HouseMate

the Smart way to control your world

App version 1.1

Features:-

- Environmental control from your iPad or iPhone
- Learn and transmit InfraRed codes
- Control Z-wave devices over Wifi
- Optional built-in EasyWave controller
- HouseMate Switch drives iOS Switch Control
- Full control over iOS device

Important Notes:

1. This manual assumes that you are familiar with the operation of an iOS device and should be read in conjunction with its user manual.
2. Read this manual carefully before installing or operating your HouseMate.
3. Due to continuous product improvement Unique Perspectives reserves the right to update this Manual. This Manual supersedes all previous issues which must not continue to be used.
4. Any attempt to gain access to or in any way abuse the electronic components of the HouseMate renders the manufacturer's warranty void and the Manufacturer free from liability.

Contents

Introduction

Imagine being able to do everything from one device: Turn on your room lights and close the curtains. Change channels on your TV and turn up the heating. Answer a phone call and send some texts. Browse the Internet, play some music or watch YouTube. HouseMate hardware in combination with an iOS device enables you to do this and much more. Read on and discover why HouseMate, together with an iOS device is the smart way to control your world.

HOW DOES IT WORK?

HouseMate is a combined hardware/app solution that enables a switch user to fully control their iOS device and use it to operate other equipment in their home or work environment using InfraRed, EasyWave or Z-Wave signals.

TELL ME ABOUT
THE HARDWARE

The hardware is controlled using the built-in switch or by connecting an external switch or joystick. It can also be interfaced to R-Net and DX wheelchair control systems.

It is powered by a rechargeable Li-Ion battery and contains a powerful omni-directional InfraRed transmitter and a Bluetooth radio module.

The hardware communicates the switch presses to the iOS device. With Switch Control enabled the user can use scanning to control their device. If the user launches the HouseMate App a grid of environmental control options is presented. If the user chooses an option then the HouseMate App will instruct the HouseMate hardware to transmit the corresponding InfraRed code.

The Bluetooth connection between the iOS device and HouseMate is reliable and fast. When the user presses their switch the device wakes up immediately and is ready for use.

HouseMate can be fitted with a radio frequency Nurse call pager. This alarm can be activated at anytime by pressing the switch for a defined period of time. Importantly this feature is independent of the iOS device and Bluetooth connection.

A further possibility is the control of EasyWave or Z-wave devices. HouseMate can be fitted with an EasyWave transmitter on request. Z-wave requires the installation of a Z-wave enabled router such as a Vera 3 and Z-wave appliances such as sockets, light switches, thermostats etc. The iOS device communicates with the Vera using Wifi which in turn communicates with the appliances using Z-wave.

TELL ME ABOUT THE APP

The HouseMate app that has been specially designed for switch access and can be downloaded free from iTunes. It will run on any iOS device running 8.0 or higher.

The HouseMate app communicates with the HouseMate hardware using Bluetooth Smart. The app presents a grid of environmental control functions using icons and text. When the user chooses and icon the app instructs the hardware to execute the chosen function.

USE IT AS AN ENVIRONMENTAL CONTROL...

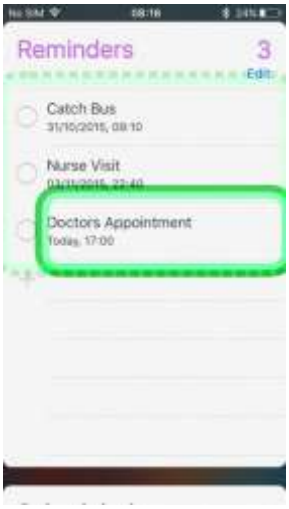
30 grids fully customizable for size and content. Comprehensive set of 600+ symbols with ability to import photographs and other pictures. 250 IR codes can be recorded into HouseMate or choose from a database of commonly used codes.

USE IT AS A MOBILE PHONE...

With iOS Switch Control and the HouseMate switch you can fully control your iOS device. Wake up the phone, answer and make calls, send and receive SMS text Messages. Manage and edit contacts. View missed calls and check your Voice Mail.

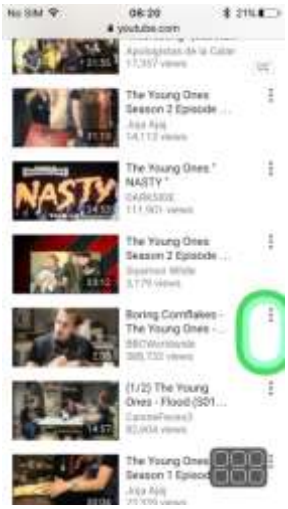
USE IT AS A PERSONAL ORGANISER...

Use an app of your choice, such as Reminders, to remind you of upcoming events. Reminders can be scheduled to go off at intervals before an event to ensure that you have plenty of time to plan and prepare.



USE IT FOR FUN AND ENJOYMENT...

Switch accessible MP3 player? Switch accessible camera? Switch accessible Internet? Yes, yes and yes! In fact you can control any app installed on your device using iOS Switch Control.



WHAT ARE THE KEY FEATURES?

Hardware features

- Control of any device that can be operated by InfraRed signals including light switches, power sockets, bed controls and door openers.
- Powerful InfraRed learn/transmit hardware. Single codes, toggle codes, macros and safety codes can be recorded.
- Pre-recorded database of common InfraRed signals including GEWA, Possum, Siemens KNX, FellerBeamIt, UPC and SKY.
- Control of EasyWave devices with a built-in 32 channel RF transmitter.
- Control of Z-wave devices over Wifi using a Vera Z-wave router.
- Single switch, two switch and joystick inputs.
- Interface cables for R-Net and DX wheelchair control systems.
- Long-life rechargeable Li-Ion battery with mini USB charger.
- Audible low battery warning, Bluetooth connection, InfraRed transmit and charging status LEDs.

Software features

- Comprehensive, graphic based, environmental control.
- Large database of icons as well as the ability to choose images from the camera roll.
- Designed to be used in conjunction with the scanning features of iOS Switch Control.
- Control over third party apps using iOS Switch Control.
- HouseMate can be downloaded free from iTunes with automatic updating as new versions become available.
- Can be installed on iPads or iPhones running iOS 8.0 or higher.

1 Getting started

Note: If you have purchased a complete system from your supplier, including an iOS device, then the steps below have probably already been carried out. In this case all you need to do is confirm that your Bluetooth hardware connects with your device when you press your switch or joystick. When you have done this move on to Chapter 2.

1.1 Downloading the software

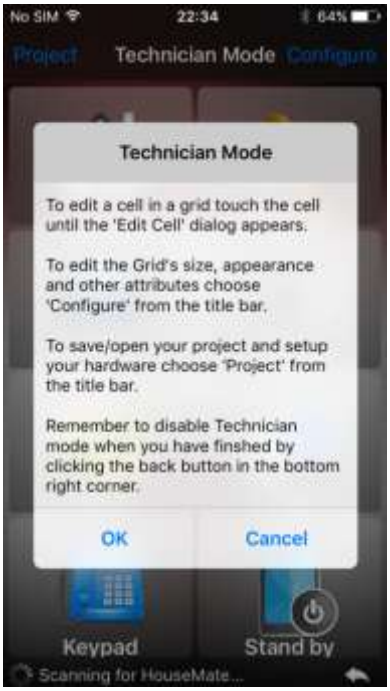
Install the HouseMate app from iTunes.
Search for "**HouseMate Home Control**" and click the install button.

After installation the HouseMate icon should appear on your home screen.

1.2 Enabling Technician Mode

Now, open the App. The example grid will appear.

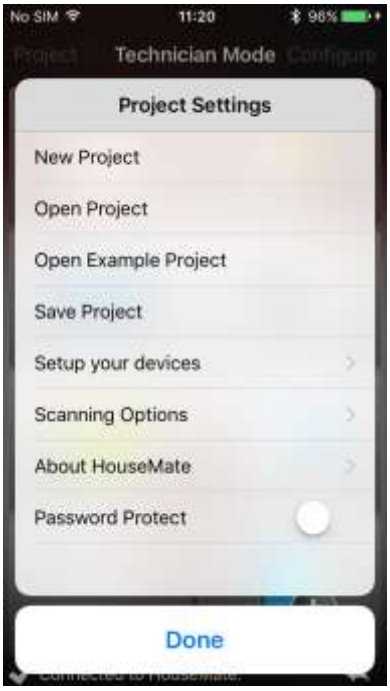
The first step is to enable **Technician Mode**. Press and hold the spanner icon in the bottom right hand corner of the screen for 5 seconds until the **Technician Mode** dialog appears.



Note: Every time you launch HouseMate the spanner icon will appear. However, after 60 seconds it will change to a padlock icon, thereby preventing the user from making inadvertent changes. If you run out of time return to the home

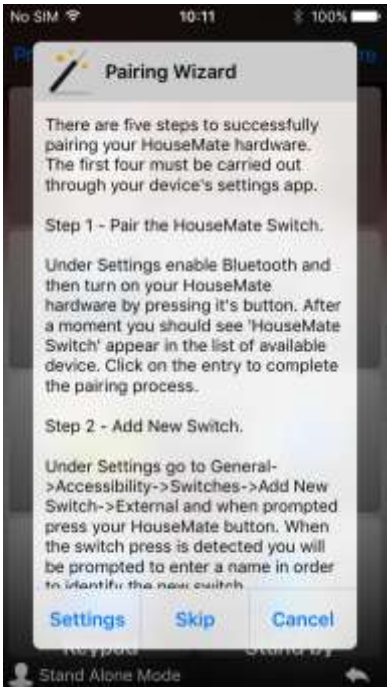
screen and start HouseMate again. Technician mode can also be password protected.

When technician mode is enabled a navigation bar appears at the top of the screen with two buttons, the Project button and the Configure Button. When you press either of these buttons on an iPAD you will be presented with a popup menu. On an iPhone you will be presented with an action sheet as in the screen shot below.



1.3 Setting up your device

Choose **Project->Setup your devices->HouseMate hardware->Pair your hardware.** The Pairing wizard is presented. Read the instructions carefully as these steps must be carried out manually within the iOS Settings page.



If you intend to use the touch-screen only then you can click **Skip** and jump to step 5 below.

Step 1: Pairing the HouseMate Switch
The first step is to pair the HouseMate Switch. The switch is used to drive the iOS scanning.

When you are ready choose **Settings** and you will be brought to the iOS Settings page. Navigate to **Settings->Bluetooth**. Turn on Bluetooth and then turn on your HouseMate hardware by pressing it's switch. After a moment you should see **HouseMate Switch** appear.

Click on the **HouseMate Switch** entry to complete the pairing process. After a moment it should move into the list of **My Devices** with the word **Connected** beside it.

Confirm that the blue LEDs on your HouseMate hardware are blinking.

Step 2: Add New Switch
You are now ready to set up the HouseMate switch to drive the iOS scanning. Navigate back to **Settings** and then choose **General->Accessibility->Switch Control->Switches->Add New Switch->External** and press your switch.

When the switch press is detected you will be prompted to enter a name for the switch. Choose “HouseMate”.

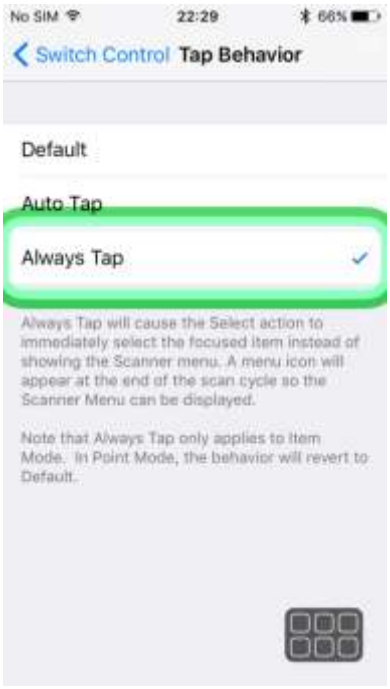
Step 3: Choose a switch action
Now you must choose the switch action that will occur whenever you press your switch. For scanning purposes this will be the **Select Item** action.

Under **Switches** choose the newly added HouseMate switch and then choose the **Select Item** action.

Step 4: Enable & optimize Switch Control
This is the last step to set up the HouseMate switch to drive the iOS scanning. Navigate back to Switch Control.

Tap Behaviour

We recommend setting the **Tap Behaviour** option to **Always Tap**. In this mode the option to carry out other actions is always displayed at the end of a complete screen scan, rather than every time you press your switch.



Large Cursor

For high visibility of the scanning cursor we recommend turning on the **Large Cursor** option.

Menu Items

If you only intend to control the HouseMate app with your HouseMate switch then choose **Menu Items->Top Level** and select **Hide All Items**. In this set up, after you launch HouseMate, there is no way for the user to return to the home screen or control other Apps.

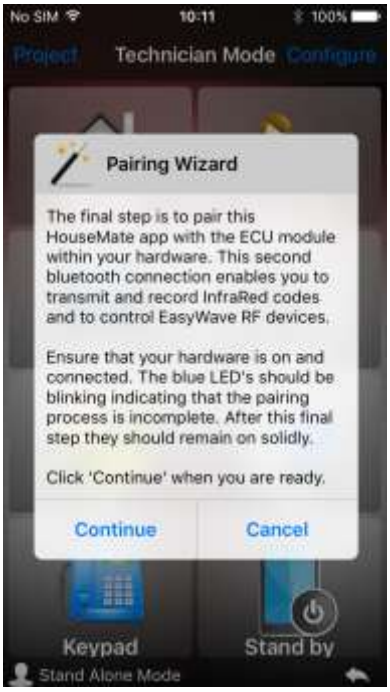
Switch Control

If you wish to start the iOS scanning at this point return to **Switch Control** and turn on the Switch Control switch. iOS will start scanning the screen objects and pressing your switch should select the currently highlighted object.

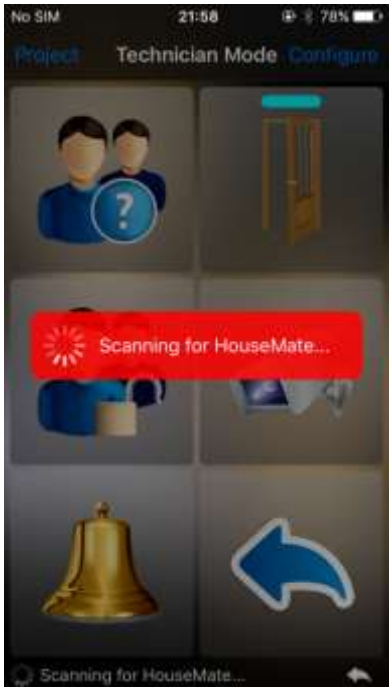
There are lots of other options under Switch Control that control the behavior of the iOS scanning including Auto Scanning Time, Loops and so on. Take some time exploring these different options so that the scanning can be optimized to suit the user's needs and abilities.

When you are finished, return to the HouseMate app for the final step of setting up your hardware.

Step 5: Pairing the ECU Module.
HouseMate contains a second Bluetooth module, called "ECU Module", that communicates with the HouseMate App for transmitting and recording InfraRed signals and other app specific functions. Pairing this module is the final step in setting up your hardware.



Make sure your hardware is on and then press **Continue**. A popup dialog will display the text **Scanning for HouseMate** and after a moment this should change to **Found HouseMate** and then **Connected to HouseMate**.



Your done! However, unless you want to start editing the grids and recording codes, be sure to exit Technician mode by tapping on the back arrow in the

bottom right corner of the screen. Notice that the icon should change to a padlock symbol.

If you switched on Switch Control you can now confirm that you can use the HouseMate switch to navigate the example grids and choose icons.

Although you have not recorded any InfraRed codes spend some time familiarizing yourself with the iOS scanning, entering and exiting grids and selecting cells.

2 Using HouseMate

In conjunction with HouseMate hardware the Housemate App allows you to control devices in your environment including lights, curtains, door openers, television, CD player, intercom system and so on. HouseMate hardware contains a powerful InfraRed transmitter and receiver that can record the signals from other remote controls. Virtually any electronic device that can already be controlled from a remote control can therefore be controlled from your iOS device.

HouseMate can be supplied with a 32 channel EasyWave transmitter fitted internally. This enables you to directly control EasyWave sockets, relays and other appliances using radio frequency. A third option is the control of Z-wave devices over Wifi by connecting your iOS device to a Z-wave enabled router such as a Vera.

When you launch HouseMate for the first time a set of default grids and icons are generated. These grids can be edited in technician mode and you can save your project to memory. The grids can be inter-linked so that you can create a tree like structure with one grid leading to the next. The bottom left cell of every grid is always a back key bringing you back to the previous grid. As a rule of thumb, and for ease of use, it is recommended not to create a grid structure more than 3-4 levels deep.

The top-level grid and the music player grid.

Assuming that you have already recorded infra-red signals, transmitting an infrared code is simply a matter of scanning to the desired key and selecting it. A progress dialog will appear while the signal is being transmitted. If you are a switch user the signal will be repeated as long as you keep your switch pressed.

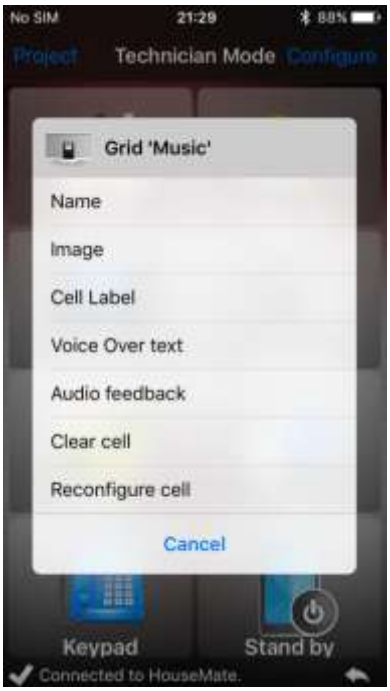
Tip: *The bell symbol in this default grid is Project Command 1, and as such will trigger the output relay in your HouseMate hardware or activate the RF alarm if fitted.*

3 Editing your Project

Note: Before you can make changes to the grids or edit the cells you must enable **Technician Mode**. When you launch HouseMate press and hold on the spanner icon for 5 seconds until the Technician Mode dialog appears.

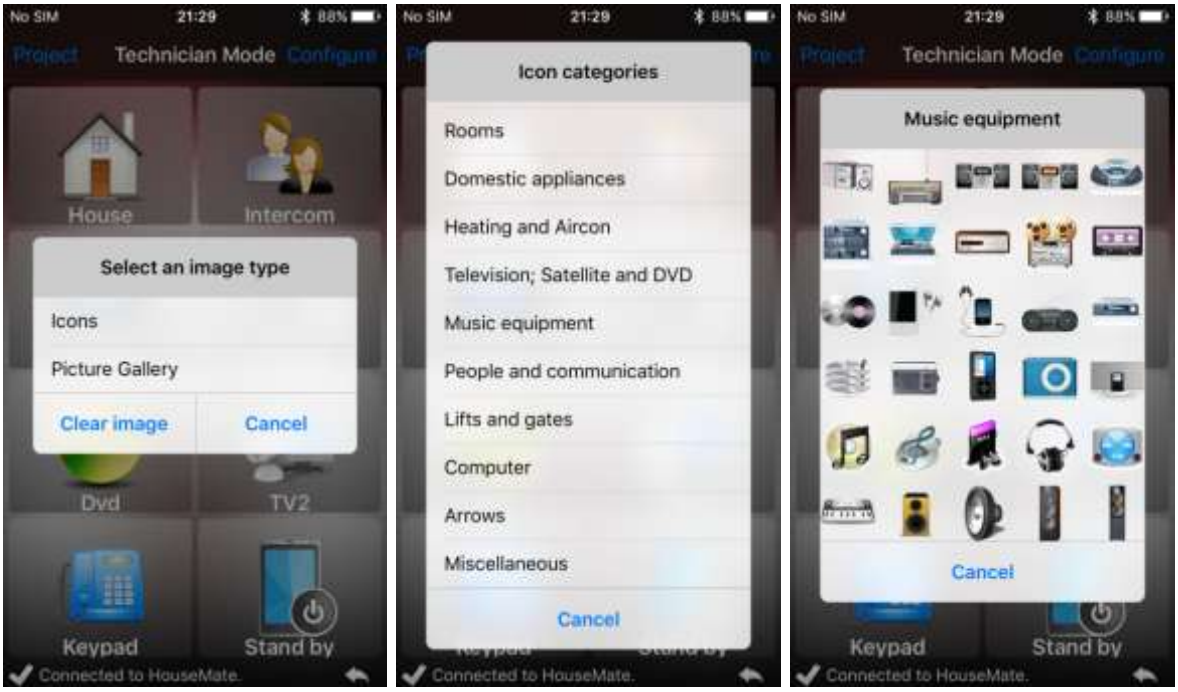
3.1 Editing a Cell

To edit a cell press and hold on the cell for a moment until a popup window appears. A different popup window will appear depending on whether you are editing a blank cell, a link to another grid or a Project Command. In the example below we are editing the cell that links to the Music grid.



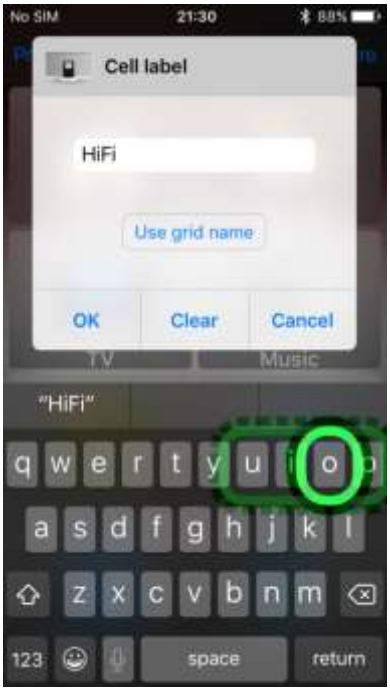
Changing the Image

You can change the image for the grid by either importing a picture or photo from your picture gallery or by choosing an icon from the pre-defined list of icons.



Changing the Name and Label

You can change the name or cell label of the grid. The cell label appears under the chosen picture. The grid name is the name that is used to identify the grid when reconfiguring a cell. In many cases they will be the same.



Voice Over text

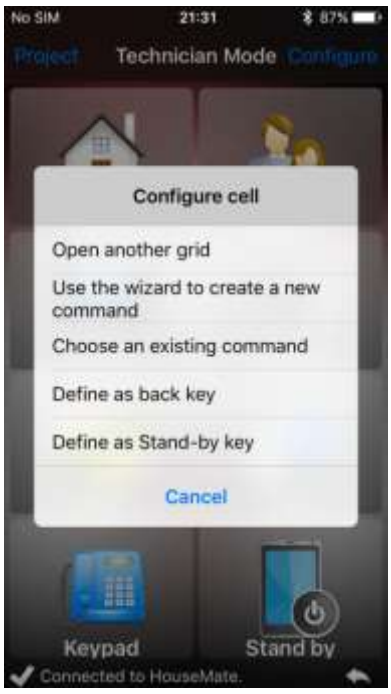
When **Speech** is enabled under **Accessibility->Switch Control** this is the text that is spoken out when the grid items are scanned..

Clear Cell

Clear cell erases the contents of a cell so that the cell can be reconfigured for a different action. Note that if the cell is linked to a grid it does not delete that grid. Similarly if the cell is linked to a Project Command it does not immediately delete the command but marks it for reuse when a new command is created.

Reconfigure Cell

When **Reconfigure Cell** is chosen the **Configure Cell** popup is shown. This allows you to either link to another grid, use the wizard to create a new Project Command or choose from the list of existing Project Commands defined within your project.



You can also define a cell as a back key or a stand-by key. **Back** will bring you back to the previous grid. **Stand-by** will instruct the HouseMate hardware to turn off and, if **Disable Lock Screen** is enabled, allow the screen to dim down. If you wish to locate the back key in a different

position disable the **Back keys** option. **Disable Lock Screen** and **Back keys** can be found under **Project->Scanning Options**.

3.2 Editing a Grid

To edit a grid, first navigate to the grid in question and then choose **Configure**.

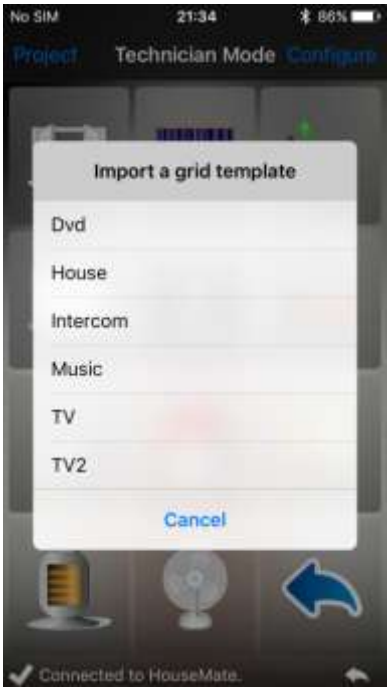
The **Configure Grid** menu provides several tools for populating and editing grids.

3.2.1 Reorder

You can re-order or re-position the cells in a grid two at a time. Simply press on the cell you want to move and then press on the position you want to move it to. The two cells will be swapped. Keep swapping cells in this way and when you are finished press **Configure** to exit 'Reorder' mode.

3.2.2 Templates

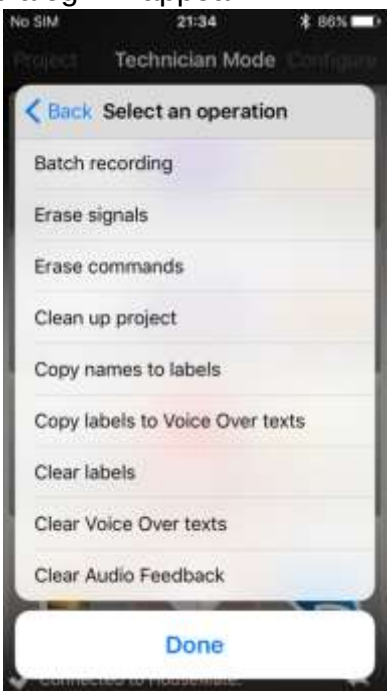
A number of grid templates are included in the software. To import a predefined grid template choose **Templates** from the **Configure Grid** menu. The following dialog will appear:



Then select the template you require. You will be prompted as whether you wish to continue as this action will replace the current grid, and, unless you have made a backup there is no undo.

3.2.3 Operations

You can apply a number of “batch” operations to the current grid which help speed up the configuration process. Choose **Operations** from the **Configure Grid** menu. The following dialog will appear:



Batch recording

Very useful for recording all the codes for a particular grid one after the other, rather than individually one cell at a time.

Erase signals

Erases the InfraRed, EasyWave and Z-Wave signals for each command defined in the current grid.

Erase commands

As well as erasing the signals this option also removes the commands defined in the current grid from the project.

Copy names to labels

If a cell is linked to a grid or a command then the name of that grid or command is used as the cell label. Applies to all cells in the grid.

Copy labels to Voice Over texts

Copies the label of each cell to the Voice Over text of each cell.

Clear labels

Clears every cell label in the current grid.

Clear Voice Over texts

Clears every Voice Over text in the current grid.

Clear Audio Feedback

Clears every Audio Feedback recording in the current grid.

Clear grid

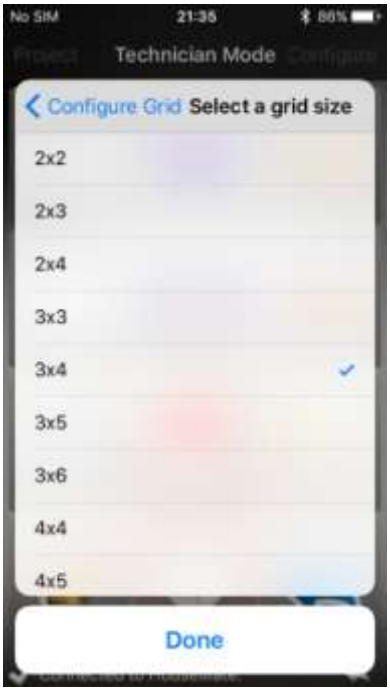
Clears the entire contents of the current grid giving you a blank grid to configure.

3.2.3 Grid size

You can choose from the list of grid sizes the size you want for the current grid.

Tip: If you have a fully populated grid and you reduce its size the commands that are no longer visible are NOT deleted. This can be helpful if you wish to expand the grid size at a later date without having to reprogram any commands etc.

In the example below the cells of the Home grid have been repositioned and the grid size has been reduced to 2x2.



3.2.3 Font size

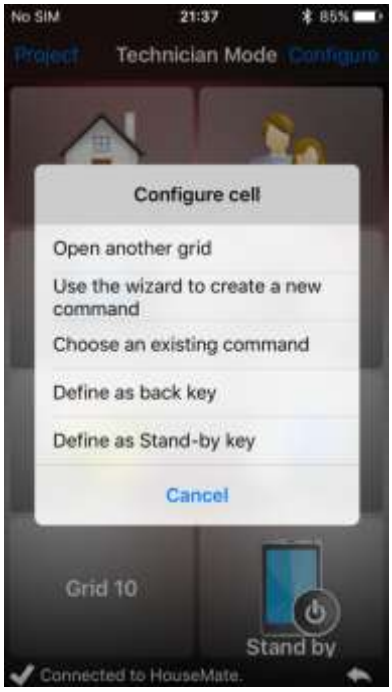
You can change the font size used for the cell labels throughout the project.

3.2.3 Colors

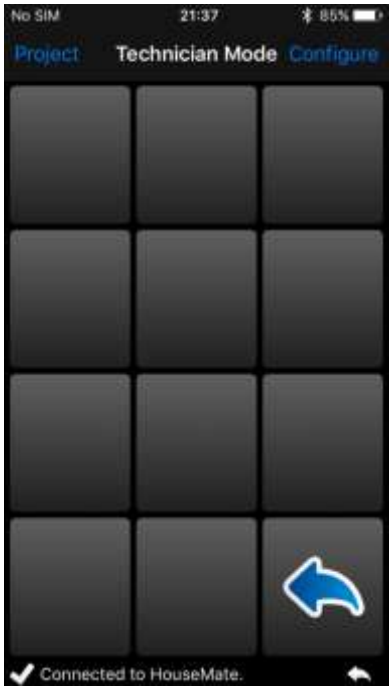
You can change the color of the grid background, key background and font.

3.3 Creating and populating a new grid

If none of the grid templates suit your requirements you can create a new grid yourself. First reconfigure a cell to link to a blank grid. Press on a cell and choose **Reconfigure Cell** from the popup dialog. Then choose the **Open another grid** option.



30 grids can be defined within HouseMate. Eight grids are pre-defined within the example project but if you create a new project you can define all 30 yourself. For now choose one of the unused grids, “Grid 10”, for example. An empty 3x4 grid will be assigned to the chosen cell. Click on the cell to open the empty grid.

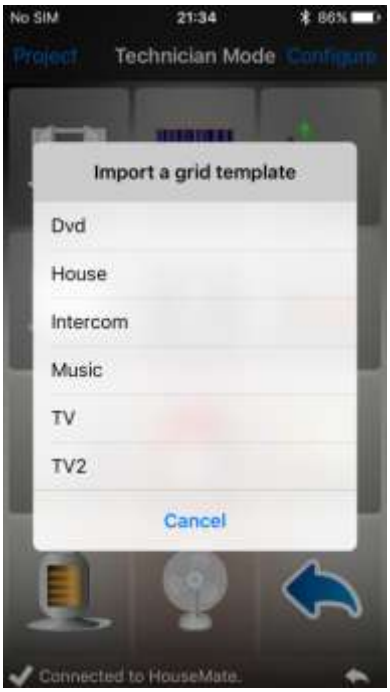


Now we want to populate the grid with commands. There are three ways to do this:

1. Importing a grid template.
2. Using the wizard
3. Populating each cell one at a time

3.3.1 Importing a Grid template

A number of grid templates are included in the App. To import a predefined grid template choose **Templates** from the **Configure Grid** menu. The following popup dialog will appear:



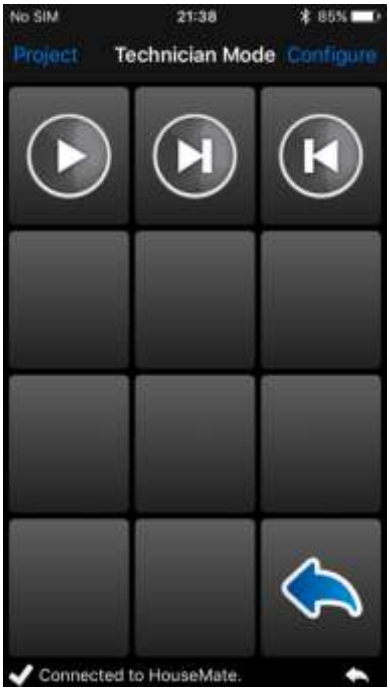
Then select the template you require.

3.3.2 Using the wizard

Choose Wizard from the **Configure Grid** menu.

First choose a category, then choose some commands within that category and then choose how you want these commands to populate your grid. This last option is useful if you want to add more commands at a later stage from the same or another category.

After the final step the grid will be populated with the commands you have chosen.



Note that the wizard tool in this section is making command suggestions from a small sub-set of the complete icon list. To access the complete icon list it is necessary to populate each cell one at a time as described in the next section.

3.3.3 Populating each cell one at a time

Make a long click on a cell and then choose **Use the wizard to create a new command** from the popup dialog.

Again there are three steps to the wizard. First select the icon category, then the icon for the command and finally a name for the new command. You can optionally choose to use the command name as the cell label during this final step. When you are done the new command will appear in the grid.

4 Recording InfraRed Signals

Difference between Project Commands and InfraRed signals

Note that there are no InfraRed signals associated with any of the Project commands at this stage. All that has been specified so far is the icon, the name and the cell label. In this way there is a distinction between Project Commands and InfraRed signals.

A **Project Command** is stored on the iOS device memory and simply consists of a name, icon and an assigned memory location within your HouseMate hardware which will contain the InfraRed signal data.

An **InfraRed signal** is data recorded and stored in the flash memory of your HouseMate hardware which is transmitted by IR when the Command is selected.

4.1 Recording an InfraRed signal

Before you start, make, sure that you have the Infra-red controls of the devices you want to control and that they have new batteries.

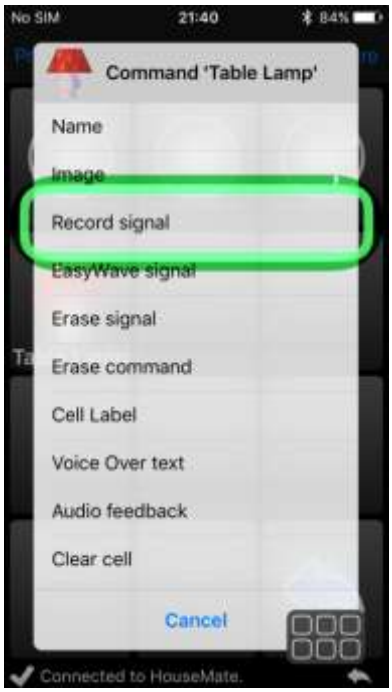
Position the Infra-red control facing into the left hand side of the HouseMate as in the picture below, at least one foot apart.

Warning: *Some fluorescent lights emit Infra-red radiation. When you are recording Infra-red signals be sure that you are not directly under fluorescent lighting.*

Note: *When recording infrared signals it is helpful to set the powerdown time of your HouseMate hardware to "Never when connected" to prevent the unit from turning off whilst you are preparing to record. See chapter 8 for details.*

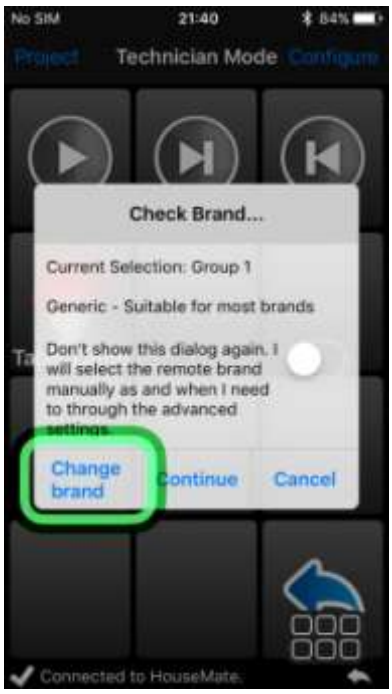
To record an InfraRed signal

Turn on HouseMate and wait until it connects. Then navigate to the grid that contains the Project Command that you want to record a signal for. Make a long click on the cell until the popup dialog for that command appears. This is called the Command dialog. Then choose Record signal.



There are four options associated with recording infrared signals. **Record single code, Record macro**, **Record toggle** and **Record push button code**. For now choose **Record single code**. You will be prompted to check the brand of remote control you are recording from.

In many cases it is not necessary to check the brand and the generic brand will suffice. However by specifying the exact brand HouseMate can reproduce a stronger more powerful signal. If the brand name of your remote is not listed choose group 1.

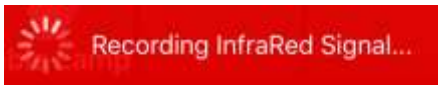


After you have chosen the brand the **Record single code** dialog will appear.

First test that the HouseMate hardware is receiving an InfraRed signal by pressing a button on the remote control. You should see the red InfraRed LED on the HouseMate hardware light up.

Next press and hold the button on the HouseMate hardware. When you are ready make a short press of the button on the remote control whose signal you want to record and then release the HouseMate button.

During this process you will see the following message:



Note that the actual recording of data does not begin until HouseMate starts receiving an InfraRed signal. Therefore there is no rush to press the remote button after you have pressed the HouseMate button. In fact you can keep the HouseMate button pressed for as long as you want. However it is important to keep the button press on the remote as short as possible AND then release the HouseMate button quickly after that. This will use up the least amount of memory.

When you are finished, test the recording by clicking on the Project Command. The HouseMate hardware should beep and you should see the **Transmitting InfraRed...** popup message.

That's it! You can record signals for all the commands in your grid using this method. However at some stage you will come up against toggle signals and may wish to record macros. These are discussed in the following sections.

4.1.1 Recording a toggle signal

Some remotes have a toggle function on single codes whereby the code is different if you press the same button two times in a row. Philips controls are noted for this and in this case it is necessary to use the method described below which records both copies of the code. If you used the **Record single code** method you would notice that the code, say Program Up, would work the first time you pressed it, but not the second or third time. Another reason to use this method is to conserve Macro memory because it forces you to use the single code memory space.

To record a toggle signal

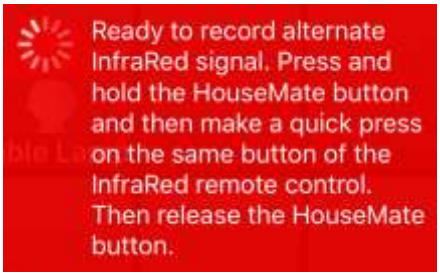
1. Make sure that you are connected to the HouseMate hardware. Make a long click on the command you want to record and then choose **Record signal->Record toggle signal** from the list of options.

2. Check the remote brand and change if required. Then the **record toggle signal** dialog will appear and the HouseMate hardware should be beeping regularly.

3. First test that the HouseMate hardware is receiving the InfraRed signal by pressing the button on the remote control. You should see the red InfraRed LED on the HouseMate hardware blink every time you press the button.

4. Now press and hold the button on the HouseMate hardware. When you are ready make a short press of the button on the remote control whose signal you want to record and then release the HouseMate button. While you are doing this the dialog text should change to just "**Recording Primary InfraRed Signal…"** and HouseMate should beep more rapidly.

5. If HouseMate did not detect any InfraRed signal the record operation will be canceled. Otherwise the following dialog should appear.



6. Now HouseMate is ready to record a second copy, or alternate, of the signal. This is how HouseMate records the toggle codes described earlier. As before press and hold the button on the HouseMate hardware. Then make a short press of the button on the remote control whose signal you want to record

and then release the HouseMate button. While you are doing this the dialog text should change to "**Recording alternate InfraRed signal…"** and HouseMate should beep more rapidly.

7. If the procedure has been successful HouseMate will stop beeping. You can test the recording by clicking on the Project Command. The HouseMate hardware should beep and you should see the **Transmitting InfraRed…** popup message. Do this twice to test both copies of the toggle signal.

A common mistake when recording toggle codes is to hold the button on the remote control for too long or to leave too long a gap between releasing the button on the remote control and then releasing the HouseMate button.. A quick press of the remote control button immediately followed by releasing the HouseMate button is all that is required. The memory size for recording toggle signals is only 2 seconds per signals. If you hold the button on the remote control for longer than this or leave too long a gap before releasing the HouseMate button, then the recording will fail, the following dialog will appear and HouseMate will beep continuously until you let go all buttons.

Another mistake is to press the HouseMate button and the remote control button at the same time. It is important to press and hold the HouseMate button before you press the remote control button so as to capture all the signal. You can leave as long as you want between pressing the HouseMate button and pressing the remote control button with no fear of using up memory because HouseMate only starts the recording process when it starts to receive an InfraRed signal.

4.1.2 Recording a Macro

Note: You can record up to 32 macros, each up to 15 seconds long. However if you record a macro that is less than 4 seconds it will not be stored in the Macro memory but in the memory for single codes and will not use up a Macro memory slot.

HouseMate allows you to record a series of Infra-red codes from the same or different remote controls on a single cell. HouseMate records in real-time meaning that the Infra-red signals and the pauses in-between them are recorded into memory. Each macro can be approximately 15 seconds long and this makes it possible to create long sequences of commands.

A good use of this feature is to record a series of **Volume Up** commands. When you select the **Volume Up** command HouseMate begins transmitting the sequence of **Volume Up** commands. You stop the sequence by pressing your switch or joystick a second time.

To record a Macro

1. Make sure that you are connected to the HouseMate hardware. Make a long click on the command you want to record and then choose **Record signal->Record macro** from the list of options.

2. Check the remote brand and change if required. Then the **Record InfraRed macro** dialog will appear and the HouseMate hardware should be beeping regularly.

3. First test that the HouseMate hardware is receiving the InfraRed signal by pressing the button on the remote control. You should see the red InfraRed LED on the HouseMate hardware blink every-time you press the button.

4. Now press and hold the button on the HouseMate hardware and then press, one after the other, the buttons on the remote control that you want to record (whilst continuing to hold the HouseMate button). Notice how the red InfraRed LED will light up every time you press a button on the remote control.

   While you are doing this the dialog text should change to "**Recording InfraRed macro…**" and HouseMate should beep more rapidly.

5. You can record approximately 15 seconds of InfraRed signal. When you have finished release the HouseMate button.

6. If the procedure has been successful HouseMate will stop beeping. You can test the recording by clicking the Project Command.

Tip: Before you record a sequence of commands try it out on the original remote first so that you can determine the pace at which you should press the buttons.

4.1.3 Recording a Macro with an OK command

Often, after transmitting a series of codes, the next code you would like to transmit is an **OK** or **SELECT** code. A good example would be a series of **PROGRAM+** codes. In this case, what you want to happen when you press your switch is not only to stop the **PROGRAM+** series but to also transmit a new code, in this case, the **OK** code.

HouseMate allows you to do this by recording two series of codes. In the example above the first series would be the **PROGRAM+** codes and the second series, or "OK command", would be just the **OK** code itself.

To record a series of Infra-red signals followed by an "OK" command.

1. Make sure that you are connected to the HouseMate hardware. Make a long click on the command you want to record and then choose **Record macro** from the list of options.

2. Check the remote brand and change if required. Then the **Record macro** dialog will appear and the HouseMate hardware should be beeping regularly.

3. First test that the HouseMate hardware is receiving the InfraRed signal by pressing the button on the remote control. You should see the red InfraRed LED on the HouseMate hardware blink every-time you press the button.

4. Now press and hold the button on the HouseMate hardware and then press, one after the other, the buttons on the remote control that you want to record – in this example a series of Program+ commands.

While you are doing this the dialog text should change to just "**Recording InfraRed Macro…"** and HouseMate should beep more rapidly.

5. When you have recorded enough Program+ codes release the HouseMate button **but then immediately** press it again before the "**Recording InfraRed Signals…"** dialog disappears. This action tells HouseMate to record a second series of codes that, more often than not, will be just a single code – the OK command.

   Note that there is no visual indication on the iOS device that you are recording an OK command. It is purely a feature of the HouseMate hardware.

6. Now press the OK button on your remote control and then release the HouseMate button.

7. If the procedure has been successful HouseMate will stop beeping. Note that you can only test the first series of codes when you click the command on the touch screen. To test the OK command you must select the cell using your switch. Select once to start the sequence and then press your switch a second time to stop the sequence **and** transmit the OK command.

Tip: A good use of this function is to create a scan of your favorite sky channels.

Record the following series of commands from a Sky remote: **GUIDE->FAVOURITES-> DOWN-> DOWN-> DOWN-> DOWN-> DOWN-> DOWN-> DOWN-> DOWN.**

For the end command record the **OK** command.

Now when the you select the cell with your switch an automatic scan of your favorite channels will take place on the TV. When you press your switch a second time the highlighted channel will be selected.

4.1.2 Recording a Push button code

A push button code, sometimes called a safety code, is only transmitted when the switch is kept pressed. It is useful for controlling a safety critical device such as the tilt on a bed. The signal will be transmitted only as long as the switch is pressed. When it is released it will stop.

A push button code is recorded in exactly the same way as a macro but when it is transmitted the macro will be stopped when you release your switch. Simply

follow the instructions above and record 10-15 seconds of the same code, say Tilt up. Then when you select that code with your switch it will only transmit when you have the switch pressed.

Notes:

1. Use push button codes sparingly, since being long macros they take up a lot of memory and backups will take a long time.
2. Push button codes can only be used when you are using a switch. i.e. they will not work from the touch screen.

Tip: *Push button codes are also useful for dimming lights. The light will keep dimming or brightening so long as you keep your switch pressed.*

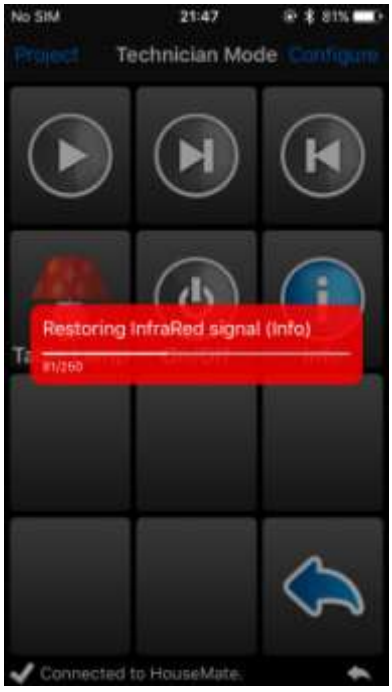
4.2 Using the signal database

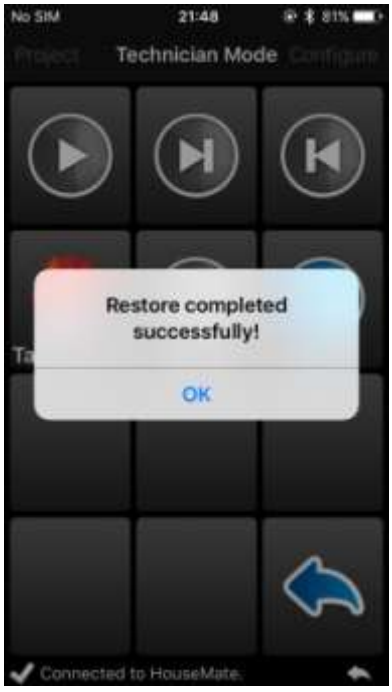
HouseMate is supplied with a number of InfraRed signal databases pre-installed. You can also create your own. The databases include SKY, UPC and GEWA and others and will be expanded over time to include other generic brands. You can download these signals into your HouseMate hardware as an alternative to recording them.

4.2.1 Downloading signals from a signal database

To open the signal databases choose **Signals** from the **Configure Grid** menu. The **Select a signal database** dialog will appear. After you choose a database the **Import and download signals** dialog will appear.

The left-hand list contains the signals stored within the database and the right-hand list contains the commands defined within the current grid. Pair the signal you want to download with the chosen command in the grid. In the example below we have paired the **Info** signal in the SKY remote database with the **Info** command in Grid 10.





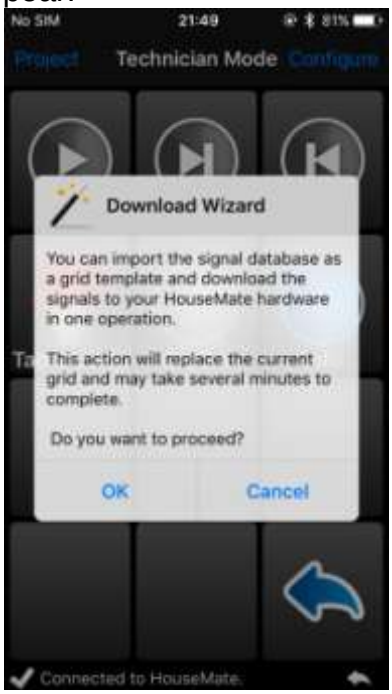
You can make more than 1 pairing and after you have done so click **Download Signals**. The InfraRed signal data will be transferred into the HouseMate memory. When the transfer has completed you can test the commands by clicking on them.

4.2.2 Importing a signal database

You can import a signal database as a grid template and download the signals it contains to your HouseMate hardware in one operation.

First open the signal databases by choosing **Signals** from the **Configure Grid** menu. The **Select a signal database** dialog will appear. After you choose a database the **Import and download signals** dialog will appear.

Instead of making pairings as before simply click **Wizard**. The following dialog will appear:



Be aware that this action will replace the current grid completely and, depending on the database size, may take several minutes to complete as the signal data is transferred into the HouseMate hardware.

The complete SKY signal database imported as a grids and downloaded to the hardware in one action.

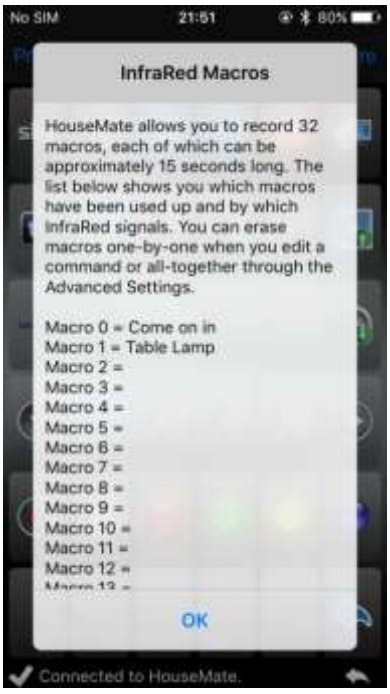
4.3 Examining the InfraRed Macros

Within HouseMate the InfraRed signals are stored in two 16Mbit flash memories. One is used for the 250 single InfraRed signals and the other is used for the 32 Macros. Sometimes it is helpful to examine the contents of the Macro memory to determine how many Macro slots you have used up and by which InfraRed codes. Remember that if you record a macro that is less than 4 seconds long it will be stored in the single InfraRed code memory and will not appear in this list.

To examine the Macro memory, make sure you are connected to the HouseMate hardware and then choose **Configure->Advanced**.

The HouseMate Advanced Settings window will appear. Choose **InfraRed settings-> InfraRed Macros** and a progress bar will be displayed as the Macro information is retrieved from the HouseMate hardware.

Followed by a list of the 32 Macros and which Project Commands they are assigned to.

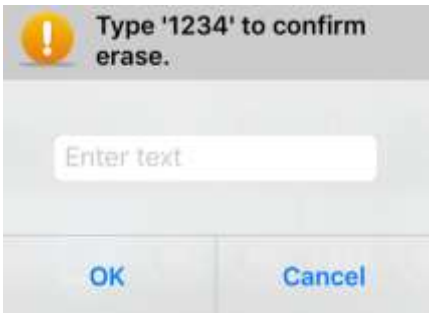


4.4 Erasing InfraRed signals

You can erase infrared signals individually by choosing the **Erase signal** option from the Command dialog or you can erase all the InfraRed signals and Macros using the Advanced settings.

To erase all infra red signals and macros

Choose **Configure->Advanced->InfraRed Settings->Erase all InfraRed signals**. A dialog box will appear requesting you to confirm this operation by typing “1234”.



After you have entered the text a progress bar will display the erase process. First the 250 single InfraRed signals are erased (these are stored in 8K blocks).

Then the 32 InfraRed macros are erased (these are stored in 64K blocks).

There is no Undo when you erase InfraRed signals. See chapter 9 on how to save your project before you carry out any erase actions.

4.5 Advanced Settings

Besides the **Remote Control Brands**, **InfraRed Macros** and **Erase all InfraRed signals** options already discussed the HouseMate Advanced Settings window gives you access to the following additional options.

4.5.1 Create a grid template

If you like a particular grid that you have designed and use it regularly then you can save it as a grid template. The template must only contain Project Commands and not links to other grids. The template files are saved to a folder on your device and will be available to you in all future projects you create. Furthermore you can copy the template folder from memory to other devices using iExplorer3 or other similar file transfer tool.

To create a grid template navigate into the grid you have designed and then choose **Configure->Advanced->Create a grid template.**

You will be asked to enter a filename for the template.

This is the name that will appear when you choose **Configure->Templates** and is also the name of the new folder that will be created in your iOS device memory.

4.5.2 Create a signal database

Creating a signal database is done in exactly the same way as creating a grid template except that the InfraRed signals that have been recorded/assigned for the commands in the chosen grid are transferred from the HouseMate hardware and saved with your project files.

In this way you can not only save a favorite grid layout but also the InfraRed codes that go along with it.

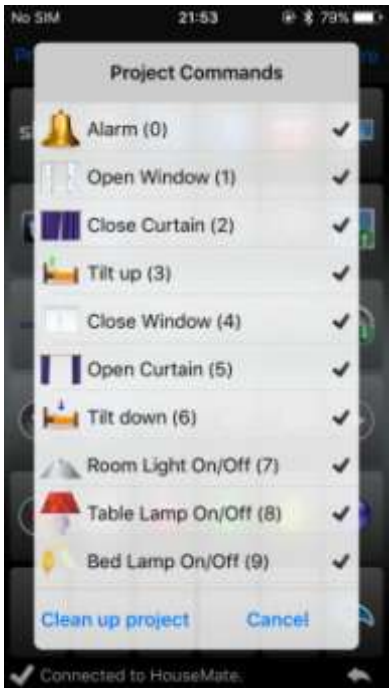
To create a signal database navigate into the grid that contains the signals you want and then choose **Configure->Advanced-> InfraRed Settings ->Create a signal database.**

You will be asked to enter a filename for the database and to confirm this action as it may take several minutes to upload the signal data from the HouseMate hardware.

To use the signals and/or grid at a later stage in another project choose **Configure->Signals** and then select the newly created signal database.

4.5.3 Project Commands

Choose **Configure->Advanced->Project Commands** to see a complete list of commands that have been defined within your project.



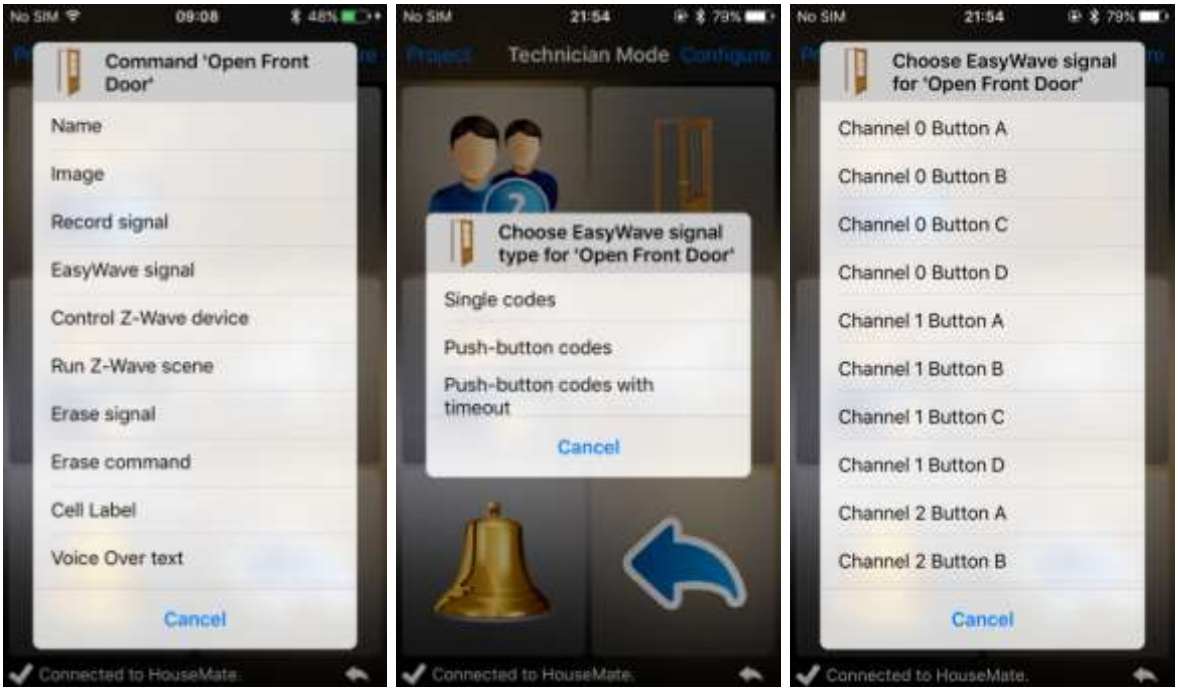
Commands with a tick mark are in use. Commands with a question mark are in use but are not visible because the grid that contains them has been reduced in size. Commands with an exclamation mark are in use by more than one grid. Finally, commands with no mark are no longer in use and will be recycled when a new command is created.

Alternatively you can choose **Clean up project.** This action will analyse the project for unused commands giving you the option to remove them if desired.

5 EasyWave

HouseMate can be fitted with a 32 channel EasyWave transmitter module. This allows you to control up to 32 RF devices such as light switches, sockets and relays. Visit www.eldat.de for more details on EasyWave and where to purchase EasyWave devices.

To program a cell for EasyWave simply select **EasyWave signal** from the Command popup dialog. Then choose the EasyWave signal you want for that devices. You will be warned if your HouseMate does not have the EasyWave module fitted or if it is faulty. Contact your supplier if this is the case.



Now, when you press that cell, the EasyWave signal will be transmitted. Follow the instructions on your EasyWave sockets and relays to program them to receive your new signals.

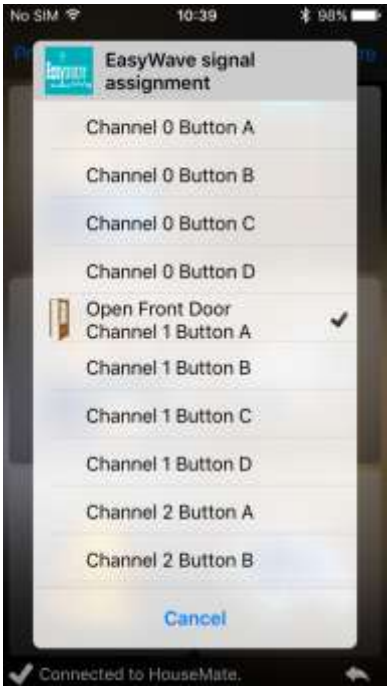
Notes:

1. The RF signals, or “Telegrams” are unique to each HouseMate. So, for example, Channel 0 Button B, will be a different EasyWave Telegram on every HouseMate. The reason for this is that they are intended to be used as security signals for opening doors and raising alarms.

2. It is not possible to backup EasyWave signals with your project files. If you need to replace a faulty HouseMate device you will need to either swap out the internal EasyWave transmitter or reprogram the system.

3. EasyWave signal Channel 0 Button A is reserved as the Alarm signal and will be transmitted if you make a hardware alarm, even if HouseMate is not connected to your iOS device at the time.

You can view what EasyWave signals have been assigned to what Project commands by choosing **Configure->Advanced->Easywave settings->EasyWave signals.**



6 Z-Wave

It is possible to control Z-wave devices using HouseMate and a MiCasaVerde Vera home controller. The Vera home controller is available from www.getvera.com and is essentially a wifi router with Z-wave capabilities.

The Z-wave enabled appliances within your home must first be paired with your Vera unit. Then, once your device is connected to the Vera unit over wifi it is possible to control these Z-wave devices from within HouseMate.

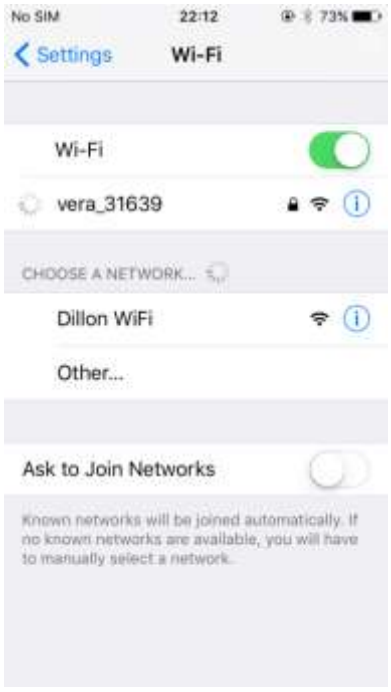
Before you start programming HouseMate you must pair your Z-wave devices with your Vera unit. For basic devices such as sockets this is a simple procedure. Put the Vera unit into pairing mode by pressing the Z-wave button at the rear of the unit and then press the corresponding button on the socket. It is beyond the scope of this document to go into more detail, such as naming devices and creating scenes and it is assumed that you have already carried out these configuration tasks. Refer to the Vera documentation for further details.

6.1 Pairing you device with your Vera unit

1. First make sure that Wifi on your iOS device is switched on.

2. If you are using your home router then connect Vera to a spare port on the router, turn it on, and wait for it to initialise (consult the Vera documentation for further details on setting it up).

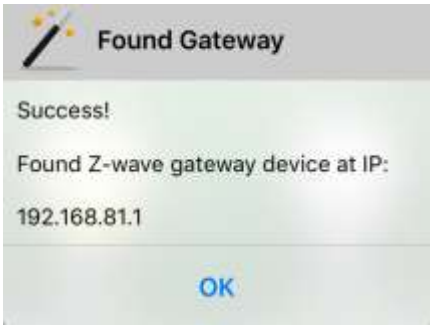
3. If you are not using a router make sure that Vera is configured to have a static IP address (usually 192.168.81.1) and make a direct Wifi connection to it on your device as in the screen image below.



Unfortunately it is beyond the scope of this manual to cover the above procedure – refer directly to Vera documentation.

4. Now launch HouseMate and choose **Project->Setup your devices->Z-Wave Gateway->Search for gateway.**

5. The HouseMate app will search for the Vera gateway and if successful will display the following message.



6.2 Controlling a Z-wave device

1. Navigate to the grid where you want to control your Z-wave devices.

2. Make a long click on the command you want to use. The familiar Command dialog will appear allowing you to edit the cell and record infrared signals etc. with two additional entries to allow you to control your Z-wave devices: **Control Z-wave device** and **Run Z-wave scene**.

3. Choose **Control Z-wave device**. A second popup dialog will appear containing a list of Z-wave devices that are paired with your Vera unit.

4. Choose the device you want to control. The **Select an action** dialog will appear containing a list of possible actions that you can perform with the chosen device. This list will vary depending on what Z-wave category the device belongs to.

5. Choose an action. After you have chosen it confirm that it operates as required by clicking the command. A short popup dialog should confirm the action that is being performed on the device.

Note: HouseMate only supports two Z-wave devices types directly. Appliance modules (including light switches and relays) and Dimmer modules. If you want

to control a device belonging to another device category then you must first create a scene that turns it on or off. Then you can run the scene as described in the following section to turn on or off the device.

6.3 Running a Z-wave scene

The major benefit of Z-wave is the ability to run scenes. Scenes reduces the complexity of the HouseMate grids and lowers the cognitive demands on the user.

A scene is simply a set of devices and associated actions to perform on them. For example an “Evening-time” scene might draw the curtains, turn on some lights and turn on the heating. A “bedtime” scene might turn off all the lights except the landing light and set the heating timer to come on in the morning. With only two commands a user can perform these otherwise complex tasks.

Scenes are created by connecting your Vera unit to a browser and using vera’s “dashboard” configuration utility (this can be done in Safari by choosing **Configure->Advanced->Z-Wave settings->Configure z-Wave**).

However, it is beyond the scope of this manual to cover this topic and it is assumed that you have previously created some scenes. In the example below there is an “All on” and an “All off” scene that have been previously created.

To run a Z-wave scene:

1. Make a long click on the command you want to use. Choose **Run Z-wave scene** from the popup dialog. The **Pick a Scene** dialog will appear with a list containing all the scenes that have been programmed into the Vera unit.

2. Choose a scene to run. To test, click on the command. You should get a popup confirmation that the scene is running.

6.4 Erasing a Z-wave command

To erase a Z-wave command simply make a long click on the command and then choose the **Erase signal** option from the popup list. Note that this is the same option you use to erase individual Infrared signals.

Notes:

1. You may find that dimmers take longer to respond than switched appliances.

2. If a Z-wave device is unplugged then you may experience delays running scenes that contain that device.

You can view what Z-Wave signals have been assigned to what Project commands by choosing **Configure->Advanced->Z-Wave settings->Z-Wave commands.**


No SIM
22:26
67%
Project
Technician Mode
Configure
SKY
TV...
Info
Help
Gui...
Ser...
Z-Wave command assignment
Socket 1: ApplianceModule [3]: Toggle On/Off
Socket 2: ApplianceModule [4]: Toggle On/Off
All On: Run Scene: All On
All Off: Run Scene: All Off
Cancel
Rec...
Stop
Red
Gre...
Yell...
Blue
Scanning for HouseMate...

7 Alarms

HouseMate contains different methods for generating alarms.

Relays
HouseMate contains a relay that is available on a 3.5mm jack socket. This can be connected to a wireless call bell system.

EasyWave
HouseMate can be fitted with a 32 channel EasyWave module. When you make an alarm the first EasyWave telegram is transmitted by default. This can be paired with an EasyWave relay or call bell.

InfraRed
When you make an alarm the InfraRed signal associated with the first Project Command is transmitted. This is the Bell symbol in the example grid. Record an infrared signal for this code that will activate an alarm.

There are three methods of triggering the alarm.

In the App
This requires you to be connected to your device. When you select the Bell symbol (in the default grid) three things occur:

- The relay is activated for 4 seconds.
- InfraRed signal 1 is transmitted (if recorded)
- EasyWave telegram 1 is transmitted (Channel 0 Button A)

Hardware only
You can activate each of the above alarms by holding your switch for a defined number of seconds. This is independent of your iOS device which can be switched off. Programming the hardware alarm is discussed in the next chapter.

8 Hardware Settings

The hardware settings option allows you to control the power down and relay output functions of HouseMate hardware. These options affect the behavior of the hardware units even when they are not connected to your iOS device. Because of this, the settings are stored within the flash memory of the hardware and not in your iOS device memory.

To view the hardware settings

1. Make sure you are connected and then choose **Project Settings->Setup your devices->HouseMate hardware->Hardware settings**

8.1 HouseMate Hardware Settings

8.1.1 Powerdown Setting

The HouseMate **powerdown time** can be set to **1minute, 5 minutes, Never when connected** or **Set-Top mode**.

When set to 1 or 5 minutes the HouseMate hardware will automatically switch off if you have not made any switch presses for the chosen time. This allows the device to turn off or dim the screen and conserves the battery life of both units.

Never when connected

This option prevents the hardware from automatically powering down and is intended to be used in conjunction with a **Stand-by** key. You must configure a cell to be the **Stand-by** key by making a long click on a cell and then choosing **Define as Stand-by key**.

Although this option can be used with scanning turned on it is primarily intended for touch screen users who require environmental control but find it difficult to operate the device's on/off button. In this case the HouseMate switch, is used primarily to wake up the device.

Set top mode

In Set-Top mode the HouseMate hardware functions like a remote infra-red transmitter. It is intended to be placed in a fixed position in your living room and used as a convenience for controlling your entertainment equipment through your iOS device. Once you are connected to HouseMate you can use the HouseMate app to control your equipment through the touch screen.

In Set-top mode the HouseMate button functions purely as an on/off button and all scanning is disabled. When the app connects with the hardware it remains connected for as long as the device is on and in range.

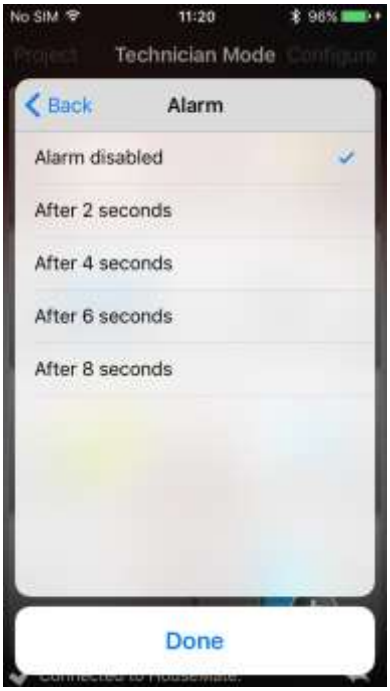
Set-Top mode is intended to be used by persons who can fully use their device, including the on/off button, and require InfraRed control.

To switch off HouseMate in Set-Top mode it is necessary to hold the switch for several seconds until the unit beeps and switches off.

8.1.2 Hardware Alarm

HouseMate can be fitted with an EasyWave transmitter to generate an RF alarm. In addition HouseMate contains a relay that can be used to activate an external radio frequency alarm. See Chapter 7 for more details on different alarm types.

To activate the alarm press and hold your switch for a defined length of time. To set the length of time go to **Hardware Settings->Alarm** and choose the period you want.



Note: The alarm/relay will function even if you are not connected to your device. This means that even if the battery in your iOS device is flat you can activate an alarm by pressing your switch for the chosen period of time.

9 Saving your Project

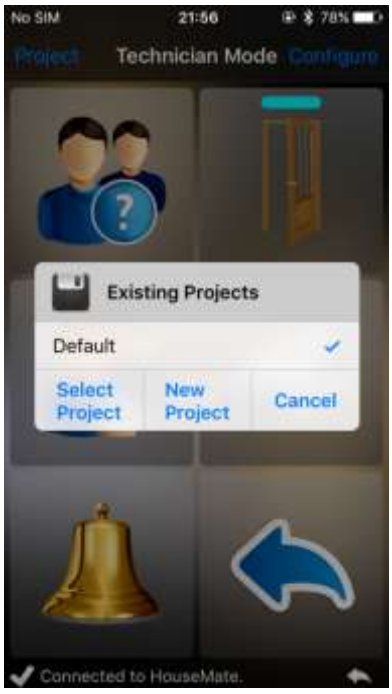
HouseMate allows you to save all user data, including recorded infrared signals to your iOS device's memory. You can then copy the data from your device onto your computer to have a permanent backup of your all your settings.

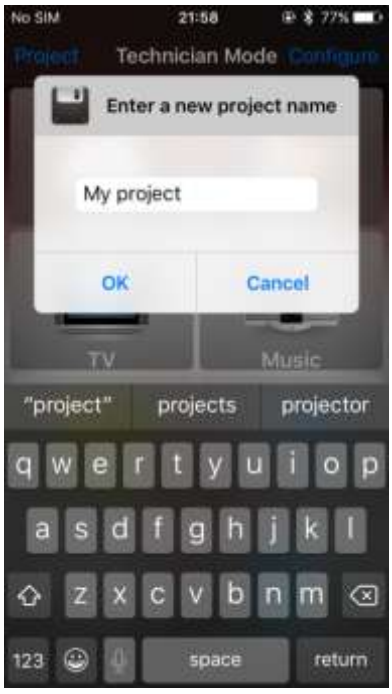
Note: We recommend using **iExplorer3** to copy your files to and from your iOS device.

9.1 Saving up your project

To save your project

1. Choose **Project->Save Project.** The **Existing Projects** dialog will appear. You can save over an existing project or you can create a new one.





2. Choose **New Project** and enter a name for the new project. When you click OK the project files are saved to your device. Then you will be prompted as to whether or not you want to backup the InfraRed signals stored in the HouseMate hardware at this time.

   Note that backing up Infrared signal data can take a long time depending on how may signals you have recorded.

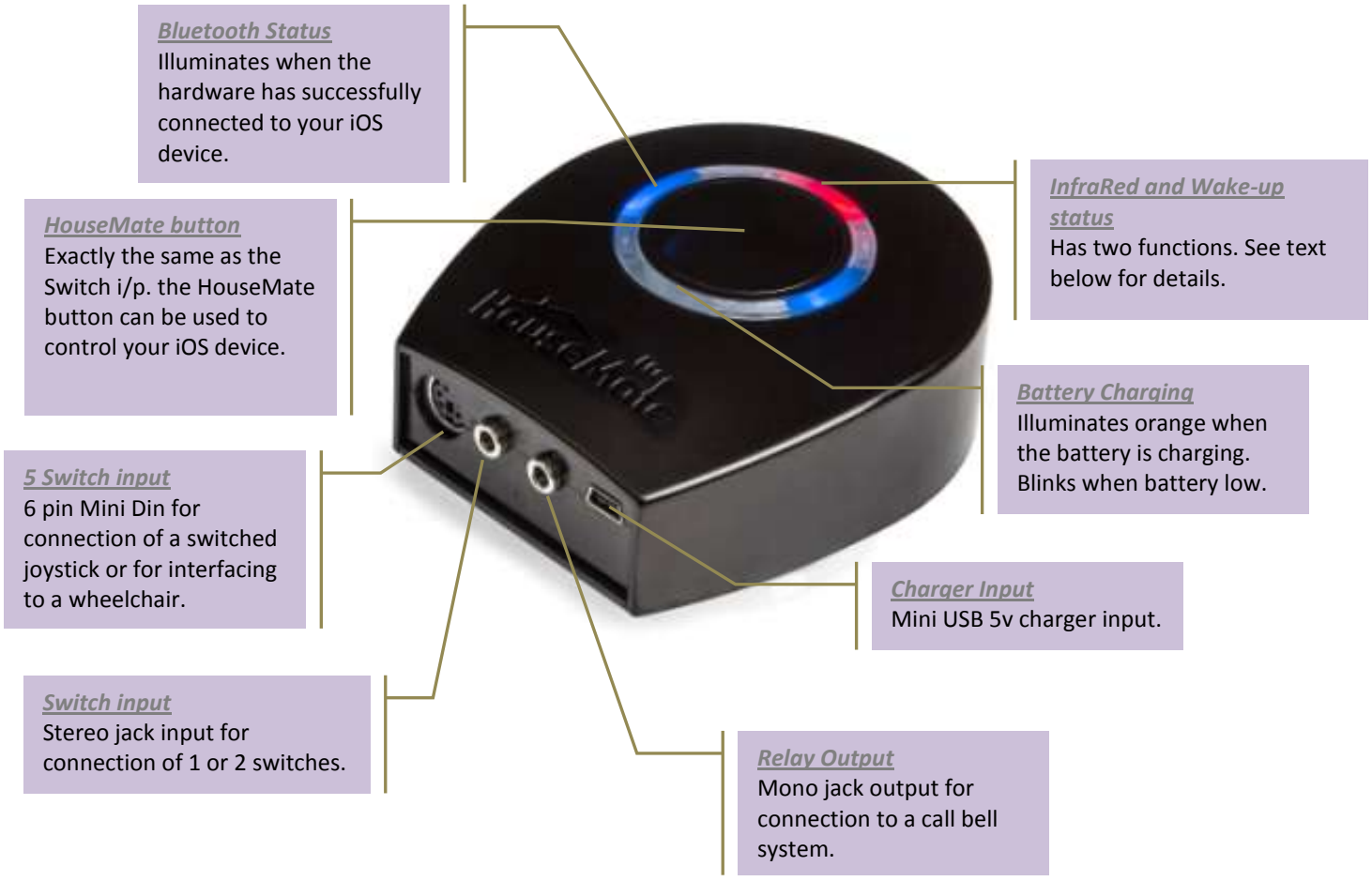
9.2 Opening an existing project

To open a project

1. Choose **Project->Open Project.** The **Existing Projects** dialog will appear.

2. Choose the project to want to open. As before, once the project has been opened, you will be prompted as to whether you want to restore the InfraRed signal data from memory to the HouseMate hardware.

10 Connections & Wheelchair Interfacing



IR Status LED

The IR status LED has two functions.

1. InfraRed Status

   LED illuminates when InfraRed is being transmitted or received.

2. Wake up and Power down status

   During powerup the IR LED remains lit until the hardware has connected to the iOS device.

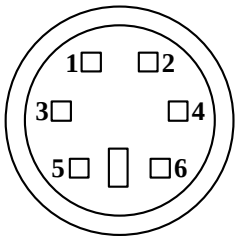
   During normal operation the IR LED will blink every so often to indicate that it is switched on. Not to be confused with transmission of an IR signal.

Switch Input Connections & Relay output

Stereo Jack I/P Pin	Signal
Sleeve	Switch common
Tip	Switch 1
Ring	Switch 2

Mono Jack O/P (isolated) Pin	Signal
Sleeve	Relay contact 1
Tip	Relay contact 2

5 Switch Input

6 pin Mini DIN. Connector	Pin	Signal
	1	Switch common
	2	Joystick Left
	3	Joystick Right
	4	Joystick Down
	5	Joystick Up
	6	Joystick Switch

Charging the battery

HouseMate hardware contains a 1950mAh Li-Ion battery.

When the battery is low the HouseMate hardware will beep continuously and when you connect with your device a message will appear on the screen warning you that the battery is running low.

If your hardware unit has a Mini USB connector you can recharge it by connecting it to the USB socket of your computer or any suitable USB charger.

11 Hardware Specifications

Electrical

Power Supply	1 x 3.7v Li-Ion rechargeable battery
Quiescent Current	20mA

Mechanical

Weight	Approx. 250grams
Case material	Black ABS plastic.

Environmental

	Min	Max	Units
Operating ambient temperature range	-25	50	ºC
Storage temperature range	-25	70	ºC
Operating and storage humidity	0	90	%RH

HouseMate is not designed for outdoor use.

12 Intended use, Safety and Misuse Warnings

Intended Use

HouseMate is a combined iOS switch interface and InfraRed remote control. It is designed to enable those individuals who cannot use a standard remote control to operate television, lights, door openers, curtains and other equipment in their home or place of work/study.

If you are controlling such environmental control equipment ensure that it has been fitted correctly, that you are using it for it's intended purpose and that it is safe to use and operate.

HouseMate can be operated directly or by connecting an appropriate switch.

HouseMate is for indoor use only.

Safety and Misuse warning

Do not install, maintain or operate your switch interface without reading, understanding and following the proper instructions and manuals, otherwise injury or damage may result.

Do not operate the switch interface if it behaves erratically, or shows abnormal response, heating, smoke or arcing. Turn the unit off, disconnect all cables, and consult your service agent.

Ensure the switch interface is turned off when not in use and disconnect the battery if it is not going to be used for an extended period.

No connector pins should be touched, as contamination or damage due to electrostatic discharge may result.

HouseMate is not designed to resist water penetration. If a spillage occurs Turn the unit off, disconnect all cables, and consult your service agent. Once turned off any spillage over the switch interface should be wiped dry without delay. The switch interface may not be used outdoors in damp or wet conditions.

Most electronic equipment is influenced by Radio Frequency Interference (RFI). While the manufacturer has made every effort to ensure that RFI does not cause problems, very strong signals could still cause a problem.

Report any malfunctions immediately to your Service Agent.

13 Maintenance

Your HouseMate hardware should be regularly checked for integrity. Loose, damaged or corroded connectors or terminals, or damaged cabling should be reported to your Service Centre and be replaced immediately.

The Li-Ion battery should be regularly checked for corrosion or leakage. Occasionally remove the back cover and check for leakages, corrosion and evidence of over-heating.

If you are not using your switch interface hardware for an extended period disconnect the battery.

All switches connected to your switch interface hardware should be regularly tested to ensure that they function correctly.

Your switch interface hardware should be kept free of dust, dirt and liquids. If necessary wipe with a cloth dampened with warm water or alcohol. **Do not** use solvents or abrasive cleaners.

Where any doubt exists, consult your nearest Service Centre or Agent.

There are no user-serviceable parts within your switch interface hardware.

In accordance with the requirements of CE marking of this device and the Company's policy, it is requested that re-occurring faults or defects be reported back to Unique Perspectives Ltd.

Warning !! If your switch interface is damaged in any way, or if internal damage may have occurred (for example by being dropped), have it checked by qualified personnel before operating.

14 CE Marking

HouseMate is marketed as a technical aid for people with disabilities and satisfies the requirements of the Medical Device Directive 2007/47/EC.

This includes conformity with essential requirements of Council Directive 2004/108/EC of 15th December 2004 concerning electromagnetic compatibility.

The following international standards have been applied:

I.S. EN ISO 16201:2006 – Technical aids for disabled persons – Environmental Control Systems for Daily living.

I.S. EN ISO 14971L2012 – Medical devices – Application of risk management to medical devices.

EN60601-1-2: 2011

EN 55016-2-3 (2010) & A1 (2010) - Emissions

EN61000-4-2 (2009) – Electrostatic discharge

EN61000-4-3 (2006) – Immunity

R&TTE Directive 1999/5/EC

15 Warranty & Sales and Service Information

All equipment supplied by Unique Perspectives Ltd. is warranted by the company to be free from faulty materials or workmanship. If any defect is found within the warranty period of 12 months, the company will repair the equipment, or at its discretion, replace the equipment without charge for materials and labor.

The warranty is subject to the conditions that the equipment:

- Has been used solely in accordance with this manual and for its intended purpose.
- Has not been subjected to misuse or accident, or been modified or repaired by any person other than someone authorized by Unique Perspectives Ltd.
- Has been used solely for the use of interfacing to an iOS device.

For Sales and Service advice, or in case of any difficulty, please contact:

Unique Perspectives Ltd.
Ballyclovan
Callan
Kilkenny
Ireland

Telephone: +353 56 7725913
Fax: +353 56 7725936

WEB: www.click2go.ie
EMAIL: info@click2go.ie

NOTE: The HouseMate device should be clearly labeled with the manufacturer's service agent's telephone number.