

WIRELESS THERMOSTAT ///

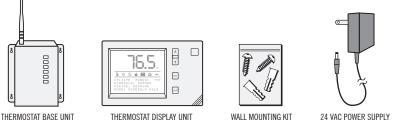


PRODUCT DESCRIPTION ///

The XWT380 Thermostat is an innovative system designed to work with the XG1000 Controller enabling remote access and operation of your HVAC system. The Thermostat offers state of the art performance and professional level reliability at cost effective prices. The fully optimized 418 MHz radio subsystem offers optimal range coverage allowing the **Thermostat** to be placed virtually anywhere.

PACKAGE CONTENTS ///

- (1) Thermostat Base Unit
- (1) Thermostat Display Unit
- (1) 24 VAC Power Supply
- (1) Wall Mounting Kit
- (1) Installation Guide



WALL MOUNTING KIT

INSTALLATION ///

The system is comprised of the Thermostat display and user interface which replaces your old Thermostat, and the base unit which should be installed adjacent to the HVAC System.

This installation must be performed by a qualified HVAC engineer. Be sure to read the complete system installation and operational manual.

The installer should ensure that all local wiring regulations and good practice are adhered to.

WALL MOUNTING THE THERMOSTAT DISPLAY UNIT ///

BEFORE INSTALLING THIS UNIT:

- 1. Read all of the installation instructions carefully.
- 2. Read the User's Manual carefully.
- 3. Ensure that this product is suitable for your application.
- 4. Ensure that wiring complies with all codes and ordinances.
- 5. Disconnect power to the control transformer of the HVAC to prevent electrical shock and damage to equipment.

LOCATION

XWT380 Thermostat display unit is designed to replace your old thermostat. In order to ensure accurate and reliable operation, please check that the following

criteria are met:

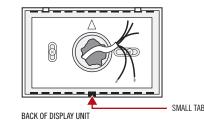
- 1. Ensure that the **Thermostat** is mounted between 5 and 5.5 ft above the floor level and is at least 2 feet away from an outdoor wall.
- 2. Ensure that the **Thermostat** is located in an area where there is adequate air circulation.
- 3. Ensure that the **Thermostat** display is not mounted in an area in direct sunlight, or in the path of heat generated by nearby appliances.
- 4. Ensure that it is not mounted on an outdoor wall, near a fireplace, or in the path of any air ducts.

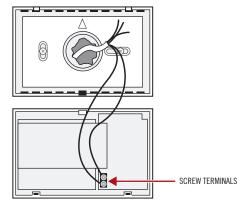
REMOVING THE OLD THERMOSTAT

- 1. Disconnect the power to the control transformer.
- 2. Remove the cover to the existing Thermostat.
- 3. Disconnect the wires going to each terminal on the Thermostat.
- 4. Remove the existing plate or base from the wall if applicable.

INSTALLING THE DISPLAY UNIT

- 1. Press the small tab on the bottom center of the display unit with a small screwdriver and separate the front from the base.
- 2. Mount the base part on the wall, using suitable screws for the mounting surface. Ensure the arrow points up.
- 3. Connect any two wires to the display unit's terminal block situated on the back. It does not matter which color goes to which screw terminal.





FRONT OF DISPLAY UNIT (REAR VIEW)

- 4. Make a note of the colors of these two wires as you will need to connect the same two wires to the base unit at the other end.
- 5. Upon completion of wiring the thermostat, push all excess wiring into the hole in the wall. If there is a large hole in the wall, plug the hole with suitable filler or foam to ensure an accurate temperature reading by the Thermostat display unit.
- 6. Engage the upper tabs of the display unit with the counterparts on the base and press the bottom gently in until you feel it click into place. Do not use excessive force. Ensure you do not have excessive wire looped inside the enclosure.

NOTE: Be sure that the Thermostat temperature sensor has not been damaged during installation.

BASE UNIT INSTALLATION ///

CAUTION

This installation must be performed by a qualified HVAC engineer. Be sure to read the complete system installation and operational manual before you begin this installation.

IF WORKING WITH GAS CENTRAL HEATING UNIT ENSURE THE GAS VALVE IS SHUT OFF!

BE SURE TO DISCONNECT THE POWER TO THE CONTROL TRANSFORMER

Do not short gas valve, fan, heat relay, or cool relay. This may damage the Base unit.

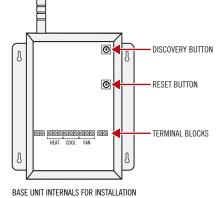
DO NOT ATTEMPT TO HOOK UP TO LIVE CIRCUITS

An accidental connection to a component on the circuit board could cause damage to the Base unit and may be dangerous.

INSTALL THE BASE UNIT AT POINT NEAR THE HVAC UNIT AND CONVENIENT FOR ACCESS

Please also ensure that you mount the unit in a position that gives you easy access to the old thermostat wiring going to the HVAC's control system.

- 1. Mount the unit vertically about on a wall as high as convenient (5.5 to 6 ft).
- 2. Remove the front cover by removing four (4) small screws on each side of the base unit.
- 3. Place the cover in a safe place and take care not to damage the plastic light pipe assembly mounted inside the cover.
- 4. Locate the cables that connected the old thermostat to the HVAC unit.
- 5. Ensure you make a note of the color/label relationship and remove the wires from the HVAC control panel.



- 6. Now locate the same two wires the colors which you chose to connect the Thermostat display unit (refer to your notes mentioned in the display unit installation instruction).
- 7. Using bottom right grommet entry connect the same two wires to the terminals marked "Com Link". Again, either color to either screw terminal.

NOTE: In order to maintain a good dust and bug seal pierce the grommets just enough to pull your wires through. Do not remove grommet. Ensure that all wires and their insulation are in good condition. Replace any wire that shows sign of aging and feels brittle to the touch.

POWER CONNECTION ///

USING 24V AC FROM THE HVAC UNIT

If you can get easy access to the HVAC unit's transformer you may use this to power the base unit. However please check the following before doing so:

- 1. That the transformer rating is not exceeded when you add the display load (approx 200mA).
- 2. That the transformer is not switched via other circuits and has a permanent primary feed from the power line.
- 3. That the voltage does not exceed 27V AC.

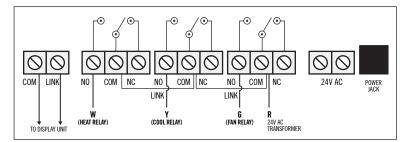
NOTE: If in doubt please use the power adapter supplied with the Thermostat Kit. To do this, simply route the power wire through the lower left grommet into the housing and plug in the power jack.

CONNECTION TO HVAC UNIT ///

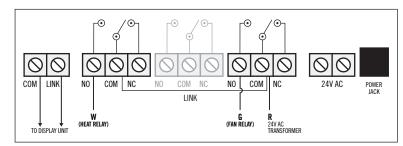
The following three diagrams cover heating only, cooling only, and heating/cooling combination HVAC units. The notations used refer to most common notations used in HVAC wiring in the US.

The installer must verify that these notations do indeed adhere to the following:

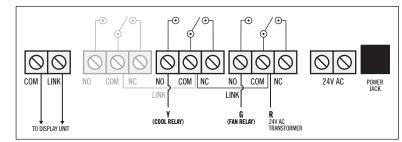
- "W" refers to the connection to the heat relay
- "Y" refers to the connection to the cooling relay
- "G" refers to the connection to the fan relay.
- "R" refers to the connection to the 24V AC transformer.
- "COMMON" refers to the connection between the other terminal of the transformer and all HVAC system relays.



SINGLE STAGE HEATING/COOLING



SINGLE STAGE HEATING ONLY



SINGLE STAGE COOLING ONLY

- 1. Double check all your connections and ensure that the installation is neat and all connections are secure.
- 2. You are now ready to perform the discovery and final set up procedure covered in the main system manual.
- 3. Leave the cover of the base unit off until the whole system is operational.
- 4. Upon completion of the set up, replace the front cover and ensure that the light pipe assembly on the inside of the cover is not damaged or detached.

DISCOVERING YOUR THERMOSTAT ///

In order for the XG1000 Controller to control devices such as cameras, thermostats and switches, each device must be registered with the Controller. The Controller establishes a "secure wireless network" between itself and all discovered devices. The Controller can only control devices that it has discovered. New devices can be discovered at any time.

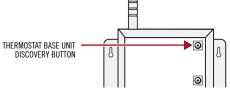
1. Log into your Remote Account and go to the **Discovery** page of the **Account Settings** section. Press the **'START DISCOVERY'** button on the **Discovery** page.

Details Contacts Notification Profiles Users Billing Discovery XG1000 Controller Start Discovery	LIVE VIDEO DEVI		EVENT ARCHIVE	ACCOUNT SETTINGS
XG1000 Controller Start Discovery	Details Contacts	Notification Pr	ofiles Users Billi	ng Discovery
	XG1000 Control	ler Start D	iscovery	

START DISCOVERY

2. Once the Discovery process has begun, press the Discovery button on the Thermostat Base Unit.





3. Once the Discovery process has finished for the **Thermostat** it will appear on the list of your devices on the **Discovery** page.

IVE VIDEO	DEVICE OVERVIEW EVENT ARC	HIVE ACCOUNT SETTINGS						
etails Conf	tacts Notification Profiles Users	Billing Discovery						
XG1000 Co	ntroller Stop Discovery							
Press 'disco Click on 'St	ess 'discovery' button on all wireless devices one at a time you want to register with your gateway. ick on 'Stop Discovery' button when done or gateway will stop discovery automatically, 15 minutes after discovery started.							
Discovered	overed and registered new device: Thermostat							
(P)	Pan Tilt Camera							
	Thermostat 4E43							
HomePlug	-PLC Device	Status	Data Rate	QoS				
T Hos	t: 00:30:0A:97:4C:D4	Good connection	85.00 Mbps	(100%)				
Nod	e: 00:30:0A:8E:1B:CD	Good connection	85.00 Mbps	(100%)				

THERMOSTAT DISCOVERED

OPERATIONAL MODES ///

OFF

The Heating and Cooling systems are both off and do not respond to any changes in temperature settings.

HEAT

The Heating system activates to maintain desired heating setting. The Heating system will be turned on at one degree Fahrenheit (approximately 5°C) below the set point and will turn off at the set point.

COOL

The Cooling system activates to maintain desired cooling setting. The Cooling system will be turned on at one degree Fahrenheit (approximately 5°C) above the set point and will turn off at the set point.

AUTO

The **Thermostat** will automatically switch between heat and cool modes to maintain the desired heating and cooling temperature settings. To ensure that the heating and air conditioning systems are not activated simultaneously, the system has a built-in offset. This offset maintains a minimum of three degrees Fahrenheit or Celsius between the desired heat and cool temperatures. If you try to change one temperature set point within three degrees of the other temperature set point, the **Thermostat** will automatically adjust the other set point to ensure the offset is maintained. For example, if you have the heat set to a desired temperature of 69°F and you attempt to set the desired cooling temperature to 71°F, the desired heating temperature will automatically decrease to 68°F to maintain the 3°F difference.

The AUTO mode automatically turns the Heating or AC on, based on the temperature ranges you entered for Cool and Heat. However, the first time the **Thermostat** changes the operating mode from heat to cool or from cool to heat, the temperature must rise two degrees above the set point for the change to occur. This keeps your HVAC system from overshooting and constantly alternating between the heater and air conditioner.

MANUAL CONTROL BUTTONS ///

TEMPERATURE UP BUTTON Adjust the Current Schedule Temperature to a higher value

TEMPERATURE DOWN BUTTON Adjust the Current Schedule Temperature to a lower value

MODE BUTTON Select a Mode you want to change

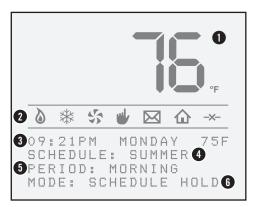
ENTER BUTTON

Activate the selected Mode

THERMOSTAT DISPLAY ///

BACKLIGHT

User-activated backlight is activated momentarily for 10 seconds when any button is pressed or is switched on permanently when selected via the 'Mode' Button.



THERMOSTAT DISPLAY

DISPLAY KEY:

1. CURRENT INSIDE TEMPERATURE

Celsius or Fahrenheit; Message - When MESSAGE mode is activated, the display will present a 40-character text message. A maximum of 4 messages, 150 characters each are stored.

2. DISPLAY ICONS



COOL ON

FAN ON



A SETTING WAS CHANGED AT THE THERMOSTAT; SCHEDULE SETTINGS WILL RESUME AT THE START OF THE NEXT PERIOD

MESSAGE

3. CURRENT TIME, DAY, AND DESIRED TEMPERATURE SETTING

4. CURRENT SCHEDULE

- 5. CURRENT PERIOD WITHIN CURRENT SCHEDULE
- 6. CURRENT MODE

TROUBLE SHOOTING ///

SYMPTOM	REMEDIES
Power LED on the base unit does not light up	 Be sure you are using the proper wiring from the HVAC system. Be sure the 24V hot wire is plugged into the hot terminal and the 24V common wires is plugged into the common terminal.
The display unit is blank	 Be sure you have connected the same color wire from the common terminal of the base to the common terminal on the display unit. Be sure you have connected the same color wire from the Link terminal on the base unit to the Link terminal on the display unit. Make sure the base unit is powered. Make sure all terminal screws are tightly fastened. Try a different set of wires.
The Status LED does not blink during range testing	 Try to reposition the base unit. Adjust the antenna, the preferred position is having the antenna in a vertical upright position. Make sure the base unit is powered properly. Try repositioning the antennas on the Controller.
The Heating/ Cooling system will turn off	1. The minimum cycle time is set to 7 minutes, be sure to wait until this time has passed.

FAQ'S ///

HOW FAR AWAY CAN THE THERMOSTAT BE PLACED FROM THE XG1000 CONTROLLER? Typically, up to 60-80 feet.

CAN I PLACE THE THERMOSTAT IN A DIFFERENT ROOM FROM THE XG1000 CONTROLLER?

Yes, the Thermostat and Controller use radio frequencies to communicate. These frequencies can go through objects like walls, ceilings and floors

HOW MANY THERMOSTATS CAN I REGISTER WITH MY XG1000 CONTROLLER?

The Controller can support up to 2 Thermostats.

IF POWER IS LOST DO I LOSE ALL OF THE THERMOSTAT SETTINGS?

No. The Thermostat has a built in battery backup. It will retain all settings after a power failure.

HOW MANY SCHEDULES CAN THE THERMOSTAT STORE?

The Thermostat stores one schedule at a time. It will display the current schedule's name on the display unit.

HOW DO I CHANGE SCHEDULES?

You create and modify schedules from the website application. After a schedule is saved, it can be downloaded to the Thermostat.

TECHNICAL SPECS ///

- Alpha numeric display supports full text in most European languages
- Large easy to read seven segment numbers and icons for easy readability and interface
- Simple three button operation
- Back lit STN LCD display for high contrast and long life
- Two wire comms and power technology simplifies retro installation
- Base unit placed near HVAC simplifies interface with the HVAC equipment
- Distance of up to 100' from thermostat base unit to Controller
- Full scheduling support
- Indoor use only
- Support for Fahrenheit (°F) and Celsius (°C)

APPROVALS ///

FCC ID NUMBER: 0U4-XWT380 / IC: 4576A

INSTRUCTION TO THE USERS (IF DEVICE DOES NOT CONTAIN A DIGITAL DEVICE)

The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

INSTRUCTION TO THE USER (IF DEVICE CONTAINS A DIGITAL DEVICE)

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 interferences 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.

This equipment has been certified to comply with the limits fro a class B computing, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

The term "IC:" before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

WARRANTY ///

This product has a one year manufacturer's warranty which covers parts and labor only. In the unlikely event that you encounter a technical or quality issue, please contact Xanboo at 1.877.926.2661. Xanboo will replace defective units within the warranty period.