



iGate™ Connect Thermostat Installation Manual

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GETTING STARTED

Welcome

This step-by-step Installation Manual will walk you through all aspects of the installation.

To ensure an on-going service relationship with your customers, please register all of your ClimateMaster thermostats in your Contractor Portal.

Technical Support

Our technical support team is available to answer your questions at **1.405.745.6000**.

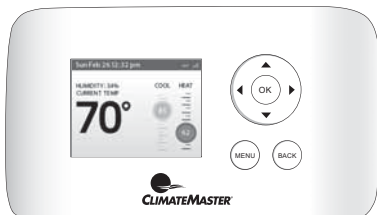
Before You Begin

This product is intended to be installed by trained service professionals.

This manual explains the procedures for installing the ClimateMaster iGate™ Connect thermostat. Please read it carefully before beginning the installation.

For information on how to operate the ClimateMaster iGate™ Connect thermostat, please see the iGate™ Connect Thermostat User Manual.

The iGate™ Connect thermostat is designed to be mounted on the homeowner's wall in a convenient location.



Caution: *Disconnect electric power to the HVAC system before installing this product. Failure to do so could result in electric shock and/or equipment damage.*

All wiring must conform to your local electrical code.

Mercury Notice: *This product does not contain mercury. If you are replacing a product that does contain mercury, contact your local waste-management authority for disposal instructions. Do not discard the old product in the regular trash.*

HVAC System Compatibility Information

The iGate™ Connect thermostat is designed to operate with the ClimateMaster Trilogy® Geothermal Unit.

The ClimateMaster iGate™ Connect thermostat supports the following equipment:

Equipment	Supported?
Trilogy® with Auxiliary Heat	Yes
iGate™ Smart Tank	Yes

Approvals

This product was designed and built in accordance to RoHS directive 2002/95/EC and contains no hazardous substances as defined by this directive.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for Class B digital devices, 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.

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

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

Change or modifications that are not expressly approved by the manufacturer could void the user's authority to operate the equipment.

RF Exposure Information

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.

Industry Canada (IC)

Compliance Notice

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.

RF Exposure Statement

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

Homologies

Ce produit a été conçu et fabriqué conformément à la directive européenne RoHS 2002/95/EC, et ne contient aucune substance dangereuse selon la définition de cette directive.

Commission fédérale des communications (FCC)

Avis de conformité :

Le matériel a été testé et jugé conforme aux limitations de la catégorie B des appareils numériques, en vertu de l'article 15 des règles de la FCC. Ces critères sont établis afin d'assurer une protection suffisante contre les interférences nocives à l'intérieur d'une résidence. Cet appareil produit, utilise et peut émettre de l'énergie radioélectrique et peut occasionner des interférences nuisibles aux communications radio s'il n'est pas assemblé et utilisé selon les directives. Toutefois, il est impossible de garantir qu'aucune interférence ne se produira dans une installation donnée. Si ce matériel cause des interférences nuisibles à la réception radio ou télévisuelle, ce qui peut être établi en éteignant et en rallumant le matériel, nous recommandons à l'utilisateur d'essayer de remédier à cette interférence de l'une ou de plusieurs des façons suivantes :

- Réorientez ou déplacez l'antenne réceptrice.
- Augmentez la distance séparant l'appareil et le récepteur.
- Branchez l'appareil à un circuit différent de celui où est branché le récepteur.
- Consultez le marchand ou un technicien expérimenté en radio et télévision pour obtenir de l'aide.

Cet appareil est conforme en vertu de l'article 15 des règles de la FCC. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage.
2. L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. Toute

modification apportée à votre appareil qui n'est pas explicitement approuvée par le fabricant pourrait annuler le droit d'usage du matériel par l'utilisateur.

Informations relatives à l'exposition aux fréquences radio

Cet équipement est conforme aux limites d'exposition aux fréquences radio de la FCC définies pour un environnement non contrôlé. Afin d'éviter de dépasser les limites d'exposition aux fréquences radio établies par la FCC, il est recommandé de maintenir une distance minimale de 20 cm entre le corps et l'antenne lors d'une utilisation normale.

Industrie Canada (IC)

Avis de conformité :

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Énoncé sur l'exposition aux fréquences radio :

Cet équipement est conforme aux limites d'exposition aux fréquences radio d'IC RSS-102 définies pour un environnement non contrôlé. Cet émetteur doit être installé à au moins 20 cm de toute personne et ne doit pas être colocalisé ou fonctionner en association avec une autre antenne ou émetteur.

MODEL: AWC99B51

FCC ID: WR9EBSTATSI01

IC: 7981A-EBSTATSI01

CONTAINS

FCC ID: DI2CT-EM2606

IC: 1700C-CTEM2606

Warning: Changes or modifications not expressly approved by ClimateMaster inc. could void the users authority to operate the equipment.

Specifications

Temperature ranges

Heat:	55 to 80 °F (12 to 27 °C)
Cool:	65 to 95 °F (18 to 35 °C)
Display:	40 to 100 °F (5 to 37 °C)
Sensitivity:	+/- 1 °F (0.5 °C)
Operating:	32 to 130 °F (0 to 55 °C)

Humidity Range

Display:	20 to 90% R.H.
Sensitivity:	+/- 5% R.H.
Operating:	5 to 95% R.H (non-condensing)

Dimensions

Thermostat: 5.5"W x 3.25"H x 1"D
(139.5mm H x 82.5mm W x 25mm D)

Power

24 VAC (3VA maximum)

Wiring Requirements

The following table shows the maximum wire lengths allowed:

Thermostat to HVAC Equipment

18 AWG	20 AWG	22 AWG
1250 ft/380	800 ft/240 m	500 ft/150 m

INSTALLING THE IGATE™ CONNECT THERMOSTAT

There are 5 steps to install the ClimateMaster iGate™ Connect thermostat:

Step 1. Power Off Trilogy® Unit

Step 2. Remove Any Existing Thermostat

Step 3. Install the iGate™ Connect Thermostat

Step 4. Connect the Wiring

Step 5. Power On Trilogy® Unit

Step 1. Power Off Trilogy® Unit

Before disconnecting the existing thermostat, or installing the iGate™ Connect thermostat, disconnect the power to the heating and air conditioning equipment.

Step 2. Remove Any Existing Thermostat

Disconnect the wires to the existing thermostat (if applicable) and remove it from the wall (if you are installing the iGate™ Connect thermostat in the same location).

Step 3. Install the iGate™ Connect Thermostat

The ideal location for the thermostat is approximately 5 ft (1.5 m) above floor level in the main living area.

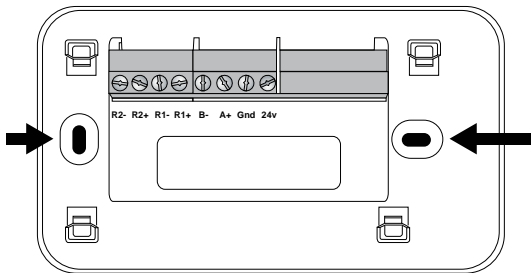
Do not install the thermostat:

- Close to sources of heat such as incandescent lights
- Near supply heating/cooling sources

- In direct sunlight
- On exterior, non-insulated or poorly insulated walls
- In the kitchen or other areas of potentially high heat and/or humidity
- In an area that could restrict air flow

To install the thermostat:

1. Gently separate the backplate from the thermostat.
2. Place the thermostat backplate on the wall. Make sure that any existing wires can be inserted through the opening for the wiring.
3. Using the backplate as a template, mark the location of the mounting holes on the wall as shown below.



The solid color indicates mounting holes

4. Move the backplate out of the way and make holes where indicated in step 3. The mounting holes can accommodate a #6 pan-head screw. It is recommended to use the included fasteners to ensure proper fitting of the front housing.
5. Use the included drywall plugs (or other suitable anchors) to ensure the thermostat can be mounted securely to the wall.
6. Fasten the backplate to the wall using the screws provided (or other suitable screws).

Step 4. Connect the Wiring

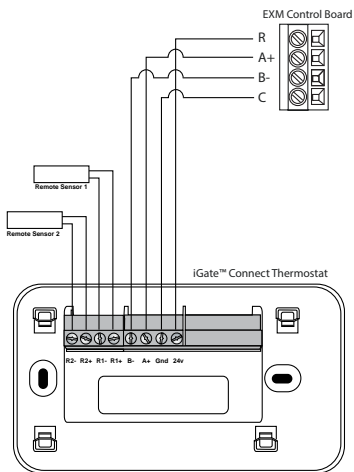
You need to use low-voltage cable to connect the thermostat to the Trilogy® Unit.

To connect the thermostat to the unit:

1. Connect the wires as shown in the wiring diagram.
2. Attach the iGate™ Connect thermostat to the backplate. Ensure that the pins on the thermostat align with the terminal block on the backplate.

Wiring Diagram

The following diagram shows how to connect the thermostat terminals to equipment.



Trilogy® unit with iGate™ Connect Thermostat

Step 5. Power On Trilogy® Unit

After you've completed the wiring, you can apply power to the unit. The iGate™ Connect thermostat receives power from the equipment and will automatically power on.

NAVIGATING THE MENUS

The iGate™ Connect thermostat has an easy-to-read color screen that displays all the information you need to configure the thermostat. Use the navigation buttons on the right to quickly change the temperature, access features, and configure settings.

Using the Navigation Buttons

The navigation buttons located on the right of the iGate™ Connect thermostat let you select options and control the iGate™ Connect thermostat.



- **▲ (up)** On the Home screen, press ▲ to increase the temperature set point by 1°F (0.5°C). For menus, press ▲ to move up.
- **▼ (down)** On the Home screen, press ▼ to decrease the temperature set point by 1°F (0.5°C). For menus, press ▼ to move down.
- **◀ (left)** On the Home screen, if Auto mode is enabled, press ◀ to switch between heat and cool set points. For menus, press ◀ to go back to the previous screen.

- **▶ (right)** On the Home screen, if Auto mode is enabled, press ▶ to switch between heat and cool set points. For menus, press ▶ to choose the currently highlighted option.
- **OK** On a menu screen, press **OK** to choose the currently highlighted option. If a configuration option is selected, pressing **OK** will keep its new value and return back to the previous screen.
- **MENU** Pressing **MENU** displays a list of all available options. If a menu is currently displayed, pressing **MENU** will cancel any unsaved changes and return to the Home screen.
- **BACK** On a menu screen, press **BACK** to go back to the previous screen.



On-Screen Keyboard

If you need to type in any information, an on-screen keyboard will appear. To enter a letter or number, move to the character by pressing the arrow keys and then press **OK** to select it.

Select **Caps** to enter capital letters; select **&@#** to enter commonly used symbols. If you make a mistake, press **X** to delete the text .

To keep your changes, select **Save**. To cancel your changes, press **BACK**.

CONFIGURING THE iGate™ CONNECT THERMOSTAT

The first step after installing the iGate™ Connect thermostat is to configure the settings for the equipment being connected.

An access code is required to enter the Installation Settings menu. The access code is 4795.

To configure the iGate™ Connect thermostat:

From the Home screen,
press MENU.

Select **Settings ▶
Installation.**

Select **Thermostat Config.**

Thermostat Config

Aux Heat Option

Configures the thermostat for electric auxiliary heat or no auxiliary heat (none).

Equipment

Capacity Configuration

- **Min Heating Capacity** Configures the minimum unit heating capacity. When the space requires a heating capacity below this setting the unit will cycle off. Range will depend on unit model.
- **Max Heating Capacity** Configures the maximum unit heating capacity. When the space requires a heating capacity above this setting the unit will call for auxiliary heat (if applicable). Range will depend on unit model.
- **Min Heating Airflow** Configures the unit airflow while operating at minimum capacity in the heating mode. The installer may wish to select a higher cfm than the nominal cfm for this setting to ensure proper air movement

To configure equipment on the iGate™ Connect thermostat:

From the Home screen,
press MENU.

Select **Settings ▶
Installation.**

Select **Equipment.**

during low capacity operation. Range will depend on model and minimum heating capacity selection.

- **Max Heating Airflow** Configures the unit airflow while operating at maximum capacity in the heating mode. The installer may wish to select a lower cfm than the nominal cfm for this setting to avoid air velocity noise from the ductwork during maximum capacity operation. Range will depend on model and maximum heating capacity selection.
- **Emergency Heat Airflow** Configures the unit airflow during the emergency heat mode (if applicable). Range will depend on unit model.
- **Min Cooling Capacity** Configures the minimum unit cooling capacity. When the space requires a cooling capacity below this setting the unit will cycle off. Range will depend on unit model.
- **Max Cooling Capacity** Configures the maximum operational unit cooling capacity. Range will depend on unit model.
- **Min Cooling Airflow** Configures the unit airflow while operating at minimum capacity in the cooling mode. The installer may wish to select a higher cfm than the nominal 400 cfm/ton for this setting to ensure proper air movement during low capacity operation. Range will depend on model and minimum cooling capacity selection.
- **Max Cooling Airflow** Configures the unit airflow while operating at maximum capacity in the cooling mode. The installer may wish to select a lower cfm than the nominal 400 cfm/ton for this setting to avoid air velocity noise

from the ductwork during maximum capacity operation. Range will depend on model and maximum cooling capacity selection.

- **Low Dehum Airflow** Configures the unit airflow while operating at minimum capacity in the dehumidification mode. Range will depend on model and minimum cooling capacity selection.
- **High Dehum Airflow** Configures the unit airflow while operating at maximum capacity in the dehumidification mode. Range will depend on model and maximum cooling capacity selection.
- **Constant Fan Airflow** Configures the unit airflow while operating in the continuous fan mode. Range will depend on unit model.
- **Heat Off Delay** This setting determines whether or not (and how long) the blower will continue to operate after the compressor has cycled off at the end of each heating cycle. Valid range: 0 seconds to 255 seconds.
- **Cool Off Delay** This setting determines whether or not (and how long) the blower will continue to operate after the compressor has cycled off at the end of each cooling cycle. Valid range: 0 seconds to 255 seconds.

Unit Configuration

The Unit Configuration settings allow the installing technician to configure the thermostat to the installed equipment. **NOTE. Unit Config is only necessary when replacing an EXM controller. The Unit Config settings are programmed at the factory when the unit is built.**

- **Heat Pump Family** Select the family of heat pump installed.

- **Heat Pump Size** Select the unit model (0930 or 1860).
- **Blower Type** Select the blower type (None or ECM Blower).
- **Loop Config** Selects the type of internal flow device. None, VS Pump – variable speed internal pump, or MOD Valve – internal modulating water control valve.

Loop Pump (or Valve) Config

Configures the internal vFlow device to the application.

- **Loop Option (if applicable)** Configures the internal variable speed pump to operate in a Single system (one unit, one loop) or a Parallel system (multiple units, one common loop, parallel pumping).
- **Heating Delta T** Sets the source flow rate for the heating mode. The vFlow device will adjust the flow to maintain this temperature difference between the entering and leaving water during the heating mode to this setting. Valid range: 5.0°F to 12.0°F. Default is 6.0°F.
- **Cooling Delta T** Sets the source flow rate for the cooling mode. The vFlow device will adjust the flow to maintain this temperature difference between the entering and leaving water during the cooling mode to this setting. Valid range: 9.0°F to 20.0°F. Default is 10.0°F.
- **Source Anti-Freeze (if applicable)** Configures the low temperature protection setting for the source water heat exchanger. Select Yes for systems with anti-freeze (10°F evaporator temperature setting) or No for systems without anti-freeze (30°F evaporator temperature setting).

HW Pump Config (If Applicable)

- **Water Heating Delta T** Sets the potable water flow rate for the water heating mode. The variable speed potable water pump will adjust the potable water flow to maintain the selected temperature difference between the entering and leaving potable water during the water heating mode. Valid range: 8.0°F to 12.0°F.

Thresholds

This section configures the temperature, time, and capacity thresholds associated with the heating, cooling, and hot water (if applicable) equipment. You must configure the Equipment settings before setting the thresholds. Only the applicable threshold settings will be displayed.

To configure thresholds on the iGate™ Connect thermostat:

From the Home screen, press **MENU**.

Select **Settings** ► **Installation**.

Select **Thresholds**.

Allow Auto Heat/Cool

Allows the user to be able to operate the unit in the auto changeover heat/cool mode. Select Yes for the user to be able to operate the thermostat in the auto heat/cool mode, otherwise select No.

Heat/Cool Min Delta

Selects the minimum temperature difference between the heating and cooling set points when the thermostat is operated in the auto changeover heat/cool mode. Valid range: 2°F to 10°F. The default value is 5°F.

Advanced Settings

Allows the installer to select the controller to configure, typically an EXM.

- **EXM Settings**

- **Cooling–HW Cut Out** Determines the point at which the space cooling demand outpaces the ability of the potable water heating mode to accept the heat of rejection from the cooling mode, when both are active at the same time. At this setting and above the heat of rejection from the cooling mode will be sent to the source (ground loop). Valid range: 70% to 100%. Default is 100%.
- **Cooling–HW Cut Out Offset** This setting establishes the maximum acceptable space temperature rise during the cooling mode while the heat from the space is being rejected into the potable hot water. If the space temperature rises more than this amount, the potable water heating mode will be terminated and the cooling mode will reject the heat from the space to the source (ground loop). Valid range: 0.5°F to 1.5°F. Default is 0.5°F.
- **Heating–HW Cut Out** Potable water heating normally takes priority over space heating. This setting determines the point at which the space heating demand will take priority over the potable water heating demand. Valid range: 70% to 100%. Default is 90%.
- **Heating–HW Cut Out Offset** This setting establishes the maximum acceptable space temperature drop during the potable hot water mode before the unit switches to the space heating mode. If the space

temperature drops more than this amount, the potable water heating mode will be terminated and the space heating mode will be activated. Valid range: 0.5°F to 1.5°F. Default is 1.0°F.

- **Aux Heat DeadBand** Configures the amount of space temperature droop allowed from the heating setpoint at maximum unit capacity before allowing auxiliary heat for space heating. Valid range: 0.0°F to 5.0°F. Default is 1.0°F.
- **Anticipator** Configures the sensitivity of the thermostat to the space temperature. A lower setting will cause the unit to respond more rapidly to changes in space temperature. A higher setting will cause the unit to respond more slowly to changes in space temperature. Valid range: 1 to 10. Default is 5.
- **Compressor ASCD** Configures the minimum amount of time the compressor will remain off between cycles. Valid range: 5 minutes to 8 minutes. Default is 5 minutes.
- **AWS – WXM Settings (If Applicable)**
 - **HW Heat DeadBand** Configures the amount of droop allowed from the potable Hot Water setpoint before activating water heating. Valid range: 10°F to 25°F. Default is 15°F.

Temp Correction

Adjusts the current space temperature displayed on the thermostat by the selected amount. Valid range: -10°F to +10°F in 0.5°F increments.

Humidity Control Settings

Configures humidity control settings (dehumidification/humidification).

Humidity Mode

Determines active humidity mode(s). Valid selections: Humidification (This logic will communicate a Humidification output when the space humidity is less than the setpoint i.e. acts as a humidistat. When the Humidification output is active, the fan output will also be active. The Humidification output will not be communicated when the space humidity is above the setpoint.), Dehumidification (This logic will reduce the cooling airflow when the space humidity is greater than the setpoint to improve dehumidification i.e. acts as a dehumidistat. The cooling airflow will not be reduced when the space humidity is below the setpoint.), Both, or None.

Service Mode

Unit – EXM Controller

- **Model** Displays the unit model number
- **Serial Number** Displays the unit serial number
- **Manual Operation** Manual Operation mode allows the service technician to manually command operation for any of the thermostat outputs, blower speed, as well as pump

To configure the humidity control settings on the iGate™ Connect thermostat:

From the Home screen, press **MENU**.

Select **Settings** ► **Installation**.

Select **Humidity Control**.

To configure the service mode on the iGate™ Connect thermostat:

From the Home screen, press **MENU**.

Select **Settings** ► **Installation**.

Select **Service Mode**.

speed or valve position (if applicable) to aid in troubleshooting.

- **Operating Mode** Selects the manual mode of operation. Valid selections are: Standby, Const Fan, Cooling, Heating, Aux Heat, EM Heat, Hot Water, and Cooling/HW.
- **ECM Target Airflow** Configures the target air flow during manual operation. Valid range will depend on unit model.
- **ECM Blower Speed** Displays current ECM motor RPM.
- **Loop Pump Speed** (if applicable) Sets loop pump speed for manual operation mode. Valid range: 0% to 100%. Default is 41%.
- **DHW Pump Speed** (if applicable) Sets DHW pump speed for manual operation mode. Valid range: 0% to 100%. Default is 0%.
- **Comp Target Speed** Displays current compressor target speed in rps (revolutions per second).

● **Diagnostics**

The Diagnostics data set allows the service technician to view the real-time status of all physical inputs, switches, temperature sensor readings, as well as the operational status of the heat pump, at the thermostat. Scroll through diagnostic data using the up/down arrow buttons.

- **Compressor Diagnostics**
 - **Unit Capacity** – displays the current operating capacity of the unit as a percentage of the unit's maximum capacity.

- **Compressor Speed** – displays the current compressor speed in revolutions per second.
- **Comp Current** – displays the current compressor amperage.
- **Inverter Current** – displays the amperage draw of the inverter.
- **Comp Input Power** – displays the power consumption of the compressor in watts.
- **Comp DC Voltage** – displays the current DC bus voltage from the inverter.
- **Comp Heat Sink Temp** – displays the temperature of the inverter heat sink.
- **Blower Diagnostics**
 - **ECM Target Airflow** – displays the blower target cfm.
 - **ECM Blower Speed** – displays the blower rpm.
 - **ECM Blower Power** – displays the power consumption of the blower in watts.
 - **ECM Blower Static** – not used.
 - **Leaving Air** – displays the temperature of the air leaving the unit.
 - **Entering Air** – displays the temperature of the air entering the unit.
- **Loop Diagnostics**
 - **Loop Pump Speed** – displays the speed of the loop pump as a percentage.
 - **Loop Pump Watts** – displays the power consumption of the loop pump in watts.
 - **Loop Flow** – displays the source flow rate in gpm.
 - **Entering Water** – displays the temperature of the water entering the source heat exchanger.
 - **Leaving Water** – displays the temperature of the water leaving the source heat exchanger.
 - **Water pressure** – displays the pressure of the water as it leaves the source heat exchanger.
- **Hot Water Pump Diagnostics (If Applicable)**
 - **DHW Pump Speed** – displays the speed of the DHW pump as a percentage.

- **DHW Pump Power** – displays the power consumption of the DHW pump in watts.
 - **DHW Flow** – displays the DHW gpm flow rate.
 - **Hot Water EWT** – displays the temperature of the potable hot water entering the potable hot water heat exchanger.
 - **Hot Water LWT** – displays the temperature of the potable hot water leaving the potable hot water heat exchanger, returning to the iGate Smart Tank.
- **Refrigerant Diagnostics**
- **Discharge Pressure** – displays the refrigerant discharge pressure.
 - **Discharge Saturation** – displays the saturation temperature of the refrigerant discharge pressure.
 - **Discharge Temp** – displays the temperature of the compressor discharge line.
 - **Suction Pressure** – displays the refrigerant suction pressure.
 - **Suction Saturation** – displays the saturation temperature of the refrigerant suction pressure.
 - **Suction Temp** – displays the temperature of the compressor suction line.
 - **Discharge Superheat** – displays the amount of superheat at the discharge of the compressor.
 - **Suction Superheat** – displays the amount of superheat at the suction to the compressor.
 - **Subcool** – displays the amount of subcooling at the liquid line.
 - **Wtr Coil Liquid** – displays the temperature of the refrigerant liquid line between the source heat exchanger and the electronic expansion valve.
 - **Wtr Coil Vapor** – displays the temperature of the refrigerant vapor line between the heat/cool reversing valve and the source heat exchanger.
 - **Air Coil Liquid** – displays the temperature of

the refrigerant liquid line between the air coil and the electronic expansion valve.

- **Air Coil Vapor** – displays the temperature of the refrigerant vapor line between the heat/cool reversing valve and the air coil.
- **HW Coil Liquid** – displays the temperature of the refrigerant liquid line leaving the potable water heat exchanger.
- **Refrigerant Valve Diagnostics**
 - **RV1 status** – displays the status (on–DHW or off–no DHW) of the RV1 (potable water heating) reversing valve. (QE models only)
 - **RV2 Status** – displays the status (on–cooling, or off–heating) of the RV2 (heat/cool) reversing valve.
 - **Water Coil EEV1 Stat** – displays the status (on or off) of the heating electronic expansion valve.
 - **Water Coil EEV1POS** – displays the position of the heating electronic expansion valve in steps. 0=fully open, 1040 = fully closed.
 - **Air Coil EEV2 Stat** – displays the status (on or off) of the cooling electronic expansion valve. (QE models only)
 - **Air Coil EEV2POS** – displays the position of the cooling electronic expansion valve in steps. 0=fully open, 1040 = fully closed. (QE models only)
- **Miscellaneous Diagnostics**
 - **Control Voltage** – displays the unit’s control voltage.
 - **Cabinet Ambient** – displays the ambient temperature in the unit’s compressor section.
 - **Ht of EXTR/REJ** – displays the amount of heat of extraction (heating) or heat of rejection (cooling) to/from the loop depending on mode of operation.
 - **Unit Power** – displays the instantaneous power consumption of the unit.
 - **COP/EER** – displays the current operating efficiency of the unit (COP for space heating, EER

for cooling mode, N/A for water heating mode).

- **AUX1 Switch** – not used.
- **AUX2 Switch** – not used.
- **SD Switch** – not used.
- **T1 Temp** – not used.
- **T2 Temp** – not used.

– **DIP Switch Settings**

Allows the service technician to view the status of all dipswitch settings for the connected communicating controls at the thermostat. NOTE: The unit control dipswitch settings cannot be changed from the thermostat.

- **S1-1 ON** = Modbus Master, OFF = Modbus Slave
- **S1-2 ON** = Diag Master, OFF = Diag Slave
- **SW1-3 ON** = ACC K3 (ACC1) Tracks compressor, OFF = ACC K3 (ACC1) Tracks blower
- **SW1-4 ON** = ACC K4 (ACC2) Tracks compressor, OFF = ACC K4 (ACC2) Tracks blower
- **SW1-5 ON** = ACC K7 Tracks compressor, OFF = ACC K7 Tracks blower
- **SW1-6 ON** = HW HX Enabled, OFF = HW HX Disabled

– **Fault History**

Fault History stores and displays the five most recent fault or warning codes for the connected communicating control.

– **Clear Fault History**

Clear Fault history will clear all fault codes stored in the thermostat as well as the fault history in any connected communicating controls.

If installing on Trilogy® 45 VE, this step can be skipped.

AWS Tank – WXM Controller (If Applicable)

- **Model** Displays the unit model number
- **Serial Number** Displays the storage tank serial number
- **Diagnostics**
 - **Upper Tank Temp** – displays the temperature of the DHW at the upper element of the storage tank.
 - **Lower Tank Temp** – displays the temperature of the DHW at the lower element of the storage tank.
 - **Hot Water T3 Temp** – not used.
 - **Hot Water T4 Temp** – not used.

To configure the sensors on the iGate™ Connect thermostat:

From the Home screen, press **MENU**.

Select **Settings** ► **Installation**.

Select **Sensors**.

Sensors

Configures sensors to be displayed at thermostat.

- **Sensors**
 - **RS-1(sensor name)** This is sensor number 1. It will not display a name until a name has been entered.
 - **Name** Establishes a name for sensor 1.
 - **Type** Configures the type of sensor. The sensor may be a dry contact or a temperature sensor. If a temperature sensor, the installer selects the manufacturer, model, and a temperature correction for the sensor.
 - **Usage** Configures the type of use for the sensor. Available options are Control

- Sensor (this temperature is used to control the unit), Monitoring Sensor (this will display the sensor temperature at the thermostat), or Outdoor Sensor (this will display the sensor temperature as the outdoor temperature at the thermostat).
- **RS-2(sensor name)** This is sensor number 1. It will not display a name until a name has been entered.
 - o **Name** Establishes a name for sensor 1.
 - o **Type** Configures the type of sensor. The sensor may be a dry contact or a temperature sensor. If a temperature sensor, the installer selects the manufacturer, model, and a temperature correction for the sensor.
 - o **Usage** Configures the type of use for the sensor. Available options are Control Sensor (this temperature is used to control the unit), Monitoring Sensor (this will display the sensor temperature at the thermostat), or Outdoor Sensor (this will display the sensor temperature as the outdoor temperature at the thermostat).

Reset HVAC Equipment Settings

You can quickly restore all HVAC equipment settings on the iGate™ Connect thermostat back to their factory defaults. Any user setting (not related to the equipment installed) will remain unchanged.

If you need to reset the entire thermostat back to its original factory default settings, including user settings and registration, select **Reset All Settings** instead.

To reset the iGate™ Connect thermostat:

From the Home screen, press **MENU**.

Select **Settings** ► **Reset**.

Select **HVAC Equipment Settings**.

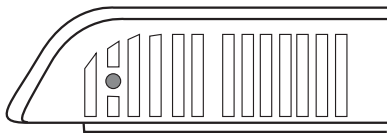
Select **Yes**.

Performing a Hardware Reset

In rare circumstances, static electricity or power surges may interrupt the operation of the thermostat, forcing a hardware reset.

Rebooting the iGate™ Connect Thermostat

You can reboot the iGate™ Connect thermostat by pressing the physical hardware reset button, located through an opening in the bottom left corner of the iGate™ Connect thermostat. Rebooting will not alter programming or configuration options.



Reset button

To configure Reminders and Alerts

From the Home screen, press **MENU**.

Select **Reminders and Alerts**.

Configure the Reminder and Alert settings as required.

Configuring Reminders and Alerts

The Reminders and Alerts list displays the reminders and alerts that help the homeowner know when to perform periodic maintenance.

System Service

The System Service (maintenance) reminder generates an alert telling the homeowner that regularly scheduled maintenance is required.

This reminder, along with technician contact information, can be displayed on the screen. If homeowners register their thermostats, the reminders will be emailed to them and be displayed in the web portal.

You can set the Last Service date, turn the Reminder On or Off, and to set the Frequency of the maintenance interval in months.

Air Filter

Generates an alert that indicates it is time to clean or replace the system air filter. You can set the Last Filter Change date, turn the Reminder On or Off, and set the Frequency of the maintenance interval.

Air Cleaner

Generates an alert that indicates it is time to replace the fiber media pad. You can set the Last Filter Change date, turn the Reminder On or Off, and set the Frequency of the maintenance interval.

UV Lamp

If the HVAC system uses a UV lamp for air purification, the iGate™ Connect thermostat can generate an alert indicating that it is time to clean or replace the lamp. You can set the Last Lamp Change date, turn the Reminder On or Off, and set the Frequency of the maintenance interval.

Alerts

The iGate™ Connect thermostat can generate alerts if the temperature in the home goes over or under a pre-programmed level. This protects the home from damage due to freezing and/or excessive heat.

This alert, along with optional technician contact information will be displayed on the screen. If the homeowner registers the thermostat, the alert will be emailed to them and be displayed in the web portal.

Low Temp Alert Sets the temperature at which the thermostat will generate a Low Temperature Alert. The range can be:

- Off – no alert will be generated.
- Set temperature range of 35 to 68 °F (1.5 to 20 °C).

High Temp Alert Sets the temperature at which the thermostat will generate a High Temperature Alert. The range can be:

- Off – no alert will be generated.
- Set temperature range of 60 to 104 °F (15.5 to 40 °C).

Aux Heat Run Time Generates an alert if the auxiliary heat runs more than the selected amount of time in a 24 hour period. The range can be:

- Disabled
- Set duration of 30 minutes to 8 hours

Aux Outdoor Temp Alert Generates an alert if auxiliary heat is called to run when the outdoor temperature is at or above the selected temperature. The range can be: 32°F to 80°F.

Low Humidity Alert Generates an alert when the space humidity falls below the selected amount. The range can be:

- Off
- Set humidity set point of 5% to 95%

High Humidity Alert Generates an alert when the space humidity exceeds the selected amount. The range can be:

- Off
- Set humidity set point of 5% to 95%

Display Alerts on Thermostat

Select No if you do not want any of the alerts to be displayed on the iGate™ Connect thermostat screen. Alerts will continue to be displayed on the web portal and sent via email.

Enable Heating/Cooling Alerts

Select No to disable alerts for heat/cool error conditions. If disabled, alerts indicating that the system failed to heat or cool will not be appear in the screen, web portal, or emails.

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