



WT530 Programmable Thermostat Heat/Cool/Off Instruction Manual 24Vac (915MHz) 170803

Before Installation

WARNING

Turn off WT530R Receiver, all electronic source and electrical devices which will be connected before installation and maintenance.

CAUTION

The installer must be a trained service personnel.

Installation Location

The WT530T thermostat should be mounted on an inner wall ~5 feet above the floor in a position where it is readily affected by changes of the general room temperature with freely circulating air.

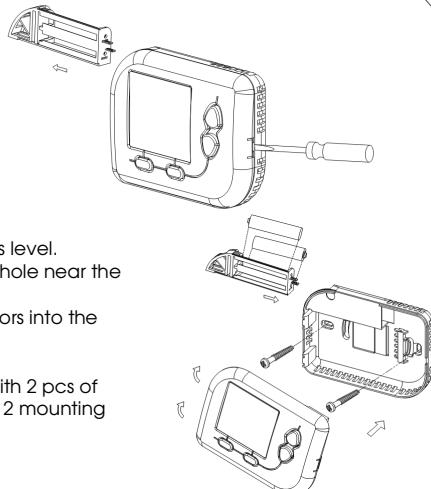
Prevent direct exposure to sunlight, drip or splash. Do not place the unit at a location where air circulation is low, or where there are great temperature changes (e.g. near door). Do not place the thermostat near heat generating sources (e.g. radiators, hot air vents, TV or lights).

WT530T transmitter Installation

Opening

Pull out the battery drawer.

Then lightly press on the spot shown below in order to detach the front shell from the base.

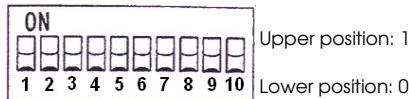


Mounting

1. Ensure that the surface is level.
2. Place the cables at the hole near the terminal block.
3. Insert 2 pcs of wall anchors into the holes of the wall.
4. Fasten the thermostat with 2 pcs of long screws through the 2 mounting holes.

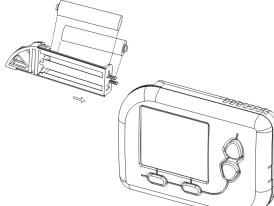
Communication address

Set communication address for Communication Setup you wish to use.

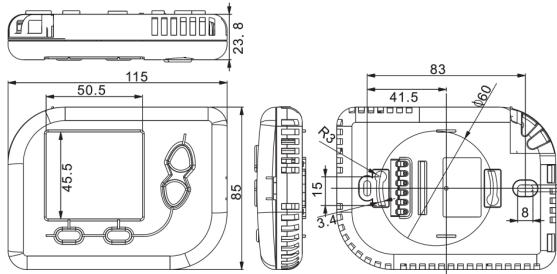


Batteries Insertion

Pull out the battery drawer and insert 2 fresh AAA alkaline batteries into the drawer according to the polarity marked inside, then slide the drawer back into place.



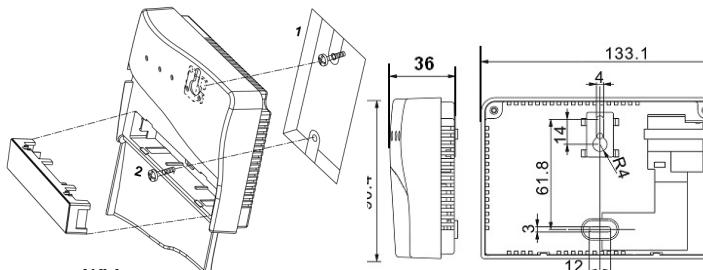
Dimension in mm(Transmitter)



WT530R receiver Installation

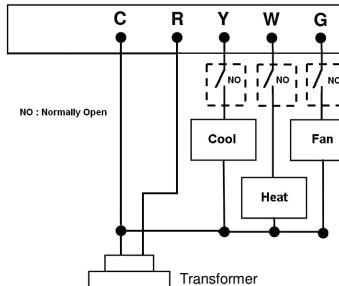
Using the accessory screws and wall anchors provided, mount the receiver with the key-hole at the back.

Open the front door and remove the battery compartment that hide the second screw hole. (This unit does not use battery; the battery compartment is a dummy to cover the screw hole.)



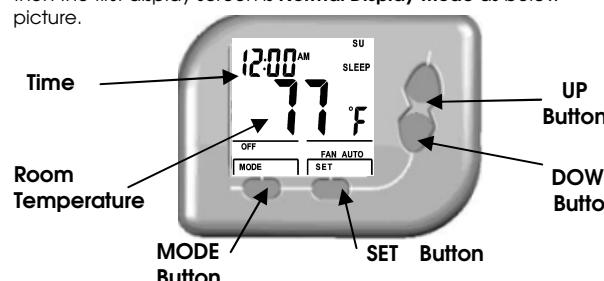
Wiring

There are 5 terminals. R and C connect to 24V power supply. Terminal W is for heating , terminal Y is for cooling and terminal G is for fan.



WT530T Operation

When the unit is powered on, all the LCD segments are ON and then the first display screen is **Normal Display Mode** as below picture.



Button	Description
MODE	For changing the system mode: OFF: system off HEAT: heating only on COOL: cooling only on.
SET	For changing the Setting Menu. (Fan, Time, Program)
UP & DOWN	To adjust temperature setpoint (temporary override)

LCD	Description
DEFROST	In heat mode, when temperature is below 5°C / 40°F, Heater is on regardless of the setting temperature.
LO	Below 0°C / 32°F, heating will be activated in Heat Mode.
HI	Above 40°C / 99°F, cooling will be activated in Cool Mode.
--	Sensor is shortened or not connected.

Communication Setup

1. Power on WT530R receiver, all LED light up then turn off.
2. Select the communication address at the WT530T transmitter.
3. Power on the WT530T transmitter (thermostat).
4. Press and hold the setup key on the receiver for 1 second, then the setup LED will be flashing.
5. Press and hold **MODE** and **SET** buttons on the thermostat, enter to the initial pairing mode ("PA" shown on screen for 5 second).
6. If the pairing is completed, the receiver setup LED will turn on.

In case the RF receiver is interfered by other wireless products, power OFF the receiver and change to other address. Redo the above steps with another address to reestablish a communication with the receiver.

Time Setting

1. Press **SET** button to enter Setting Menu.
2. Press **UP** or **DOWN** button to display **CLOC** and press **SET** button.
3. Press **NEXT** button to select the item that you want to change (Day of week, Hour or Minute).
4. Press **UP** or **DOWN** button to adjust the item.
5. Press **MODE** button to confirm the setting and return to Setting Menu.
6. *** Press **MODE** button to return to Normal Display Mode.

Temperature Control

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

Program On

When program is on, this thermostat will control the output according to the programmed time and temperature. The Default Program Settings are as below:

Heat Mode:

Time Zone	MON~FRI		SAT		SUN	
	Time	°F/°C	Time	°F/°C	Time	°F/°C
WAKE	6AM	70/21.0	8AM	70/21.0	8AM	70/21.0
OUT	8AM	61/16.0	10AM	61/16.0	10AM	61/16.0
BACK	6PM	70/21.0	6PM	70/21.0	6PM	70/21.0
SLEEP	10PM	61/16.0	11PM	61/16.0	11PM	61/16.0

Cool Mode:

Time Zone	MON-FRI		SAT		SUN	
	Time	°F/°C	Time	°F/°C	Time	°F/°C
WAKE	6AM	75/24.0	8AM	75/24.0	8AM	75/24.0
OUT	8AM	85/29.5	10AM	85/29.5	10AM	85/29.5
BACK	6PM	75/24.0	6PM	75/24.0	6PM	75/24.0
SLEEP	10PM	85/29.5	11PM	85/29.5	11PM	85/29.5

Program Setting

The above program time and temperature can be modified.

To adjust Heat/Cool program settings:

1. In Heat/Cool Mode, press **SET** button to enter Setting Menu.
2. Press **UP or DOWN** button to display **PROG.**
3. Press **SET** button to enter program setting: "ON" / "OFF".
4. Press **UP or DOWN** button to select program on / program off.
5. Make sure "On" is selected, press **SET** button to select the item that you want to change (Weekday/Weekend, Four Zones, Hour, Minute or Setting Temperature).
6. Press **UP or DOWN** button to adjust the item.
7. Press **MODE** button to return to Weekday/Weekend program
8. Press **MODE** button again, to confirm the setting and return to Setting Menu.
9. *** Press **MODE** button to return to Normal Display Mode.

Temporary Override

When Program is On, this thermostat controls the output according to the program.

If you want to override the programmed temperature temporarily:

1. Press **UP or DOWN** button to adjust Heat / Cool setting temperature setpoint with **OVERRIDE** displayed.
2. In Heat Mode, only Heat setting temperature can be adjusted.
3. In Cool Mode, only Cool setting temperature can be adjusted.
4. The Heat / Cool setting temperature will be confirmed and the thermostat will return to Normal Display Mode, if no key is pressed for 10 sec.

Temporary Override Mode will last until the next programmed time (zone) begins. At that time, the Heat / Cool setting temperature will follow the programmed setting temperature and **OVERRIDE** will disappear. Or **OVERRIDE** can be stopped manually by pressing **MODE** key.

Program Off (default)

When Program is Off, this thermostat controls the output according to a single setpoint like a simple setback thermostat. To set the unit to be Program Off, follow the above "Program Setting" to select Program Off. When this thermostat is Program Off, the Program Mode will be disabled and the time zone icons will disappear in Normal Display Mode.

To adjust the setpoint at Program Off:

1. Press **UP or DOWN** button to adjust the Heat / Cool setting temperature. The icon **OVERRIDE** will NOT be shown in Program Off.
2. In Heat Mode, only Heat setting temperature can be adjusted.
3. In Cool Mode, only Cool setting temperature can be adjusted.
4. *** The Heat / Cool setting temperature will be confirmed.

Fan Operation

If **FAN ON** is selected, fan runs continuously.

If **FAN AUTO** is selected, fan runs only when the Heating or Cooling system is on. Fan will be turned off 2 minutes after the Heating / Cooling system is off.

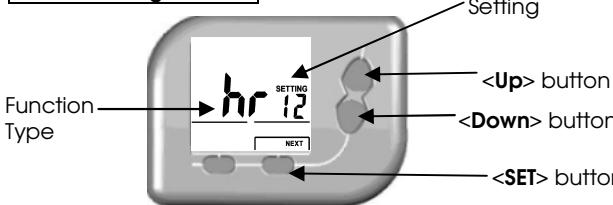
Fan Mode setting:

1. Press **SET** button to enter Setting Menu.
2. Press **UP or DOWN** button to display **FAN** and press **SET** button.
3. Press **UP or DOWN** button to select **FAN ON** / **FAN AUTO**.
4. Press **MODE** button to confirm the setting and return to Setting Menu.
5. *** Press **MODE** button to resume to Normal display mode

Advanced Setting

Advanced Setting contains Function Setting Selection and Temperature Calibration and Room Temperature Display.

Function Setting Selection



1. Press and hold **SET** and **DOWN** buttons for 2 seconds to enter Advanced Setting Mode.
2. The left letters represent Function Type; the right letters represent the settings.
3. Press **UP or DOWN** button to adjust the setting.
4. *** Press **MODE** button to select Function Type or to return to Normal Display Mode at the end of Function Setting selection.

Table of the Function Setting Selection

Function Type	Setting	
Description	LCD Display	
Fan Control	FC	E (Electrical Heat) (default) O (Gas/Oil Heat)
Temperature Display Unit	dE	°C °F (default)
Temperature Control Span	SP	05 (+/- 0.5°C) 10 (+/- 1.0°C) 10 (+/- 1°F) (default) 20 (+/- 2°F)
12hr/24hr Selection	hr	12 (default) 24
Heater Minimum-Off Delay	dL	S (10 seconds) (default) L (4 minutes off time)

Temperature Control Span : It controls how much the room temperature can be deviated from the setpoint. A smaller degree will result in a more accurate control. A larger degree will result in less on/off cycling and it usually saves more energy.

Fan Control : It should be set according to the type of Heating system used. Select "E" for Electric Heat, fan will be On when Heat is On. Select "O" for Gas Heating or Oil Heating, fan will NOT be on when Heat is On.

Heater Minimum Off Delay : It should be set according to the heater type. Select "L" if compressor is used for heating. Select "S" when a compressor is not used.

Temperature Calibration

This thermostat is calibrated at factory and calibration is generally not required. However, in the event that a deviation is found.

1. In Normal Display Mode, press and hold **UP** and **DOWN** buttons for 5 seconds to change the temperature calibration display and the current temperature will flash.
2. Press **UP** and **DOWN** button to calibrate the temperature. The maximum range to be adjusted is +/- 3.0°C or +/- 3°F, in step of 0.5°C / 1°F.
3. *** Press **MODE** key to confirm the setting and return to Normal Display Mode.

*** The operation will return to Normal Display Mode if no key is pressed for 10 sec.

Specification

WT530T Transmitter

1. RF transmission:
2. Power Supply:
3. Temperature Measurement:
4. Accuracy:
5. Resolution:
6. Heat/Cool Setting:
7. Sensing Element:

915MHz
2 x AAA Alkaline Batteries
0 - 40°C / 32 - 99°F
±0.5°C / 1°F
0.5°C / 1°F
5 - 35°C / 40 - 95°F
NTC Thermistor

RT530R Receiver

1. RF transmission:
2. Power Supply:
3. Rating:
4. Relay Contact Voltage:
5. Relay Contact Current:
6. Operating Temperature:
7. Storage Temperature:

915MHz
24Vac 50/ 60Hz
24Vac 50/ 60Hz 1A Max
24Vac Max. 50/60 Hz
1A Max.
0 - 50°C / 32 - 122°F
-5 - 50°C / 23 - 122°F

FCC STATEMENT

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.**
- Increase the separation between the equipment and receiver.**
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- Consult the dealer or an experienced radio/TV technician for help.**

The Responsible party information:

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