

The iPachie™

Commercial & Residential Thermostat with Occupancy Detection.

The Autonomous Energy Saving Appliance.

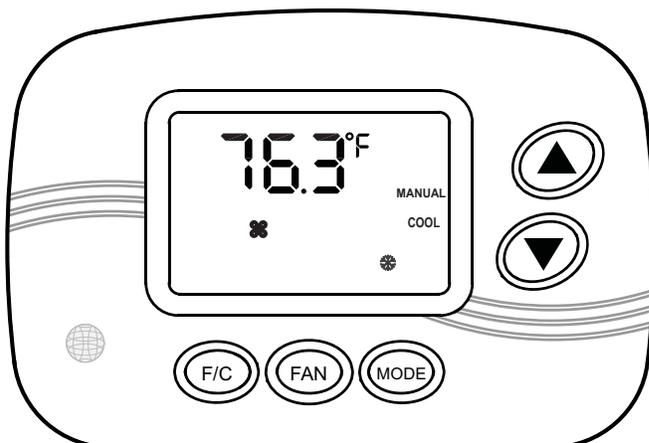
- > Built in door monitoring system and much more.
- > Automatically disables HVAC if doors or windows are open.
- > System can monitor up to 40 doors and/or windows.
- > All Temperature and Timer settings are Completely Programmable.
- > Advanced Occupancy Detection saves money while unoccupied.
- > Keeps you comfortable and saves money at the same time.
- > Save 23% to 47% on annual heating and cooling cost.
- > Secure with a Four digit *PassCode*.
- > No more Wi-Fi issues; *Set it and Forget it*.
- > Easy to Install.

The iPachie™ uses Advanced Occupancy Detection to control the Temperature. AOD “knows” if someone’s home; it doesn’t “guess” like other systems. Sleep all night without being disturbed by changing Temperatures.

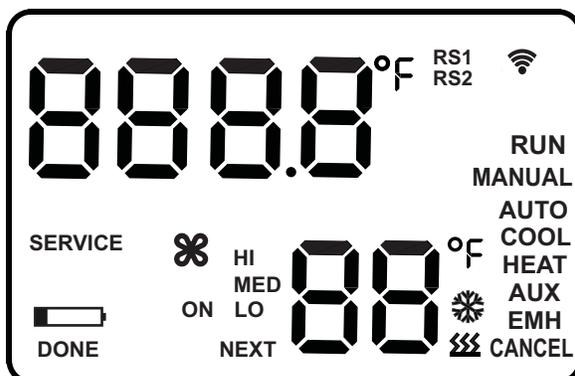
- WHEN NO ONE IS HOME THE iPachie™ CAN;
- Adjust the Temperature to a more Economical Setpoint.
- Turn OFF the main Water Supply.
- Turn OFF the Water Heater.
- Control Appliances wirelessly or with a wired relay circuit.
- Tell you if the condensation drain Float Switch disables the HVAC.

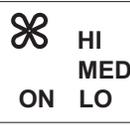
iPachie Thermostat

Commercial - Residential - Hospitality



-  Fahrenheit/Celsius switch.
-  Turn fan on and off.
-  Switch between Heat - Cool - Auto.
-  Raise the setpoint temperature.
-  Lower the setpoint temperature.



-  This symbol is used to indicate cooling mode.
-  This symbol is used to indicate heating mode.
-  Used to indicate the FAN operation.
- RUN** is used to indicate the TEST mode.
-  Indicates a Radio signal is being received.

DONE - NEXT - CANCEL are used for programming

MANUAL is used to indicate that the thermostat is in the manual (occupied) mode.

AUTO - COOL - HEAT - AUX - EMH are all used to indicate the mode of operation.

SERVICE is used to indicate that the thermostat is in the HVAC service mode.

 This means that a low battery signal has been received from a transmitter.

RS1 - Indicates that the thermostat has a remote temperature sensor on S1.

RS2 - Indicates that the thermostat has a remote temperature sensor on S2.

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The iPachie Thermostat definitions and abbreviations.

1. **Setpoint** - The temperature setting the thermostat uses as its target temperature.
2. **User Setpoint** - The temperature setting selected by the occupant.
3. **Actual Setpoint** - The temperature setting selected automatically by the thermostat.
4. **Occupied** - The thermostat has determined the dwelling to be occupied.
5. **Unoccupied** - The thermostat has determined the dwelling to be unoccupied.
6. **AOD** - Advanced Occupancy Detection; occupancy is determined by the Entry/Exit DoorMonitors and the PIR sensors.
7. **PIR** - Passive InfraRed occupancy sensor. Uses body heat to detect occupancy.
8. **DoorMonitor** - A wireless (Radio) transmitter with a magnetic switch; used to determine if a door or window is open or closed. They are designated as Entry DoorMonitors (**ED**) or Door/Window (**DW**) monitors. **DWs** are sometimes called **Open Door** monitors.
9. **ED - Entry DoorMonitor** – used with PIR sensors and the Away Timer (**AT**) to determine occupancy. An **ED** is used to monitor the Entry/Exit doors so the thermostat knows when a door opens and when it closes.
When AOD is enabled an Entry door closure starts the Away Timer (AT).
When AOD is disabled the Entry DoorMonitors are also disabled and have no effect on the Thermostat.
10. **DW - Door/Window Monitor** – sometimes called “**Open DoorMonitor**”: used with the **Open Door Timer (ODT)** to disable the heating and cooling system when a door or window is open for an extended period of time; determined by the **ODT**.
When a DW monitor transmits the door closed signal it is perceived as an indication of occupancy just like a PIR signal.
11. **ODT - Open Door Timer**; if a door or window is open for this time period the thermostat disables the **HVAC** system.
12. **Manual Mode**; Occupancy has been detected and the thermostat is in the manual occupied mode. Operating between **MHL & MCL**.
13. **MCL - Manual Cooling Limit**; The lowest cooling setpoint that is allowed in the Manual occupied mode.
14. **MHL - Manual Heating Limit**; The highest heating setpoint that is allowed in the Manual occupied mode.
15. **Away mode** - The first step in the unoccupied mode; changing the temperature setpoints to the **AHL** and the **ACL**. The Away Mode begins when the Away Timer (**AT**) expires. **The occupant is “Away”.**
16. **AT - Away Timer**; if occupancy is not detected during this time period the thermostat shifts into the Away mode.
17. **ACL - Away Cooling Limit**. The lowest cooling setpoint allowed in the Away mode.
18. **AHL - Away Heating Limit**. The highest heating setpoint allowed in the Away mode.
19. **Hold mode** - The second step in the unoccupied mode; changing the temperature setpoint to the **HHL** and the **HCL**. The Hold Mode begins when the Hold timer (**HT**) expires. **It “Holds” a moderate temperature between Away mode and Vacant mode.**
20. **HT - Hold Timer**; if occupancy is not detected during this time period the thermostat shifts into Hold mode.
21. **HCL - Hold Cooling Limit**. The lowest cooling setpoint allowed in the Hold mode.
22. **HHL - Hold Heating Limit**. The highest heating setpoint allowed in the Hold mode.
23. **Vacant mode** – The third step in the unoccupied mode; operating in a temperature zone between **VHL** and **VCL**. The Vacant Mode begins when the Vacant Timer (**VT**) expires. **The dwelling is Vacant.**
24. **VT - Vacant Timer**; if occupancy is not detected in this time period the thermostat shifts into the Vacant mode.
25. **VCL - Vacant Cooling Limit**. The lowest cooling setpoint allowed in the Vacant mode.
26. **VHL - Vacant Heating Limit**. The highest heating setpoint allowed in the Vacant mode.
27. **FST - Fail Safe Timer** - if occupancy is not detected by a **PIR** for a preprogrammed period of time the thermostat shifts into the Vacant mode. **This is independent of Entry DoorMonitors and AOD. Range: 1 to 24 hours. 0 = disabled. Default = 12.**
28. **ESP1 = preset 1**; selects timer settings, temperature limits and other control options for **P1**.
29. **ESP2 = preset 2**; selects timer settings, temperature limits and other control options for **P2**.
30. **Relay #7 control: 0 = OOL = Out of Limits - 1 = OCC = Occupancy - 2 = ODC = Open Door Control.**

Cleaning and Care *

To clean the iPachie Thermostat wipe the outside surface with a damp cloth; do not spray liquids directly onto the thermostat as it will get on and damage the circuits inside the thermostat.

Remove the thermostat from service during construction or remodeling as dust could enter the thermostat case and interfere with the proper operation of the thermostat and the HVAC system.

*** Failure to comply with these instructions will void the warranty.**

The iPachie Thermostat Programming and Testing Modes.

Four Digit PassCode: >> **Make sure you never lose your PassCode as you cannot access programming without it <<** CGA strongly recommends that you turn on the PassCode feature and create a four digit number for security purposes; this will keep unauthorized persons from accessing your custom parameter settings. See details below and on page 12 - CONF - 55.

To set up a PassCode go to CONF-55 and change the “0” to a “1”. Press the FAN button. “0000” appears on the upper four characters and the first digit begins to flash “0” on and off. “d1” is displayed on the lower two characters. Use the up and down buttons to select the first digit of the PassCode. Press the FAN button; the first digit stops flashing and the second digit starts to flash on and off; “d2” will appear on the lower two digits. Use the up and down buttons to select the second digit then press the FAN button to move to the third digit. The second digit stops flashing and the third digit begins to flash. Use the up and down buttons to select the third digit then press the FAN button to move to the fourth digit. The third digit stops flashing and the fourth digit begins to flash. Select the fourth digit using the up and down buttons. The fourth digit you select continues to flash and all 4 digits appear on the display. Press the F/C button twice to save the PassCode and exit the programming mode.

After this you must enter the PassCode to access the iPachie programming.
The only modes you can access without the PassCode are TEST and SERVICE.
For all other modes you must enter the PassCode.

How to access the five different modes:

- 1. Test mode** - ▲ up & ▼ down buttons; press both for Five seconds; “RUN” appears on the display.
To exit Test mode press the F/C button; if you don’t exit manually it will exit automatically after 5 minutes.
Test mode shows the room temperature even if the thermostat is not programmed to do so.
Test mode also changes the Open Door Timer (ODT) to instant so the DoorMonitors can be tested more quickly.
- 2. Service mode** - ▲up & ▼down buttons + MODE button; press all three for 3 seconds.
To exit Service mode press the F/C (DONE) button once.
This mode is for the HVAC technician to service the heating and cooling equipment. See page 4 for details.
- 3. Preset Menu** - Press and hold the F/C button and the MODE button simultaneously for three seconds. Use the ▲UP or ▼DOWN button to switch between **Energy Saving Preset P1 and Energy Saving Preset P2.**
To exit the Preset Menu press the F/C (DONE) button once. See page 8 for details.
- 4. Enrollment Menu** - ▲up & ▼down buttons + FAN button; press all 3 for three seconds. Press the **FAN (NEXT)** button to scroll thru the Transmitter Enrollment Menu. It starts in the transmitter “**tEst**” mode then **EdEr** then **OdEr** then **rPir** then **iPEr**. Use the up and down buttons to navigate thru the transmitter numbers; **Od01, Ed01. Pir1 etc.**
To exit the enrollment tEst mode press the F/C (DONE) button. See page 5 for details.
- 5. Main Menu.** To enter into Main Programming menu press and hold the ▲up button, ▼down button and the F/C button simultaneously for three seconds. “**ESP1**” will appear on the display. Use the ▲up button to scroll thru the Main menu; **ESP1** is the first option in the Main menu. After you select the category (**ESP1, ESP2, CONF or EQUIP**) then scroll thru the parameters with the NEXT (**FAN**) button.
Use the ▲up button to scroll thru the Main Menu; the options appear in the following order:
 - (1) ESP1** = preset 1; selects timer settings, temperature limits and other control options for **P1**.
 - (2) ESP2** = preset 2; selects timer settings, temperature limits and other control options for **P2**.
 - (3) CONF** = these parameters are common to both **P1** and **P2**.
CONF parameters remain the same when you switch between P1 & P2.
 - (4) EQUIP** = Selects the Equipment type and associated options.
EQUIP parameters remain the same when you switch between P1 & P2.

While in one of the Main Menu options Press the NEXT button to scroll thru the parameter options.
While in one of the Main menu options press the DONE button to return to Main Menu selection.

> The Main menu mode has a 5 minute time limit. Once the main menu has been accessed the thermostat will resume normal operation 5 minutes after the last button press; **without saving changes.**
To Exit and SAVE CHANGES press the DONE (F/C) button twice. See page 4 for more details.

Operation with default settings; All time and temperature settings are selectable in ESP1 & ESP2.

How the thermostat operates, with AOD & ESP1 enabled, using default settings and an Entry DoorMonitor: Start with the dwelling being unoccupied for more than 8 hours. The thermostat is in the Vacant mode; maintaining the room temperature between the VHL (60°F) and the VCL (78°F). When motion is detected by the integrated PIR or by a remote PIR the thermostat shifts into the Manual Occupied mode. The occupant can now change the setpoint by pressing the up button or down button. The occupant can also change the mode from heat to cool. The occupant can press the FAN button to put the fan in the constant mode (for one hour). The occupant can change the temperature scale from Fahrenheit to Celsius by pressing the F/C button. This is all the occupant can do while in the manual occupied mode. If the occupant leaves a monitored door or window open for more than two minutes the thermostat will disable the heating and cooling system. The display will show the number of the DoorMonitor (Od01 etc.) and “do” to indicate a door or window is open. The heating & cooling system will come back on when all the monitored doors & windows are closed. **The iPachie will return to normal operation in the Manual mode.**

When the occupant leaves via an Entry/Exit door and there is no occupancy detected for 30 minutes (via a PIR) the thermostat shifts into the Away Mode; 68°F (AHL) or 76°F (ACL). If there is no motion detected for 4 hours (after the Entry door is closed) the thermostat shifts into the Hold Mode; 65°F (HHL) or 77°F (HCL). The thermostat will remain in the Hold Mode until the Vacant Timer (VT) expires (8 hours without occupancy being detected). At this point the thermostat shifts into the Vacant Mode; operation in a temperature zone between (60°F and 78°F). The thermostat remains in the Vacant Mode until occupancy is detected at which point the thermostat shifts into the Manual (occupied) mode. Now the occupant can control the thermostat (within limits) by pressing the **buttons**.

Programming Scheme.

- > In all programming modes the F/C button becomes the “DONE” button.
- > In all programming modes the FAN button becomes the “NEXT” button.
- > In all programming modes [except TEST (RUN)] the MODE button becomes the “CANCEL” button.
- > Programming information is displayed on the LCD indicating the function of each button.
- > To enter into the Main Thermostat programming menu press and hold the up and down buttons and the F/C button simultaneously for three seconds. Use Up and Down buttons to move thru the menu. Use the NEXT button to scroll thru each section of programming; using the Up and Down buttons to make changes. Press the DONE (F/C) button once to return to the Main Menu or press the DONE (F/C) button twice to exit to the Manual operating mode.

Main Programming Menu:

Energy Saving Preset 1: ESP1 = P1; Timer settings, temperature limits and other control options for P1.

Energy Saving Preset 2: ESP2 = P2; Timer settings, temperature limits and other control options for P2.

Configure: CONF parameters are common to P1 and P2. CONF defines features used for both P1 and P2.

Equipment: EQUP = Selects the Equipment type and associated options.

EQUP defines the Heating and Cooling equipment and how it will be controlled by the Thermostat.

SERVICE MODE: The Service Mode is used for testing the heating and cooling system.

> To enter into the SERVICE Mode press and hold the Up and Down buttons and the MODE button simultaneously for three seconds. The word “SERVICE” and the word “DONE” appear on the display.

At any time during the Service mode you can press the F/C (DONE) button to exit and return to normal operation.

MCL is changed to 65°F and MHL to 85°F. The AT, HT, VT, ODT and the DoorMonitors are disabled so the run cycle of the HVAC system is not affected during testing or charging the system. Also while in the Service Mode you can press the FAN button to put the fan in the constant “ON” mode for one hour. **The service mode has a one hour time limit; terminating one hour after initiation.**

In the Service mode the HVAC technician has one hour to test and charge a system without interruption.

All pertinent information is displayed in the **Service Mode**; system mode (AUTO, HEAT, COOL, AUX, EMH), fan mode and speed, the fan  icon, the heat  icon, the cool  icon, room temperature, setpoint temperature, the words “SERVICE” and “DONE”. In SERVICE Mode the RF symbol  is not displayed when signals are received from enrolled transmitters. The RF symbol is displayed in all other modes as an indication of signals being received from enrolled (only) transmitters.

TRANSMITTER ENROLLMENT MODE:

→To enter into Transmitter Enrollment mode press and hold the **Up** and **Down** buttons and the **FAN** button simultaneously for three seconds. Press the **NEXT (FAN)** button to scroll thru the Transmitter Enrollment Menu. It starts in the Enrollment **tESt** mode then **EdEr** then **OdEr** then **rPIr** then **iPEr**. In the Enrollment **tESt** mode pressing the **MODE** button causes the thermostat to transmit a test signal in order to enroll it into other thermostats and other types of CGA equipment. Press the **DONE (F/C)** button to exit the Enrollment **tESt** mode.

tESt = Transmitter Test.

EdEr = Entry DoorMonitor Transmitter Enrollment; Learns ID codes from entry/exit door transmitters.

OdEr = Open DoorMonitor Transmitter Enrollment; Learns ID codes from door/window (DW) transmitters.

rPIr = PIR Sensor Transmitter Enrollment; Learns ID codes from remote PIR transmitters.

iPEr = iPachie Transmitter enrollment; Learns integrated transmitter ID codes from other iPachie thermostats.

Any time during the transmitter Enrollment **tESt** mode you can press the **DONE (F/C)** button to exit the Transmitter **tESt** mode and return to normal operation in the Away Mode with the Away temperature setpoint. Press **Up** or **Down** to revert to Manual Mode.

Any time during one of the transmitter Enrollment modes you can press the **DONE (F/C)** button once to exit the Enrollment mode and return to the Transmitter TEST (“tESt”) mode. **The Transmitter Enrollment and Test mode will exit automatically in 5 minutes.**

Any time during one of the transmitter Enrollment modes press the **DONE (F/C)** button twice to exit the Enrollment mode and return to normal operation; the thermostat restarts in the Away mode. **Press Up or Down to revert to the Manual (occupied) Mode.**

During the transmitter Enrollment TEST mode press the **NEXT (FAN)** button to scroll thru the transmitter enrollment options.

1. In the Transmitter Enrollment “tESt” mode press the **MODE** button to initiate a test transmission from the iPachie transmitter. **This signal is for CGA equipment that needs to receive the Manual “Occupied” and “Unoccupied” signals from the iPachie.**
2. In the Transmitter Enrollment “rPIR” mode press the **MODE** button to initiate a test transmission from the iPachie transmitter. **This signal is for CGA equipment that needs to receive the integrated PIR (on front of Thermostat) signals from the iPachie.**

Transmitter Enrollment and Test mode:

Enter Transmitter Enrollment tESt mode by pressing and holding the **Up** button, **Down** button and the **FAN** button simultaneously for three seconds. “tESt” will appear on the display. In the transmitter test mode the open door timer (**ODT**) is changed to instant (so that transmitters can be checked more quickly). The Four upper characters display the name of the transmitter, example: **OD12** for Open DoorMonitor 12, **Ed02** for Entry DoorMonitor 2 or **Pir1** for remote **PIR Sensor 1**. The two lower characters display “do” for open doors and windows or “Hi” for **PIR** Sensors. In the Enrollment test mode normal thermostat functions are disabled. Press the **DONE (F/C)** button to exit the Transmitter Enrollment Test mode to Away mode. **Press Up or Down to revert to the Manual (occupied) Mode.**

When in the Transmitter Enrollment tESt mode an enrolled transmitter sends a Low battery signal the thermostat displays the  symbol and also displays the assigned name of the transmitter (Od11 etc). The lower 2 digits will display “Lb” to indicate the problem.

When finished with the transmitter Enrollment Test mode press the F/C button to exit and return to normal operation or press the FAN button to enter into one of the Transmitter Enrollment Modes; EdEr, OdEr, rPIR, or iPEr.

Enrolling Transmitters into the iPachie Thermostat.

Four different types of transmitters can be enrolled (programmed) into the iPachie thermostat: Remote wireless PIR sensors, integrated iPachie transmitters, Entry DoorMonitors and door/window monitors (also called Open door monitors).

The DoorMonitors are physically identical but the way they are enrolled into the iPachie changes the way they are perceived by the iPachie. There are two different methods used to enroll DoorMonitors into the thermostat.

Method one: EdEr – Entry DoorMonitor (ED) Enrollment. Up to 8 ED monitors can be enrolled in an iPachie.

ED (Entry DoorMonitors) and AOD (Advanced Occupancy Detection); The iPachie uses **Entry DoorMonitors** and **PIR sensors** to determine occupancy. Entry DoorMonitors are associated with the Away Timer (**AT**). If the AT is programmed for 30 minutes then the thermostat will “look” for occupancy (via PIR sensors) for 30 minutes after and Entry door closes. If occupancy is not detected in that time period then the dwelling is determined to be “unoccupied” and the thermostat changes the setpoint to a more moderate and economical temperature (AHL or ACL). **However; if at any time a PIR detects occupancy the iPachie stays in the Manual Mode and all Timers are turned off so that the Temperature will remain exactly as it is set.** Entry DoorMonitors are also associated with the **ODT** so that the heating and cooling system is disabled when an entry door is left open longer than the time period set by the **Open Door Timer**.

First enter the Transmitter Enrollment tESt mode as above then enter the transmitter enrollment mode by pressing the **NEXT (FAN)** button; “EdEr” will appear on the display. Press the **Up** button. “Ed01” appears on the **LCD**; if the “01” is flashing on and off then that memory location is unused and available for enrollment. If the “01” is not flashing on and off (on steady) then that memory location has already been used. While “01” is flashing on and off move the magnet away from the door transmitter causing it to send signals. The DoorMonitor transmits an **ID (identification)** code that is received and memorized by the iPachie. The “01” will stop flashing and go solid-on indicating that the iPachie has enrolled the DoorMonitor into memory location **Ed01**. **Wait until the RF  symbol disappears** before you continue, then use the **UP** arrow button to scroll to “Ed02” for the second Entry DoorMonitor (if there is one). Proceed as in the previous example. **Up to eight (8) Entry DoorMonitors can be enrolled into each iPachie thermostat.**

Method Two: OdEr - DW monitor enrollment. Up to 32 DW monitors can be enrolled in an iPachie.

DW Monitors are used to monitor **doors** and **windows** in order to disable the heating and cooling system if a door or window is open for a programmed time period. This is controlled by the **ODT** (default = two minutes). If the **ODT** is programmed for **1** then the HVAC system would be disabled when a door or window is open for **1** minute. **A “door closed” signal from a DW Monitor indicates occupancy.**

First enter Transmitter Test mode as on page 5 then enter the transmitter enrollment mode by pressing the **NEXT (FAN)** button; **“EdEr”** will appear on the display. If you don't want to program any Entry DoorMonitors then press the **NEXT (FAN)** button to move to the next section; **“OdEr”** will appear on the display. Press the **Up** button; **“Od01”** appears on the display. If the **“01”** is flashing on and off then that memory location is unused and may be programmed. If the **“01”** is not flashing on and off (on steady) then that memory location has already been used. While **“01”** is flashing on and off move the magnet away from the door transmitter causing it to send signals. The DoorMonitor transmits an identification code that is received and memorized by the iPachie. The **“01”** will stop flashing and go solid-on indicating that the thermostat has enrolled the DoorMonitor into memory location **“Od01”**. **Wait until the RF  symbol disappears** before you continue, Use the **Up** arrow button to scroll to **“Od02”** for the second **DW** Monitor if there is one. Proceed as in the previous example until all **DW** monitors have been enrolled into the Thermostat (thirty-two maximum). **To move to the rPir (remote PIR) section press the FAN button. To exit the Enrollment mode press the F/C button once to go to Transmitter tEst mode or twice to return to normal operation.**

rPir - Remote PIR enrollment. Passive Infrared Occupancy Sensors. Up to 8 PIR sensors can be enrolled in an iPachie. The iPachie Thermostat has a built-in PIR sensor located on the front of the thermostat. However in some applications it will be necessary to add remote wireless PIR sensors in order to improve occupancy detection. **The wireless PIRs affect the thermostat just like the integrated PIR. The remote wireless PIRs can be enrolled into the iPachie and other CGA equipment concurrently.**

First enter the Transmitter Enrollment Test mode as above then enter the transmitter enrollment mode by pressing the **NEXT (FAN)** button; **“EdEr”** will appear on the display. If you don't want to program any Entry DoorMonitors then press the **NEXT (FAN)** button to move to the next section; **“OdEr”** will appear on the display. If you don't want to program any Open DoorMonitors then press the **NEXT (FAN)** button to move to the next section (**PIR Sensors**). **“rPir”** will appear on the display. Press the **Up** button **“Pir1”** appears on the display; if the **“1”** is flashing on and off then that memory location is unused and may be programmed. If the **“1”** is not flashing on and off (on steady) then that memory location has already been used. While the **“1”** is flashing on and off cause the **PIR** to transmit signals. The PIR transmits an identification code that is received and memorized by the thermostat. The **“1”** will stop flashing and go solid on indicating that the thermostat has enrolled the PIR into memory location **“Pir1”**. **Wait until the RF  symbol disappears** before you continue, Use the **Up** button to scroll to **“Pir2”** for the second **PIR**. Proceed as in the previous example. **Up to eight (8) PIRs can be enrolled into each iPachie.**

iPEr- iPachie Transmitter enrollment. iPachie thermostats can be equipped with a 433MHz integrated transceiver. They can Learn ID (identification) codes from other thermostats: each thermostat transmitter has its own individual and **unique ID code**. Other thermostats can receive signals from transmitting thermostats if the receiving thermostat has enrolled the **ID** code of the transmitting thermostat. **Thermostats can enroll 8 other thermostats** and number them **iP01** thru **iP08**. This means a network of eight thermostats can be created in each system. Other thermostats (not in the group of 8) can receive signals from the networked thermostats.

The following method is used to enroll an iPachie thermostat's transmitter into another iPachie thermostat's receiver.

While in the Enrollment Test mode you can press the MODE button to initiate an RF transmission from the integrated transmitter. It transmits its **ID** code in order to enroll it in other CGA equipment; Thermonators and Flex Receivers, etc. First put the receiving thermostat into the **iPEr** enrollment mode; **iP01** thru **iP08**. Next put the transmitting thermostat into the Enrollment **tEst** mode. Now press the **MODE** button on the transmitting thermostat; it sends a signal and the receiving thermostat receives that signal and enrolls the transmitting thermostats **ID** code into memory. Put transmitting thermostat back into normal mode. Put receiving thermostat into the normal mode.

Detailed instructions: First enter Transmitter Test mode as above then enter the transmitter enrollment mode by pressing the **NEXT (FAN)** button. Continue pressing the **NEXT** button until **“iPEr”** appears on the **LCD**. Press the **Up** button **iP01** appears on the **LCD**; if the **“01”** is flashing on and off then that memory location is unused and may be programmed. If the **“01”** is not flashing on and off (on steady) then that memory location has already been used. While the **“01”** is flashing cause the transmitting thermostat to send a signal. The transmitting thermostat sends an **ID** code that is received and memorized by the receiving thermostat. The **“01”** will stop flashing and is on constant (not flashing) indicating the receiving thermostat has enrolled the other thermostat into memory location **“iP01”**. **Wait until the RF  symbol disappears** before you continue, Use the **Up** button to scroll to **“iP02”** for the second thermostat transmitter **ID** code (if there is one). Up to seven (**7**) transmitting thermostats can be enrolled into each receiving thermostat; this makes a total of eight (**8**) thermostats that can communicate with each other in a single installation). **Each iPachie will have its own number; iP01 thru iP08.**

To erase transmitters from memory; while the transmitter number is on steady (for example **“Ed01”**) Press the **CANCEL (MODE)** button. The transmitter number (example **“01”**) will start to flash on and off indicating that the transmitter number **“Ed01”** has been removed from memory. To erase other Entry DoorMonitor transmitters from memory press the **Up** or **Down** button until that transmitter memory location appears on the **LCD** then press the **CANCEL (MODE)** button once to erase that transmitter code from memory. Continue in this fashion until you have erased any and all of the Entry DoorMonitor transmitters from the memory you wish to erase. If you wish to erase other types of transmitters then press the **NEXT** button once go to the next category of transmitters; **EdEr, OdEr, rPir, or iPEr.**

The Thermostat can transmit seven different signals.

(1) Door (open or closed), (2) Manual, (3) Away, (4) Hold, (5) Vacant, (6) Out of Limits and (7) integrated PIR.

> **First**; the transmitting thermostat must have the desired signal enabled under CONF; (44) Away, (45) Hold, (46) Vacant, (47) Door, (49) Out of Limits (temperature limits) and (50) PIR before it will transmit that signal.

When 44, 45 or 46 are enabled then the Manual (occupied signal) is automatically enabled.

> **Second**; receiving equipment must have the iPachie thermostat's ID code enrolled before it will receive those signals.

> **Third**; the receiving iPachie thermostat must have the desired signal enabled before it will receive that signal. CONF; (51) Away, (52) Hold, (53) Vacant and (54) Door. **Thermostats do not receive the Out of Limits signal.**

In the Main menu under the CONF heading; 44, 45, 46, 47, 49 and 50 can be enabled concurrently.

In the Main menu under the CONF heading; 51, 52, 53, and 54 can be enabled concurrently.

The receiving iPachie will enroll the transmitting iPachie's ID code only once; to send a signal from the transmitting iPachie go to the Enrollment tEST mode and press the MODE button. **Each press of the MODE button causes the iPachie to transmit a signal.**

In the receiving iPachie go to the Enrollment mode "iP01", "iP02" etc. and press the MODE button on the transmitting iPachie.

44 - Away signal transmission; The iPachie Transmitter will send the Away signal when the iPachie shifts into the Away mode. CONF-44; **0 = disabled-default. 1 = enabled.**

45 - Hold signal transmission; The iPachie Transmitter will send the Hold signal when the iPachie shifts into the Hold mode. CONF-44; **0 = disabled - default. 1 = enabled.**

46 - Vacant signal transmission; The iPachie Transmitter will send the Vacant signal when the iPachie shifts into the Vacant mode. CONF-44; **0 = disabled - default. 1 = enabled.**

47 - Open door signal transmission; The iPachie Transmitter will transmit the "open door" signal when the iPachie determines that a monitored door has been open for a preset time period (ODTT). CONF- 47; ***0 = disabled - default. 1= enabled.**

48 - Open Door Transmit Timer; range = 1 to 24 hours. *0 = default. if ODTT = 0 then the ODTT will sync with the ODT.

Thermostats, Thermonators, FLEX receivers and other CGA wireless equipment can receive signals if that equipment has been programmed to do so. Receiving devices will have the option of receiving or not receiving the following RF signals: Manual (occupied and unoccupied) – PIR signals (Hi and Lo) – Door status signals (open and closed).

An Open door transmission signal (47) from a transmitting thermostat causes receiving thermostats to disable the heating and cooling system. All monitored doors and windows must be closed before the heating and cooling system will be enabled.

49 – Future Feature: Out of Limits.

50 - Enables transmission of integrated PIR signals; if CONF-50 = 1 then when the integrated PIR detects motion the iPachie transmits a PIR signal imitating the signals transmitted by the wireless standalone PIR sensors. CONF-50; ***0 = disabled - default or 1 = enabled. The PIR must have a period of at least 2 minutes without motion detected before it will detect a person and transmit signals.**

To cause the iPachie to send a PIR test transmission go to the Enrollment mode - "rPir" and press the MODE button.

51 - Enables reception of the Away signal. CONF-51; ***0 = disabled - default or 1 = enabled.**

52 - Enables reception of the Hold signal. CONF-52; ***0 = disabled - default or 1 = enabled.**

53 - Enables reception of the Vacant signal. CONF-53; ***0 = disabled - default or 1 = enabled.**

54 - Enables reception of the Open door signal. If "open door" signals are enabled then "door closed" signals are automatically enabled so that CGA equipment will receive the appropriate signals when desired. CONF-54; ***0 = disabled - default or 1 = enabled.**

iPachie thermostats do not receive the temperature Out of Limits (OOL) signal. The iPachie can energize relay K7 to control other devices for alerting maintenance personnel of the problem; **EQU-57=0.**

Thermonators (water heater controllers) can receive occupancy signals from an iPachie to turn a water heater on or off.

WaterGate (water control valve) can receive occupancy signals from an iPachie in order to control the main water supply.

FLEX receivers can receive occupancy signals from an iPachie to turn various appliances on or off.

Preset Menu – P1 and P2.

Preset 1 and Preset 2 are programmed in the Main Menu under ESP1 and ESP2.

The default settings will work for most people with no changes being required.

Preset 1 – Economy; programmed under code **ESP1** and is typically used for the “Rental” settings. “1” will appear on the lower digits indicating that Preset 1 is engaged. **The list of the default settings for ESP1 is on page 9.**

Preset 2 – VIP; programmed under code **ESP2** and is typically used for the “Owner” settings. “2” will appear on the lower digits indicating that Preset 2 is engaged. **The list of the default settings for ESP2 is on page 10.**

If you want to change the settings for one of the presets then go to ESP1 or ESP2 under the MAIN Menu. However, the default settings will work for most applications. Once you have the parameters set the way you want then you can use the Preset Menu to switch between P1 and P2. This is so the owner can be more comfortable while staying in their own dwelling; also Hotels use this feature for VIP guest.

A four digit code can be set to access this feature. This code is the same four digit code as the **PassCode** found under **CONF-55**. We recommend that the installer selects “1” under **CONF-55** and enters a four digit code (selected by the owner). This will ensure that unauthorized persons cannot change the programming. **Make sure you use a code you will not forget as you cannot enter programming without it. You can enter the SERVICE mode and the TEST mode without a PassCode.**

You can switch between P1 and P2 under the Preset Menu as follows.

The number “1” or “2” will appear on the lower two characters indicating which Preset is currently controlling the thermostat.

P1 = Preset 1 and P2 = Preset 2. “P1” and “P2” will appear on the display in the Preset Menu but not in the Manual Mode.

In the MANUAL mode a “1” = P1 and a “2” = P2.

To enter into the Preset Menu (without a PassCode) and select either P1 or P2 proceed as follows:

> Press and hold the F/C button and the MODE button simultaneously for 3 seconds.

> Press the UP or Down button to select P1 or P2.

> Press the DONE button to exit the Preset menu and return to the Manual Mode.

> **If you do not exit the preset menu manually then it will exit automatically in one minute.**

Detailed Instructions for switching between P1 and P2 without a PassCode:

Press and hold the F/C button and the MODE button simultaneously for 3 seconds.

Whichever preset program that is currently running (**P1** or **P2**) will determine what is displayed next. If **P1** is the current selection then **P1** will appear on the display as soon as the thermostat enters the Preset Menu. If **P2** is the current selection then **P2** will appear on the display as soon as the thermostat enters the Preset Menu. If **P1** is displayed then simply press the **Up** button to switch to **P2**. Now press the **DONE (F/C)** button to exit the Preset Menu and return to normal operation. The Preset number that is displayed when you exit will be the Preset settings that control the thermostat in the normal operating mode. If **P2** is selected then “2” will appear on the display when in the normal operating mode. If **P1** is selected “1” will appear in the normal operating mode so you will know that **P1** is selected. The lower two digits also display “do”, “Lb”, “Hi”, “Lo”, “00” and other information when needed.

Detailed Instructions for switching between P1 and P2 with a PassCode:

Press and hold the F/C button and the MODE button simultaneously for 3 seconds.

On the upper four characters the first digit of the PassCode begins to flash “0” on and off. The other 3 digits are zeros not flashing; “d1” is displayed on the lower two characters of the **LCD**. Use the **Up** and **Down** buttons to select the first digit of the **PassCode** (same as the PassCode entered under **CONF-55**). The first digit stops flashing. After the first digit is entered press the **NEXT (FAN)** button, the second digit will start to flash on and off; “d2” will appear on the lower two digits. Use the **Up** and **Down** buttons to select the second digit then press the **NEXT (FAN)** button to move to the third digit. The second digit will stop flashing and the third digit will start to flash on and off. Use the **Up** and **Down** buttons to select the third digit then press the **NEXT (FAN)** button to move to the fourth digit. The third digit will stop flashing and the fourth digit will begin to flash on and off. Select the fourth digit using the **Up** and **Down** buttons. The fourth digit that you selected continues to flash and all 4 digits appear on the display. Now press the **DONE (F/C)** button to enter the four digit code. The thermostat displays the Preset selection screen; **P1 or P2 will appear on the LCD (depending on which preset is currently active).**

Use the UP or Down button to select P1 or P2. Use the F/C button to exit the Preset menu and return to the normal operating mode. If **P1** is the current selection then “P1” will appear on the display as soon as the thermostat enters the Preset Menu. If **P1** is displayed then simply press the **Up** button to switch to **P2**. Now press the **DONE (F/C)** button to exit the Preset Menu and return to normal operation (Manual mode). Whichever Preset is displayed when you exit the Preset menu will be the one that controls the thermostat in the normal operating mode. If **P2** is selected then “2” will appear on the lower digits of the display when in the normal operating mode. If **P1** is selected “1” will appear in normal operation. This is so the owner or management company will know which Preset is in control. Sometimes the lower characters will display other information such as “do”, “Lb”, “Hi”, “Lo”, “00” etc.

DEFAULT PARAMETER SETTINGS

ENERGY SAVING PRESETS - ESP1 and ESP2 under Main Menu = Time and Temperature settings for P1 and P2. You can customize ESP1 and ESP2 to correspond to the specific circumstances and intended use.

Set ESP1 parameters for guest; keeping in mind the occupant's comfort as well as economy. After the parameters are set for ESP1 and ESP2 then you can switch between P1 & P2 in the Preset mode; press and hold the F/C button and the MODE button for three seconds then enter the four digit PassCode (if necessary). Then select either P1 for guest settings or P2 for VIP settings.

ESP1 – Energy Saving Preset 1 = P1: Rental mode - typically used for rental property; having more economical settings.

00 – Display; room temperature or setpoint or both.

* **0 = SP = default** – Setpoint temperature only.

1 = RT – Room temperature; displays **RT** until you press the **Up** or the **Down** button then it displays **SP** for 5 seconds.

2 = SR – setpoint and room temperatures are displayed in rotation, 5 seconds of **RT** then 5 seconds of **SP**.

01 – Manual Cooling Limit: Selects minimum temperature while in the Manual (occupied) cooling mode.

* **70°F (21°C) = default. Range: 60°F to 85°F (16°C to 30°C).**

02 – Manual Heating Limit: Selects maximum temperature while in the Manual (occupied) heating mode.

* **76°F (24°C) = default. Range: 45°F to 85°F (16°C to 30°C).**

03 – Away Cooling limit. Cooling limit while in the Away (unoccupied) mode.

* **76°F (23°C) = default. Range: 60°F to 99°F.**

04 – Away Heating limit. Heating limit while in the Away (unoccupied) mode.

* **68°F (21°C) = default. Range: 45°F to 85°F.**

05 – Hold Cooling limit. Cooling limit while in the Hold (unoccupied) mode.

* **77°F (24°C) = default. Range: 60°F to 99°F.**

06 – Hold Heating limit. Heating limit while in the Hold (unoccupied) mode.

* **65°F (20°C) = default. Range: 45°F to 85°F.**

07 – Vacant Cooling Limit: Cool limit while in the Vacant (unoccupied) mode. * **78°F (26°C) = default. Range: 60°F to 99°F.**

08 – Vacant Heating Limit: Heat limit while in the Vacant (unoccupied) mode. * **60°F (16°C) = default. Range: 45°F to 85°F.**

09 – Open Door Timer: Selects the time delay between an open door or window signal and the thermostat switching to the disabled mode (when the open door timer expires “do” will appear on **LCD**).

* **2 = 2 minute delay = default. Range: 1 minute to 99 minutes (in 1 minute increments). “00” = disabled.**

10 – Away Timer: Sets period of time to Look for occupancy; if occupancy is not detected (**PIR**) before this timer (**AT**) expires the thermostat shifts into the **AWAY** mode. **The AT can be used with or without AOD. An Entry DoorMonitor must be used with the AT in order to utilize the AOD feature and AOD must be enabled under CONF-29.**

* **30 minutes = default. Range: 1 minute to 720 minutes in 10 minute increments.**

11 – Hold Timer: If occupancy is not detected during this time period (**HT**) the thermostat shifts into the Hold mode.

* **4 hour = default. Range: 1 hour to 24 hours in 1 hour increments.**

12 – Vacant Timer: If occupancy is not detected during this time period (**VT**) the thermostat shifts into the Vacant mode.

* **8 hours = default. Range: 1 hour to 24 hours in 1 hour increments.**

13 – Fan Hold Timer: Limits constant fan mode to a preset time period. If the fan is manually placed in the constant mode by pressing the “**FAN**” button it will automatically revert back into **AUTO** mode when the **FHT** elapses.

* **1 hour = default. Range: 0 hours to 24 hours. “0” = timer disabled = Constant fan on and off with the FAN button.**

ESP2 – Energy Saving Preset 2 = P2; VIP mode.

ESP2 under Main Menu = Time and Temperature settings for P2.

Set ESP2 parameters for VIP mode; keeping in mind the occupant's comfort as well as economy. After the parameters are set for ESP1 and ESP2 then you can switch between P1 & P2 in the Preset mode; press and hold the F/C button and the MODE button for three seconds then enter PassCode (if necessary).

ESP2 – Energy Saving Preset 2 = P2; typically used for greater comfort in hotels and other rentals.

14 – Display; room temperature or setpoint or both.

0=SP – Setpoint temperature only.

*** 1=RT = default** – Room temperature; displays RT until you press the **Up** or the **Down** button then it displays **SP** for 5 seconds.

2=SR – setpoint and room temperatures are displayed in rotation, 5 seconds of **RT** then 5 seconds of **SP**.

15 – Manual Cooling Limit: Selects minimum temperature while in the Manual (occupied) cooling mode.

***68°F (20°C) = default. Range: 60°F to 85°F.**

16 – Manual Heating Limit: Selects maximum temperature while in the Manual (occupied) heating mode.

***78°F (25°C) = default. Range: 45°F to 85°F.**

17 – Away cooling limit. Cooling limit while in the Away (unoccupied) mode. **Associated with the AT.**

***76°F (23°C) = default. Range: 60°F to 99°F.**

18 – Away heating limit. Heating limit while in the Away (unoccupied) mode. **Associated with the AT.**

***70°F (22°C) = default. Range: 45°F to 85°F.**

19 – Hold cooling limit. Cooling limit while in the Hold (unoccupied) mode. **Associated with the HT.**

***77°F (24°C) = default. Range: 60°F to 99°F.**

20 – Hold heating limit. Heating limit while in the Hold (unoccupied) mode. **Associated with the HT.**

***68°F (21°C) = default. Range: 45°F to 85°F.**

21 – Vacant Cooling Limit: Cooling limit while in the Vacant (unoccupied) mode. **Associated with the VT.**

***78°F (26°C) = default. Range: 60°F to 99°F.**

22 – Vacant Heating Limit: Heating limit while in the Vacant (unoccupied) mode. **Associated with the VT.**

***65°F (20°C) = default. Range: 45°F to 85°F.**

23 – Open Door Timer: Selects the time delay between an open door or window signal and the thermostat switching to the disabled mode.

(when the ODT expires “do” will appear on LCD). ***0 = disabled = default. Range: 1 minute to 99 minutes (in 1 minute increments).**

“0” = disabled; if the ODT is set to “0” the doors can be left open indefinitely.

24 – Away Timer (AT): If occupancy is not detected during this time period (AT) the thermostat shifts into the **AWAY** mode.

The AT can be used with or without AOD. An Entry DoorMonitor must be used with the AT in order to utilize the AOD feature and AOD must be enabled under CONF-29. ***60 minutes = default. Range: 1 minute to 720 minutes in 10 minute increments.**

***60 minutes = default. Range: 1 minute to 720 minutes in 10 minute increments.**

25 – Hold Timer (HT): If occupancy is not detected during this time period (HT) the thermostat shifts into the Hold mode.

***6 hours = default. Range: 1 hour to 24 hours in 1 hour increments.**

26 – Vacant Timer (VT): If occupancy is not detected during this time period (VT) the thermostat shifts into the Vacant mode.

***12 hours = default. Range: 1 hour to 24 hours in 1 hour increments.**

27 – Fan Hold Timer (FHT): Limits manual fan mode to a preset time period. If the fan is manually placed in the constant mode by pressing the “FAN” button it will automatically revert back to **AUTO fan** mode when the FHT expires.

***8 hours = default. Range: 0 hours to 24 hours. “0” = timer disabled = constant fan on and off with the FAN button.**

CONF – Configure

28 – Future Feature – WiFi enabled or disabled. *0 = disabled - default. 1 = enabled

29 - AOD – Turns AOD on or off. *1=Ena - default = AOD is active. 0 = dis - AOD is inactive.

30 - FST – Fail Safe Timer – shifts the thermostat to the Vacant mode after a preset time period with no PIR signals. This is regardless of Entry DoorMonitor signals or AOD. If FST is active it will shift the thermostat into Vacant mode based solely on PIR occupancy signals. When FST is active the thermostat shifts into Vacant when no occupancy is detection for a preset time period. This is independent of AOD and works when AOD is active or inactive. *12 hours - default. Range: 1 to 24 hours. 0 = disabled.

31 – Temperature scale used only in the programming mode (°F or °C). *0 = °F = default. or 1 = °C

32 - OFF – Determines if pressing the MODE button will turn the thermostat off.
*0 = dis - default = disabled - OFF not allowed. 1 = Ena = enabled, press MODE button until “OFF” appears on display.

33 – Dead Band between heat and cool (auto mode only). *4°F (default) – range: = 2°F to 10°F in 1 degree increments.

34 – Differential – Selects the temperature differential. *0.6°F = default - range: 0.2°F to 1.0°F, in 0.2 degree increments.

35 – MODE button: HAC – Press and hold MODE button for 5 seconds to put system in Emergency Heat mode.

- *0 - default; selectable Heat and Cool.
- 1 – H-A-C; selectable heat / auto / cool.
- 2 – H-A-C-E; selectable heat / auto / cool / emergency heat.
- 3 - Auto mode only.
- 4 - Cool mode only.
- 5 - Heat mode only.

36 – Cycle Rate: *12 cycles per hour = default - range: 2 cycles to 12 cycles per hour.

37 – Future use - Transmit Manual Signals when the iPachie enters Manual mode and when it exits Manual mode.
*CONF-37-0 = disabled - do not transmit and CONF-37-1= Enabled - transmit.

38 – Fan Refresh Cycle: The time period between fan refresh cycles. *1 hour = default - range: 0 (disabled) to 24 hours.

39 – Fan Refresh Duration: The time period the fan will run on each refresh cycle. *2 minutes = default - range: 1 to 10 minutes.

40 – Fan Refresh Logic: selects the modes wherein the fan refresh will operate.
*0 = disabled - default; operates in the unoccupied modes only. 1 = Enabled; operates in all modes; Occupied and Unoccupied.

41 – Freeze Protection: Freeze protection on or off. *1 = on = default or 0 = OFF = No freeze protection.

42 – Freeze Setpoint: Selects freeze protection Temperature. *40°F = default - range: 35°F to 55°F, in 1 degree increments.

43 – Temperature Calibration: Selects the temperature offset. *0°F = default - range: –5°F to +5°F, in .2 degree increments.

The following determines if a thermostat will transmit Away, Hold, Vacant, Door or PIR signals.

44 – TRANSMIT Away signals when the iPachie shifts to Away mode. *0 = dis = default = do not transmit or 1= Ena = transmit.

45 – TRANSMIT Hold signals when iPachie shifts to Hold mode. *0 = dis = default = do not transmit or 1= Ena = transmit.

46 – TRANSMIT Vacant signals when iPachie shifts to Vacant mode. *0 = dis = default = do not transmit or 1= Ena = transmit.

47 – TRANSMIT Open Door signals. *0 = dis = default - do not transmit or 1= Ena = transmit. Associated with ODTT below.

48 – ODTT - Open Door Transmit Timer: Time period that a door or window is open before the Thermostat sends the open door signal.
*0 = default. Range: 1 to 24 hours in 1 hour increments. 0 = sync with the ODT. CONF- 47 must be enabled to transmit.

49 – Out of Limits: Thermostats do not receive Out of Limits signals.

50 - Transmit integrated PIR signals; if CONF-50 = 1 then when the PIR detects motion the thermostat transmits a PIR signal imitating the signals transmitted by the wireless standalone PIR sensors. CONF-50; 0 = disabled - default or 1 = enabled. > A period of at least 2 minutes must elapse between transmissions; 2 minutes of no motion before next transmission.

To transmit a test PIR signal go to Enrollment mode - “rPir” and then press the MODE button.
This test transmission is used to enroll the iPachie’s integrated PIR into other CGA equipment.

The following defines when a thermostat will receive the Away, Hold, Vacant and Door signals.

51 – Receive Away signal: *0 = dis = default - do not receive or 1 = Ena = receive.

52 – Receive Hold signal: *0 = dis = default - do not receive or 1 = Ena = receive.

53 – Receive Vacant signal: *0 = dis = default - do not receive or 1 = Ena = receive.

54 – Receive Open door signal: *0 = dis = default - do not receive or 1 = Ena = receive.

55 – PassCode: *0 = OFF = default - no PassCode protection. 1 = On - Locks MAIN menu and Presets with 4 digit PassCode.

56 – RESET: Reset All Programming to factory default settings. →**Custom Settings will be lost !**

*0 = default – DO NOT RESET or 1 = RESET; when “1” is selected and the FAN (NEXT) button is pressed the thermostat will load the factory default settings and exit the programming mode. The thermostat will start back up in the Manual Mode.

EQUP – EQUIPMENT; Type of Equipment (HVAC) that is being controlled by the thermostat:

Equipment parameters: After selecting the equipment type scroll thru the parameters using the Next (FAN) button.

Some parameters will not be displayed for certain equipment types **otherwise** the Parameters appear in the following order:

The default values have been pre-programmed at the factory and are appropriate for a 1C-1H (electric non HP) system.

The DONE (F/C) button can be pressed at any time to save and exit programming. The revised options will be saved.

EQUP options should be programmed by a qualified HVAC technician to avoid damaging the HVAC system.

To navigate EQUIP:

1. To enter the main programming menu press and hold the Up button, the Down button and the F/C button for 3 seconds.
2. ESP1 appears on the display.
3. Press the down button.
4. EQUIP appears on the display.
5. Press the NEXT (FAN) button to scroll through the options menu to access the desired parameter.
6. Press the Up or Down button to change the setting.
7. Press the NEXT (FAN) button to select the next parameter.
→Continue scrolling by pressing the NEXT button, then use the Up or Down buttons to change Parameter values as desired.
8. Press the DONE (F/C) button to exit back to the Main Menu to select heading; ESP1, ESP2, CONF or EQUIP.
9. Press the DONE (F/C) button twice to save settings and exit the programming mode to the Manual Mode.

57 – Selects function of relay #7; energizes for: *0 = OOL (default) or 1 = OCC or 2 = ODC.

(0) OOL= Out Of Limits (temperature), (1) OCC= Occupied, (2) ODC = Open Door Control.

Remove Jumper 7 from the circuit board to operate Relay 7 as dry contacts. See Pages 14 and 15 for details.

With J7 in place screw terminals 8 & 9 output 24 volts ac.

58 – Selects System Equipment. See Chart on Page 15.

*0 - 1H1C = Single stage heat, single stage cool, conventional (default). **Electric or Gas.**

1 - 2H1C = Two stage heat, single stage cool, conventional.

2 - 1H2C = Single stage heat, two stage cool, conventional.

3 - 2H2C = Two stage heat, two stage cool, conventional.

4 - 1H1C - HP = Single stage heat pump, no auxiliary heat.

5 - 2H1C - HP = Single stage heat pump, single stage auxiliary heat. > **Heat Pump with 1 cool & 2 heat.**

6 - 3H1C - HP = Single stage heat pump, two stage auxiliary heat.

7 - 2H2C - HP = Two stage heat pump, no auxiliary heat.

8 - 3H2C - HP = Two stage heat pump, single stage auxiliary heat.

9 - 4H2C - HP = Two stage heat pump, two stage auxiliary heat.

10 - FC4P = Four pipe fan coil.

11 - FC2P = Two pipe fan coil.

12 - MV = MilliVolt - heat only.

13 - 1H = Single stage - heat only.

14 - 2H = Two stage - heat only.

15 - 1C = Single stage - cool only.

16 - 2C = Two stage - cool only.

59 – RV - Selects type and mode of operation for the reversing valve:

- *0 – > Energize with Cool Mode. * default.
- 1 – > Energize with Cool Cycle.
- 2 – > Energize with Heat Mode.
- 3 – > Energize with Heat Cycle.

60 – Compressor Protection Timer - Selects the minimum time OFF before the compressor restarts.

*0 minutes - default. Range: 0 to 7 minutes, in 1 minute increments. “0” = no compressor protection.

61 – Second stage compressor delay in cool mode: *5 minutes = default. Selections: 1, 2, 3, 4, 5, 10, 15, 30, 45, 60, 75 or 90.

62 – Second stage compressor Temperature offset in cool mode: *4°F = default. Range: 0°F to 10°F in 1° increments.

63 – Second stage compressor delay in heat mode: *5 minutes = default. Selections: 1, 2, 3, 4, 5, 10, 15, 30, 45, 60, 75 or 90.

64 – Second stage compressor Temperature offset in heat mode: *4°F = default. Range: 0°F to 10°F in 1° increments.

65 – FAN Control: based on Fuel Type: Selects type of fan control: select Gas/oil or Electric heat.

*0 = default - fan cycles with heating and cooling calls (electric heat or HP). 1- Fan cycles with cooling but heat system controls fan.

66 – Fan Speed and Operation: options depend on type of equipment selected.

*0 - 1U - single speed user selectable fan - default.

- 1 - 1C - single speed constant fan.
- 2 - 1A - single speed auto fan.
- 3 - 2U - two speed user selectable fan.
- 4 - 2C - two speed constant fan.
- 5 - 2A - two speed auto fan.
- 6 - 3U - three speed user selectable fan.
- 7 - 3C - three speed constant fan.
- 8 - 3A - three speed auto fan.

67 – HP Compressor Control during Auxiliary Heat: *1 - default = compressor enabled with Auxiliary Heat.

0 = disables the compressor when Auxiliary Heat comes on.

68 – Fan Control in Heat mode (fan coil): this selects high, medium or low fan for heating with Fan Coil systems.

*0 = default - high and medium fan (if medium available). or 1 = low fan only.

69 – Fan Coil Heat valve (4-pipe only): Selects the type of Heat valve; normally open or normally closed.

*0 - NC = default - normally closed. 1 = NO - normal open.

70 – Fan Coil Cool valve (4-pipe only): Selects the type of Cool valve; normally open or normally closed.

*0 - NC = default - normally closed. 1 = NO - normal open.

71 – 2 Pipe Fan Coil valve ; Selects the type of valve for 2 pipe fan coil; *0 - NC = default - normally closed. 1 = NO - normal open.

72 – Fan Purge Timer : Fan run time after heat or cool cycles.

*30 sec = default – range: 00 to 180 seconds, in 10 sec increments.

For RS1 & RS2 Use 22AWG - 1 pair twisted wire cable with foil shield. Connect shield to ground.

RS1 - Remote Sensor 1 connects between S1 & C.

73 - RS1 – Selects the function of Remote Sensor 1. *0 - No remote sensor (default).

- 1 - Remote sensor is room temperature sensor; 10KΩ Omega 44006-40-T or Veris TEJOO.
- 2 - Remote room temperature sensor is averaged with integrated sensor; 10KΩ Omega 44006-40-T or Veris TEJOO.
- 3 - Remote sensor is outside temperature sensor; 10KΩ Omega TH-44006-40-T or Veris TRAJO.
- 4 - Remote sensor is wired Entry Door (AOD) Switch; NC.
- 5 - Remote sensor is wired Entry Door (AOD) Switch; NO.

RS2 - Remote Sensor 2 connects between S2 & C.

74 - RS2 – Selects the function of Remote Sensor 2. *0 - No remote sensor (default).

- 1 - Remote sensor is outside temperature sensor; 10KΩ Omega TH-44006-40-T or Veris TRAJO.
- 2 - Remote sensor is pipe temperature sensor; 10KΩ Omega TH-44006-40-T or Veris TRAJO.
- 3 - Remote sensor is floor slab temperature sensor; 10KΩ Omega TH-44006-40-T or Veris TRAJO.
- 4 - Remote sensor is wired Open Door (DW) Switch; NC.
- 5 - Remote sensor is wired Open Door (DW) Switch; NO.
- 6 - Remote sensor is wired Float Switch (NC); for condensation drain line.

75 - Selects outside temperature that will disable the compressor and switch AUX heat to the primary heat; **applies to HP only.**
***40°F = default.** Range: 0°F to 40°F, in 1 degree increments.

76 - Selects outside temperature that disables AUX heat. ***70°F = default.** Range: 40°F to 70°F in 1 degree increments. **HP only.**

77 - Selects the high floor temperature to turn valve off. ***80°F = default.** Range: 56°F to 110°F, in 1 degree increments.

78 - Selects the low floor temperature to turn valve on. ***65°F = default.** Range: 55°F to 109°F, in 1 degree increments.

79 - When an Aquastat pipe sensor is connected (RS2) it will control the thermostat functions based on pipe temperature.

***0 = default - Aquastat and related functions are disabled.** **1 = remote pipe sensor for 2 pipe fan coil only.**

80 - Selects the pipe temperature that activates heating and fans. ***80°F = default.** Range: 76°F to 99°F, in 1 degree increments.

81 - Selects the pipe temperature that activates cooling and fans. ***65°F = default.** Range: 40°F to 70°F, in 1 degree increments.

82 - If the pipe sensor is turned on (#79 above) this parameter selects the type of 2 pipe fan coil system.

***0 = default = 2-pipe fan coil with single normally closed valve. > N.C. valve.**

1 - 2-pipe fan coil with single normally open valve. > **N.O. valve.**

2 - 2-pipe fan coil with normally closed valve and electric AUX heat. > **N.C. valve.**

3 - 2-pipe fan coil with normally open valve and electric AUX heat. > **N.O. valve.**

4 - 2-pipe valveless fan coil. > **Has no valve.**

83 - Selects the length of time between valve purges. ***60 minutes = default.** Range: 30 to 120 minutes in 10 minute increments.

84 - Selects the time that a valve is in purge mode. ***180 seconds = default.** Range: 30 to 300 seconds in 10 second increments.

Wired inputs RS1 and RS2 = screw terminals S1 & S2 and relay number 7 (screw terminals 8 and 9).

See page 12 EQUIP-57 and page 13 EQUIP-73 and EQUIP-74 for programming instructions.

Relay number 7 (terminals 8 & 9) can be used as dry contacts or 24 volt ac contacts. For dry contacts remove J7.

Here is a drawing of the iPachie PCB showing the location of Jumper 7 (J7).

J7 is near the middle-top of the PCB.

Remove J7 for MV or Out of Limits or Occupancy or Open Door Control operation.

Also remove J7 to connect any device that is not 24vac (up to 30 volts 1 amp max).

Use Relay number 7 with wired controllers like those sometimes found in hotels. Also use to control fans or lights or a dehumidifier.

Some hotels are wired for controlling room lighting and electrical outlets based on occupancy.

Relay 7 can be connected to this system and then control the electrical circuits automatically.

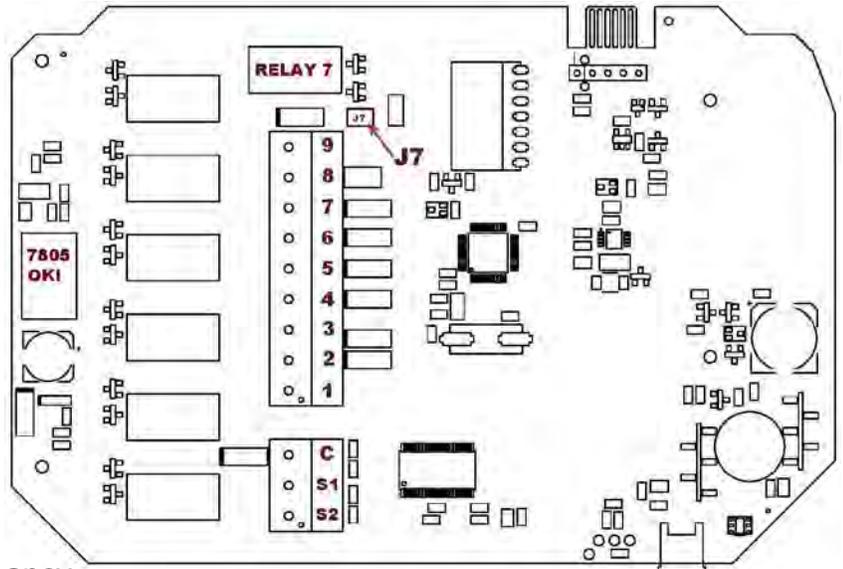
Relay 7 is connected to screw terminals 8 and 9 and can either be a 24 volt or dry contact output. It can be used to indicate occupancy in various ways. Sometimes it is as simple as connecting a light to screw terminals 8 and 9. Sometimes infrared lights and scanners are used so that the hotel staff will know if the room is occupied or unoccupied.

Also in a wired installation wired door and window switches and wired PIRs can be connected to RS1 and RS2 on screw terminals C and S1 and S2. See page 13 - #73 RS1 & #74 RS2 for instructions.

RS2 can be used for condensation drain Float Switch by connecting it to terminals C and S2. Set CONF-74 to 6. Disconnect the Float Switch from the HVAC and connect it directly to the iPachie.

For RS1 & RS2 you can use thermostat cable for short runs (30 feet or less) but for longer runs up to 150 feet use 22AWG - 1 pair twisted wire cable with foil shield; connect shield to earth ground.

RS1 and RS2 are low voltage (3 volt) inputs; do not connect S1 or S2 to the 24 volt circuits.



TERMINAL ASSIGNMENTS and EQUIPMENT TYPES.

EQUIP - 58 option #	Equipment Type	Terminal 1	Terminal 2	Terminal 3	Terminal 4	Terminal 5	Terminal 6	Terminal 7	Terminal 8	Terminal 9
#0	1H/1C	W1		24 volt	F1	F2	Y1	F3	ACC	ACC
#1	2H/1C	W1	W2	24 volt	F1	F2	Y1	F3	ACC	ACC
#2	1H/2C	W1		24 volt	F1	F2	Y1	F3	Y2	Y2
#3	2H/2C	W1	W2	24 volt	F1	F2	Y1	F3	Y2	Y2
#4	1H/1C HP		F3	24 volt	F1	F2	Y1	RV	ACC	ACC
#5	2H/1C HP	EMH/AUX 1	F3	24 volt	F1	F2	Y1	RV	ACC	ACC
#6	3H/1C HP	EMH/AUX 1	EMH/AUX 2	24 volt	F1	F2	Y1	RV	ACC	ACC
#7	2H/2C HP		F3	24 volt	F1	F2	Y1	RV	Y2	Y2
#8	3H/2C HP	EMH/AUX 1	F3	24 volt	F1	F2	Y1	RV	Y2	Y2
#9	4H/2C HP	EMH/AUX 1	EMH/AUX 2	24 volt	F1	F2	Y1	RV	Y2	Y2
#10	FC4P	Heat VLV	EMH/AUX 1	24 volt	F1	F2	Cool VLV	F3	ACC	ACC
#11	FC2P	Heat VLV	EMH/AUX 1	24 volt	F1	F2		F3	ACC	ACC
#12	MV	AUX heat		24 volt	F1	F2		F3	MV	MV
#13	1H	W1		24 volt	F1	F2		F3	ACC	ACC
#14	2H	W1	W2	24 volt	F1	F2		F3	ACC	ACC
#15	1C			24 volt	F1	F2	Y1	F3	ACC	ACC
#16	2C			24 volt	F1	F2	Y1	F3	Y2	Y2

Use the chart above to select the Option Number that describes the type of equipment being controlled by the Thermostat. The screw terminals are marked as below so that you can associate the label in the Thermostat to the chart above. The output from each screw terminal is changed to comply with the option number. **Please note that screw terminals 8 & 9 are used as wired auxiliary controls and both are connected to Relay 7 and are energized and de-energized simultaneously.** EQUIP-57 and EQUIP-58 determine which feature is enabled for the output of screw terminals 8 & 9. Remove jumper 7 for MilliVolt and other devices that do not use 24 volts ac. Max: 30 volts, 1 amp.

Terminal 9 is for ACC – Accessories

9	OCC	→ Occupancy - Out of Limits - Open Door Control
8	Y2	→ Second Stage Compressor or MilliVolt
7	RV	→ Reversing Valve
6	Y1	→ First Stage Compressor
5	F2	→ Fan 2
4	F1	→ Fan 1
3	R	→ 24 Volt Hot
2	W2	→ Heat 2
1	W1	→ Heat 1
Wire Color	C	→ Common
Wire Color	S1	→ Sensor 1
Wire Color	S2	→ Sensor 2

> inside back of Thermostat <

Wired Sensors can be either temperature sensors or door switches or a condensation drain Float Switch. See pages 13, 14 & 15 for details.

You can use thermostat cable for short runs only (30 feet or less). For longer runs (150 feet maximum) use 22AWG 1 pair (twisted) wire cable with foil shield; Alpha Wire #2211C or equivalent - 150 feet maximum.

ESP1 – ESP2 – CONF Parameters

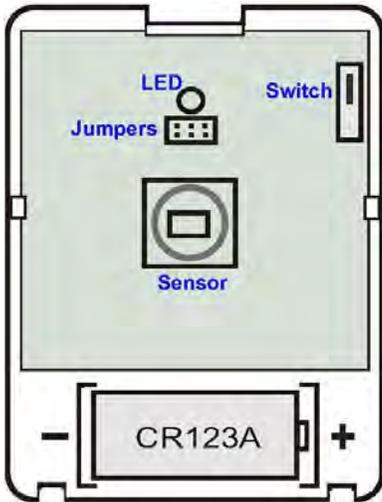
ESP1	Energy Saving Preset 1	ESP1	Default	Minimum	Maximum	Increment	Range
DSP	Selects what is displayed	0	0 = SP	1 = RT	2 = SR	NA	0 - 2
MCL	Manual Cooling Limit	1	70°F	60°F	85°F	1°F	60°F to 85°F
MHL	Manual Heating Limit	2	76°F	45°F	85°F	1°F	45°F to 85°F
ACL	Away cooling limit.	3	76°F	60°F	99°F	1°F	60°F to 99°F
AHL	Away heating limit.	4	68°F	45°F	85°F	1°F	45°F to 85°F
HCL	Hold cooling limit	5	77°F	60°F	99°F	1°F	60°F to 99°F
HHL	Hold heating limit	6	65°F	45°F	85°F	1°F	45°F to 85°F
VCL	Vacant Cooling Limit	7	78°F	60°F	99°F	1°F	60°F to 99°F
VHL	Vacant Heating Limit	8	60°F	45°F	85°F	1°F	45°F to 85°F
ODT	Open Door Timer	9	2 minutes	00 disabled	99 minutes	1 minute	00 to 99 min
AT	AWAY Timer	10	30 minutes	01 minute	720 minutes	10 minute	1 to 720 min
HT	HOLD Timer	11	4 hours	05 minutes	24 hours	1 hour	1 to 24 hours
VT	Vacant Timer	12	8 hours	010 minutes	24 hours	1 hour	1 to 24 hours
FHT	Fan Hold Timer	13	1 hour	00 disabled	24 hours	1 hour	1 to 24 hours
ESP2	Energy Saving Preset 2	ESP2	Default	Minimum	Maximum	Increment	Range
DSP	Selects what is displayed	14	1 = RT	0 = SP	2 = SR	NA	0 - 2
MCL	Manual Cooling Limit	15	68°F	60°F	85°F	1°F	60°F to 85°F
MHL	Manual Heating Limit	16	78°F	45°F	85°F	1°F	45°F to 85°F
ACL	Away cooling limit.	17	76°F	60°F	99°F	1°F	60°F to 99°F
AHL	Away heating limit.	18	70°F	45°F	85°F	1°F	45°F to 85°F
HCL	Hold cooling limit	19	77°F	60°F	99°F	1°F	60°F to 99°F
HHL	Hold heating limit	20	68°F	45°F	85°F	1°F	45°F to 85°F
VCL	Vacant Cooling Limit	21	78°F	60°F	99°F	1°F	60°F to 99°F
VHL	Vacant Heating Limit	22	65°F	45°F	85°F	1°F	45°F to 85°F
ODT	Open Door Timer	23	0-disabled	0-disabled	99 minutes	1 minute	0 to 99 min
AT	AWAY Timer	24	60 minutes	01 minute	720 minutes	10 minute	1 to 720 min
IT	HOLD Timer	25	6 hours	05 minutes	24 hours	1 hour	1 to 24 hours
ET	Vacant Timer	26	12 hours	010 minutes	24 hours	1 hour	1 to 24 hours
FHT	Fan Hold Timer	27	8 hours	00 disabled	24 hours	1 hour	1 to 24 hours
CONF	CONFIGURE	CONF	Default	Minimum	Maximum	Increment	Range
	Future Feature	28					
AOD	Advanced Occupancy Detection	29	1 = Enabled	0 = disabled	1	NA	0 or 1
FST	Fail Safe Timer	30	12 hours	0 = dis	24 hours	1 hour	1 to 24 hours
Unit	F/C	31	°F = 0	°C = 1	°F = 0	NA	0 or 1
OM	Off Mode	32	dis=0	dis	1=Ena	NA	0 or 1
DB	dead band	33	4°F	2°F	10°F	1°F	2°F to 10°F
DIF	differential	34	0.6°F	0.2°F	1.0°F	0.2°F	.2°F to 1°F
HAC	0=HC - 1=HAC - 2=HACE - 3=A - 4=C - 5=H	35	HC=0	HC=0	H=5	NA	0 to 5
CR	Cycle Rate	36	12	2	12	1	2 to 12
	Future Feature	37					
FRC	fan refresh cycle	38	1 hour	0 = dis	24 hours	1 hour	0 - 24
FRD	fan refresh duration	39	2 minutes	1 minute	10 minutes	1 minute	1 to 10
FRL	Fan Refresh Logic	40	dis = 0	0 = dis	1 = Ena	NA	0 or 1
FP	freeze protection	41	1 = on	0 = off	1 = On	NA	1 to 2
FPS	freeze protection setpoint	42	40°F	35°F	55°F	1°F	35°F to 55°F
TC	temperature calibration	43	0.0°F	-5.0°F	+5.0°F	0.2°F	-5°F to +5°F
TAWY	Transmit Away signal	44	dis=0	0=dis	1=Ena	NA	0 or 1
THNT	Transmit Hold signal	45	dis=0	0=dis	1=Ena	NA	0 or 1
TVCO	Transmit Vacant signal	46	dis=0	0=dis	1=Ena	NA	0 or 1
TODS	Transmit Open door signal.	47	dis=0	0=dis	1=Ena	NA	0 or 1
ODTT	Open Door Transmit Timer	48	0 instant	1 hour	24 hours	1 hour	1 to 24
TOLS	Transmit Out of Limits - Future Feature	49	dis=0	0=dis	1=Ena	NA	0 or 1
TPIR	Transmit integrated PIR signal	50	dis=0	dis=0	1=Ena	NA	0 or 1
RAWY	Receive Away Signal	51	dis=0	0=dis	1=Ena	NA	0 or 1
RHNT	Receive Hold Signal	52	dis=0	0=dis	1=Ena	NA	0 or 1
RVCO	Receive Vacant Signal	53	dis=0	0=dis	1=Ena	NA	0 or 1
RODS	Receive Open door signal	54	dis=0	0=dis	1=Ena	NA	0 or 1
PCP	PassCode protection	55	OFF=0	0=OFF	1=On	NA	0 or 1
DFLT	Return to factory default settings	56	OFF=0	0=OFF	1=On	NA	0 or 1

iPachie DoorMonitor and PIR installation instructions

No wiring is required to the doors or windows; one thermostat can receive signals from 40 door or window transmitters. A *DMT433* transmitter is installed on each door and window that you wish to monitor. iPachie thermostats can enroll up to 8 Entry door monitors and up to 32 Door/window monitors. A small magnet is mounted on the door and a *DMT433* transmitter is mounted on the doorframe. Install the battery in the transmitter and the *DoorMonitor* is ready to go. The three volt lithium battery is included with the kit and has an average life expectancy of three years (depending on use). **CGA recommends Energizer CR2450 batteries or equivalent.**

The transmitter is 1½" x 1" x ¾" and the magnet is 1⅝" x ⅝" x ½" .

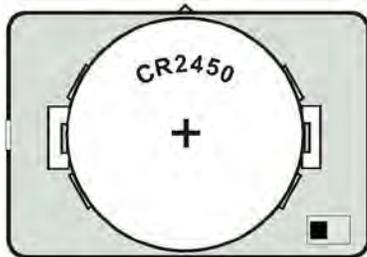
How it works: If a door is left open for an extended time period (usually 2 minutes) the thermostat will disable the heating & cooling system, and it will remain disabled until all monitored doors and windows are closed. A high quality metal film decal is provided for each door being monitored. This decal has a warning alerting the occupant that leaving the door open for a prolonged period of time will disable the heating & cooling system (HVAC).



To erase a transmitter from memory (un-enroll) enter the transmitter enrollment mode and scroll to the transmitter number that you wish to erase. Then press the MODE (cancel) button. **See page 6 of this manual for details.**

To enroll a Passive Infrared (PIR) transmitter into the iPachie; enter the transmitter enrollment mode and scroll to **rPir**. Then scroll to the transmitter number that you wish to enroll (for example **Pir1**). Insert the battery into the PIR. Put the cover on the PIR; the number "1" stops flashing indicating it is enrolled. The battery has an approximate life of 3 years (depending on use). Replace with a **CR123A** lithium type as found in the photo departments of many stores. Use the mounting plate to install the PIR 7 feet above the floor. Do not aim the PIR at windows or other light source. A kitchen/dining area is usually a good location.

To enroll a new **DW** (door/window) transmitter into the iPachie enter the transmitter enrollment mode and scroll to **OdEr**. Then scroll to the transmitter number that you wish to enroll (example: **Od01**). The number "01" will be flashing on and off. Start with the magnet next to the transmitter (door closed); move the magnet away from the transmitter (door open). The Transmitter number "01" will stop flashing indicating that it has been enrolled.



To enroll a new **Entry door** transmitter into the iPachie enter the transmitter enrollment mode and scroll to **EdEr**. Then scroll to the transmitter number that you wish to enroll (example **Ed01**). Place the magnet next to the transmitter (door closed), wait 3 seconds; move the magnet away from the transmitter (door open). The Transmitter number "01" stops flashing indicating that it is enrolled.



When you take a new door transmitter out of the box you must insert the battery into the transmitter. The plus + will be facing you when the battery is installed correctly. Replace with an Energizer CR2450 Lithium three volt battery. Other batteries may not work. To remove the cover from the transmitter insert a flat screwdriver into the slot on the side or end and twist. **WARNING: Reinstalled the cover correctly or it will disable the HVAC system. The Tab on the end of the cover must be inserted into the Notch on the end of the mounting base.**

There is a V shaped mark on the side of the transmitter case; the magnet must be mounted on this side.

Align the magnet mark V so that it is not more than ¾ of an inch from the magnet.

Use the screws (supplied with transmitter) or the double sided tape and superglue to attach the transmitter and magnet to the door and doorframe. If you use the tape you must clean the surface (door and doorframe) first then use a few drops of superglue on each part (transmitter and magnet). This will prevent moisture from getting under the tape which could cause it to separate from the door or doorframe. If you use the screws make sure that the head of the screw is all the way down into the counter sink hole so the screw does not come in contact with the transmitter circuit board. **Drill the holes for the screws using a 3/32" bit for wood or a 7/64" bit for metal. When mounting the magnet on a steel door or doorframe you must use the plastic spacer provided in the hardware kit or else the magnet will lose its power over a period of time (2 to 4 years).**

> Quick Guide <

Energy Saving Presets; ESP1 & ESP2 > To switch from P1 to P2: Press and hold the **F/C** button and the **MODE** button for **3 seconds**; “0000” appears on the upper display and “d1” appears on the lower display. The first “0” will begin to blink on and off. Use the **up** and **down** buttons to enter the first digit of the **PassCode**. Now press the **FAN** button. The second “0” starts to blink; enter the second digit. Press the **FAN** button. The third digit starts to blink; enter the third digit. Press the **FAN** button. The fourth digit starts to blink; enter the fourth digit. Press the **F/C** button. **P1** or **P2** will appear on the display (depending on the one enabled). Use the **up** or **down** button to change it to the one you prefer then press the **F/C** button. **The thermostat shifts into the normal operating mode and the Energy Saving Preset that you have selected.**

Energy Saving Preset 1 = P1

ESP1 default Settings:

- > **Occupied Cool Limit; ESP1-01 = 70°F.**
- > **Occupied Heat Limit; ESP1-02 = 76°F.**
- > **Open door timer; ESP1-09 = 2 minutes.**
- > **Away timer; ESP1-10 = 30 minutes.**
- > **Away Cool Limit; ESP1-03 = 76°F.**
- > **Away Heat Limit; ESP1-04 = 68°F.**
- > **Hold timer; ESP1-11 = 4 hours.**
- > **Hold Cool Limit; ESP1-05 = 77°F.**
- > **Hold Heat Limit; ESP1-06 = 65°F.**
- > **Vacant timer; ESP1-12 = 8 hours.**
- > **Vacant Cool Limit; ESP1-07 = 78°F.**
- > **Vacant Heat Limit; ESP1-08 = 60°F.**

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved could void your authority to use this equipment. 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.

INDUSTRY CANADA STATEMENT

This device complies with Industry Canada license-exempt RSS standards. 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.

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.

Main Menu: To enter the Main Programming menu Press the **F/C**, the **Up** and the **Down** buttons simultaneously for three seconds; **ESP1** will appear on the upper display. Scroll thru the headings with the **up** and **down** buttons to find the menu you want to change then press the **FAN** button. Use the **FAN** button to scroll thru the chosen menu and the **up** and **down** buttons to change the parameter settings. Press the **F/C** button once to return to the Main menu or twice to save changes and exit the programming mode and return to normal operation. **If you do not exit manually the iPachie will exit automatically after 5 minutes and it will not save any changes.**

Four Digit PassCode:

CGA strongly recommends that you turn on the PassCode feature and create a four digit number for security purposes; this will keep unauthorized persons from accessing your custom parameter settings. **See page 3 for details.**

Test Mode - press both the up ▲ and the down ▼ buttons for Five seconds; “RUN” appears on the display.

The Test Mode will exit automatically to the Manual mode after five minutes.

Test mode shows the room temperature even if the thermostat is not programmed to do so.

Test mode also changes the Open Door Timer (ODT) to instant so the DoorMonitors can be tested more quickly.

To exit the Test mode press the **F/C** button once.

Service Mode - press both the up ▲ and the down ▼ buttons + the **MODE** button; press all three for 3 seconds.

This mode is for the HVAC technician to service the heating and cooling equipment. **See page 4 for details.**

To exit the Service mode press the **F/C** button once.

Enrollment Mode - press both the up ▲ and the down ▼ buttons + the **FAN** button; press all 3 for 3 seconds. Press the **FAN** button to scroll thru the Transmitter Enrollment Menu. It starts in the transmitter **tESt** mode then **EdEr** then **OdEr** then **rPir** then **iPEr**. Use the up and down buttons to navigate thru the transmitter numbers (**Od01**, **Ed01** etc). To exit the enrollment **tESt** mode press the **F/C** button once or to exit one of the Enrollment modes press the **F/C** button twice. **See page 5 for details.**

To cause the iPachie to transmit a Test signal with its ID code; go to the Enrollment **tESt** mode and press the **MODE** button. Each press of the **MODE** button sends a test signal.

To send a PIR test signal go to Enrollment mode “**rPir**” and then press the **MODE** button.

iPachie™ Optional Equipment and Sensors

DoorMonitor – up to 40 doors and/or windows can be monitored by



Each iPachie™ used in the dwelling.

Disables HVAC system when a door or window is open.

PIR occupancy sensor



up to 8 can be used with each iPachie.

Aids occupancy detection in large dwellings

And Commercial buildings.

FLEX Receiver



Universal appliance control unit

has four different operating modes.

The FLEX can control virtually any appliance based on occupancy.

WaterGate



Controls Water Flow based on occupancy.

Can turn the water off to the whole dwelling

or just to the water heater.