

1 Cool Only

A. Installation, Mounting:

CAUTION:

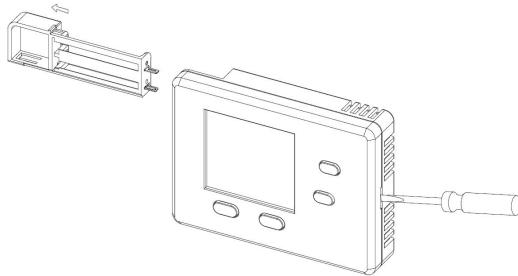
1. This device should be installed by a qualified technician with due regard for safety, as improper installation could be hazardous.
2. Turn off the thermostat, all electronic sources and any electrical devices (e.g. heater) which will be connected before installation and maintenance.
3. This product should be used in conjunction with a NTRL LISTED Class 2 power supply. Operation from other supplies may result in a potential fire risk.

1. Installation location

The thermostat should be mounted on an inner wall 1.5m (~5 feet) above the floor in a position where it is readily affected by changes of the general room temperature with freely circulating air. Prevent direct exposure to sunlight. Do not place this thermostat at a location where air circulation is low, or where it is subject to frequent temperature changes (e.g. near a door). Do not place the thermostat near heat generating sources (e.g. radiators, hot air vents, TV or lights). Do not expose the thermostat to moisture. Do not expose the thermostat to dripping or splashing.

2. Opening

Pull out the battery drawer and then lightly press on the spot shown below in order to detach the front shell from the base.

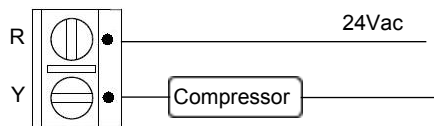


3. Wiring

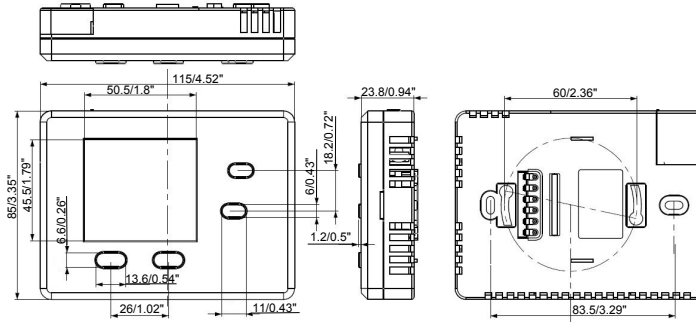
There are 2 wiring terminals at the back of the thermostat which are labeled as "R" and "Y". The recommended wire range is (AWG) 14-22. Do not use metal conduits or cables provided with a metal sheath.

Symbols	Terminals
R	24Vac Hot
Y	Compressor output (1A max)

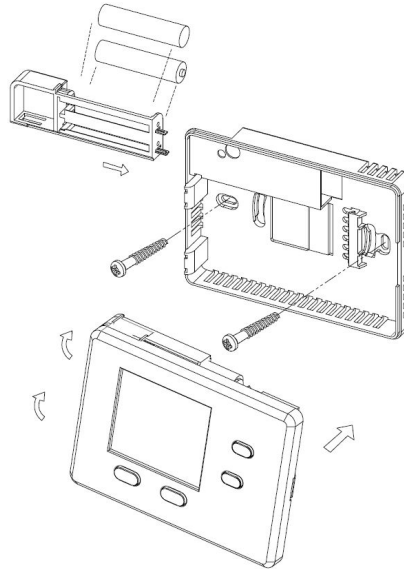
Wiring Diagram



4. Mounting



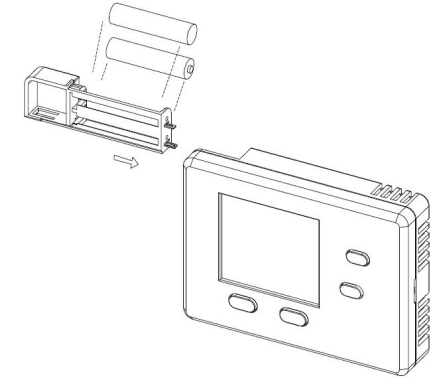
Dimension in mm/in



1. Position the wall plate on the wall and pull any existing wires through the large opening in the plate.
2. For proper appearance, level the plate on the wall.
3. If your existing holes do not line up with the new wall plate, mark holes for the plastic anchors provided.
4. Drill holes with a 3/16" bit and gently tap anchors into the holes until flush with wall.
5. Reposition the wall plate to the wall, pulling wires through the large opening.
6. Insert mounting screws provided into wall anchor and tighten.

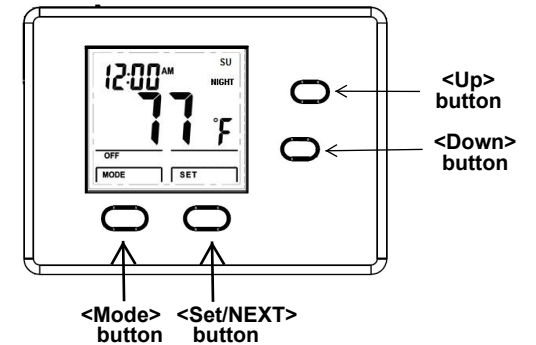
Batteries insertion

Pull out the battery drawer and insert two fresh AAA alkaline batteries into the drawer according to the polarity marked inside; then slide the drawer back into place. Do not mix batteries of different types or brands. Do not use old and new batteries together.



B. Operation:

1. When the thermostat is first powered on, all segments will show. After 2 seconds the thermostat will display normally as shown below.
2. Temperature detection starts and the LCD will display the current room temperature within a few seconds.



3. When the backlight is off press any button to turn on the backlight.
4. Press <MODE> button to select off mode (default) or cool mode.
5. By default, the thermostat runs in Program mode and will control cooling automatically according to the default program times and temperatures.
6. Press <SET> button to select the Setting Menu.
7. Press <Up> or <Down> buttons to adjust cool setting temperature.
8. Below 0°C/ 32°F, RS1010 will display **LO**.
9. Above 40°C/ 99°F, RS1010 will display **HI**. Cooling will be activated.

C. Time setting:

1. Press any button to turn on backlight.
2. Press <SET> button to enter the Setting Menu and "CLOC" is displayed.
3. Press <ENT> button, the Day of Week (MO/TU/WE/TH/FR/SA/SU) will flash, press <Up> or <Down> buttons to select the current Day of Week, then press <NEXT> button.
4. The Hour will flash, press <Up> or <Down> buttons to set the hour, then press <NEXT> button.

- The Minutes will flash, press <Up> or <Down> buttons to set the minutes.
- Press <MODE> button to confirm the setting and return to Setting Menu. Press <NEXT> button twice to return to the Normal display mode or the thermostat will return to the Normal display mode if no button is pressed for 10 seconds.

D. Temperature control:

This thermostat can work as a simple setback thermostat or a programmable thermostat. By default, this product is configured as a programmable thermostat (Program On).

Program On

When the Program is turned on, the thermostat will control the output according to the programmed times and temperatures. The Default Program settings are displayed below:

Cool mode:

	MON-FRI		SAT		SUN	
	time	°F/°C	time	°F/°C	time	°F/°C
MORN	6AM	75/24	8AM	75/24	8AM	75/24
DAY	8AM	85/29.5	10AM	85/29.5	10AM	85/29.5
EVE	6PM	75/24	6PM	75/24	6PM	75/24
NIGHT	10PM	85/29.5	11PM	85/29.5	11PM	85/29.5

Program Setting:

The program may be changed to your preferences. To adjust cool program settings:

- Press any button to turn on backlight.
- Press <SET> button to enter the Settings Menu.
- Press <NEXT> button until "Prog" is displayed.
- Press <ENT> button to enter Program setting, "ON"/"OFF" will flash, press <Up> or <Down> button to select program ON/OFF.
- Make sure "On" is selected, press <NEXT> button to modify the program setting. Settings are adjusted in the order of: (Hour → Minute → Setting Temperature)
- There are three schedules to be set. MO~FR, SA, SU.
- The first setting is MO~FR schedule and MORN program setting, the MORN hour will flash, press <Up> or <Down> button to program the MORN hour.
- Press <NEXT> button, the MORN minute will flash, press <Up> or <Down> button to program the MORN minutes.
- Press <NEXT> button, the temperature will flash, press <Up> or <Down> button to program the setting temperature.
- Press <NEXT> button to enter the DAY program settings, the modification of other events (DAY, EVE, NIGHT) are the same as the above steps.
- Press <NEXT> button to get into the other schedules (SA, SU), the modification of other schedules is the same as the above steps.
- Press <NEXT> button twice to confirm the settings and return to the Normal display or the thermostat will return to the Normal display mode if no button is pressed for 10 seconds.

Temporary Override:

When the program is On, this thermostat controls the temperature according to the program. If you want to override the programmed temperature temporarily:

- Press any button to turn on backlight.
- Press <Up> or <Down> button in the Normal display mode, the current cool setting temperature will flash.
- Press <Up> or <Down> button to adjust cool setting temperature with **OVERWRITE** displayed.
- The cool setting temperature will be confirmed and return to the Normal display mode, if no button is pressed for 10 sec.

Temporary Override Mode will last until the next programmed time begins. At that time, the cool setting temperature will return to the programmed set temperature and **OVERWRITE** will disappear. Or **OVERWRITE** can be stopped manually by pressing <MODE> button.

Program Off

When the Program is Off, this thermostat controls the output according to a single setpoint like a simple setback thermostat. To configure the unit to program Off:

- Press any button to turn on backlight.
- Press <SET> button to enter Settings Menu.
- Press <NEXT> button until "Prog" is displayed.
- Press <ENT> button to enter Program setting, "ON"/"OFF" will flash, press <Up> or <Down> button to select program ON/OFF.
- Select "OFF" and then press <NEXT> button to return to the Settings Menu.
- Press <NEXT> button to return to the Normal display mode or the thermostat will return to the Normal display mode if no button is pressed for 10 seconds.
- In this stage, the Program mode will be disabled and event icons will disappear in the Normal display mode.

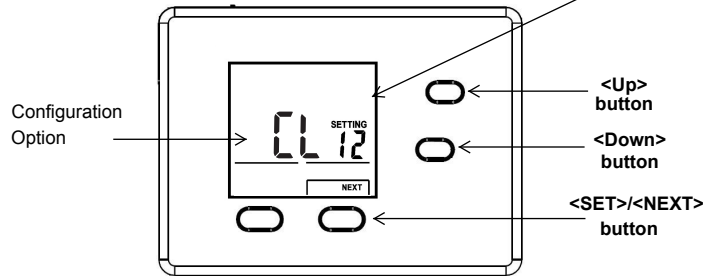
To adjust the setpoint at Program Off

- Press any button to turn on backlight.
- Press <Up> or <Down> button, the current cool setting temperature will flash.
- Press <Up> or <Down> button to adjust cool setting temperature. The symbol **OVERWRITE** will NOT display at Program Off.
- The cool setting temperature will be confirmed and return to the Normal display mode if no button is pressed for 10 sec.

E. Advanced Settings:

Advanced settings contain the configuration menu and temperature calibration.

Configuration Menu



- Press any button to turn on backlight.
- Press and Hold <SET> and <Down> buttons for 2 seconds to enter configuration menu.
- The left letters represent the configuration option; the right letters or numbers represent the settings.
- Press <Up> or <Down> button to adjust the Setting.
- Press <NEXT> button to select the next configuration option or to return to the Normal display mode at the end of configuration menu.
- The thermostat will return to the Normal display mode if no button is pressed for 10 seconds.

Configuration Menu

Configuration options		Setting	
Description	LCD Display		
12hr/24hr selection	CL	12	(default)
Temperature display unit	SC	°C	(default)
Differential	dF	05	(+/- 0.5°C)
		10	(+/- 1.0°C)
		10	(+/- 1°F) (default)
		20	(+/- 2°F)

The differential controls how much the room temperature can deviate from the setpoint. A smaller differential will result in more accurate control. A larger differential will result in less on/off cycling and usually saves more energy.

Temperature Calibration

This product is factory calibrated and calibration is generally not required. However, if the reading is incorrect, you can adjust it.

- Press any button to turn on backlight.
- In the Normal display mode, press and hold <Up> and <Down> buttons for 5 seconds to enter the temperature calibration display, the temperature will flash.
- Press <Up> or <Down> buttons to calibrate the temperature. The maximum you can adjust the range is +/- 3.0°C or +/- 6°F, in increments of 0.5°C / 1°F.
- Press <MODE> button to confirm the setting and return to the Normal display mode. The thermostat will return to the Normal display mode if no button is pressed for 10 sec.

F. Replacing the Batteries:

When the **LOW BATT** icon is displayed, replace the batteries promptly with two fresh AAA alkaline batteries. New batteries should be installed with proper polarity. Do not use old and new batteries together.

G. System re-set:

To return the unit to factory default settings, remove the battery compartment for 10 seconds, then hold down the MODE, SET and UP buttons simultaneously whilst re-inserting the battery compartment until the screen returns to normal mode.

H. Specification:

- | | |
|---------------------------|-------------------------------------|
| 1. Battery Voltage: | 3 V DC (2 x AAA alkaline batteries) |
| 2. Battery Life: | 1 year |
| 3. Relay Contact voltage: | 24 Vac Nominal 50/60 Hz |
| 4. Relay Contact Current: | 1A Max. (inductive) |
| 5. Sensing Element: | NTC thermistor |
| 6. Cool setting: | 5°C~35°C / 40°F ~ 95°F |
| 7. Operating temperature: | 0 – 50 °C / 32 – 122 °F |
| 8. Storage temperature: | -5 – 50 °C/ 23 – 122 °F |