## **INSTALLATION MANUAL**



## TRUE COMFORT ||||

This manual covers the following models:

- T955WH Master Thermostat
- Base Module

## **Thermostat Applications Guide**

Description	
Gas or Oil Heat	Yes
Electric Furnace	Yes
Heat Pump (No Aux. or Emergency Heat)	Yes
Heat Pump (with Aux. or Emergency Heat)	Yes
Multi-stage Systems	Yes
Heat Only Systems	Yes
Cool Only Systems	Yes
Dual Fuel Systems	Yes
Millivolt	No
Humidity	Yes

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Una versión española de este manual puede ser descargada en www.pro1iaq.com

## **Power Type**

Battery Power\*
Hardwire (Common Wire)
Hardwire (Common Wire) with Battery Backup

# A trained, experienced technician must install this product.

Carefully read these instructions. You could damage this product or cause a hazardous condition if you fail to follow these instructions.

## **Need Help?**

For assistance with this product please visit http://www.pro1iaq.com or call Pro1 Customer Care toll-free at 888-Pro1iaq (776-1427) during normal business hours (Mon-Fri 9 AM - 6 PM Eastern)

<sup>\*</sup> If using remote sensors the thermostat must be hardwired.

# THERMOSTAT QUICK REFERENCE

## Getting to know your thermostat





LCD

Days of the week and time. Flashes ambient

Low Battery Indicator:

Replace batteries when

this indicator is shown.

Wireless Icon

## **Important:**

The low battery indicator is displayed when the AA battery power is low. If the user fails to replace the battery within 21 days, the thermostat display will only show the low battery indicator as a final warning before the thermostat becomes inoperable. The batteries are located on the back of the thermostat.

- 2 \*Glow in the Dark Light Button
- (3) Fan Button
- 4 System Button
- 5 Temperature Setpoint Buttons
- 6 Menu Button
- 7 Humidity Button
- \* NOTE ABOUT THE LIGHT BUTTON:
  This button is used to light up the
  display, but it is also used to set up
  communication with the base module.
  DO NOT hold the light button down for
  more then 10 seconds, unless you are
  performing the initial communication
  setup steps.

## Programmable Time

This thermostat has 4 programmable time periods per day.

#### Temperature:

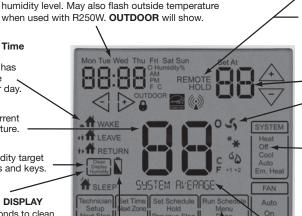
Indicates the current system temperature.

#### **Humidity:**

Shows the humidity target setpoint settings and keys.

#### Clean Display:

Pressing CLEAN DISPLAY will allow 30 seconds to clean the display. The keys will be inoperable during this time. CLEAN will appear if your contractor has programmed a filter change reminder. Press CLEAN when filter has been replaced to reset the filter change reminder timer.



**REMOTE** indicates a remote has control of the system.

**HOLD** is displayed when thermostat program is permanently overridden.

Displays the user selectable setpoint temperature.

System operation indicators:

\*\* OD S

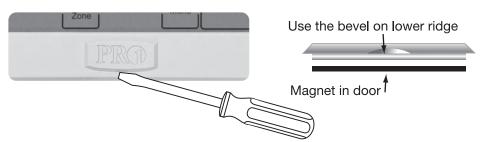
The COOL, HEAT or FAN icon will display when the COOL, HEAT or FAN is on.

NOTE: The compressor delay feature is active if these icons are flashing. The compressor will not turn on until the 5 minute delay has elapsed.

Program Menu Options: System Information: Shows different options during programming. System Information: Shows which zone or zones are controlling

Shows which zone or zones are controlling your system. Shown only when one or more indoor sensors **R251W** are connected.

## Removing the private label badge



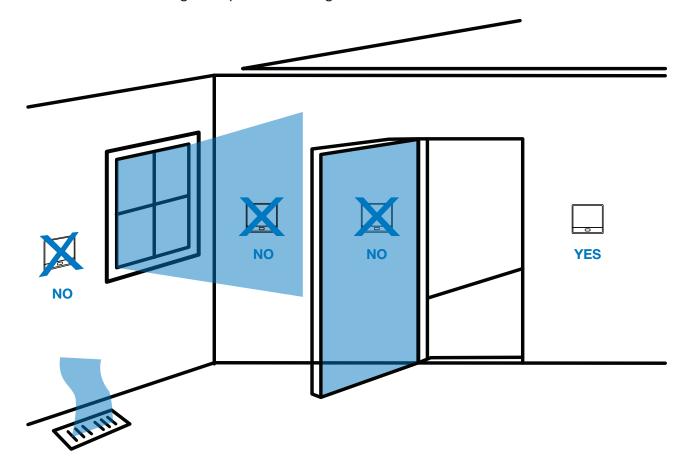
Gently slide a screwdriver into the bottom edge of the badge. Gently turn the screwdriver counter clockwise. The badge is held on by a magnet. The badge should pry off easily. **Do not use force.** 

### PRO1 Tip

All Pro1 thermostats use the same universal magnetic badge. Visit our website at www.pro1iaq.com to learn more about our free private label program.

#### **Wall locations**

The thermostat should be installed approximately 4 to 5 feet above the floor. Select an area with average temperature and good air circulation.



Do not install thermostat in locations:

- Close to hot or cold air ducts
- That are in direct sunlight
- With an outside wall behind the thermostat
- In areas that do not require conditioning
- Where there are dead spots or drafts (in corners or behind doors)
- Where there might be concealed chimneys or pipes
- Where appliances could radiate heat

## **PRO1 Tip**

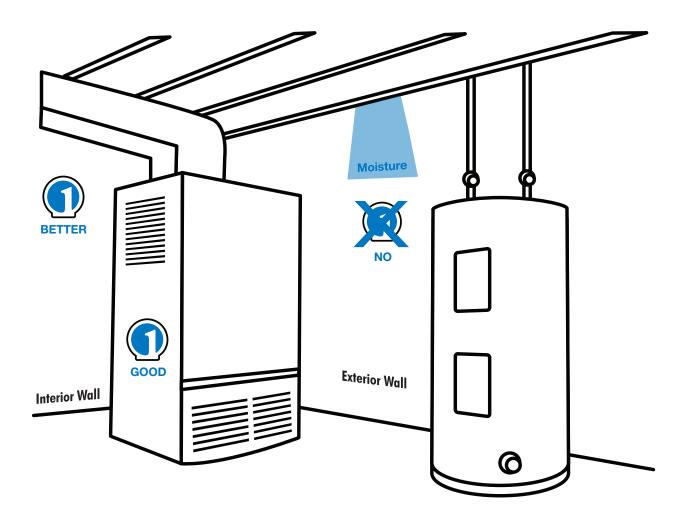
Pick an installation location that is easy for the user to access. The temperature of the location should be representative of the building.

## **Base Module - Basement Installation**





Range between the T955WH and the base module is up to 100 feet with no obstructions and up to 50 feet in standard residential metal, brick, and concrete construction. To extend the range try placing the base unit higher if in a basement or further away from large metal objects.



## PRO1 Tip

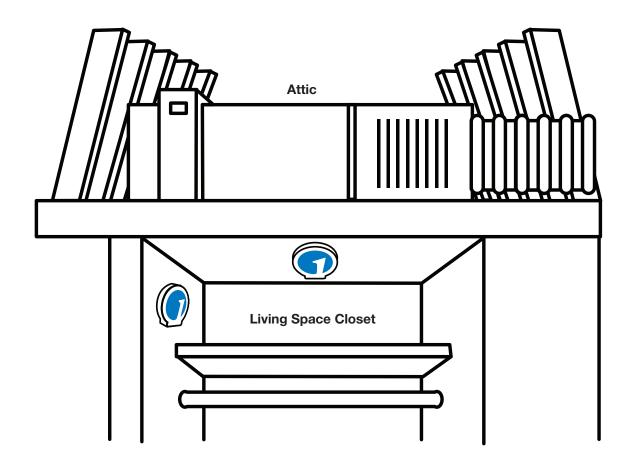
Do not install the base module in locations:

- That are behind a chimney
- Where temperature could exceed 150°F
- Where rain or snow or extreme hot or cold is possible

**NOTE:** The base module is NOT weatherproof.

## **Base Module - Attic Installation**

When performing an attic installation, instead of placing the base module in the attic, locate the closet nearest to the air conditioning unit. Then mount the base module high on the wall inside the closet or on the ceiling of the closet. This location will insure the base module is below the 150°F maximum ambient temperature specification.



## PRO1 Tip

Do not install the base module in locations:

- That are behind a chimney
- Where temperature could exceed 150°F
- Where rain or snow or extreme hot or cold is possible

**NOTE:** The base module is NOT weatherproof.

# MASTER THERMOSTAT SUBBASE INSTALLATION



# Caution: Electrical Hazard

Failure to disconnect the power before beginning to install this product can cause electrical shock or equipment damage.



## **Mercury Notice:**

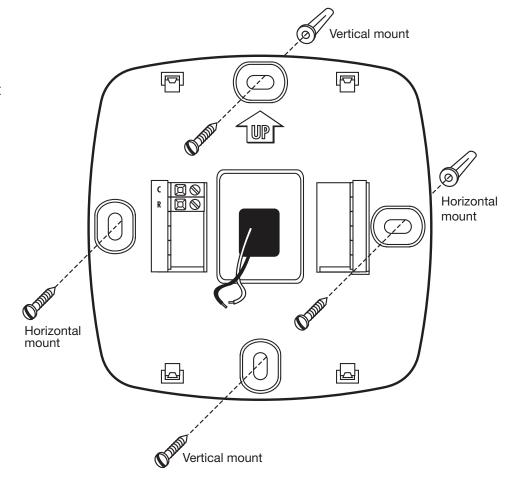
All of Pro1's products are mercury free. However, if the product you are replacing contains mercury, dispose of it properly. Your local waste management authority can give you instructions on recycling and proper disposal.

For vertical mount put one screw top and one screw bottom.

For horizontal mount put one screw left and one screw right.

### NOTE:

To insure a solid fit between the thermostat and the subbase, mount the subbase on a flat wall with the drywall anchors flush to the wall. Using the screws and drywall anchors that were provided with the thermostat.



#### Note:

The T955WH can be battery powered only if used as a stand-alone thermostat solution. The T955WH must be hardwired (C and R terminals connected to 24V power) if remote sensors (R251W or R250W) are used.

# BASE MODULE SUBBASE INSTALLATION

## **Wiring Note:**

Wire the base module's subbase the same way you would wire a hardwired thermostat subbase.

## Note:

To connect the base module to master thermostat, refer to the directions on page 9 of this manual.

For vertical mount put one screw top and one screw bottom. Vertical mount For horizontal mount put one screw left and one screw right. **UP** 回 国 Horizontal mount □ Y1 W1/E **◎** 🎑 | Y2 Horizontal mount Vertical mount

#### Note:

The base module must be hardwired (C and R terminals connected to 24V power).

## Wiring

- If you are replacing a thermostat, make note of the terminal connections on the thermostat that is being replaced. In some cases the wiring connections will not be color coded. For example, the green wire may not be connected to the G terminal.
- 2. Loosen the terminal block screws. Insert wires then retighten terminal block screws.



## Warning:

All components of the control system and the thermostat installation must conform to Class II circuits per the NEC Code.

#### Wire specifications

Use shielded or non-shielded 18 - 22 gauge thermostat wire.

#### Note:

In many heat pump systems with no emergency heat relay a jumper can be installed between E and W2.

## **Terminal Designations on Base Module**

This thermostat is shipped from the factory to operate a conventional heating and cooling system. This thermostat will also operate a heat pump system. See the "heat pump" configuration step on page 12 of this manual to configure the thermostat for heat pump applications.

Terminal	2 Heat 2 Cool Conventional System	2 Heat 2 Cool Heat Pump System	3 Heat 2 Cool Heat Pump System
RC	Transformer power (cooling)	Transformer power (cooling)	Transformer power (cooling)
RH	Transformer power (heating)	Transformer power (heating)	Transformer power (heating)
C	Transformer common	Transformer common	Transformer common
В	Energized in heating	Heat pump changeover valve energized in heating	Heat pump changeover valve energized in heating
0	Energized in cooling	Heat pump changeover valve energized in cooling	Heat pump changeover valve energized in cooling
G	Fan relay	Fan relay	Fan relay
W/E	First stage of heat	Emergency heat relay	Emergency heat relay
Y	First stage of cool	First stage of heat & cool	First stage of heat & cool
Y2	Second stage of cool	Second stage of cool	Second stage of cool & second stage of heat
W2	Second stage of heat	Auxiliary heat relay, second stage of heat	Auxiliary heat relay, third stage of heat
Н	Humidify	Humidify	Humidify
D	Dehumidify	Dehumidify	Dehumidify

## **Terminal Designations on T955WH Master Thermostat**

Terminal	2 Heat 2 Cool Conventional System	2 Heat 2 Cool Heat Pump System	3 Heat 2 Cool Heat Pump System
R	24 VAC Transformer power	24 VAC Transformer power	24 VAC Transformer power
С	Transformer common	Transformer common	Transformer common

## Powering the T955WH Master Thermostat

# **ESTABLISHING COMMUNICATION**

## **Establishing Communication between T955W Master Thermostat and the Base Module**

## **Easy, Two Step Communication Link**

To set up the initial link between the Master Thermostat and the base module please follow the steps below:

- Press and hold the base module button for 3 seconds. The Blue LED will flash when ready to receive initial signal from T955WH. (Base module must be powered by 24V. Blue LED will be continuously on when 24V power is present.)
- Hold the Light key (shown here) of the T955WH for 10 seconds, the Blue LED on the base module will stop flashing after communication has been established between base module and the T955WH.

### Note:

The **Blue LED** on the **base module** will be on when power is present. The **Blue LED** will flash 3 times every time it receives a signal from **T955WH**. When a relay is on the corresponding LED relay indicator will be on.

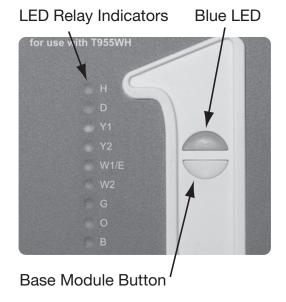
#### Note:

If the base module does not receive a signal from the **T955WH** for 15 minutes it will turn off all relays until communication is reestablished. The **Blue LED** on the base module will also turn off to show communication has been lost.

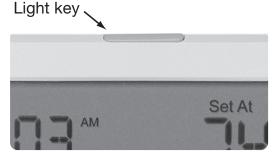
#### Note:

If communication has been lost for 1 hour and if freeze protection is enabled, heat and emergency heat relays will be turned on. The heat and emergency heat relays will turn on for 10 minutes every hour if there has been a call for heat in the last 24 hours.

Step 1.



## Step 2.



## **Important:**

DO NOT hold the light button on the **T955WH** for more than 10 seconds after Step 2 above has been completed. Holding the light button down will break the communication link and the base module button will need to be pressed again to reestablish communication.

## **Technician Setup Menu**

This thermostat has a technician setup menu for easy installer configuration. To set up the thermostat for your particular application:

- 1. Press **MENU** button
- 2. Press and hold **TECHNICIAN SETUP** button for 3 seconds. This 3 second delay is designed so that homeowners do not accidentally access the installer settings.
- 3. Configure the installer options as desired using the table below.

Use the or keys to change settings and the **NEXT STEP** or **PREV STEP** key to move from one option to another. **Note:** Only press **DONE** key when you want to exit the Technician Setup options.

Filter Change Reminder	Room Temperature Calibration	Minimum Compressor On Time	Compressor Short Cycle Delay	Cooling Swing	Heating Swing	Keypad Lockout
This feature will flash FILT in the display after the elapsed run time to remind the user to change the filter. A setting of OFF will disable this feature.	This feature allows the installer to change the calibration of the room temperature display. For example, if the thermostat reads 70° and you would like it to read 72° then select +2.	This feature allows the installer to select the minimum run time for the compressor. For example, a setting of 4 will force the compressor to run for at least 4 minutes every time the compressor turns on, regardless of the room temperature.	The compressor short cycle delay protects the compressor from "short cycling". This feature will not allow the compressor to be turned on for 5 minutes after it was last turned off.	The swing setting, often called "cycle rate", "differential" or "anticipation" is adjustable. A smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles.	The swing setting, often called "cycle rate", "differential" or "anticipation" is adjustable. A smaller swing setting will cause more frequent cycles and a larger swing setting will cause fewer cycles.	Keypad lockout allows you to configure the thermostat so that none or some of the keys do not function.
LCD Wi <b>ll</b> Show						
OFF States and	COLDANGE			0.5 dF 🔷	0.4 dF \$\infty   \frac{1}{2}	PR
Adjustment Options						
You can adjust the filter change reminder from OFF to 2000 hours of runtime in 50 hour increments.	You can adjust the room temperature display to ready -4°F to +4°F above or below the factory calibrated reading.	You can select the minimum compressor run time from "off", "3", "4", or "5" minutes. If 3, 4, or 5 is selected, the compressor will run for at least the selected time before turning off.	Selecting <b>ON</b> will not allow the compressor to be turned on for 5 minutes after the last time the compressor was on. Select <b>OFF</b> to remove this delay.	The cooling swing setting is adjustable from ±0.2°F to ±2°F. For Example: A swing setting of 0.5°F will turn the cooling on at approximately 0.5°F above the setpoint and turn the cooling off at approximately 0.5°F below the setpoint.	The heating swing setting is adjustable from ±0.2°F to ±2°F. For Example: A swing setting of 0.5°F will turn the heating on at approximately 0.5°F below the setpoint and turn the heating off at approximately 0.5°F above the setpoint.	Pick PA or FU  PA = partial keyp lockout, which lock all the keys except  veys.  FU = Full keypad lockout, which lock out all the keys.  Note: Keypad lockoinstructions are believed.
Factory Default Setting	gs					
OFF	0 °F	OFF	ON	0.5 °F	0.4 °F	PA

**Note:** To lock the keypad hold down the  $\triangle$  and  $\nabla$  keys for 3 seconds. You will see a lock in the display. To unlock the keypad hold down the  $\triangle$  and  $\nabla$  keys for 3 seconds.



Tech Setup Ste	Tech Setup Steps (Continued from the previous page)					
Heating Temperature Setpoint Limit	Cooling Temperature Setpoint Limit	°F or °C	12 or 24 Hour Clock	Morning Recovery	Program Options	Display Light
This feature allows you to set a maximum heat setpoint value. The setpoint temperature cannot be raised above this value.	This feature allows you to set a minimum cool setpoint value. The setpoint temperature cannot be lowered below this value.	Select <b>F</b> for Fahrenheit temperature read out or select <b>C</b> for Celsius read out	You can select either a <b>12</b> or <b>24</b> hour clock setting.	This feature turns your system on before the WAKE programming time to ensure the environment is at the WAKE setpoint when the WAKE stronger time period begins. This recovery changes over time based on the previous day's experience.	You can configure this thermostat to have a 7 day program, a 5+1+1 program or nonprogrammable.	The display light can be configured to come on when any key is pressed or only when the light key is pressed.
LCD Will Show	YY   COLUMN (MI)	OF STATE OF	0.00-81. S H ←		S d	
Use the or key to select the maximum heat setpoint.	Use the or key to select the minmum cool setpoint.	°F for Fahrenheit °C for Celsius	Use the < or > key to select 12 or 24 hour clock.	Use the ← or → key to turn on or off.	Use the ← or → key to select <b>7d</b> for 7 day, <b>5d</b> for 5+1+1, or <b>0d</b> for nonprogammable.	OFF configures display light to come on only with the light key, which will save battery power.  ON configures the display light to come on when any key is pressed.
Factory Default Settings 90 °F	44 °F	°F	12 Hour Clock	ON	5d	ON



## **PRO1 Tip**

The second stage will turn on at 2x the swing setting. The second stage will turn off when 1x the swing is reached. For example, if the swing setting is .8 degrees for heating and the thermostat is set at 70°F, the first stage will turn on at approximately 69.2°F. The second stage will turn on at 68.4°F. The second stage will turn off at 69.2°F and the first will turn off at 70.8°F. If third stage is used, it will turn on at 3x the swing and turn off at approximately 2x the swing.

#### **Balance Point:**

The system operates differently when a balance point is used on a dual fuel system. The balance point outdoor temperature setting will be the outdoor temperature at which the thermostat chooses either the heat pump or gas furnace. For Example: A balance point setting of 30°F will turn on only the heat pump above 30°F and only the gas furnace below 30°F. **Y1** will be stage one above 30°F and **W2** will be stage one below 30°F.

Tech Setup Ste	eps (Continued	from the prev	ious page)				
Contractor Call Number	Веер	Heat Pump	System Switch	Fan Operation	Gas Auxiliary for Heat Pump	Cooling Fan Delay	Outdoor Sensor
Allows you to put your phone number in the display.  You can choose ON or OFF	When any key is pressed an audible beep will sound. You can choose ON or OFF	When turned on the thermostat will operate a heat pump.  1. EM.Heat will show as an option in the system switch.  2. Y will be first stage of heat & cool, W/E will be emergency heat relay & W2 will be auxiliary heat relay.	You can configure the system switch for the particular application: Heat - Off - Cool, Heat - Off, Cool - Off, Heat - Off - Cool-Auto  Note: EM. Heat will show if in heat pump mode.	Select GAS for systems that control the fan during a call for heat.  Select ELEC to have the thermostat control the fan during a call for heat.	This option will turn the heat pump off 45 seconds after the auxiliary heat relay turns on.  For 2 heat applications, the first stage will turn off 45 seconds after the auxiliary stage turns on.  For 3 heat applications, the first and second stage will turn off 45 seconds after the auxiliary stage turns on.	The cooling fan delay setting will delay the fan from coming on in cool mode and keep running after the compressor shuts off for a short time to save energy in some systems.	Enables the use of an outdoor sensor R250W.  Connecting a R250W allows for a balance point setting.  Selecting YES requires the T955WH master thermostat to be powered with 24V on C and R terminals.  See R250W user guide for more information.
LCD Will Show							
OFF STEELS		OFF C	9518 91 mm	SRS ⇔	OFF   Ab  St 01:  The base in	(00, fill) ((0.0))	01/4009 \$0500P
Adjustment Options  If selected ON, you will see the input screen after pressing next step.  Use the or when you have to select the desired number and the FAN or SYSTEM key to move from one character to another. See note below on operation.	If ON is selected the beep will sound.  If OFF is selected, there is no sound.	OFF configures the thermostat for non heat pump systems.  ON configures the thermostat for heat pump systems.	Use the or heep until the desired application is flashing.	GAS or ELEC	For heat pump systems that are "dual fuel" (use a gas furnace for auxiliary stage heat) you can turn this feature on to turn off the heat pump when the auxiliary stage of heating has been called for.  This feature is disabled when a R250W is connected.  See Balance Point on page 13.	You can select the Cooling Fan Delay from OFF, 15, 30, 60 or 90 seconds.  If 15, 30, 60 or 90 is selected the fan will not turn on for that many seconds when there is a call for cool and will run for that many seconds after satisfying a call for cool.  This feature is disabled when a R250W is used.  See Balance Point on page 13.	When NO is selected the thermostat is unable to connect to an outdoor remote sensor R250W.  When YES is selected the thermostat is able to connect to an outdoor remote sensor R250W.  Press and hold connect button on R250W until the T955WH says FOUND OUTDOOR on display.
Factory Default Settings  OFF	ON	OFF	Heat - Off - Cool	GAS	OFF	OFF	NO
VII	VIII	VII	11601 - 011 - 0001	UNJ	VIII	VII	110

### Note:

Connect an optional **R250W** outdoor remote temperature sensor to enable the balance point tech setup option.



Tech Setup Step	s (Continued fro	om the previou	s page)			Requires	R250W
Remote Sensor	Finding Sensor	Local Temp Sensor	Freeze Protection	Energy Star® Logo	Stages of Heat	Balance Point	Balance Run Time
Enables the use of up to four indoor sensors R251W.  Selecting YES requires the T955WH master thermostat to be powered with 24V on C and R terminals.	This step connect R251W to T955WH.  The previous step Remote Sensor must be set to YES in order to connect an R251W.	Disable the sensor on the master.  At least one R251W indoor remote sensor must be connected to disable the local T955WH sensor.	Turns on the heat for 10 minutes each hour if unable to communicate with the <b>T955WH</b> master thermostat if there has been a call for heat in the last 24 hours.	Shows the Energy Star logo when the program meets Energy Star guidelines.	You can configure the thermostat to operate a 3 stage heat pump system.  2H 2C = 2 heat, 2 cool 3H 2C = 3 heat, 2 cool This feature only shows if Technician Setup Step for HEAT PUMP is set to ON.	Balance point can eliminate the need for a fossil fuel kit.  An outdoor temperature above balance point will cause the thermostat to only allow the Y terminal(s) to energize. An outdoor temperature below balance point will cause the thermostat to only allow the W2 to energize.	Balance point run time will allow the W2 auxiliary terminal to energize even if outdoor temperature is above the selected balance point temperature. If enabled, auxiliary will energize for the current cycle after the balance point run time has expired.
LCD Will Show							
Adjustment Options	FD606 506095	3E5	FREEZ PROTECTION  Manual Institute Institute  FREEZ PROTECTION  Manual Institute Institute  FREEZ PROTECTION  Manual Institute  FREEZ PROT	000 57W 000 meter by less	STATE STATE	APACE POINT	NARCE RATING
When NO is selected the thermostat is unable to connect to an indoor remote sensor R251W.  When YES is selected the thermostat is able to connect to up to four indoor remote sensors R251W.  Go to the next step FINDING SENSOR to connect R251W.	The number shown represents the zone.  Use or to select the zone you wish to connect.  The zone setting on the T955WH and the R251W must be the same to connect.  See R251W user guide for detailed R251W connection information.  See note below for more information.	YES enables local T955WH sensor NO disables local T955WH sensor	YES enables freeze protection NO disables freeze protection	YES enables Energy Star feature  NO disables Energy Star feature	Use the <+ or >key to change between 2 heat and 3 heat.  2 heat will use Y1 as first stage and W2 as auxiliary.  3 heat will use Y1 as first stage, Y2 as second stage and W2 as auxiliary.	YES 10, 20, 30, 35, 40, 45, 50 outdoor temperature balance point setting. NO	YES 15, 30, 45, 60, 75, 90 continuous run time minutes. NO
Factory Default Settings							
NO	1	YES	NO	NO	2 Stages	NO	NO

#### Note:

Up to four R251W indoor temperature sensors can be connected to one T955WH.

This allows for 5 sensing points (zones). For Example: The local (T955WH) plus four R251W sensors enables 5 sensing points. To connect an R251W to a T955WH, Select 1 on the T955WH FINDING SENSOR technician setup step. Then select Zone 1 on the R251W technician setup step. Then hold down the light button on the R251W until it beeps, while in ZONE technician setup step on R251W. To connect a second R251W change the T955W to read 2 and change the R251W to zone 2. The zone setting must match between the T955WH and the R251W to connect. When the connection is established the T955WH will show FOUND + NAME OF R251W in the system information area of the display.

Tech Setup Sto	Tech Setup Steps (Continued from the previous page)						
Humidify	Dehumidify	Humidity Calibration	Dehumidify with AC	Over Cool Limit	HUM Terminal	DHM Terminal	
This feature adds humidity when <b>System</b> key is in <b>Heat</b> .	This feature removes humidity when <b>System</b> key is in <b>Cool</b> .	This feature allows the installer to change the callibration of the ambient humidity displayed.	This feature forces the A/C to run longer to remove humidity when needed. The A/C will "over cool" the room a few degrees until the humidity reaches the desired setpoint.	The amount of over cooling allowed when using A/C to remove humidity. This screen is only shown when ON is selected in the "Dehumidify with AC" tech setup step.	Options for how the Hum terminal energizes.	Option for how DHM terminal energizes.	
LCD Will Show							
OFF     OFF	OFF STATES	CO COLDANGE	### ### ### #### #####################	3	Company   Comp		
Adjustment Options							
Use the or be key to turn on or off.  If ON is selected the humidity will be displayed on the main screen and Hum terminal will energize when humidity setpoint is above ambient humidity in Heat mode.	Use the or key to turn on or off.  If ON is selected the humidity will be displayed on the main screen and DHM terminal will energize when humidity setpoint is below ambient humidity in Cool mode.	Use the $\triangleleft$ or $\bowtie$ key to adjust the calibration $+/-3$ .	Use the or be key to select YES or NO.  If selected YES allows over cooling to be used to control humidity in Cool mode. If NO is selected the system will not use over cooling.	Use the or key to select the maximum number of degrees of over cool.  Options are: 2, 3, 4, 5	Use the < or > key to select one of the four options.  View the HUM Terminal chart below for an explanation of these options.	Use the or leave to select one of the four options.  View the DHM Terminal chart below for an explanation of these options.	
Factory Default Settings							
OFF	OFF	0	NO	3	1	1	

## **HUM Terminal**

OPTIONS	HUM terminal energizes when the ambient humidity is
1	below the humidity setpoint and heat or fan is energized.
2	below the humidity setpoint and heat is energized.
3	below the humidity setpoint. It will also energize the fan during a call for humidity.
4	below the humidity setpoint.

## **DHM Terminal**

OPTIONS	DHM terminal energizes when the ambient humidity is		
1	above the humidity setpoint and cool or fan is energized.		
2	above the humidity setpoint. It will also energize the fan during a call for humidity.		
3	above the humidity setpoint.		
4	above the humidity setpoint and the compressor is not running.		

# **MOUNT THERMOSTAT & BATTERY INSTALLATION**

### **Mount Thermostat and Base Module**

Align the 4 tabs on the subbase with corresponding slots on the back of the thermostat or base module. Then push gently until the thermostat or base module snaps in place.

Note: To insure a solid fit between the thermostat and the subbase:

- 1. Mount subbase to a flat wall
- 2. Use screws provided
- 3. Drywall anchors should be flush with the wall
- 4. Wires should be pushed into the wall



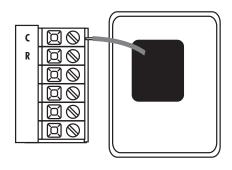


## Note:

The base module can be wired from the back or the bottom.

## **Battery Installation**

Battery installation is optional if there are no remotes connected to the Master Thermostat (**C** terminal connected). If you connect an outdoor remote and/or indoor remote sensors it is required the thermostat be hardwired.





On the back of the thermostat insert 2 AA Alkaline batteries (included).

## **Setting Target Humidity Setpoint**

Follow the steps below to change your target humidity setpoint.

Press the **HUMIDITY** key

Use the or target humidity setpoint.

Press **DONE** when completed



The target humidity setpoint is not programmable. Unlike temperature, humidity does not change quickly and should not be programmed.

#### Note:

Humidity is only energized during heat. Dehumidify is only energized during cool. Heat and Cool each have their own target setpoints.



**HUMIDITY KEY** 



## **Ambient Humidity Display**

Ambient humidity will flash opposite the day and time, if the optional **R250W** outdoor temperature sensor is installed the ambient outdoor temperature will also cycle in the display.



AMBIENT HUMIDITY



**DAY & TIME** 



**OUTDOOR TEMPERATURE** 

## **Recommended Heating Settings:**

**Increasing Humidity** 

The table on the right shows recommended indoor humidity levels in relation to outdoor temperatures during heating (adding humidity).

Outside Temperature (0°F)	Recommended Relative Humidity
+20° and above	35% to 40%
+10°	30%
0°	25%
-10°	20%
-20°	15%

## **Recommended Cooling Settings:**

Consult your professional HVAC technician for recommended settings for your climate.

### **Set Time**

Follow the steps below to set the day of the week and current time:

- 1. Press MENU
- 2. Press SET TIME
- 3. Day of the week will be flashing. Use the 
  or 
  key to select the current day of the week.
- 4. Press **NEXT STEP**
- 5. The current hour is flashing. Use the or key to select the current hour. When using 12-hour time, make sure the correct a.m. or p.m. choice is selected.
- 6. Press **NEXT STEP**
- 7. Minutes are now flashing. Use the 
  or 
  key to select current minutes.
- 8. Press DONE when completed

## **Programming**

All programmable Pro1 thermostats are shipped with an energy saving pre-program. You can customize this default program by following the Set Program Schedule.

Your thermostat can be programmed to have each day of the week programmed uniquely (7days), all the weekdays the same with a separate program for Saturday and a separate program for Sunday (5+1+1), or nonprogrammable. There are four time periods for each day (WAKE, LEAVE, RETURN, SLEEP). This thermostat has a programmable fan feature, which allows you to run the fan continuously during any time period.

	Factory Default Program							
Day of the Week	Events	Time	Setpoint Temperature (Heat)	Setpoint Temperature (Cool)	Zone (If R251W is connected)			
Weekday	Wake 🕍	6 a.m.	70° F (21° C)	75° F (24° C)	System Average			
	Leave 4iff	8 a.m.	62° F (17° C)	83° F (28° C)	System Average			
	Return i	6 p.m.	70° F (21° C)	75° F (24° C)	System Average			
	Sleep 👚	10 p.m.	62° F (17° C)	78° F (26° C)	System Average			
Saturday	Wake 🖈	8 a.m.	70° F (21° C)	75° F (24° C)	System Average			
	Leave 4	10 a.m.	62° F (17° C)	83° F (28° C)	System Average			
	Return i	6 p.m.	70° F (21° C)	75° F (24° C)	System Average			
	Sleep 👚	11 p.m.	62° F (17° C)	78° F (26° C)	System Average			
Sunday	Wake 🕍	8 a.m.	70° F (21° C)	75° F (24° C)	System Average			
	Leave 4	10 a.m.	62° F (17° C)	83° F (28° C)	System Average			
	Return is fi	6 p.m.	70° F (21° C)	75° F (24° C)	System Average			
	Sleep 👚	11 p.m.	62° F (17° C)	78° F (26° C)	System Average			

You can use the table below to plan your customized program schedule if using 5+1+1.

Factory Default Program								
Day of the Week	Events	Time	Setpoint Temperature (Heat)	Setpoint Temperature (Cool)	Zone (If R251W is connected)			
Weekday	Wake 🖈							
	Leave diff							
	Return i							
	Sleep 👚							
Saturday	Wake 🖈							
	Leave diff							
	Return i							
	Sleep 👚							
Sunday	Wake 🖈							
	Leave diff							
	Return i							
	Sleep 👚							

## Set 5+1+1 Program Schedule

To customize your 5+1+1 program schedule, follow these steps

## Weekday:

- Select HEAT or COOL using the SYSTEM key.
   Note: You have to program heat and cool each separately.
- 2. Press MENU
- 3. Press **SET SCHED**. Note: Monday-Friday is displayed and the **WAKE** icon is shown. You are now programming the **WAKE** time period for the weekday setting.

## Additional step if R251W indoor remote sensor is connected.

The **T955WH** master thermostat will either average all sensors (system average) or only use one sensor for the system ambient temperature (priority). The default setting is **SYSTEM AVERAGE**, which means all sensors are averaged to create the system average ambient temperature reading. The **NEXT ZONE** key can be pressed to change the priority. The system information area of the display shows the priority.

For Example: There is an R251W connected and it is named REMOTE 1. If the NEXT ZONE key is pressed until REMOTE 1 is shown, then the REMOTE 1 ambient temperature reading will be used exclusively for that time period. All other sensors will be ignored.

- 4. Time is flashing. Use the or key to make your time selection for the weekday **WAKE** time period. Note: If you want the fan to run continuously during this time period, select **ON** with the **FAN** key.
- 5. Press NEXT STEP
- 6. The setpoint temperature is flashing. Use the  $\stackrel{\frown}{\searrow}$  or  $\stackrel{\frown}{\bigvee}$  key to make your setpoint selection for the weekday **WAKE** period.
- 7. Press NEXT STEP
- 8. Repeat steps 4 through 7 for weekday **LEAVE** time period, for weekday **RETURN** time period, and for weekday **SLEEP** time period.

#### Saturday:

 Repeat steps 4 through 7 for Saturday WAKE time period, for Saturday LEAVE time period, for Saturday RETURN time period, and for Saturday SLEEP time period.

#### Sunday:

10. Repeat steps 4 through 7 for Sunday WAKE time period, for Sunday LEAVE time period, for Sunday RETURN time period, and for Sunday SLEEP time period.

## **Set 7 Day Program Schedule**

To customize your 7 day program schedule, follow these steps:

#### Monday

- 1. Select **HEAT** or **COOL** using the system key. You have to program heat and cool each separately.
- 2. Press MENU
- 3. Press SET SCHED

**Note:** Monday is displayed and the **WAKE** icon is shown. You are now programming the **WAKE** time period for the Monday setting.

## Additional step if R251W indoor remote sensor is connected.



The **T955WH** master thermostat will either average all sensors (system average) or only use one sensor for the system ambient temperature (priority). The default setting is **SYSTEM AVERAGE**, which means all sensors are averaged to create the system average ambient temperature reading. The **NEXT ZONE** key can be pressed to change the priority. The system information area of the display shows the priority.

For Example: There is an R251W connected and it is named REMOTE 1. If the NEXT ZONE key is pressed until REMOTE 1 is shown, then the REMOTE 1 ambient temperature reading will be used exclusively for that time period. All other sensors will be ignored.

- 4. Time is flashing. Use the or two want the fan to run continuously during this time period, select **ON** with the **FAN** key.
- 5. Press NEXT STEP
- 6. The setpoint temperature is flashing. Use the  $\bigwedge$  or  $\bigvee$  key to make your setpoint selection for the Monday **WAKE** period.
- 7. Press NEXT STEP
- 8. Repeat steps 4 thru 7 for Monday **LEAVE** time period, for Monday **RETURN** time period, and for Monday **SLEEP** time period.

#### Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday

Repeat steps 4 thru 7 for the remaining days of the week.

#### A Note About Auto Changeover:

Auto changeover will switch between heating and cooling as needed. It is very important to make sure the cooling setpoint temperature is at least 3° above the heating setpoint temperature and that the heating setpoint temperature is at least 3° below the cooling setpoint temperature.

#### A Note About Programmable Fan:

The programmable fan feature will run the fan continuously during any time period it is programmed to be on. This is the best way to keep the air circulated and to eliminate hot and cold spots in your building.

## **SPECIFICATIONS & CONTACT INFORMATION**

## **Specifications**

#### **T955WH Thermostat**

Battery power from 2 AA Alkaline batteries

Dimensions of thermostat ...... 4.7"W x 4.4"H x 1.1"D

Frequency ...... 916 MHz

#### **Base Module**

#### **Contact Us**

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