable regulation sensibility (SPAN)

This thermostat has been designed for simple and quick installation requiring only a few tools.

REQUIRED MATERIAL

Hammer Masking tape Drill and 3/16" drill bit Screwdriver

REMOVING YOUR OLD THERMOSTAT

CAUTION : To avoid electric shock, turn off the power of the heating system at the main power box in your home. Read the following instructions carefully before disconnecting the wires.

- 1. Turn off your old thermostat.
- 2. Remove the cover from the old thermostat. You may have to pull extra hard.
- 3. Unscrew the old thermostat from the wall plate.
- 4. Now find the screws attaching the wall plate to the wall, and remove them. You should now be able to pull the wall plate a small distance from the wall. Do not disconnect any wire yet, simply locate the wires.

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Note : If your old thermostat has only two (2) wires connected to it (heating system only), simply disconnect the two wires from the wall plate, skip over steps 1 and 2 in the Wire labelling section and go on to step 3.

WARNING : After removing the wall plate, if you find that it is mounted on a junction box (e.g. a box similar to one behind a light switch or electric outlet), 240 volts circuit may be present and there is a danger of electric shock. Please consult a qualified electrician.

WIRE LABELLING

- If your old thermostat wall plate has MORE THAN TWO WIRES connected to it, then you will need to label the wires (Wire identification sticker provided). First look for LETTER near each terminal where a wire is connected. These terminals and markings may be on either side of the wall plate.
- 2. Disconnect and identify each wire.
- 3. You may wish to tape the wires to the wall to keep them from slipping through the hole in the wall. If the hole in the wall is larger than necessary, fill it in order to prevent hot or cold air to penetrate the thermostat. In this manner, the thermostat will behave perfectly.

CHOOSING A LOCATION

Note : for a new installation, choose a mounting location about five feet (1.5 meter) above the floor in a area with good air circulation and away from.

- 1. Drafts of dead air sports.
- 2. Air ducts.
- 3. Radiant heat from the sun or appliances.
- 4. Concealed pipes and chimneys.

Mounting the thermostat onto the wall

- 1. Remove completely the slide door of the thermostat.
- 2. Unscrew and remove the cover over the connector.
- 3. Mark the holes position and align the wire coming from the wall in the hole beside the connectors.
- 4. Drill two holes and insert the plastic anchors carefully into the holes until they are flush with the wall.
- 5. Fasten securely the thermostat to the wall with the two (2) screws.

1. Connect the system wires to the terminals according to the wiring diagram shown in the section "WIRING DIAGRAM"

2. Push on the wires in the wall and replace the cover over the connectors.

3. Install two (2) "AA" size batteries into the battery compartment.

4. Turn on the main switch of the system. The thermostat is ready for use.

WIRING DIAGRAM

The 093 thermostat can be used with any single stage 240 VAC heating system.

TWO (2) WIRES HEATING SYSTEM

1. Connect 240 VAC life to terminal COM

2. Connect HEATER in series with terminal NO and and 240 VAC neutral.

* Note : Heater must be capable of direct operating under 240 VAC



FIRST POWER-UP

When power is applied for the first time, the display must show time and day as well as the ambient temperature as follows :

If the display is different, press the RESET button. Use a fine probe such as straightened paper clip to gently push the RESET button.

Note : Your thermostat is using two (2) "AA" size batteries to operate, it is recommended to replace the batteries when the display is showing "BATT".



The thermostat has three (3) operating modes : AUTOmatic, MANual, TIMER ECONO

AUTO : The AUTOmatic mode executes in sequence (hourly) the recorded programs.

IPress on the AUTO button. The "PROG" icon and the running program will be displayed. IPressing Vor Abutton display the temperature set point of the running program for five (5) seconds.

MAN : The MANual mode allows the user to bypass the programming.

Press on the MAN button. The displayed. IA first pressing on Vor ▲displays the MAN temperature set point. IEach subsequent pressing will change the MAN temperature set point by 0.5°C



TIMER ECONO

The TIMER ECONO mode holds the ECONO temperature set point until user predetermined time and day is is reached. Then, the thermostat turns to AUTOmatic mode.

This operating mode avoids the user to reprogram his thermostat for a prolonged absence (up to one week) and allows for maximum savings.

- ≠ To get into this operating mode, press and hold MAN button for three (3) seconds.
 - The icon, the return time and the ECONO temperature set point will be displayed.
- ≠ Press DAY, HOUR and MIN keys to specify the return time.
- ≠ Press **V**or **▲** button to specify the ECONO temperature set point.

Function switch

This switch selects the functions HEAT, OFF and 5°C.

HEAT : Select that position to control the heating system . In AUTO mode the thermostat refer to programs to control the temperature.

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- OFF This function shuts off the heating system.
- 5°C This function holds the temperature set point at 5°C (heating) in older to prevent freezing.
- FILTER : The thermostat keeps a record of the number of hours your filter has been used. It will display the total number of hours the system has used the filter from the moment the filter was replaced and that the filter counter was reset to zero. After 250 hours of system operation, the FILTER indicator will begin flashing, to remind you to change or clean the filter and to reset the filter counter back to zero. The filter counter will count up to a maximum 999 hours and stays there until you reset it again.

To reset the counter, press and hold the FILTER key until the display shows 000.

The thermostat has an automatic return. When function such as the program recording filter review etc have not been completed by pressing the RETURN key, the thermostat will automatically exit those functions after five (5) seconds. TIME AND DAY ADJUSTMENT

Any time in normal modes, press DAY, HOUR and MIN keys to set the time and day

PRE-RECORDED PROGRAMS

This thermostat has four (4) pre-programmed heating programs for weekday and two (2) for weekend. They can be used as is or you can modify them at your convenience.

Weekday programs (Mon...Fri.)

_		Temperature
Program		set point
number	Hour	Heating
Program 1	6:00 AM	21°C
Program 2	8:30 AM	21°C
Program 3	4:00 PM	21°C
Program 4	11:00 PM	17°C

Weekend program	/eekend programs (Sat. & Sun.) rogram		
number	Hour	Heating	
Program 1	6:00 AM	21°C	
Program 2	11:00PM	17°C	



PROGRAMMING MODIFICATION

- 1 Place function switch to HEAT position.
- 2 Press the PROG key. The display shows the program's starting time and setpoint. The Monday to Friday indicator are turning on showing that this program is associated to the days of the week. The program number 1 is flashing to indicate the selected program.

Pressing again PROG key will scroll weekday programs 1 to 4 and weekend programs 1 and 2.

- 3 Select program to be modified using PROG key.
- 4 Press HOUR and MIN keys to modify program's starting time and ▼ or ▲ buttons to modify program's temperature set point.
- 5 Press RETURN key or wait 10 seconds for automatic return.

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PROGRAMMING SCHEDULE

Use following programming schedule as a memorandum before programming or changing a program by writing down your schedule of heating.

Weekday programs (Mon...Fri.) Program Temperature number Hour Heating Program 1 Program 2 Program 3 Program 4 Program 4 Program 4

Weekend programs (Sat. & Sun.)

Program 1

Program 2

TEMPERATURE SPAN ADJUSTMENT

The factory set temperature span is 1°C. For example, if the temperature set point is 20°C, the heating system will turn on at 19.5° C and turn off 20.5° C. This span is programmable. You can choose between 0.5, 1.0, 1.5 and 2.0 °C.

To review or to change the temperature span :

- 1 Press PROG key while RETURN key is pressed in.
- 2 Release both keys.
- 3 Press ∇ or \blacktriangle to select the new temperature span.
- 4 Press RETURN key or wait 10 seconds the automatic return.

Note : Choosing a small temperature span such as 0.5° C will be more comfortable (less temperature variation in the apartment) but in counter part, the heating system will turn on and off more often.



CHARACTERISTICS

Model :	093
Power Supply :	AA alkaline battery x 2
Load :	8 amp maximum, 240 VAC
Number of programs :	4 weekday programs and 2 weekend programs
Storage temperature range:	-20 to 50°C
Operating temperature range:	0 to 50°C
Control range :	5 to 27°C, 0.5°C resolution
Display range :	0 to 40°C, 0.5°C resolution