Electronic thermostat User Manual

Function

The thermostat is designed to turn a chest freezer into a fridge. The nominal power of the compressor should not exceed 300 Watt.

Installation

The temperature sensor (located at the end of the thin grey cable) should be placed inside the fridge compartment. It is best if the sensor does not touch the wall or the bottom of the fridge. After all, we need to control the temperature of the air inside the fridge, not temperature of the wall.

You need to install the temperature sensor first. The most convenient method of installing the sensor cable is from the top near the hinge of the chest door. The cable can be held in place using adhesive tape. More advanced installation is using a drain hole at the bottom of your freezer.

Turning on

A red sticker near the corner of the thermostat covers a 3-position switch. The tip of the switch can be seen (see photo) inside the hole, about 2 cm below the surface of the box. The switch is hidden, because it needs to be accessed only on rare occasions, such as after a power outage or when servicing your thermostat.

You need to use a pencil, small screwdriver or other suitable object to operate this switch.

Pointing the switch tip towards power cables powers the thermostat from 240 VAC and disables the “zero standby power” feature. This setting can be used to provide the internal NiMh battery with extra charge.

Pointing the switch lever away from power cords enables “zero standby power” feature. The system uses internal NiMh battery during standby and recharges the battery when the fridge compressor is on.

The central position of the switch turns thermostat off and disconnects the battery. It is important to keep the switch in the central position when the system is not in use, otherwise the internal battery will be totally discharged. When the battery is discharged, the system needs to operate from 240V (switch lever pointing towards power leads) for a few hours so that the battery is charged. Only when the battery is charged, the “zero standby power” feature can work.

The AC plug of the thermostat should be plugged into correctly installed 240VAC power point. The fridge should be plugged to the socket of the thermostat.

Temperature adjustment

The thermostat is delivered set to 4 deg Celsius and should not require adjustment, unless you have a special application such as storing wine or brewing beer.

Adjusting the temperature setting is done using a tiny screwdriver knob located underneath a blue sticker. Adjustment allows setting the fridge temperature between -5 and +10 deg Celsius. Turn the knob clockwise to make fridge interior colder, anticlockwise to make it warmer.

It is a good idea to use a thermometer to verify the actual temperature inside the fridge. Using thermometer, observe at what temperature the fridge compressor is turned on and adjust the knob until it turns the fridge on at desired temperature. Once the adjustment is done, the thermostat no longer needs your attention.