

Installer : Save these instructions for future use!

FAILURE TO READ AND FOLLOW INSTRUCTIONS CAREFULLY BEFORE INSTALLATION OR OPERATION COULD DAMAGE THIS CONTROL OR CAUSE PROPERTY DAMAGE.

DESCRIPTION

The EWT-3900 7Day/5-2 Day Wireless Programmable Digital Solid State Thermostat uses a microcomputer to provide precise building temperature and fan control. This wireless thermostat allows additional flexibility to zoned heating and cooling systems where hard wired installations are prohibited or difficult to do.

The Model EWT-3900 Wireless Thermostat is Linked to the Receiver at the factory and set to Sleep Mode for shipping. Wire & Power up the Receiver, Wake up the thermostat and operate your HVAC system.

Features:

The Thermostat is powered by a rechargeable lithium-ion battery.

The receiver module is powered with 24VAC from a Control Panel or 24VAC Class 2 Transformer.

The receiver module terminal block has the following terminals: R, C, W1/E, W2, Y1, Y2, G, O, B and one NC (no connection) terminal.

Compatible Equipment: ULTRA-ZONE Control Panels: NCM-300, BMPlus3000 & UZC-4.

Single or two stage heating and cooling equipment Gas, Electric, Oil or Hydronic. One or two stage compressor heat pump with electric backup.

Simultaneous heat and cool program storage.

Program storage is retained in case of power loss.

LCD continuously displays time and room temperature.

Temperature set point is displayed when it is being changed.

Temperature display can be configured in °F or °C.

The Thermostat can be programmed between 45°F and 95°F.

Backlit display.

Air Filter Replacement Monitor.

Electrical Ratings

19-30VAC 50/60 Hz

1.0 Amp (Max load per terminal)

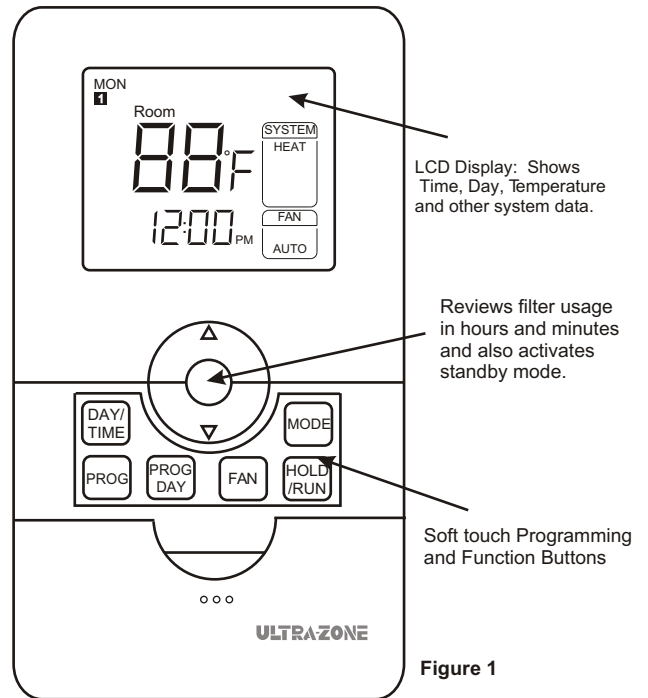
Thermal Ratings

Set point Temperature Range 45°F to 95°F

Operating Ambient Temperature Range 30°F to 99°F

Storage Temperature Range 14°F to 140°F

Operating Humidity Range 0-90% R.H. (Non Condensing)



LCD Display: Shows Time, Day, Temperature and other system data.

Reviews filter usage in hours and minutes and also activates standby mode.

Soft touch Programming and Function Buttons

Figure 1

Contents:

- 1 EWT 3900 Thermostat
- 1 Lithium-Ion battery 2000 mAh
- 1 EWT 3900 Receiver
- 1 USB Adapter Cord
- 1 Tabletop Base
- 1 Wall Outlet Charger
- 1 Wall Mounting Plate
- 1 USB Adapter Cord
- 6 Plastic Wall Anchors
- 6 #8 x 1" Screws
- 1 TB-236 Technical Bulletin

Charging Requirements:



- 120VAC Wall Outlet or
- PC Computer with USB Port

ATTENTION

This product does not contain mercury. However, this product may replace a unit which contains mercury. EWC Controls Inc. would like to advise all technicians and consumers that all mercury thermostats should be recycled.

INSTALLATION

The installer should be an experienced and trained HVAC contractor. Failure to read and follow instructions carefully before installation or operation could damage this control or cause property damage. Test the finished installation for proper operation.

To conserve power, the EWT-3900 leaves the factory in Sleep Mode. When removed from the box, "PE" will be displayed on the LCD to indicate Sleep Mode. When you are ready to use the thermostat, press and hold the  and  buttons for five seconds to exit Sleep Mode.

⚠ CAUTION

To prevent electrical shock and/or equipment damage, disconnect electric power to HVAC system at main fuse or circuit breaker box until installation is complete.

Mount the EWT-3900 Thermostat about 5 feet above the floor in an area with good air circulation and average temperature. DO NOT install the thermostat where it can be affected by:

- drafts or dead spots behind doors and in corners
- hot or cold air from ducts
- radiant heat from sun or appliances
- concealed pipes and chimneys
- on surfaces such as an outside wall, that are a different temperature than the room air temperature.

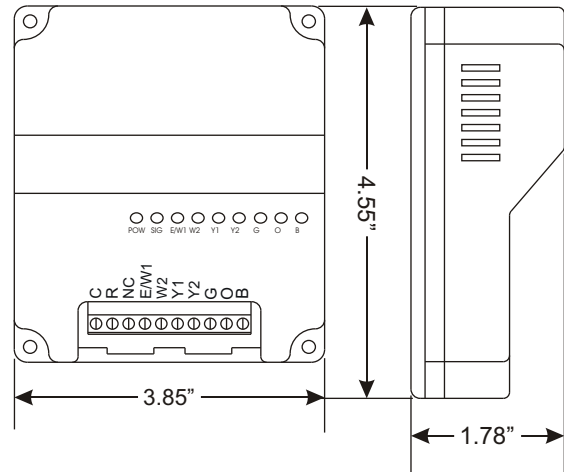
Mounting the Thermostat

ATTACH THE MOUNTING BRACKET TO THE WALL

1. Place the bracket on the wall where you would like the thermostat to be and mark the two holes with a pencil.
2. Using a 3/16" drill bit, drill out the marks you just made on the wall.
3. Insert the wall anchors into the holes pressing flush with the wall.
4. Place the bracket over the holes and fasten with the supplied #8 screws.

Mounting the Receiver

Mount the receiver with the supplied mounting screws near the zone control panel or HVAC equipment to be controlled. **Do not mount the receiver inside the equipment cabinet or any other metal enclosure. Do not Mount the receiver in any location than is subject to freezing and/or condensation.**



Technical Data

Power	AC24V, 50/60Hz
Working Environment	30°F~99°F
Range	0~90%RH(non-condensing)
Shell	Fire Retardant PC ABS
Dimension	4.55x3.85x1.78 in (HxWxD)
Connection Interface	Each terminal is capable of accepting 2 x 18 AWG solid copper wires.
Wireless Frequency	433MHz
Communication baud rate	10 kbps
Wireless Channels	1~6 Channels
Communication Distance	Beeline distance 300ft in the field. (The distance will shorten through walls and floors)

⚠ WARNING

Do not use circuits exceeding specified voltage. Higher voltage will damage control and could cause shock or fire hazard.

Do not short out terminals on gas valve or primary control to test. Shorted or incorrect wiring will damage thermostat and could cause personal injury and/or property damage.

Thermostat installation and all components of the system shall conform to Class 2 circuits per the NEC code.

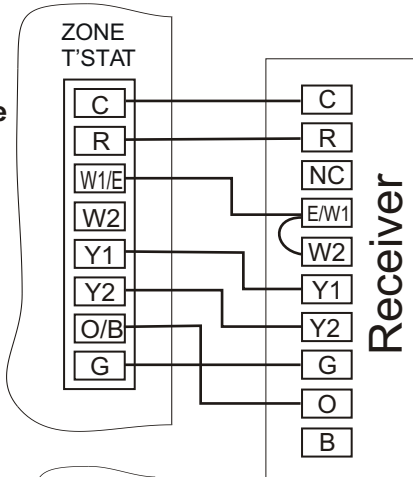
WIRING THE RECEIVER TO THE EQUIPMENT

THERMOSTAT TERMINALS (HEAT PUMP)		
SYSTEM	Heat Pump 1	Heat Pump 2
C	24 Volt (Common)	
R	24 Volt (hot)	
E/W1	Emergency	Emergency
W2	Auxiliary 2nd Stage	Auxiliary 3rd Stage
Y1	Heat and Cool mode 1st stage (compressor)	
Y2	No output	2nd Stage Compressor
G	Blower/Fan Energized on call for Heat and Cool	
O	Energized in Cool Mode	
B	Energized in Heat Mode	

THERMOSTAT TERMINALS (CONVENTIONAL)		
SYSTEM	Single Stage	Multistage
C	24 Volt (Common)	
R	24 Volt (hot)	
E/W1	Heat Mode 1st stage	
W2	No Output	Heat Mode 2nd stage
Y1	Cool mode 1st stage (compressor)	
Y2	No output	2nd Stage Compressor
G	Blower/Fan Energized on call for Cool (and Heat if HE was selected)	
O	No Output	
B	No Output	

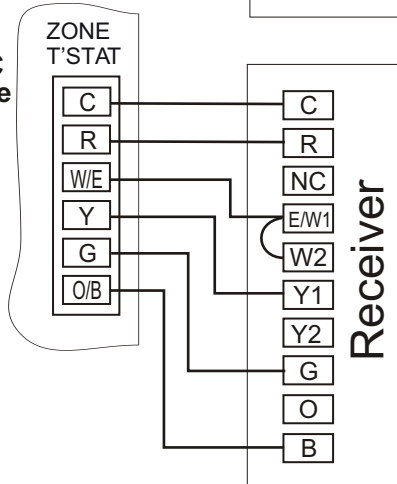
UZC-4
Heat Pump 3H/2C
O Reversing Valve

Figure 2



BmPlus 3000
Heat Pump 2H/1C
B Reversing Valve

Figure 3



NCM-300
Gas/Elec. 1H/1C

Figure 4

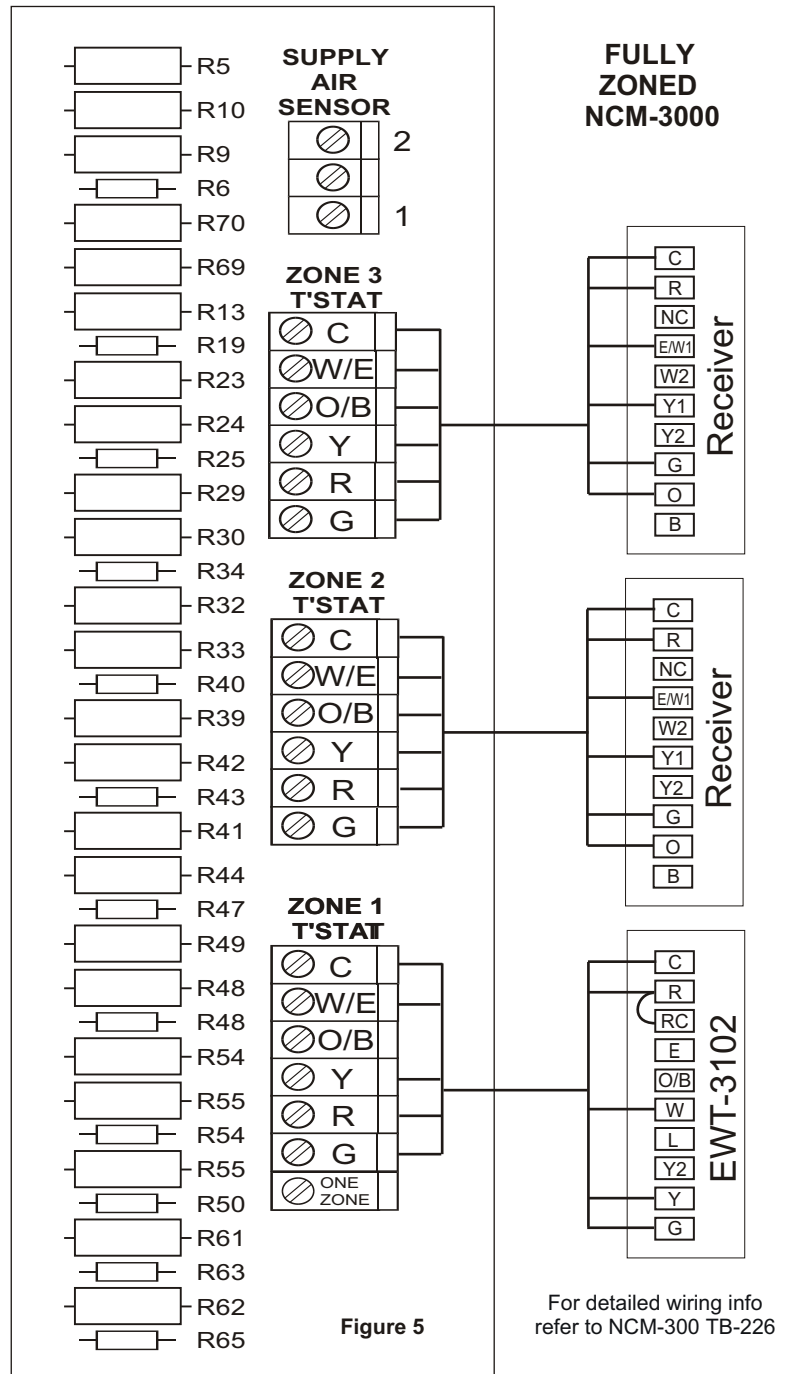
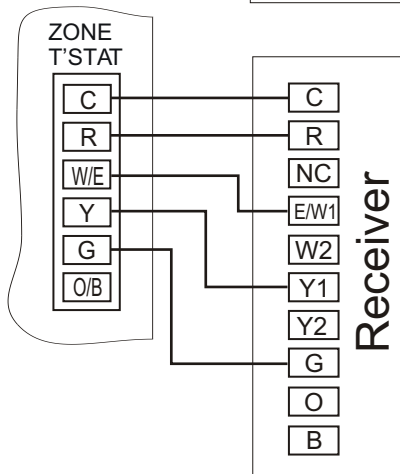


Figure 5

For detailed wiring info refer to NCM-300 TB-226

Warning: There should be at least 1 hardwired system thermostat in the home or building to ensure the ability to control the HVAC equipment in the event of a drained battery or loss of communication.

PROGRAMMING CONFIGURATION

The configuration menu allows you to set the thermostat operating characteristics to your system requirements. Set SYSTEM mode to OFF, then press and hold the **PROG** key for five seconds to enter the configuration menu. The display will show the first item in the configuration menu. The configuration menu table shows the configuration options and an explanation of each option. Press the **PROG** key to step to the next menu item. To exit the menu and return to program operation, press **HOLD/RUN** key. If no keys are pressed within fifteen seconds, the thermostat will revert back to program operation.

⚠ ATTENTION

If you have any questions regarding the steps in the configuration menu please call our Technical Support Hotline at 1-800-446-3110.

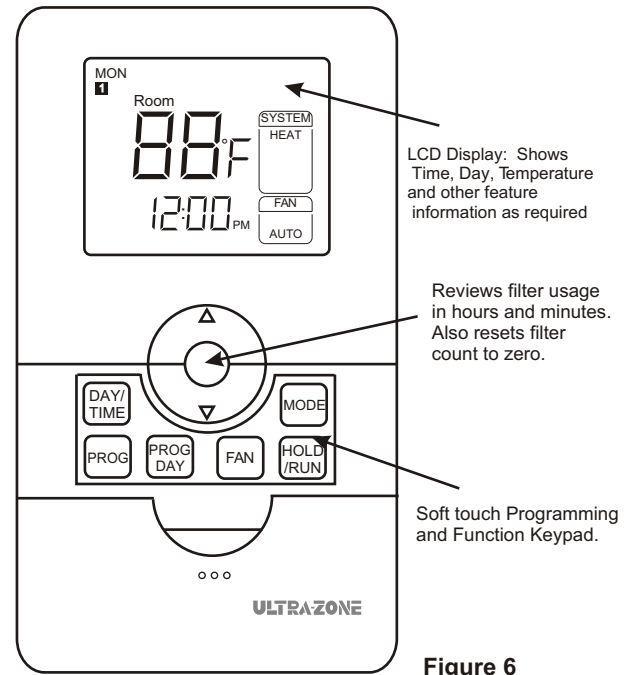


Figure 6

Installer Configuration Menu

Step	Press Key	Displayed (Factory Default)	Press up or down key to select	Comments
1	Mode		System OFF	System must be OFF to run Configuration menu
2	Prog	SS1	SS1, SS2 HP1 or HP2	Selects System Configuration Conventional, Heat Pump 1 or 2 Stage
3	Prog	Fan (HE)	HG	Select Fan Gas/Electric On Heat Pump must be HE
4	Prog	RECO (OF)	ON	Recovery Function ON or OFF
5	Prog	SP1 (2)	1 or 3	Stage 1 Differential Selection (1-3°)
6	Prog	SP2 (2)	1 or 3	Stage 2 Differential Selection (1-3°)
7	Prog	SP3 (2)	1 or 3	Stage 3 Differential Selection(1-3°)
8	Prog	BLIT (ON)	OFF	Selects Backlight ON or OFF
9	Prog	CF (F)	C	Temperature Selection °C or °F
10	Prog	Hour (12)	24	Select Time Format 12 or 24 Hr
11	Prog	COHP (ON)	OFF	Selects Compressor Lockout ON or OFF
12	Prog	STAG (CO)	EC	Selects Stage Turnoff Sequence Comfort or Economy
13	Prog	PROG (0)	1	Select either Non-Programmable(0) or Programmable(1)
14	Prog	CANL (1)	1-10	Selects Communication Channels Requires thermostat to be re-matched
15	Prog	CRES (0)	1	This Function is not used in Installer Configuration. This Function is for Matching Your T'stat and Receiver
16	Prog	LOCK (0)	1	1 = Lock only allows Temperature Change 0 = Locks all Functions of the Thermostat
17	Prog	ECO (OF)	ON	Activates Economy Operation
18	Prog	ECO _H (62°F)	41-93°F	Selects Economy Heat Setting Between 41-93°F (5-34°C)
19	Prog	ECO _C (80°F)	43-95°F	Selects Economy Cool Setting Between 45-95°F (6-35°C)
20	Prog	COST (40°F)	28-95°F	Selects Compressor Lockout Temperature Between 28-95°F (-2-35°C)
21	Prog	TEST (0)	1 or 2	This Function Tests System Outputs. Turn Off Power to Condensing Unit Before Using This Function
22	Prog	FACT (0)	1	To Restore Factory Defaults Select 1 If Desired Requires thermostat to be re-matched

Configuration Menu Steps

Step 2) Selects the System type. SS1 - Single Stage

Conventional, SS2 - Multi-Stage Conventional, HP1 - Single Stage Heat Pump, HP2 - 2 Stage Heat Pump

Step 3) Selects whether or not you want to energize the Fan output on a call for heat.

HE - Energizes the fan on a call for heat; HG - Does not energize the fan on a call for heat.

Step 4) Enables the recovery feature. This feature turns on the HVAC equipment several minutes prior to the programmed start time to reach the set temperature at the intended time.

OF - Disables the recovery feature; ON - Enables the recovery feature.

Step 5) Selects the temperature differential at which the thermostat will activate stage 1. (1-3°)

Step 6) Selects the temperature differential from stage 1 activation to stage 2 activation. (1-3°)

Step 7) Selects the temperature differential from stage 2 activation to stage 3 activation. (1-3°)

Step 8) Turns the backlight function On or Off. On - Enables backlight; Off - Disables backlight.

Step 9) Selects temperature readout; Either Fahrenheit (F) or Celsius (C). When you change this parameter the time and

PROGRAMMING CONFIGURATION

Step 10) Selects clock format, Either 24 hours (24) or 12 hours (12).

Step 11) Selects the Compressor Protection On or Off. If set to on the thermostat will wait 4 minutes in between heating and cooling calls. This is intended to protect your compressor from short cycling. Select Off when connected to a zone system.

Step 12) Selects between Comfort and Economy mode. When set to Comfort (CO) all stages will remain energized until the setpoint is reached. When set to Economy (EC) each stage will turn off individually as the temperature increases in the heat setting or decreases in the cool setting.

Step 13) Selects whether or not the thermostat will be configured for Programmable or Non-Programmable. To set the thermostat up for Programmable select (1). To set the thermostat up for Non-Programmable select (0).

Step 14) Selects the channel the thermostat and receiver are communicating on. This should only need to be changed if you are using 100 thermostats or more in one building. Once the channel is changed you will need to re-match the thermostat to the receiver.

Step 15) This function is used when matching the thermostat with the transmitter. Select (1) to match. See page 21 For more details on matching.

Step 16) This parameter selects the function of the lock feature of the thermostat. Select (1) to allow temperature change only when the lock is enabled. Select (0) to lock all of the thermostat functions.

Step 17) This function activates the economy feature (step 17 and step 18). When (ON) is selected, the programmed economy temperatures will be active when the center round button is pressed. To return to a normal set point press the center round button again. When (Off) is selected

Step 18) While in the heating mode and the center button is pressed, the room temperature will change to the program economy temperature. Press center button again to return to normal operation. This setting is adjustable between 41-93F.

Step 19) While in the cooling mode and the center button is pressed, the room temperature will change to the program economy temperature. Press center button again to return to normal operation. This setting is adjustable between 43-95°F.

Step 20) This function is used to select a compressor lock out temperature. This function is not applicable with this model thermostat.

Step 21) This function is used to test the thermostat after the initial installation. Select (1) to turn on stage 1; Select (2) to turn on stage 2. Caution - Do not use this when connected to a zone system.

Step 22) This function restores all of the settings to the factory default. Select (1) to restore factory defaults. Restoring factory settings will require the thermostat and receiver to be re-matched. Caution - Do not use this when connected to a zone system.

Temperature Range

This thermostat can be programmed between 45°F and 95°F (7°C and 35°C). However, it will display room temperatures from 30°F to 99°F (0°C and 37°C). "HI" will be displayed if the temperature is higher than 99°F (37°C), and "LO" will display if the temperature is lower than 30°F (0°C). This thermostat will automatically cutoff in Heat if the temperature rises above 95°F (35°C), and automatically cutoff in Cool mode if the temperature drops below 45°F (7°C).

Time Delay

The thermostat will provide a 4 minute delay after shutting down the heating or cooling system before it can be restarted if [ON] is selected at step 10 of the configuration menu. This delay applies equally to heating or cooling systems. This feature should **not** be used in conjunction with a ULTRA-ZONE Zone Panel.










Thermostat Programming

You can program your thermostat prior to installation by following these instructions and starting at the configuration menu. This can be done while you relax in your favorite chair and is a very good way to familiarize yourself with all the functions of your thermostat.

The EWT-3900 has the following Time and Temperature Energy Saving settings pre-programmed into the thermostat.

Program Number	Time	Temperature in °F (°C)	
		Heat	Cool
1	6:00 am	68°F (20°C)	78°F (26°C)
2	8:00 am	60°F (16°C)	85°F (29°C)
3	4:00 pm	68°F (20°C)	78°F (26°C)
4	10:00 pm	60°F (16°C)	82°F (28°C)

Setting The Current Time and Day of the Week

- 1) Press  key. The hour will start flashing. Press the  or  keys to set the correct hour and AM/PM designation.
- 2) Press  key again and the minute will start flashing. Press the  or  keys to set the correct minutes.
- 3) Press  key again and the current day of the week will start to flash. Press  or  keys to set the current day of the week.

After 30 seconds the thermostat will return to the current program.

PROGRAMMING CONFIGURATION














Programming Temperature Settings

The EWT-3900 Thermostat can be programmed for weekdays and weekends [5/2] or have a unique program for each of the 7 days of the week. Each day can have a maximum of 4 time and temperature settings for heating and cooling. With the "Auto Recovery" feature enabled, the thermostat will advance the program based on temperature difference [t] of the current temperature and the next desired set point.

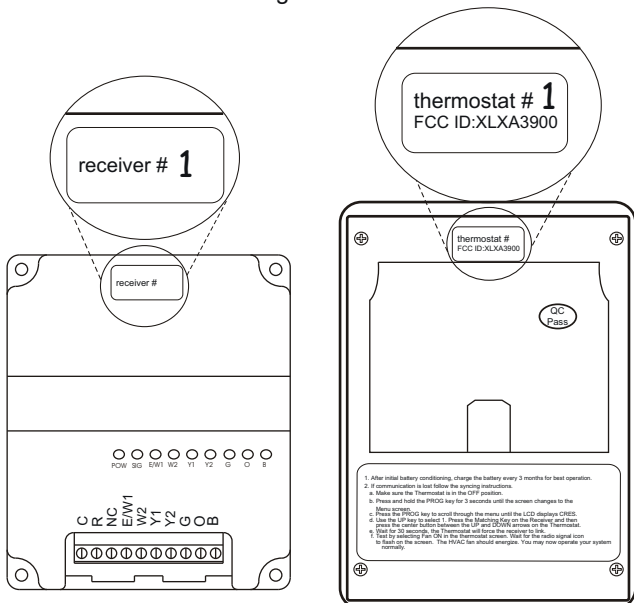
The program time can be set in 10-minute increments, and remains the same for both heat and cool programs.

The program temperature can be set in increments of 1°F (1°C).

The Heat set point can not be set higher than the Cool set point, and the Cool set point can not be set lower than the Heat set point.





- 1) Put Thermostat into **RUN MODE** in either heat or cool.
 - 2) Select program mode, either 5-2 day or 7 individual days by pressing  key until desired program is selected.
 - 3) Press  key and in the program window will appear the hour flashing. Use the  or  keys to set the hour. Note AM or PM.
 - 4) Press  key again to change to the minute position. Use  or  keys to change the minute.
 - 5) Press  key again to set to the program COOL set temperature. Use the  or  keys to set to your desired temperature setting.
 - 6) Press  key again to set to the program HEAT set temperature. Use the  or  keys to set to your desired temperature setting.
- Program 1 is Complete**
- 7) Press  key to move to program 2, 3 and 4 and follow the same steps.

If you have more than one EWT-3900 installed on your system, be sure to number each receiver with its corresponding thermostat after removing them from the box.





Permanent Override or a Designated Day Override


To hold your Manual Override for a designated number of days.

- 1) Press the  key once to make the current program temperature the HOLD temperature. "Permanent Override" will be displayed on the LCD and the program number will disappear.
- 2) Use the  or  keys to set the Permanent Manual Override temperature you desire.
- 3) Press  key to initiate Permanent Manual Override or wait 20 seconds for it to take effect.

You are now set in Permanent Override Mode. To set your thermostat to hold it for a designated number of days:

- 1) Press the  key once. Override Until **1 Days** will appear on the LCD and the clock will disappear.
- 2) Press the  key to adjust the number of override days.
- 3) After 30 seconds the change will take affect.

To end Override:

To end a Designated Day Override, press the  key once. The thermostat will return to the current program and the HOLD will be canceled.

To end Permanent Override press the  key twice.

Auto Changeover

When the system mode selector is in the AUTO position, the thermostat will automatically change between Heating and Cooling modes as the actual room temperature fluctuates. We recommend keeping the programmed heating and cooling temperature at least 3° apart to allow the Auto Changeover to occur when the appropriate temperature span has been reached. For example, you may have the following temperatures programmed at a given time:

Heat Set Temp = 68°F, Cool Set Temp = 78°F

If the room temperature rises above 78°F, then the thermostat will automatically change to cool mode and turn on the air conditioner.

Likewise, the thermostat will automatically switch to heat mode and turn on the heat when room temperature falls below 68°F. In between 68°F and 78°F - no system operation will occur.

Auto Recovery

Auto Recovery calculates when to start the HVAC system in order to reach the programmed set-point at the programmed time. Auto Recovery can be enabled or disabled in step 4 of the installer configuration menu.



Auto Recovery will not operate if Permanent Hold or Temporary Hold is in operation.

The Heat set point can not be set higher than the Cool set point, and the Cool set point can not be set lower than the Heat set point.




OPERATION

Fan Operation




If your system does not have a G terminal connection, skip to the next section (cooling).

1. Turn on power to system.
2. Press  key to ON mode. The blower should begin to operate.
3. Move  key into AUTO mode. The blower should stop immediately.




Cooling System

1. Press  key to select Cool mode.
2. Press  key to adjust thermostat setting below room temperature. The blower should come on immediately on high speed, followed by cold air circulation. The display should show "STG1".
3. Adjust temperature setting to 4°F (2°C) below room temperature. The second stage cooling should begin to operate and the display should show "STG1+2".
4. Press  key to adjust the temperature setting above room temperature. The cooling system should stop operating.

Heating System (Gas)




1. Press the  key until HEAT shows on the LCD display.
2. Press  key to adjust thermostat setting to 2°F (1°C) above room temperature. The first stage heating system should begin to operate. The display should show "STG1".
3. Adjust temperature setting to 4°F (2°C) above room temperature. If your system configuration is set to STD-2, the second stage heat system should begin to operate and the display should show "STG1+2".
4. Press  key to adjust the thermostat below room temperature. The heating system should stop operating.

Heating System - (Heatpump Application Only)

1. Press the  key until HEAT shows on the LCD display.
2. Press  key to adjust thermostat setting to 2°F (1°C) above room temperature. The heating system should begin to operate. The display should show "STG1". However, if the set point temperature display begins to flashing, the compressor lockout feature is operating (see configuration menu, item 10).
3. Adjust temperature setting to 4°F (2°C) above room temperature. If your system configuration is set to STD-2, HP2 or HP1, the auxiliary heat system should begin to operate and the display should show "STG1+2".
4. Press  key to adjust the thermostat below room temperature. The heating system should stop operating.



Emergency System (Heatpump Application Only)

EMER Mode bypasses the Heat Pump to use the heat source wired to terminal E/W1 on the Receiver. EMER is typically used when compressor operation is not desired, or you prefer back-up heat only.

1. Press the  key to select EMER. "EMER" will show on the display.
2. Press  key to adjust thermostat setting above room temperature. The Aux. heating system will begin to operate. The display will show "STG1" "EMER" to indicate that auxiliary heat is operating.
3. Adjust temperature setting to 4°F (2°C) above room temperature. The auxiliary system should begin to operate and the display should show "STG1+2".
4. Press the  key to adjust the thermostat below room temperature. The auxiliary heating system should stop operating.

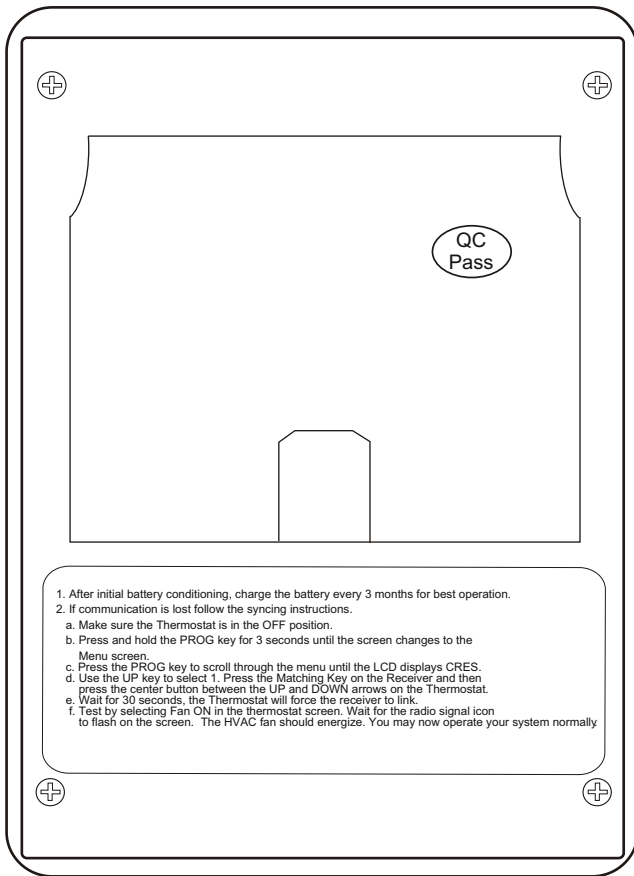
TESTS/BATTERY/ ERROR CODES

The Model EWT-3900 Wireless Thermostat is Linked to the Receiver at the factory. Simply power up the Receiver and operate the Thermostat. Follow the instructions below **only** if you find the Thermostat and Receiver are not communicating.

1. Make sure the thermostat is in the OFF position.
2. Press and Hold the **PROG** key for 3 seconds until the screen changes to the menu screen.
3. Press **PROG** key to scroll through the menu until the LCD displays "CRES".
4. Use the  key to select 1. Press the Matching Key on the receiver and then press the  round button. The thermostat will force the receiver to link.
5. Test by selecting Fan ON in the Thermostat screen. Wait for the radio signal icon to flash on the screen.


If you continue to have difficulty matching your thermostat to the receiver please contact the engineering Department at EWC Controls, Inc. 1-800-446-3110.


When using more than one EWT-3900 thermostat on the same system be sure to set up **one zone at a time** to ensure a unique address is used for each zone.



Keyboard Lock


The thermostat can be locked to prevent unauthorized changes from being made.



To lock or unlock the keyboard, press and hold the  button for 3 seconds. The keyboard is locked when LOCK appears on the display. Anytime a key is pressed, LOCK will appear on the screen for one second.

To exit Lock mode press and hold the  key for 3 seconds.

Filter Monitor

Your thermostat also keeps a record of the number of days your filter has been in use. To maximize your systems performance and energy efficiency, change or clean your filter regularly. When the total fan time reaches 400 hours, you need to clean or change your systems filter, "FILTER" will continue to display until the counter is reset to zero.

Press the  button for 3 seconds to review filter usage. "FILTER" displays with the total number of days in use.

To reset the Filter Monitor counter, press the  button again for 3 seconds when the filter monitor day shows. The display will blink and the counter will be reset to zero. Press the  button to return to normal operation.

Battery Conditioning

Your lithium battery can be recharged from the USB port on a PC or 5V power supply wall charger. The Lithium Battery should be charged at least 12 hours for the first 3 times to properly condition the battery.

Low Battery Warning

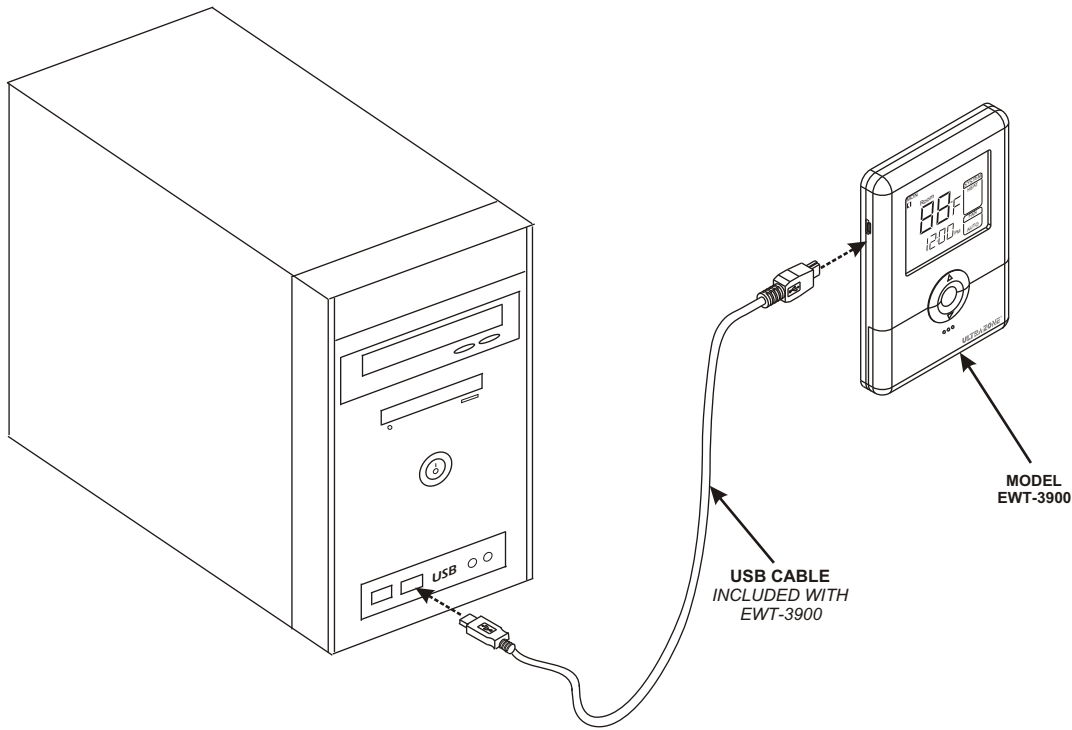
Your thermostat has a battery warning system. When the batteries become weak, the first stage low battery warning is indicated by the battery symbol flashing on the LCD display. At your earliest convenience you need to charge the batteries through a wall charger or USB port. During the charging process the battery icon will flash. When charging is complete, the battery icon will disappear.

ERROR CODES

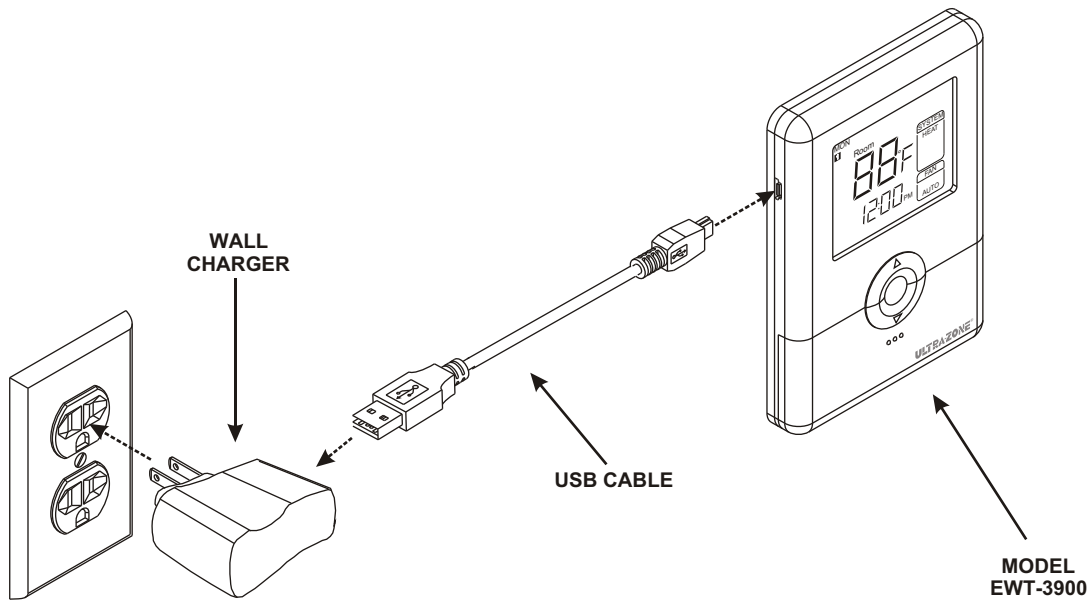
If the thermostat is unable to control the system due to an unexpected problem, the thermostat will enter Error Mode. In this condition, the thermostat flashes "E1", "E2" on the LCD Display, and shuts off your system. When the thermostats wireless channel is changed without registration, the display will show "E4" to warn, it must re-register again. "E4" will disappear after registration succeeded. You can set your thermostat back to the original channel to avoid re-registration.

LCD Display	Error Info	LCD Display	Error Info
E1	Sensor Error	E2	System Switch Error
E4	Channel Change without matching with receiver		

The EWT-3900 comes with a USB Cable to charge your thermostat battery using your home computer. **TO USE:** Attach the USB Cable (Provided with the EWT-3900) to the Thermostat and to the USB Port on your home computer. Your computer must be on for the charge to take affect. Allow the thermostat to charge for at least 12 hours during the first three charging cycles.



The EWT-3900 comes with a Wall Charger to charge your thermostat battery using a Standard 120VAC Wall Outlet. **TO USE:** Attach the USB Cable to the Wall Charger. Then plug the charger into a 120 VAC wall outlet. Allow the thermostat to charge for at least 12 hours during the first three charging cycles.



FCCID: XLXA3900

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

FEDERAL COMMUNICATIONS COMMISSION (FCC) STATEMENT

This equipment has been tested to FCC requirements and has been found acceptable for use. The FCC requires the following statement for your information:

This equipment generates and uses radio frequency energy and, if not installed and used properly; that is, in strict accordance with the manufacture's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:

If using an indoor antenna, have a quality outdoor antenna installed.

Reorient the receiving antenna until interference is reduced or eliminated.

Move the radio or television receiver away from the receiver/control.

Move the antenna leads away from any wire runs to the receiver/control

Plug the receiver/control into a different outlet so that it and the radio or television receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user or installer may find the following booklet prepared by the Federal Communications Commission helpful:

"Interference Handbook"

This booklet is available under Stock Number 004-000-00450-7 from the US Government Printing Office, Washington DC 20402.

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment and will void the product warranty.