housEvolve

User Guide

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Introduction

Thank you for purchasing a FREEVOLVE® product. We designed it to provide you with years of reliable service.

The following setup instructions will help you get up and running quickly, and while we hope all our products are self-explanatory, the enclosed user guide should cover all questions you may have. Please refer to the "Support" section of our website – www.freevolve.com – for additional information.

Warranty Information

All FREEVOLVE® products are covered against manufacturing defects for a period of 2 years from the date of purchase. During the warranty period we will replace any defective unit free of charge.

The warranty does not cover any problem caused by accident; abuse; neglect; improper installation, operation or modification; any misuse contrary to the instructions in this user guide.

How to Use this Guide

We wanted to make this guide as easy to read as possible. Detailed examples guide you, step-by-step, through all important aspects of the system. Our products are truly easy to use and understand. We believe that once you are familiar with the simple concepts behind the user interface, this will become that one user manual you will not need again. So please take a few minutes and read through the sections relevant to your purchase.

This document assumes the physical installation of all your housEvolve devices is complete apart from the final housEvolve network connections, if applicable.
For installation help please refer to the Installation Guide provided for each housEvolve system component.

This document is a complete reference to the following FREEVOLVE® products in the housEvolve line:

All these devices can work either in stand-alone mode or as part of a housEvolve system. When part of a housEvolve system, each device's functionality becomes available to you remotely, to any phone.

We recommend using this guide as follows:

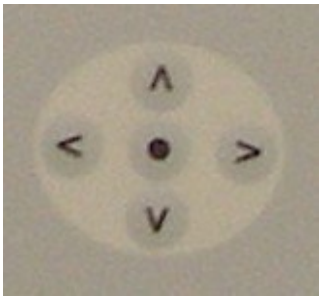
If you own a Thermostat and/or a Main Controller, please begin by reading the "housEvolve Navigation" section on page 4.

Please continue to the section(s) dedicated to each of your housEvolve devices. Because the Main Controller (if one is present) incorporates control capabilities for all other devices in the system, read this section last.

As always, if you have any questions please call us, toll-free, at 1-888-5-HEVOLVE (that is 1-888-543-8658) and we will be glad to help out.

housEvolve Navigation

All features offered by a housEvolve Thermostat or Main Controller are accessed and most can also be altered through the use of the 5-button navigation keypad shown below, in conjunction with the display. The only exceptions are those features requiring a numeric input on the Main Controller Module (ex: passwords or telephone numbers), for which the numeric keypad is used. Most of the information displayed on any screen is selectable and configurable. You simply navigate to the feature of interest and then act upon it.



Rules:

- The Left-Right keys (< >) are used to navigate to the feature of interest (indicated by selection markers… **>**like this**<**).
- The UP-Down keys (**^** v) are used to roll up/down through the available settings for the selected feature.
- The Select key (•) is used to accept the feature/value chosen or to perform an action (Ex: sending the display to the "Menu" screen).

All housEvolve devices enter a "stand-by" mode in the absence of user action. If the device is equipped with a display, this is identified by its backlight switching to a "dim" setting by the disappearance of the selection markers. Any button press in this mode causes the system to enter the "user" mode, defined by the screen switching to a bright backlight setting and the selection markers appearing around a default function.

EXAMPLE:

Let's go through the task of setting the clock. This process is the same on a stand-alone Thermostat and the Main Controller, which is why we chose this example.

a. With the system in stand-by mode, press any key. The screen will light up and the default function is selected.
b. Use the Left or Right (< >) key to move the selection markers until they surround the clock "day" feature. Here is what the top line of the display might look like:

73F >Wed< 12:01A

c. Use the Up or Down (**^** v) key to scroll through the days of the week until reaching the desired day. When you're done, press the Right (>) key to select the clock "hour" feature.

73F Fri >12<01A

d. Use the Up or Down (**^** v) key to increment/decrement the hour field. Note: keeping the Up/Down key pressed will allow the system to scroll through the hour field.

73F Fri > 7<01P

e. Pressing Select (•) on the hour field will allow you to toggle to and from Military time. Note that in Military time mode the AM/PM marker at the end of the field disappears.

73F Fri >19<01

f. Press the Right (>) key to select the clock "minute" feature.
g. Use the Up or Down (**^** v) key to increment/decrement the minute field. Note: keeping the Up/Down key pressed will allow the system to scroll through the minute field.

73F Fri 7>15<

h. That's it! The device will return to "stand-by" mode after a few seconds of user inactivity, keeping the newly chosen time, or you may immediately go on to perform other tasks.

Please continue to the section(s) dedicated to each of your housEvolve devices. Because the Main Controller (if one is present) incorporates control capabilities for all other devices in the system, read this section last.

Thermostat Module Guide

The housEvolve Thermostat, like all housEvolve system components, may be used in stand-alone mode or as part of a housEvolve system. There are very few differences between the two operating modes. We'll attract your attention when such differences are addressed by surrounding relevant text with 3 stars: ***.

Using the Thermostat Module

The housEvolve thermostat was designed to allow easy access to its functions. The most common tasks can be accomplished right from the main screen. Here is what the main screen might look like:

72F Wed 6:23P
68F Heat Menu

Let's become familiar with it:

-the top line shows the current temperature, current day and time

-the bottom line shows the desired (or target) temperature, the current Heating , Ventilation and Air Conditioning (HVAC) system mode (in this case, the heat is on) and "Menu".

Every item on this screen is accessible except for the current temperature (since this is a measured quantity).

***** Note that when the thermostat is used in a housEvolve system, the day and time settings cannot be accessed. This setting is supervised by the Main Controller. Set the day and time at the Main Controller and all thermostats in the housEvolve system will be updated automatically.*****

Most often you will just want to use your thermostat to change the ambient temperature or change the HVAC mode (Heat-A/C-Off). Both tasks can be accomplished right from the main screen. Here is how:

a. Start by pressing any button. The screen lights up and the selection markers **><** appear around the target temperature field:

72F Wed 6:23P
>68F< Heat Menu

b. Press the Up (^) key to increase the target temperature value or the Down (v) key to decrease it. Holding either key pressed will cause the target temperature to begin scrolling in the desired direction.

c. When you're done, press the Right (>) button to move the selection markers to the HVAC mode field.

72F	**Wed**	**6:23P**
63F	**>Heat<**	**Menu**

d. Use the Up (^) or Down (v) key to scroll through the available options. When finished, press Select (•). The thermostat goes back to stand-by mode with the new settings:

72F	**Wed**	**6:23P**
63F	**A/C**	**Menu**

Additional features

If your HVAC system is a "forced air" type, you may have noticed a switch on your old thermostat labeled "FAN". The available settings are usually labeled "Auto" and "ON". Setting this switch to "ON" causes the fan to run constantly, even after the Heat or A/C turns off. If you desire this functionality, it is available in the "Menu" screen of the housEvolve thermostat. Use the Left or Right buttons to navigate to "Menu" and press Select. The Menu screen looks like this:

>Program<	**Setup**
FAN Auto	**Done**

Again, using the Left (<) or Right (>) key, navigate to "Auto". Use the Up(^) or Down (v) key to change the setting to On, then press Select (•). The thermostat returns to the main screen and the "Fan On" setting is shown by a symbol that appears next to the HVAC mode:

72F	**Wed**	**6:23P**
>63F<	**A/C***	**Menu**

*****Note that if the HVAC mode is changed from the Main Controller or remotely, from a phone, the FAN setting is automatically switched back to "Auto"*****

Programming the housEvolve thermostat

The Thermostat Module can hold up no 9 separate program events. An event is defined as a change in the climate control target conditions. For example, if you would like the target temperature to change from 70F to 65F at 10:00AM, that is an event. Programming the thermostat consists of defining when an event occurs (day and time) and what the event consists

of (a change in temperature and/or a change in the HVAC operating mode – from heat to A/C, for instance).

An event can be applied repeatedly by defining its occurrence on a "weekday" as opposed to on a specific day like "Monday", or on a "weekend" day as opposed to "Saturday".

Let's run through a simple programming example:
From the main screen, choose "Menu" and press Select. (•)
On the next screen, choose "Program" and press Select (•).
On the next screen, choose "Events" and press Select (•).
The Event Selection screen looks like this:

>E1< Undefined
Edit Done

Scrolling up and down will let you access any of the 9 available events.
Using the Left (<) or Right (>) key, navigate to "Edit" and press Select (•).
The Event Screen looks like this:

>E1< Wkday 8:00A
45F Heat Done

Let's say the first thing we want to do is set the house at 68F every weekday morning at 6:45AM, Heat mode. Navigate to each parameter and alter it so that the event looks like this:

E1 Wkday 6:45A
>68F< Heat Done

Note that we must define at least one other event in order to have a useful schedule. Otherwise we could just as well have set the temperature at the main screen and accomplished the same thing.
Choose the current event (E1) and press the UP (^) key.
The screen shows the state of the next event:

>E2< Undefined
Edit Done

Choose "Edit" and press Select (•). The process now repeats just as for the previous event. Let's say we want to set the temperature to 60F every weekday night at 11:15PM. Navigate to each parameter and alter it so that the event looks like this:

E2 Wkday 11:15P
>60F< Heat Done

We now have a program that runs every weekday. Keep in mind that on Friday night the thermostat will lower the temperature to 60F. The next time that will change is, according to our program, on the next weekday at 6:45AM – which is Monday. Because you probably don't want your home this cold all weekend, more events need to be programmed to address Saturday and Sunday.
Let us choose Event3 to turn the temperature to 72F every weekend day at 9:00AM. Using the same steps as above, edit the event so that it looks like this:

E3 Wkend 9:00A
>72F< Heat Done

The last event in the program will lower the temperature back to 60F every weekend day at 11:45PM:

E4 Wkend 11:45P
>60F< Heat Done

That is it. Navigate to "DONE" and press Select (•). The system returns to the program screen:

Program >ON<
Events Done

Press Select (•) again and the thermostat returns to the main screen, with the current event displayed on the top line. In Stand-by Mode, the thermostat will now constantly switch the top display line between the current date and time and the program event that is currently running.

Notes:

- Changing the thermostat target temperature when a program is running will place it on Hold. To turn the program back On you must navigate to the Program Screen above and change the "HOLD" state to "ON"
- To erase the program, go to the Program Screen above and use the Up (^) or Down (v) key to scroll through the Program state options: On, Hold, Clear. Choose "Clear" and press Select (•). The program is erased.

- To erase and individual event, go to the Event Selection screen and scroll to the one you don't want anymore. Press Select (•). You will see its contents change to "Undefined". An event is not permanently erased until you leave the Event Selection screen, so if you erased an event by mistake navigate to "Edit" on that event and press Select (•). The event is restored.

Changing the temperature scale

The last setup feature you may like to know about is related to your ability to change the temperature scale (Fahrenheit to Celsius). This feature is available in the Setup screen (Navigate to Menu, press Select (•), navigate to Setup, press Select (•)). Please note that if you change the temperature scale any programmed events will be automatically erased.

Please note that the housEvolve thermostat contains a 9V battery. When this battery is low a "Replace battery" message appears on the bottom display line in Stand-by Mode. This battery is important to the thermostat functionality in stand-alone mode so when you see the low battery message please replace it as soon as possible.

Remote Operation

The following features are available from any phone or the Main Controller if the thermostat is part of a housEvolve system.

Alerts:

The housEvolve system will generate a “Temperature Out-of-Bounds Alert” if:

- The HVAC is in Heat mode and the current temperature drops more than 5F (or 3C) below the target temperature at any thermostat connected to the housEvolve system

OR

- The HVAC is in A/C Mode and the current temperature rises more than 5F (3C) above the target temperature at any thermostat connected to the housEvolve system

This alert is an early warning of a problem with the HVAC system. It could also be caused by a power failure.

The housEvolve system will generate a “Freeze Alert” regardless of the HVAC operating mode if the temperature measured at any thermostat in the system and/or Main Controller falls below 40F (5C).

The housEvolve system will generate an “Overheat Alert” regardless of the HVAC operating mode if the temperature measured at any thermostat in the system and/or Main Controller climbs above 90F (32C).

Control:

You can check the current temperature, target temperature and HVAC mode at every thermostat in the system.
You can set the target temperature at every thermostat in the system to any value between 45F and 85F (7C and 29C).
You can set the HVAC operating mode (Heat, A/C, Off) at any thermostat in the system. Note that this change will be automatically applied to all thermostats in the system.

Garage Door Controller Guide

The Garage Door Controller is designed to work in parallel with your wireless garage door opener and wall button. It provides remote access to your garage door through the phone or from inside the house through the Main Controller interface.

Note: If you do not intend to use the optional Keypad Module, the Garage Door Controller setup is complete.

The optional Keypad Module is designed to provide a local means of opening/closing the garage door. It is also equipped with 3 indicator lights: Green, Yellow and Red. These indicators provide useful local information as to the operational state of the Garage Door Controller Module.

- **Blinking Yellow:** No access code is defined (device just installed). Keypad will not allow door control until an access code exists
- **Solid Green:** Device OK
- **Solid Green, Solid Yellow:** The Garage Door Controller could not verify that the door completed opening/closing after activation (this condition is also reported to your phone by the housEvolve alert system).
- **Blinking Green, Blinking Yellow:** Keypad is accepting a change of access code.
- **Solid Green, Blinking Yellow:** Device OK, in the process of accepting the access code.
- **Solid Yellow:** Wrong access code was entered too many times. Keypad is locked out for 10 minutes (this condition is also reported to your phone by the housEvolve alert system). Door control is not possible from the keypad during the timeout period but continues to be available remotely (over the phone) or from the Main Controller.
- **Solid Red:** The keypad is damaged and cannot accept an access code (specifically, one or more keys are detected stuck). Door control is still available remotely or from the Main Controller.
- **Blinking Red:** There is a power failure. Door cannot open.
- **Blinking Red, Solid Yellow:** Keypad cannot communicate with the Garage Door Controller. Remote door control may still be available.

Basically, if the Green light is on, you can open the door from the keypad. Otherwise there is a problem.

Local Operation:

Using the Keypad Module:

- If an access code is already defined, begin typing it. As soon as the first digit is recorded the yellow light begins blinking to show you that the keypad is accepting the code.
- If you make a mistake, press CLEAR. The keypad will beep twice and the blinking yellow light turns off. You may immediately begin re-entering the access code.
- When you're done, press ENTER.
  - If the password is correct, the keypad will beep 3 times and the garage door will open/close
  - If the password is incorrect, the keypad will beep 1 time.
  - If an incorrect password is entered 5 consecutive times in 10 minutes, the keypad will lock out and will not accept a code for the next 10 minutes. This condition is indicated by a solid yellow light.

Changing the Keypad Module access password

If the Garage Door Controller Module is used as a stand-alone device, the keypad access code can be changed as follows:

- Using a pen or another pointy object press the "PWD" recessed switch on the side of the Garage Door Controller Module enclosure. The keypad will begin blinking the Green and Yellow lights.
- Within one minute begin typing the desired keypad access code using the Keypad Module keys. Press Enter when done.
- The keypad now only blinks a Green light. Re-enter the keypad access code to confirm accuracy. Press Enter when done.
- If the two codes match, the Keypad Module beeps 3 times and the light switches to solid Green.
- If the codes do not match, the Keypad Module switches back to blinking both Green and Yellow lights and the process can start over.
- If a key is not pressed for more than a minute, the Keypad Module returns to stand-by.

Note: This method of changing the keypad access code is disabled when the Garage Door Controller Module is part of a housEvolve system. ***You can easily change this access code from the Main Controller or over the phone.***

Remote Operation

The following features are available from any phone or the Main Controller if the Garage Door Controller is part of a housEvolve system.

Alerts:

The housEvolve system will generate a “Door Timeout Alert” if, following a Door Open or Door Close command, the Garage Door Controller Module cannot confirm successful execution. For example, if you tell the door to close, the door encounters an obstruction on the way down and goes back up again.
NOTE: if the Open/Close Door command was not issued through the housEvolve system there will be no alert generated on failure to execute. However, you can always check the door state remotely.

The housEvolve system will generate a “Door Password Alert” if the Keypad Module is driven into Lockout Mode by too many incorrect attempts at entering an access code.

Control:

You can check the state of every garage door connected to the system (Open or Closed).
You can Open or Close each garage door connected to the system.

Water Presence Detector Guide

The Water Presence Detector Pod is designed to alert you to the presence of water in the monitored area. Each Pod has the ability to connect up to 6 Water Presence Sensors and will show which sensors have detected water.

Affected Area Mapping:
This concept was developed by FREEVOLVE to maximize the information provided by the Water Presence Sensors. This is particularly useful when used remotely.

The Water Presence Detector Pod will show the state of each of the 6 available Water Presence Sensors: dry, wet, not connected. The same information is provided to the housEvolve system, which will generate an alert for every sensor that detects water.
Using multiple water presence sensors in the area being monitored (around the water heater, for example) gives you the ability to judge the extent of the problem in two ways:

- By determining how many sensors are affected versus the number of sensors available in the area
- By determining the rate at which additional sensors in the area detect the presence of water

For example, let's say sensors 1, 2 and 3 are placed around the water heater. housEvolve calls you to report sensor 2 is wet. If sensors 1 and 3 remain dry, you can deduce the problem is most likely a small leak. If another alert is generated some time later reporting sensor 1 is wet too you will know the rate at which the affected area is expanding and, depending on sensor arrangement, possibly even the direction in which the expansion takes place.

An optional feature allows each Water Presence Sensor Pod to control up to 2 electrically actuated water valves. In stand-alone mode, the Pod will automatically shut off the water valves it is connected to if water is detected at any of its sensors. In a housEvolve system, the Main Controller can be instructed to shut off all valves in the system, regardless of which Pod they connect to, when any Water Presence Sensors detect water.

Local Operation:

Each Pod sensor jack has an indicator light next to it.

- If a sensor is not present, the light is off.
- If a sensor is connected but dry, the indicator light blinks every second.
- If the sensor is wet, the indicator light turns on. An audio alarm also sounds. You may turn off the audio alarm by pressing the SILENCE button on the sensor Pod. However, the audio alarm will reactivate if more sensors become wet.

On Pods equipped with valve control, the water valves shut off automatically every time a sensor becomes wet. You may also manually Open or Close the water valves by pressing the “OPEN” or “CLOSE” buttons.

Remote Operation

The following features are available from any phone or the Main Controller if the Water Presence Detector is part of a housEvolve system.

Alerts:

The housEvolve system will generate an alert for every water sensor in the system that detects water. One alert is generated for multiple water sensors that detect water at the same time.

Control:

If water valves are connected to the system you may turn them on or off remotely. Note that this control ability is global: all valves in the system will either turn off or on – there is no individual valve access.

Main Controller Guide

The housEvolve Main Controller can interact with you remotely (over the phone), or locally. Over the phone, housEvolve speaks to you through a voice interface similar to voicemail and, just like voicemail, you respond by pressing buttons on your phone's keypad.

The Main Controller can be used as a stand-alone device, providing current temperature information, Freeze and Power Failure alerts. However, its main function is as the central control point in a housEvolve system.

The Main Controller can communicate with up to 5 housEvolve Thermostats, 5 Garage Door Controllers and 5 Water Presence Detector Pods and gives you the ability to monitor and control the functionality of all these devices remotely.

The housEvolve system is powered by a rechargeable battery backup system, contained within the Main Controller hardware. This allows the system to continue to monitor and report alert conditions during a power failure.
NOTE: if your telephone service is supplied by an Internet Service Provider it will not be available during a power outage and the housEvolve system will not be able to communicate with you.

Configuration:
Whether used in stand-alone mode or part of a housEvolve system, three parameters need to be configured for the Main Controller to function properly:

- An access password, allowing you to identify yourself to the system over the phone and to alter certain protected settings.

- One or more phone numbers the system will call if it needs to report a problem. The system calls these "access numbers".

- Information that will allow the housEvolve system to work with your answering machine or voicemail service.

NOTE: If no password and no phone numbers are defined, the system's telephone functionality is disabled (it will not report problems and will not answer incoming calls).

1. **Defining a password:**
   Enter User mode by pressing any key. The screen activates and “No password” is selected automatically on the bottom display row:

   >No password< SETUP

   Press Select (•) to enter the setup screen, which looks like this:

   Edit phone password
   >NOT DEFINED<
   Edit access numbers
   DONE

   Use the number pad to enter the desired password. The screen will follow your entries:

   Edit phone password
   >554<
   Edit access numbers
   DONE

   When finished, press Select. The password will be masked from now on:

   Edit phone password
   >********<**
   Edit access numbers
   DONE

   You can always delete it or enter a new one.

This password will be required to accomplish the following tasks from the Main Controller keypad:

- Change this password
- Edit the list of phone numbers the system will call to report problems
- Change the Garage Door Keypad access code

You may now choose to begin entering one or more access phone numbers from this screen. Just navigate to “Edit access numbers” and press Select. Otherwise you can leave this screen by choosing “DONE” and pressing Select or by simply leaving the system alone. It will time out and move back to the main screen by itself after a few seconds.

Note that the main screen's bottom line has now changed because a password has now been defined:

>No phone #s< SETUP

Also note that you will need to enter the password just defined to add/change the access phone numbers.

2. **Entering access phone numbers:**
   You can configure up to 5 access phone numbers. When a problem arises they will be called, in order, at intervals of about 30 seconds, until you acknowledge receipt of the report. If the Main Controller Module does not receive a confirmation after going through all the numbers in the list, it waits about 25 minutes and starts the whole process again.

   Choose "No phone #s" from the main screen and press Select. This feature is password protected, so you will need to enter the password you just created. Once that is done, the display goes to the first access number screen:

   1: >NOT DEFINED<
   2: NOT DEFINED
   3: NOT DEFINED
   MORE DONE

   Use the number pad to enter a phone number – just as you would have to dial it from this location – into the selected slot. To choose a different slot, simply use the Left or Right button to navigate to it.

   Start typing the number using the numeric keypad. The screen will follow along:

   1: >17325551234<
   2: NOT DEFINED
   3: NOT DEFINED
   MORE DONE

When finished, press Select. The number moves to the right of the screen and the selection markers move to the next slot.

1: 17325551234
2: >NOT DEFINED<
3: NOT DEFINED
MORE DONE

Note that if you simply move away from the current entry without pressing Select, your entry will be abandoned.

To enter another number, simply repeat the process:

1: 17325551234
2: >17325551235<
3: NOT DEFINED
MORE DONE

To enter more than 3 access numbers, choose “MORE” and press select. The remaining number slots become visible. When finished, choose “DONE” and press Select. You device returns to the main screen. You will notice that the “No phone #s” message is now gone, replaced by “RINGS: VM”.

3. **Configuring incoming call operation:**

housEvolve can also answer incoming phone calls, thereby making its monitoring and control capabilities available whenever you want to make use of them. However, because the system shares incoming call functionality with members of the household and the local answering system, there must be a way to clearly indicate when housEvolve is the intended recipient of the call. This is done through ring signal manipulation.

The default answer setting is “VM”, which stands for Voice Mail. This setting has the advantage that it can allow housEvolve to work in conjunction to either a voicemail system (this feature is provided by the phone company and some people prefer it to a traditional answering machine) or an answering machine.

- To access the housEvolve system remotely using the VM feature, dial your home’s phone number and allow it to ring twice. Hang up and call it back within 3 minutes. The housEvolve system will answer the phone after the first ring of the second call.

While universally compatible with every type of answering device, this calling method can feel difficult or annoying because you have to hang up and then dial again. If you don't use voicemail (i.e. you have either an answering machine or no answering system at all), you can configure the Main Controller Module to answer the phone without having to make two calls:

- Check the number of rings your answering machine is set to. Usual settings are 2, 4 or 6 rings. If the machine is configured for 2 rings please change the setting to either 4 or 6.
- Navigate to the "RINGS VM" feature on the Main Controller.
- Use the Up or Down keys to scroll through the available settings and chose the number that matches your answering machine (ex: "RINGS 4")
- Unplug the answering machine's phone cord from the wall jack and connect it to the "OUT" port on the Main Controller.

- To access the housEvolve system using the answering machine rings feature, dial its phone number and let it ring until the answering machine picks up. Press the star (*) key on your phone sometime over the next 15 seconds. The housEvolve system will then take over and automatically cut off the answering machine. This prevents your session from being needlessly recorded, or the answering machine speaking over the housEvolve system.

NOTES:

a. If your answering machine malfunctions and does not answer after the specified number of rings, the housEvolve system will answer directly.
b. If you do not have an answering system, the housEvolve system will answer directly after the specified number of rings is exceeded. Just set the RINGS to 4 or 6.
c. The VM answering feature is always active, so even if RINGS is set to 4 or 6 you can still access the system using the VM method.

REMOTE USER IDENTIFICATION

After the initial setup, housEvolve will only allow a change to the access phone number list after the user identity has been verified (you will be required to enter the password). This allows the system to consider the access numbers as "trusted". When housEvolve finds a problem it calls one of the numbers on the list, reports the issue and then gives the user full access to its functions without requiring a password.

Conversely, an incoming call is not considered "trusted" and housEvolve will require the password to be entered before its features can be used.

If you forget your access password, there are two ways to change it:

- Request a call-back. When you call the housEvolve system it begins the session with the following message:

  "housEvolve. Enter access password followed by the pound key. <pause> Press Star to activate call-back."

  Press the Star (*) key on your phone. The system will say:

  "Enter the last seven digits of call-back number"

  At this time, type in the last seven digits of one of the phone numbers in the system's access number list. Because these numbers are trusted, when the system calls one of them it will not require a password. If the number you entered matches one on the list, the system will say:

  "Call-back mode on. Goodbye!"

  then hangs up. Wait by that phone because housEvolve will call you in about 30 seconds.
- Wait for a problem to occur. When the system calls you it has unrestricted access to all its functions, including password edit.

housEvolve Setup

A housEvolve system forms around the Main Controller Module, which is the central element of the housEvolve network. It is also the contact point between the remote user and all available monitoring and control functions.

Connecting housEvolve devices to the Main Controller:
The housEvolve network is flexible, allowing for a wiring configuration most appropriate for your needs. Peripheral components (such as Thermostats, Garage Door Controllers or Water Presence Detectors) may be directly connected to the “System Components” jacks on the Main Controller Module, or they may be “daisy-chained” (connected to each other) – as long as each network “chain” includes a connection to the Main Controller Module.

Initial system configuration

The Main Controller Module is designed to automatically recognize, configure and communicate with any peripheral module connected to the housEvolve system. Setting up a housEvolve system is as simple as connecting the peripheral modules to the Main Controller. The only requirement is that **during the initial system installation the Main Controller must be ON and each peripheral module must connect to the Main Controller one at a time. Once a peripheral module is added to the network, please allow a few seconds for the Main Controller to identify, configure and incorporate the capabilities of the new device into the system. Then a new peripheral module may be added.**

If your network wiring configuration involves peripheral modules that connect to the Main Controller through each other, work your way out from the Main Controller (ex: connect device 1 to the Main Controller first, then device 2 to device 1 and so on).

Note that this requirement is only applicable to the initial installation of a peripheral module. If, for example, you need to move the Main Controller to a new location at a later time, you may disconnect/reconnect everything in any order, without restrictions.

EXAMPLE:

1. Power up the Main Controller Module by connecting the enclosed 15V AC/DC adapter to a wall outlet and to the DC IN port and allow the device to complete its startup sequence. Here is what the main screen looks like:

   74F Wed 9:44A
   SYSTEM: No devices

   RINGS: 4 SETUP

2. At the main screen you can always check the current system configuration. In this case: “SYSTEM: No devices”
3. Connect a peripheral device. After a few seconds the peripheral is recognized on the screen:“SYSTEM: 1 device”. Repeat this step for every peripheral device in your housEvolve system. The Main Controller screen will continue to update the system info message.

74F Wed 9:44A
SYSTEM: 2 devices

RINGS: 4 SETUP

That's it! The housEvolve system is ready for use.

Local housEvolve Operation:

The Main Controller communicates with all devices connected to it. This is how it can relate, for example, the state of a garage door to your phone. This means that you also have access to all housEvolve devices directly from the Main Controller interface.

If installed in a convenient spot (on an end-table next to the living-room couch, for example), the Main Controller can be used as a central command point from where you can change your home's temperature or close the garage door.

Example: Let's assume your housEvolve system contains one Thermostat Module and one Garage Door Controller Module. The Controller's main screen will look like this:

74F Wed 9:44A
SYSTEM: 2 devices

RINGS: 4 SETUP

Press any button to enter User Mode. The default selection is "devices":

74F Wed 9:44A
SYSTEM: 2 >devices<

RINGS: 4 SETUP

Press Select to go to the device screen.

>Thermostats<
Garage Controllers

DONE

Press Select to access the thermostat screen:

HVAC state: >HEAT<
Thermostat 1

OK SCALE: F

The HVAC state for the entire housEvolve system can be changed here. Press the Up or Down key to scroll through the available choices: A/C, Heat, Off. This screen also lists all available thermostats. In this case, only one is present. To change this thermostat's target temperature, navigate to it using the Left or Right buttons, then press Select.

Thermostat 1: 68F
Target temp: >67F<

OK Remove

Press the Up or Down key to adjust the target temperature to the desired value. Press Select when done. The Main Controller will update the thermostat as requested and then return to the main screen.

The above example shows that even without a step-by step guide to every single feature offered by the housEvolve system, the user interface is consistent, simple and, to a great extent, self-explanatory.

housEvolve Reporting summary

Here is a summary of housEvolve's alert reporting capabilities:

1. **Freeze Alert** (temperature below 40F)
2. **Overheat Alert** (temperature above 90F)
3. **Power Failure Alert** (power out for more than 30min)
4. **Low Battery Alert** (battery level has reached critical levels and continued operation under power failure conditions is no longer guaranteed from this point forward).
5. **Temperature Out-of-Bounds Alert** (only available if the housEvolve system contains at least one Thermostat Module). Condition is reported in Heat mode if the temperature drops 5F or more below the target temperature. Condition is reported in A/C mode if the temperature climbs 5F or more above the target temperature. Alert not generated if the HVAC is Off.
6. **Door Timeout Alert** (only available if the housEvolve system contains at least one Garage Door Controller Module). Condition is reported if the garage door takes too long to open of close after it was instructed to do so.
7. **Door Password Alert** (only available if the housEvolve system contains at least one Garage Door Controller Module). Condition is reported if an incorrect password is entered too many times at the Garage Keypad Module.
8. **Water Presence Alert** (only available if the housEvolve system contains at least one Water Presence Detector Pod, used with at least one Water Presence Sensor). Condition is reported if any water sensor in the system detects the presence of water.
9. **Device Unavailable Error**. Condition is reported if the Main Controller is no longer able to communicate with any system component.

Reporting Method:
The housEvolve system will call, in order, each access phone number until receipt is acknowledged (press * # * on your phone, as instructed, after the report completes). If no confirmation is received the system will attempt to leave a message on the called number's answering system, then calls the next number on the list. When the end of the list is reached the system waits 25 minutes and begins calling again, starting with the first number.

When a report is acknowledged the housEvolve system will only call you again if another problem is detected.

Regulatory Compliance Information

This device, trade name FREEVOLVE, model housEvolve, 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.

This device complies with Part 68 of the FCC Rules.
ID: US:RP0AL05BHE_TI_10
USOC: RJ11C, RJ11W
FIC: 02LS2
SOC: 9.0Y

Product Safety Validation of Exemption
Declaration of Safety Extra Low Voltage GLIQ6838

This product is technically and legally EXEMPT from the USA's NRTL Listing and Canada's Standards Council Directives as it electrically powered by Safety Extra Low Voltage (SELF) and thus considered to have a Low Risk of Electric Shock, Fire, Personal Injury or Property Damage.