dynamic™

iPortal™

iPortal™2

your communication bridge to the world

User Manual

Made for iPod iPhone iPad

CE Bluetooth®

compatible with

DX™ dx2

SHARK

GBK52983 iPortal2 User Manual Issue 1.0, February 2013

1. About this manual

This User Manual describes how to use *DYNAMIC CONTROLS'* iPortal2 system; the intended audience is the user of a powered-wheelchair, with the iPortal2 system already installed on the wheelchair.

The iPortal2 connects with a *DYNAMIC CONTROLS'* Shark, DX, or DX2 Control System.

Please note that the words ***iOS device*** in this manual refer to *iPhone*, *iPod touch and iPad*.

The following symbols are used throughout this manual to outline important and helpful information:

WARNING

Warnings provide important information that must be followed in order to install, configure, and use the product safely and efficiently. Not following the instructions given in a warning can potentially lead to equipment failure, damage to surrounding property, injury or death.

CAUTION

Cautions provide supporting information in order to install, configure, and use the product. Not following the instructions given in cautions can lead to equipment failure.

NOTE

Notes provide supporting information that may be important to the user, but which does not involve risk to life, or injury, or damage to the equipment.

REFERENCE

Reference directs the reader to a source of further or more detailed information on a given topic.

ⓘ *Key information follows such as a mechanical or electrical specification.*

WARNINGS

1. *The iPortal, Shark, DX and DX2 Systems are not user serviceable. Specialised tools are necessary for the repair of any component. Any attempt to gain access to, or in any way abuse the electronic components and associated assemblies that make up the powered wheelchair system, renders the manufacturer's warranty void and the manufacturer free from liability.*
2. *Do not install, maintain, or operate this equipment before you have read and understood all the instructions and all the manuals for this product and all the other products that you use or install together with this product. Follow the instructions of the manuals. If you do not follow all instructions, injury or damage could result.*
3. *Do not try to open or disassemble any case - there are no user-serviceable parts inside.*
4. *Do not touch the connector pins. If you touch the pins, they can become dirty and/or the system's electronic components can be damaged by electrostatic discharge.*
5. *DYNAMIC CONTROLS has tested the iPhone to confirm that Radio Frequency Interference (RFI) caused by the iPhone does not change the behaviour of the wheelchair control systems in any way. In the very unlikely case that the iPhone or another mobile communications device would cause the wheelchair to behave erratically, turn off the control system. When you turn off the control system, the chair will halt.*

NOTES

Due to continuous product improvement, DYNAMIC CONTROLS reserves the right to update this manual. This manual supersedes all previous issues, which must no longer be used.

DYNAMIC CONTROLS reserves the right to change the product without notification.

NOTE

*iPortal2 is the new, updated module in Dynamic Controls' iPortal system. In this manual, **iPortal** refers to the complete system, that is: iPortal2 module, cradle, cables and software etc., where **iPortal2** just refers to the latest electronic module, that is, the electronics that the iPortal system connects to.*

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"Made for iPhone" means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards.

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4. iPortal

DYNAMIC CONTROLS' iPortal is a bridge between your powered-wheelchair and your communications technology.

When combined with an **iOS device** and the **Dashboard** application, iPortal provides the powered-wheelchair user with essential wheelchair information such as battery state, driving speed, seating adjustments, and an emergency call function.

Dashboard

An iPhone/iPod touch/iPad App that connects to the wheelchair system via Bluetooth®.

- Wheelchair information displayed in real-time including fault logs and chair diagnostics.
- Operates with Apple iPhone 3GS and later, iPod touch 4 and later and iPad.
- Can be easily added to any new or existing Dynamic Controls' Shark, DX or DX2 wheelchair control systems.
- No programming required.
- The iPhone and iPod touch can be easily removed when required.
- Discreet iPhone and iPod touch cradle with adjustable tilt angle mounts the iPhone to the wheelchair in a convenient position for the user.
- USB charger cable ensures the iPhone/iPod touch/iPad stays fully charged throughout the day.
- Second USB charger port.
- Upgradeable to Accessibility and/or Mouse Mover.

Requires iOS 5 or later

When combined with an **iOS device** and the **Accessibility** feature, the powered-wheelchair's remote joystick is used to navigate and interact with your iOS device.

Accessibility

A pioneering solution that gives wheelchair users the ability to control an iPhone, iPod touch or iPad via their wheelchair joystick or speciality input device.

- Life changing functionality that allows power wheelchair users to navigate iPhone, iPod touch or iPad using their wheelchair joystick (including head array).
- Get reading again with eBooks, send text messages, write emails and take notes, shoot video and photographs of family and friends and keep them up to date on your favourite social media communities.
- Ideal for users with impaired hand control who are unable to use an Apple device or a cell phone.
- From your joystick or speciality input device, use Apple's VoiceOver and AssistiveTouch features to browse and control your Apple device, surf the net, make calls, play music, use assistive speech Apps without needing to touch your Apple device.
- Operates on iPhone 3GS and later, iPod touch 4 and later and iPad.
- Available exclusively on Dynamic Controls' Shark, DX or DX2 range of power wheelchair controllers.
- Upgradeable to Mouse Mover.

Requires iOS 5 or later.

When combined with a **PC or laptop** and the **Mouse Mover** feature, the wheelchair's joystick or other speciality input device is used to navigate and interact with your PC or laptop's mouse pointer.

Mouse Mover

A Bluetooth Mouse Mover for power wheelchairs with Dynamic Controls' electronics.

- Will work with any PC, laptop or tablet that is Bluetooth HID device capable.
- Gives users control of their PC/laptop from their joystick or head array.
- Ideal for users with poor hand function or speciality control users.
- Joystick or speciality input device acts like a mouse to gain access to a PC or laptop.
- Essential for study or employment and day to day life.
- Very easy to set up and use.
- Roll up and start working.
- Can be fitted to new or existing power wheelchairs that have Dynamic Controls' Shark, DX or DX2 systems fitted.
- Upgradeable to iPortal™ Accessibility.
- Uses standard Bluetooth technology.
- Plug and play.
- No iOS device needed.

Dashboard is a free application, and can be downloaded from the iPortal™ store via iTunes. Once installed on your iOS device, Dashboard can also be used to manage upgrades for the Accessibility and Mouse Mover features. Upgrades can be purchased at any time, and in any order. Alternatively, the iPortal unit can be purchased with either or both of the Accessibility and Mouse Mover features already enabled, as shown in the table below.

iPortal2 part number	Description
DJ-BTINT	iPortal Dashboard
DJ-BTINT–ACC	iPortal Accessibility
DJ-BTINT–HID	iPortal Mouse Mover
DJ-BTINT–HID–ACC	iPortal Mouse Mover + Accessibility

4.1. The iPortal2 in detail

The iPortal2 is the front-runner of a new generation of powered-wheelchair accessories that present a completely new approach to meeting a powered-wheelchair user's needs and wishes.

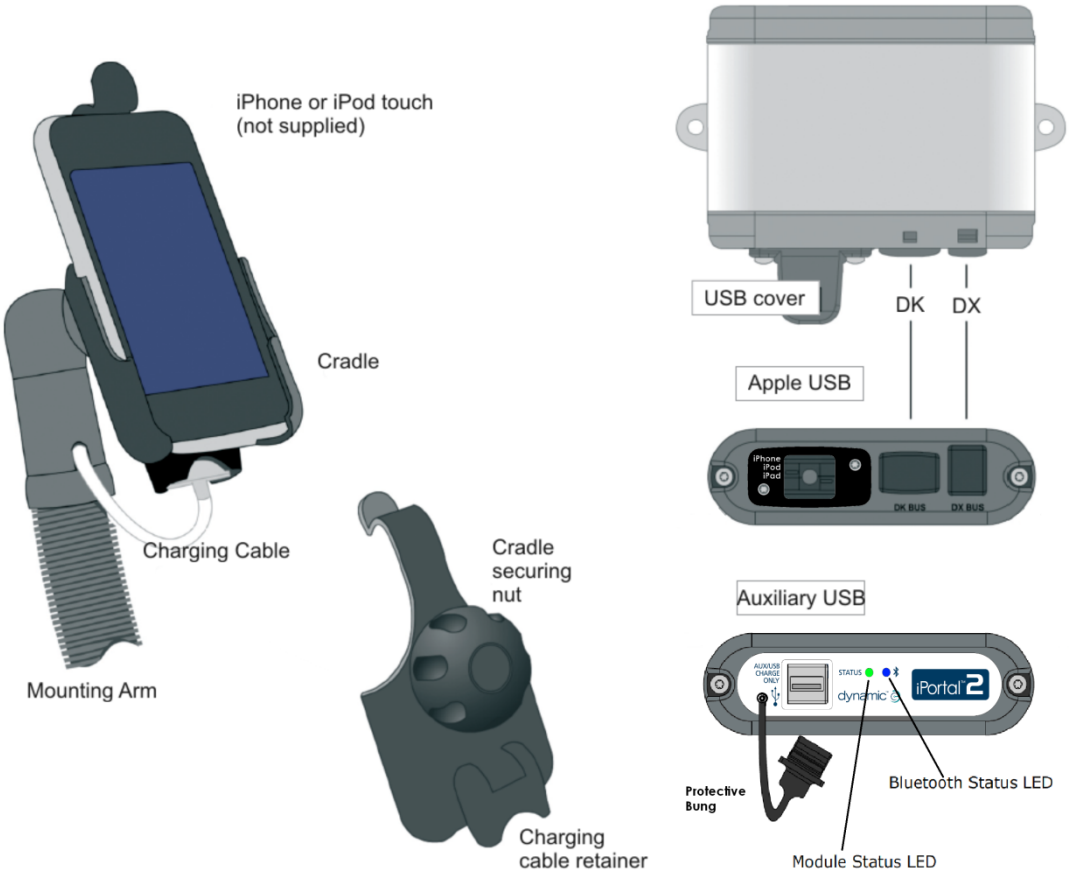
The iPortal2, which is compatible with *DYNAMIC CONTROLS'* Shark, DX, and DX2 wheelchair controllers, can connect to an iOS device to display powered-wheelchair information in real time.

The iPortal2 has the following features:

- connects with DYNAMIC CONTROLS' Shark, DX or DX2 wheelchair control systems without reprogramming the wheelchair
- an adjustable mounting arm and cradle that attaches to the wheelchair and conveniently positions the iOS device for the user
- an Apple USB charging port to keep the iOS device fully charged
- an auxiliary USB port (charging-only), for other devices
- wheelchair fault logging
- the iPortal Dashboard application displays wheelchair information in real time. Using Bluetooth® technology to connect with the wheelchair system, the following is provided:
    - speed and speed range indicator
    - compass heading (iPhone 3GS (or later) only)
    - seat adjustment indicator
    - battery state
    - drive profile indicator
    - emergency call function (iPhone only)
- with the **Accessibility** feature enabled, the powered-wheelchair's remote joystick is used to navigate, interact and control your iOS device.
- with the **Mouse Mover** feature enabled, the wheelchair's joystick or other speciality input device is used to navigate and interact with your PC or laptop's mouse pointer
- with the **Mouse Mover + Accessibility** features enabled, the wheelchair's joystick or other speciality input device is used to navigate and interact with your PC or laptop's mouse pointer as well as navigate, interact and control your iOS device.

4.2. The iPortal2 system components

The following components are provided with the iPortal system. Note the names of the components, as they will be referred to throughout the rest of this manual.



Note: iPhone and iPod touch are not included in the packages. The cables (DK BUS, DX BUS, and Y-cable (for Shark)), mounting arm and cradle must be ordered separately.

4.3. Setting up the iPortal2 with your iOS device

Before you can use your iPortal2 system, you will need to set up the iPortal2 with your iOS device by placing your iOS device securely in the cradle, and then making sure that the iPortal2 and your iOS device can communicate correctly. As a one-off set-up process, you will also have to download the iPortal Dashboard application to run on your iOS device.

The following section describes how to get your iPortal2 working with your iOS device for the first time. The process is as follows:

- **step 1 - place your iOS device in the iPortal cradle**
- **step 2 - pair the iPortal2 and the iOS device (this means establish a Bluetooth connection)**
- **step 3 - download the iPortal Dashboard application**
- **step 4 - optionally activate the iPortal Accessibility feature**
- **step 5 - optionally activate the iPortal Mouse Mover feature**

These topics are explained in more detail, in the sections following.

REFERENCE

For more details of iOS device features, capability, and minimum system requirements visit www.apple.com

The iPhone, iPad and iPod touch User Guides are available from www.apple.com/support

NOTE

*Dashboard can only display information it receives from your wheelchair control system. Dashboard does **not** send any information back to your control system, and **cannot** control the wheelchair.*

WARNING

ALWAYS switch off the wheelchair system when leaving the wheelchair.

ALWAYS ensure that the wheelchair system is switched off before entering the wheelchair.

ALWAYS switch off the wheelchair system when not in use.

4.3.1. Step 1 - place your iOS device in the iPortal cradle

Make sure that you have the correct cradle for your device. Check the identifier as shown below, right. Put your iPhone or iPod touch into the iPhone or iPod touch cradle on your wheelchair. When your device is in position, you will feel a click.

Put your iPhone or iPod touch into the cradle at the bottom first. Be sure that your device is correctly located.

Push the top of your device into the cradle. You will feel the device click into position.

✓ Be sure your device is secure in the cradle before driving your wheelchair.

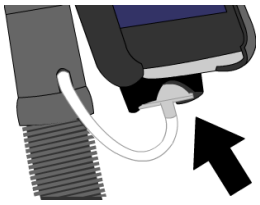
The cradle identifier is on the back of the cradle above the charging cable park.

iPhone

iPod touch

WARNING

*iOS devices are not intended for use in the rain or other wet environments. To protect the iOS device from damage when in a wet environment, it **MUST** be removed from the cradle and stored in a dry place. Put the charging cable connector in the charging cable park.*

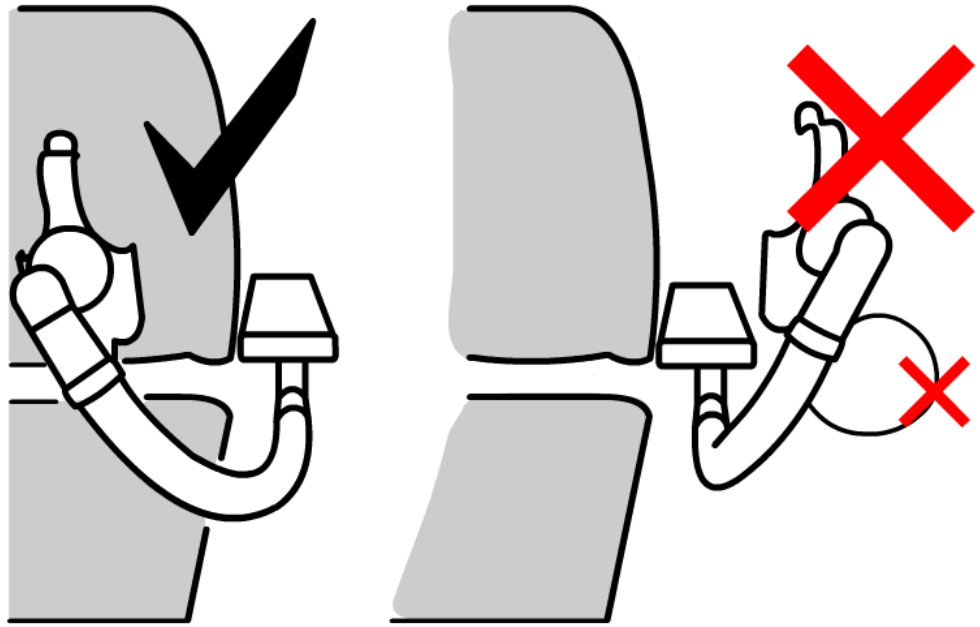


The protective bung on the iPortal2 MUST be used when the charge-only socket is not in use.

NOTE

The cradles included support both the iPhone 3 & 4 variants and the iPod touch 3.

For mounting solutions of other Apple iOS devices and models, consult your local Dynamic Controls office or mobility dealer.



Adjust the mounting arm to position your device for comfortable operation.

WARNING
Do not position the cradle outside the frame of the wheelchair otherwise it can strike objects or passers-by, causing injury. Adjust the cradle such that it remains inside the frame of the wheelchair.

Connect the charging cable to your device. When you turn on the power at your Remote, your iOS device will beep or vibrate to confirm that it is receiving a charge from the wheelchair battery.

4.3.2. Step 2 - pair the iPortal2 and the iOS device

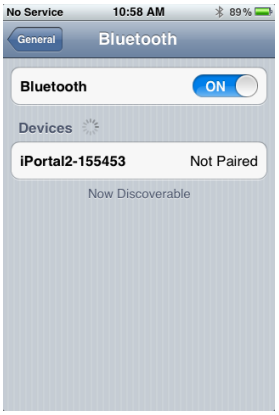
The Shark, DX or DX2 wheelchair control system communicates with your iOS device via the iPortal2 module, using a Bluetooth® wireless link. Before using your iOS device with your wheelchair control system, you must first **pair** (this means establish a Bluetooth connection) your iOS device with the iPortal2.

To pair the devices, start from your iOS device **Home** screen, and then:

- browse to Settings ► General ► Bluetooth ;
- turn on Bluetooth. Your iOS device will start searching for nearby devices;
- on the wheelchair, turn the power off and on;
- when your iOS device finds your iPortal module, tap on it to connect to it.

Note, your iPortal2 module will be displayed as "iPortal2-xxxxxx", where "xxxxxx" is a unique number identifying your iPortal2.

NOTE
If you see an instruction on your iOS device to "cycle the power", turn the power off at your Remote, and then turn it on again.



After your device and the iPortal2 have successfully paired, the connection is listed on the Bluetooth® menu.

Note that sometimes when attempting to pair your iOS device with the iPortal2, one or the other may time out while waiting for an input from you. If the procedure does not work the first time, repeat the steps above.

If your chair is programmed to go into sleep mode after only one minute of inactivity, the chair may enter this mode during pairing, causing pairing to fail. If this is the case, ask your therapist or dealer to increase the sleep time-out value.

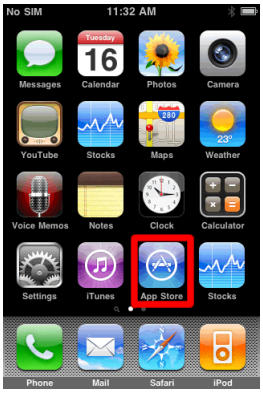
4.3.3. Step 3 - download the iPortal Dashboard application

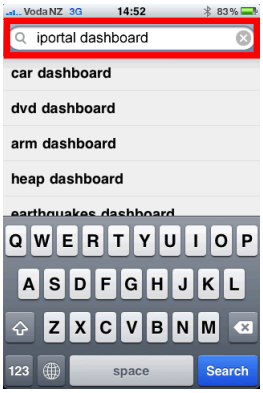
To download the iPortal Dashboard application, you must have an iTunes Store account and an active internet connection. You can use either your iOS device or your computer to connect to the Internet and the iTunes Store. You can set up an iTunes account at *www.apple.com/itunes*.

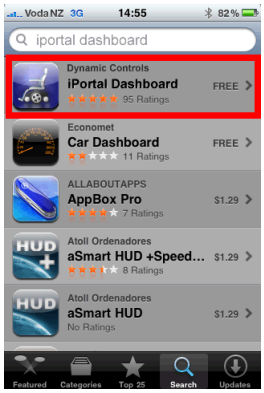
4.3.3.1. To download the iPortal Dashboard using your iOS device:

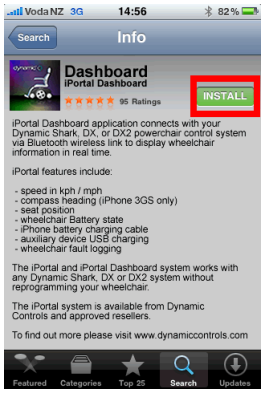
Start from the iOS device **Home** screen.

- Browse to the **App Store**
- Search for iPortal Dashboard
- Select **iPortal Dashboard** from the search results
- Tap INSTALL









If you use your iPhone to download the iPortal Dashboard application, the application is installed automatically on your iPhone and is ready to use.

REFERENCE
For more details of how to download and install an application from the iTunes Store, refer to the iPhone, iPod touch, or iPad User Guides. The iPhone, iPod touch, and iPad User Guides are available from www.apple.com/support

4.3.3.2. To download iPortal Dashboard using your computer:

Start your Internet connection and start iTunes.

- Browse to the **iTunes Store,** and then browse to the **App Store**
- Search for **iPortal Dashboard** and select **iPortal Dashboard** from the search results
- Click **INSTALL**

If you use your computer to download the iPortal Dashboard application, the application will be installed automatically on your iOS device next time you sync.

4.3.3.3. After downloading

When a new Dashboard application is started for the first time, it will check the firmware on the iPortal2 module. If the firmware of the iPortal2 module is out-of-date, the iPortal Dashboard application will ask you to upgrade the firmware of the iPortal2 module.

If you see this screen, and if the time is convenient for you, press **Upgrade Now**. The process can take several minutes, after which the Dashboard application will restart.

DO NOT CYCLE THE POWER during the upgrade process, even if the screen shows "unable to connect" and advises you to cycle the power. The connection will automatically resume after the upgrade process is complete.

If you press **Later**, the Dashboard application will start normally. You will be asked again to upgrade the next time Dashboard is started after 24 hours has passed. **It is strongly recommended to perform the upgrade when asked.**

4.3.4. Step 4 - optionally activate the iPortal Accessibility feature

If your iPortal2 module does not have Accessibility enabled, then as a one-off process, you can enable it through Dashboard.

To activate the iPortal Accessibility feature, you must have an active internet connection on your iOS device, and be paired with the iPortal2 module (see section 4.3 to see how to pair the iOS device with the iPortal2).

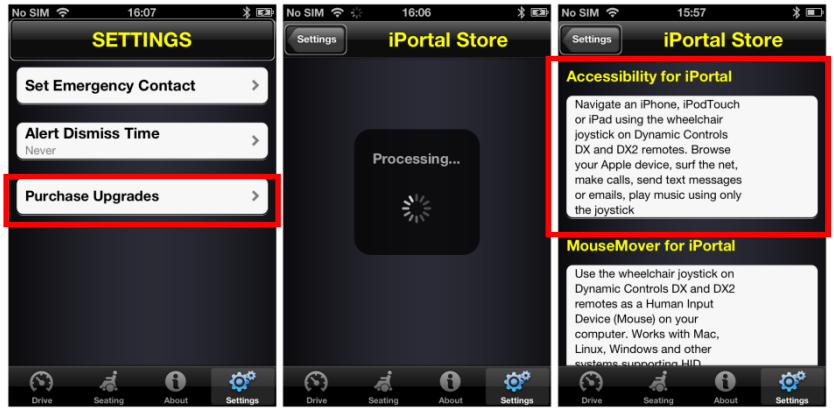
NOTE

*When activating the iPortal Accessibility feature, it is important that you **DO NOT**:*

- *press the iOS device Home button*
- *turn off the wheelchair's power*
- *drive the wheelchair*

To activate the iPortal Accessibility feature, proceed as shown below:

- Start the **Dashboard** application.
- Browse to **Settings** -> **Purchase Upgrades**
- Buy the **Accessibility** feature



After performing the steps above,

- Select **Buy from the AppStore**
- Tap **Buy** on the confirm purchase screen
- Tap **Use Existing Apple ID** on the Sign In screen (To buy from the AppStore, you must have an active AppStore account. If you do not have an AppStore account, you can create one by selecting **Create New Apple ID** on the **Sign In** screen)
- Enter your Apple ID and password and tap **Ok**
- Wait for the **Thank You** screen to pop up to confirm your successful purchase
- Click **Ok**

4.3.4.1. Completion of purchase

When the purchase is successfully completed, the iPortal2 module will restart.

Once the iPortal2 reconnects to the iOS device, the iPortal Store screen on your iOS device will show the Accessibility feature as **Installed** and will automatically be activated on your iPortal2 module.

NOTE

If the unit does not restart automatically, then you can power-cycle the unit (power off, then power on) to enable the Accessibility feature.

4.3.5. Step 5 - optionally activate the iPortal Mouse Mover feature

If your iPortal2 module does not have Mouse Mover enabled, then as a one-off process, you can enable it through Dashboard.

To activate the iPortal Mouse Mover feature, you must have an active internet connection on your iOS device, and be paired with the iPortal2 module (see section 4.3 to see how to pair the iOS device with the iPortal2).

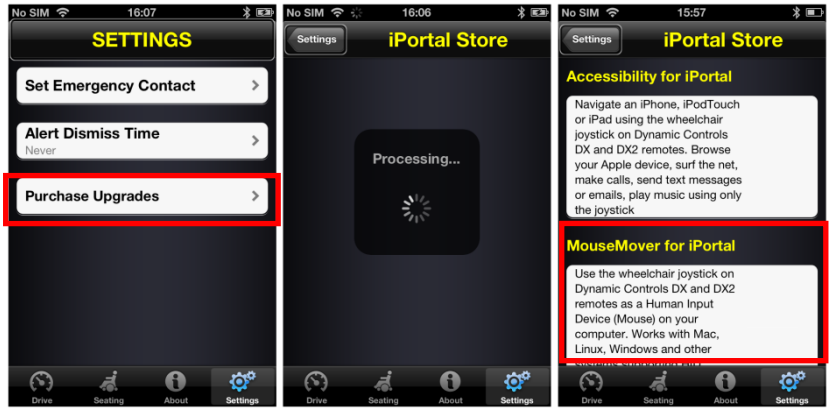
NOTE

*When activating the iPortal Mouse Mover feature, it is important that you **DO NOT**:*

- *press the iOS device Home button*
- *turn off the wheelchair's power*
- *drive the wheelchair*

To activate the iPortal Mouse Mover feature, proceed as shown below:

- start the **Dashboard** application;
- browse to **Settings** -> **Available Upgrades;**
- buy the **Mouse Mover** feature.



After performing the steps above:

- select **Buy from the AppStore** ;
- tap **Buy** on the confirm purchase screen;
- tap **Use Existing Apple ID** on the Sign In screen. To buy from the AppStore, you must have an active AppStore account. If you do not have an AppStore account, you can create one by selecting **Create New Apple ID** on the **Sign In** screen.
- enter your **Apple ID** and **password** and tap **Ok** ;
- wait for the **Thank You** screen to pop up to confirm your successful purchase;
- click **Ok;**

4.3.5.1. Completion of purchase

When the purchase is successfully completed, the iPortal2 module will restart.

Once the iPortal2 reconnects to the iOS device, the iPortal Store screen on your iOS device will show the Mouse Mover feature as **Installed** and will automatically be activated on your iOS device.

NOTE

If the unit does not restart automatically, then you can power-cycle the unit (power off, then power on) to enable the Mouse Mover feature.

4.4. Setting up the iPortal2 with your PC or laptop

The following instructions describe how to pair the iPortal2 and a PC or laptop for use with the iPortal Mouse Mover. These instructions are based on the Windows XP operating system, but the principle is similar for both Vista, and Windows 7.

Before you begin, ensure that iPortal2 is connected correctly to the wheelchair, and then power up the Remote. The green status light of the iPortal2 will light up, and the Bluetooth's blue indicator will flash slowly.

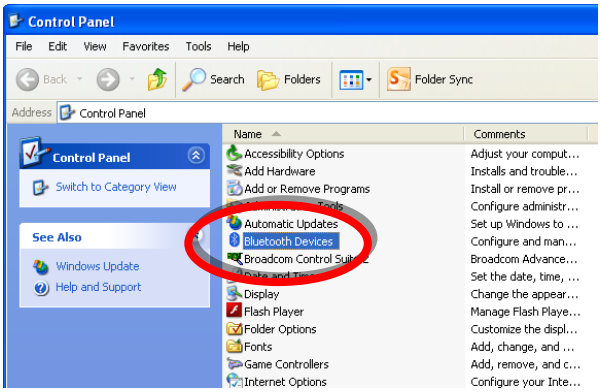
Step 1

From your PC or laptop:

Open the Control Panel:

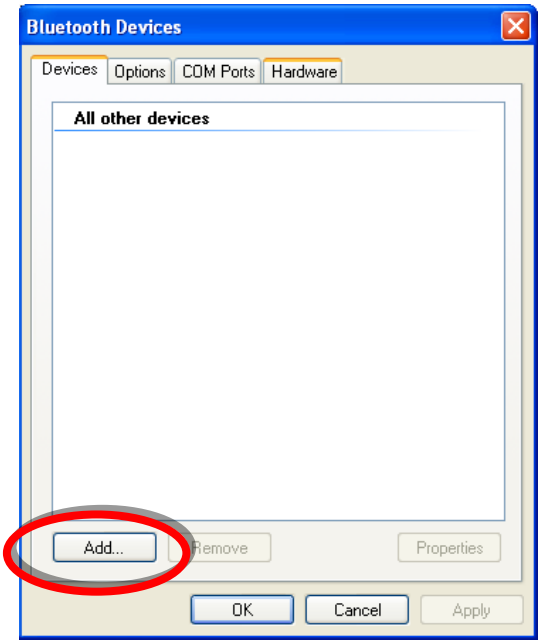
Start -> Control Panel

Select **Bluetooth devices**.



Step 2

In the **Bluetooth Devices** dialogue, press the **Add** button.

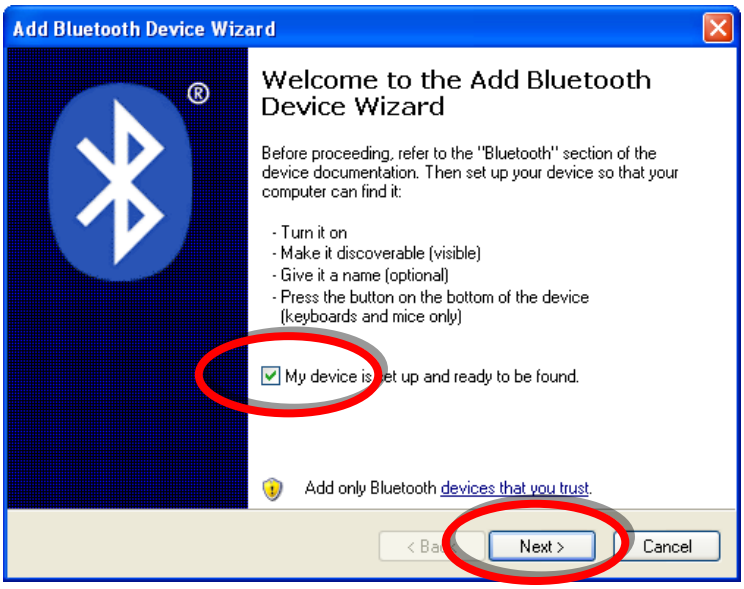


Step 3

In the **Add Bluetooth Device Wizard**:

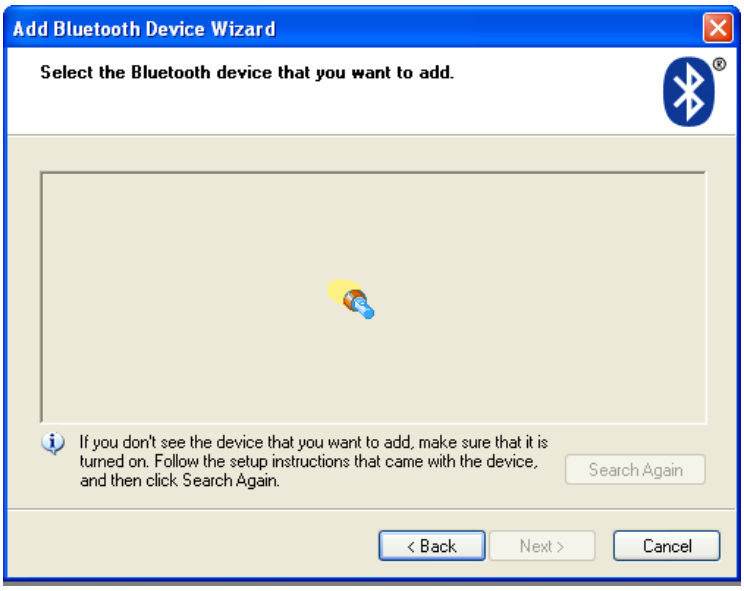
Check the checkbox "**My device is set up and ready to be found**"

Press the **Next** button



Step 4

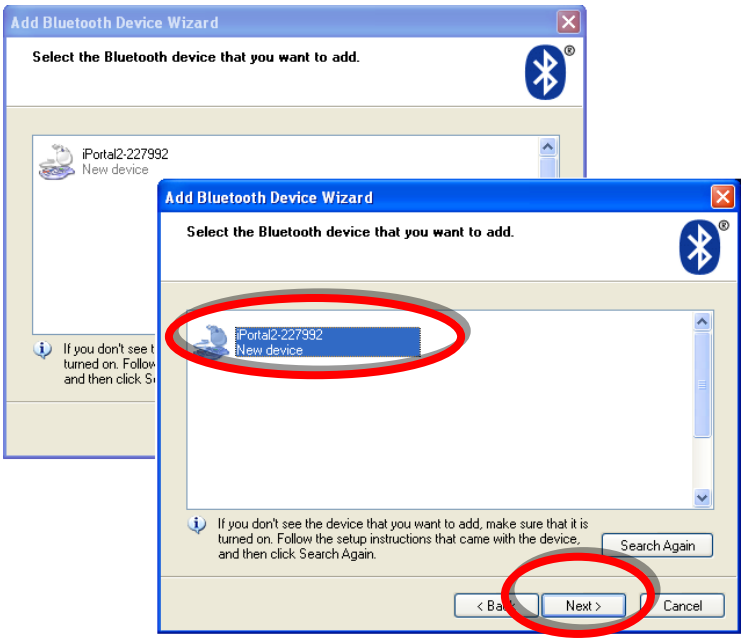
Wait while Windows searches for nearby devices.



Step 5

When the Wizard has discovered the iPortal2 device, select it and then press the **Next** button.

If the iPortal2 was not found, power-cycle the Remote, and then press the **Search Again** button.

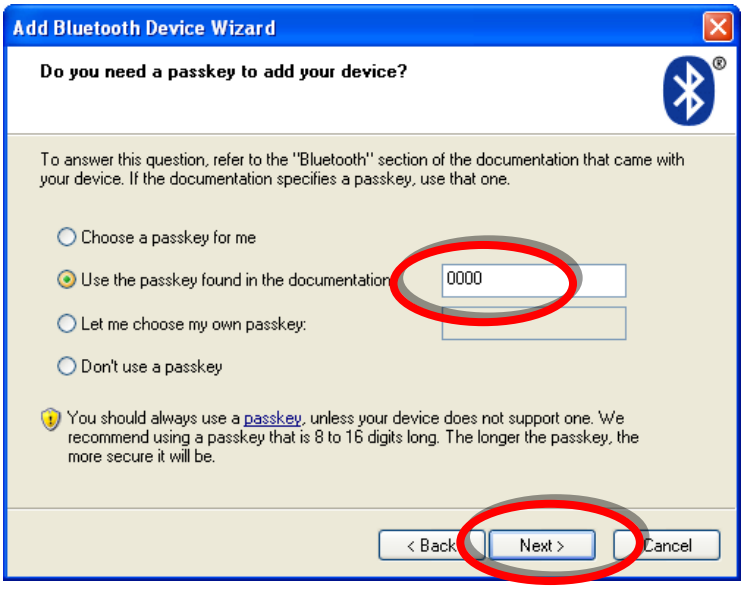


Step 6

When asked "**Do you need a passkey to add your device**":

Click on the second radio button "**Use the passkey found in the documentation**", and then type in "**0000**", as shown right.

Press the **Next** button.



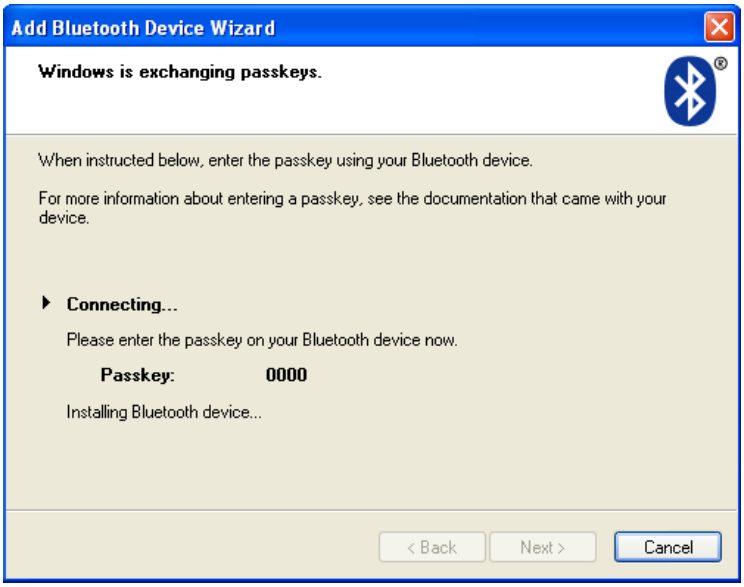
NOTE

This step may not be shown in Vista and Windows 7, as newer versions of Bluetooth do not always require an exchange of passkeys. If this is the case, then, once connected, you will be shown the connection confirmation window, similar to that shown in Step 8.

Step 7

After entering the passkey, Windows will attempt to exchange passkeys with the iPortal.

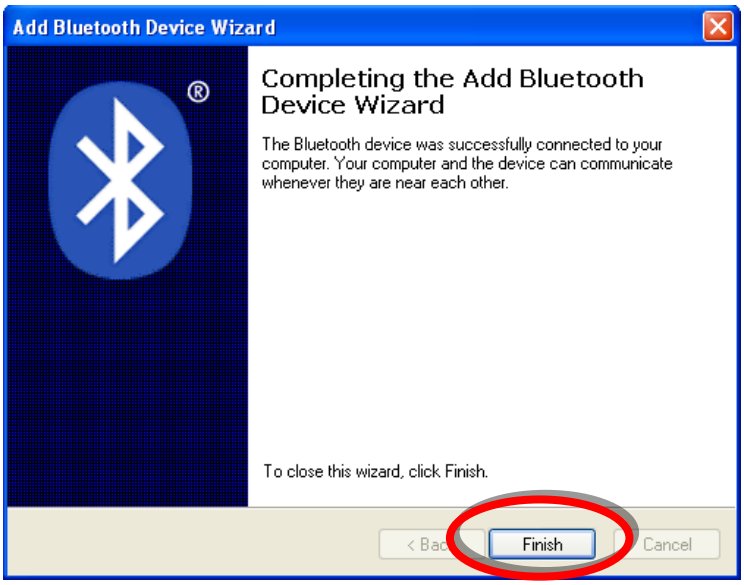
Wait until this succeeds.



Step 8

Once the passkeys have been exchanged successfully, Windows will display the window shown right.

Press **Finish** to complete the set-up.



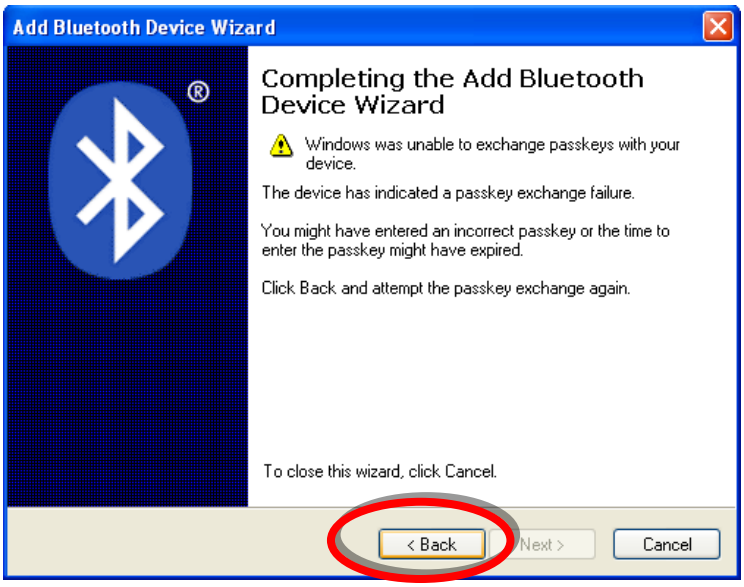
You are now ready to start using your Remote's joystick as a Mouse Mover.

Note:

If Step 7 does not succeed, you will be presented with the message (shown right):

"**Windows was unable to exchange passkeys with your device**".

Use the Back button to return to Step 6, and ensure that the passkey entered was "**0000**", and then press the **Next** button to re-try the passkey exchange.



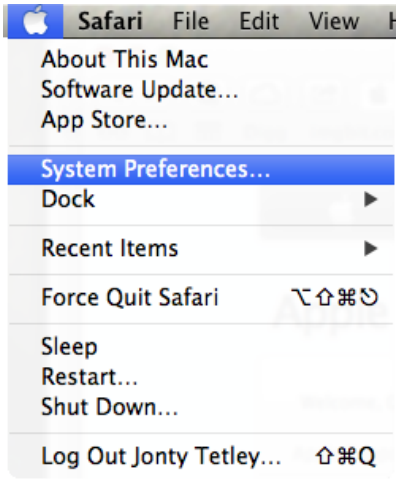
4.5. Setting up the iPortal 2 with your Apple iMac (OS X)

The following instructions describe how to pair the iPortal2 and an Apple Mac iMac or MacBook Air for use with the iPortal Mouse Mover. These instructions are based on the Mac OS X operating system 10.6 or later.

Before you begin, ensure that iPortal2 is connected correctly to the wheelchair, and then power up the Remote. The green status light of the iPortal2 will light up, and the Bluetooth's blue indicator will flash slowly.

Step 1

From the Apple menu, open **System Preferences**.

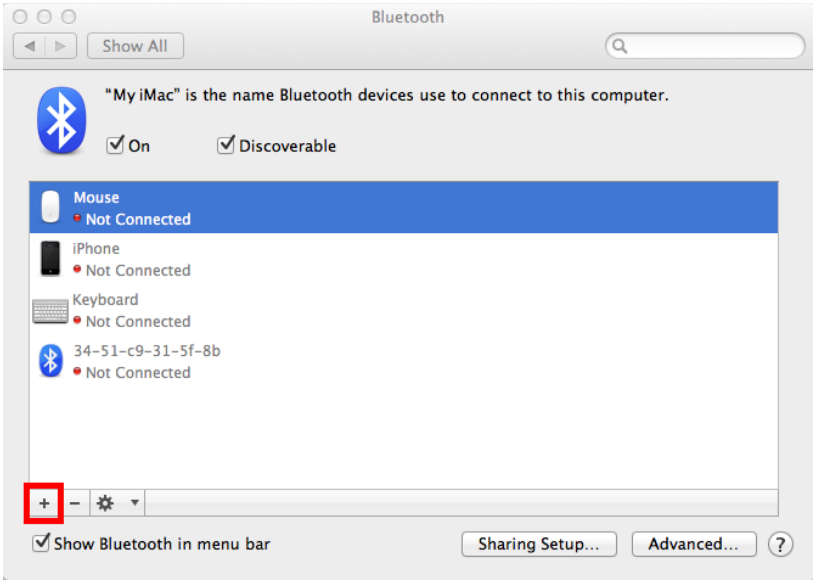


Step 2

Select **Bluetooth** settings from the **Internet & Wireless** panel.

Step 3

Click on the **+** button to add a new device.

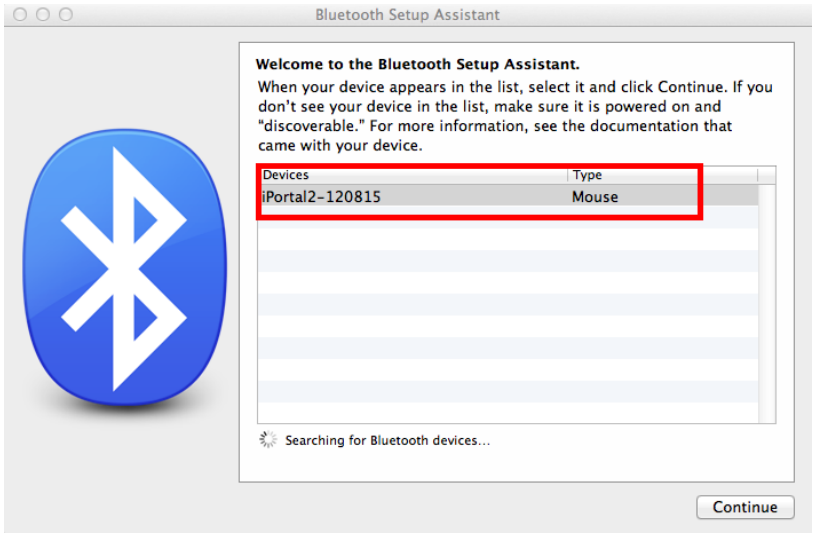


Step 4

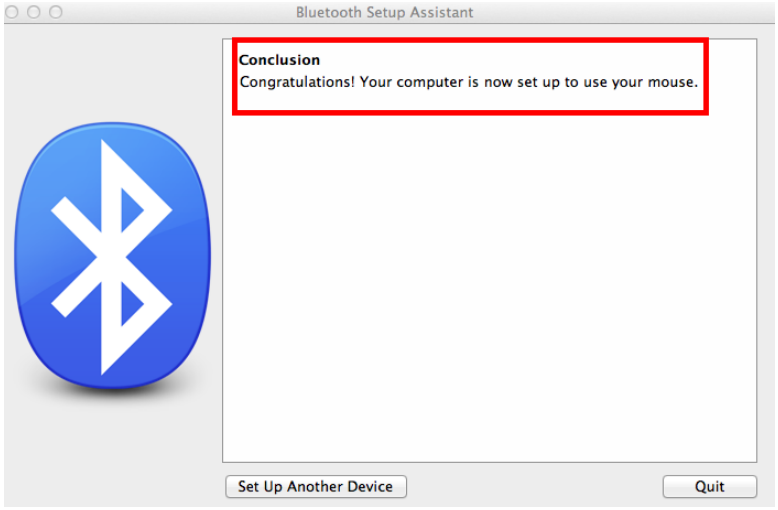
Wait until the iPortal2 is displayed.

Sometimes this may require powering off and then on the iPortal2 unit.

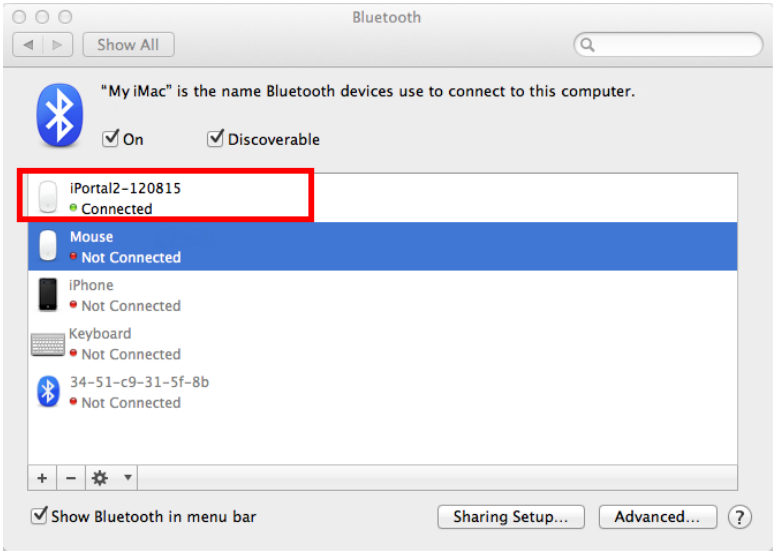
When the iPortal2 is displayed, click on **Continue**.



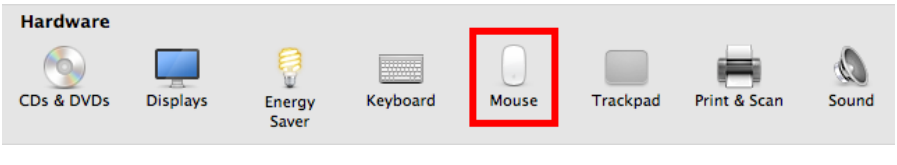
Step 5
Wait for the Bluetooth connection confirmation and then click on **Quit.**



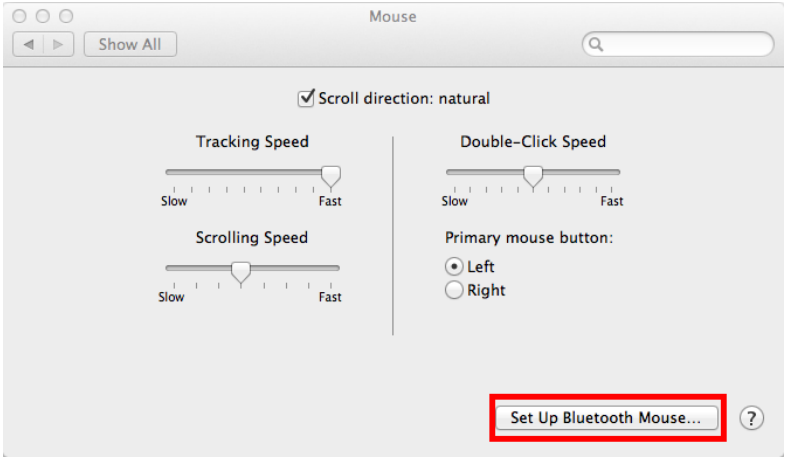
Step 6
The iPortal2 will now be listed as a Bluetooth device. Return to the System Preferences window by clicking on **Show All**.



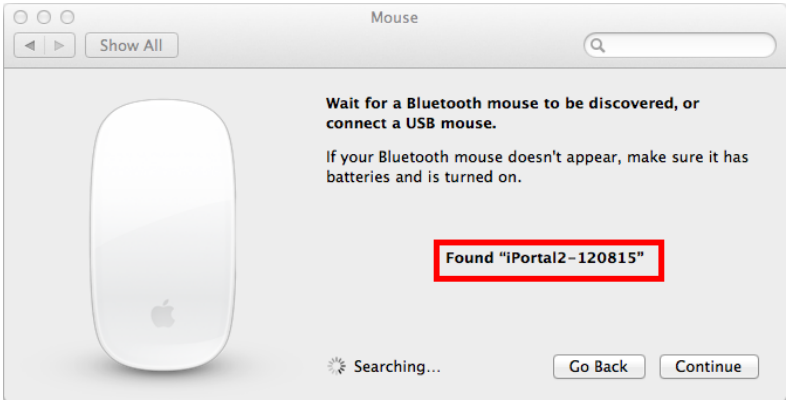
Step 7
Click on the **Mouse Settings**, in the Hardware panel.



Step 8
Click on **Set Up Bluetooth Mouse…**



Step 9
Wait until the iPortal2 is listed, and then click **Continue**.

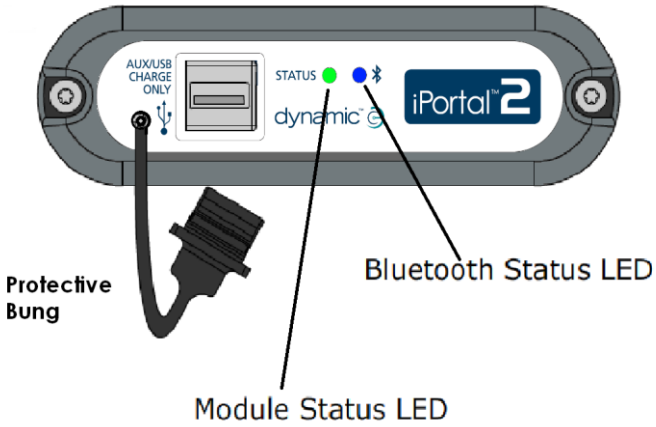


You have now completed the Bluetooth pairing process and you will be able to operate your iMac using Mouse Mover.

4.6. iPortal2 Status LEDs

4.6.1. Bluetooth® wireless link flash codes (blue LED)

The status of the Bluetooth® wireless link is indicated by a blue LED on the iPortal2 connection module.



Pattern	Status
On steady	Connected to at least one device
Off	Bluetooth® off, or power off, lost all connections
Slow flash	Listening for devices to connect to
Fast flash	Trying to re-establish known connections/firmware upgrade in progress

4.6.2. iPortal2 connection module flash codes (green LED)

The status of the iPortal2 system is indicated by a green LED on the iPortal2 connection module.

Pattern	Status
Steady green light	The iPortal2 is operating normally
Flashing green light	An internal error has occurred; contact DYNAMIC CONTROLS

4.7. Charging an iOS device

You can charge an iOS device via the Apple USB port (see 4.2) on the bottom of the iPortal2 module. Note that this USB port is for charging only; it cannot be used for data.

4.8. Charging or powering a second device

A second device can be charged or powered by connecting it to the auxiliary USB charging port on the top of the iPortal2 module. This USB port provides power only.

When the auxiliary USB connector is not in use, ensure that the protector is inserted. The word "TOP" on the USB protector plug refers to the top of the USB connector socket, not the top of the iPortal2.

NOTE
Not all devices can be charged by this port. Check your device to make sure that it is being charged when connected.

CAUTION
No Apple devices should be connected to the top auxiliary USB charging port. Only Apple devices should be connected to the bottom USB port. Do not connect your device to the wrong USB port – no damage will occur to your device or the iPortal2 module, but your device battery will not be charged until the correct connection is made.

WARNING

The protector shown in the diagram above must be replaced when the auxiliary USB charging port is not in use. The purpose of the protector is to prevent dirt and moisture entering the auxiliary USB connector. If water enters the USB connector the module will not be damaged, but it will not work until it is fully dry.

4.9. Supported remotes and operating modes

The following tables identify the supported remotes and how they can be set up to use the Accessibility feature. For more information on setting up your Remote to work with the Accessibility Functionality, see section **Quick Start Guide to iPortal Accessibility** (9.1).

4.9.1. DX/DX2 Remotes

Remote	To use iPortal Accessibility	Remote	To use iPortal Accessibility
DX-ACU3B	Drive Profile 0	DX-REMG91	ECU1 or Drive Profile 0
DX-REM24SD	ECU1	DX2-REMA-ACS2	Drive Profile 0
DX-REM34	Drive Profile 0	DX2-REMB-ACS2	Drive Profile 0
DX-REM34B	Drive Profile 0	DX2-REM420	Drive Profile 0
DX-REM41D	Drive Profile 0	DX2-REM421	Drive Profile 0
DX-REM41E	Drive Profile 0	DX2-REM550*	ECU1 for switch controls. Drive Profile 0 for proportional.
DX-REMG90	ECU1	DX2-REM551	ECU1

* **The DX2-REM550 cannot be used in Joystick-only mode with iPortal.**

WARNING

The iPortal Accessibility feature is seen by the DX system as an "ECU1". For this reason, ensure that there are no DX-ECUs in the system configured as "ECU1".

4.9.2. Shark Remotes

The following Shark remotes can be used with the Accessibility feature, but do not need to be set in any particular profile to operate with the Accessibility feature. Shark systems need to be in inhibit mode before operating the Accessibility feature – please see the iPortal Installation Manual for more details.

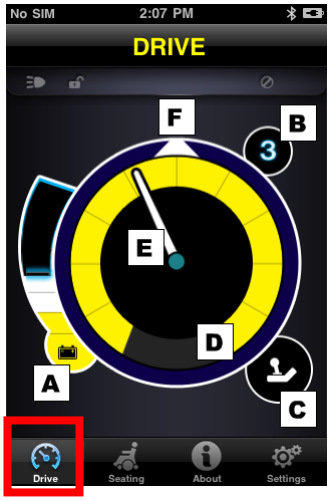
Remote	To use iPortal Accessibility
DK-REMD01	Requires inhibit switch. See installation manual.
DK-REMD01B	Requires inhibit switch. See installation manual.
DK-REMD11	Requires inhibit switch. See installation manual.
DK-REMD11B	Requires inhibit switch. See installation manual.
DK-REMD21	Requires inhibit switch. See installation manual.
DK-REMD21B	Requires inhibit switch. See installation manual.
DK-REMD31	Requires inhibit switch. See installation manual.
DK-REMD31B	Requires inhibit switch. See installation manual.

5. iPortal – Dashboard

The iPortal Dashboard is simple and intuitive to use. Change between **Drive** and **Seating** modes on your Remote, and Dashboard will follow.

To navigate to the **About** menu screen or to the **Setting** menu screen simply tap an icon on the navigation bar along the bottom of your screen.

5.1. Drive mode



To change to **Drive** mode, switch your Remote to Drive, and Dashboard will follow.

When in Drive mode, Dashboard displays the following information:

A Wheelchair battery state
B Drive profile
C Master / Attendant Remote control indicator
D Speed pot setting
E Speed
F Compass heading (iPhone 3GS (or later) only)

5.2. Seating mode

To change to **Seating** mode, switch your Remote to Seating and Dashboard will follow.

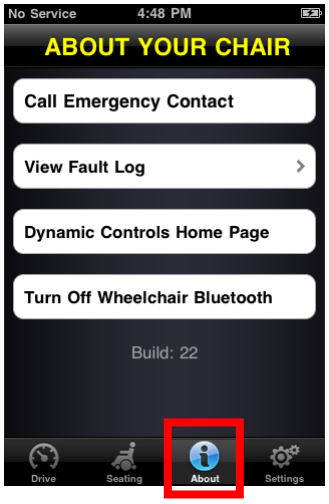
When in Seating mode, Dashboard displays the following information:

- Wheelchair battery state
- The active part of the seat is highlighted
- While the seat moves, the graphic flashes

Note On some systems it may be necessary to tap Seating on the navigation bar at the bottom of the application screen.

Note: The seating graphics, shown above, cannot be displayed properly with systems comprising the DX-REM24SD and DX2 power module (with seating actuators).

5.3. About menu



To enter the **About** menu, tap the About icon on the navigation bar along the bottom of your screen.

When in the **About Your Chair** menu, the following options are available:

1. Call a pre-set Emergency Contact number (iPhone only).
2. Inspect your chair's fault log. Tap any list item to see a brief description and suggested actions.
3. Visit the DYNAMIC CONTROLS' Home Page. Access product and product support information.
4. Turn off the Bluetooth wireless link in the iPortal2 module. The Bluetooth link will remain disabled until you next cycle the power on your chair.

CAUTION
*In areas where wireless is restricted, you must set **Airplane Mode** to **ON** on your iPhone.*

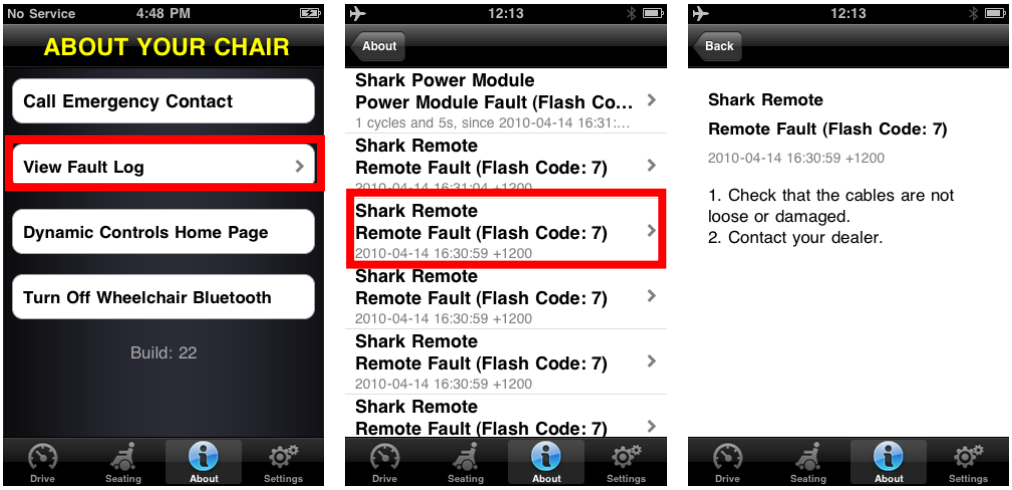
CAUTION
Except in an emergency, do not cycle the power of your chair in areas where wireless is restricted. When the power is switched on at the Remote unit, the iPortal2 module activates its Bluetooth wireless link and searches for an iOS device to connect to. Cycling the power of the chair resets the Bluetooth® disabled state that was previously set in Dashboard.

To call the pre-set Emergency Contact number (iPhone only):

- in the **About** menu, tap **Call Emergency Contact**;
- your iPhone dials the number.

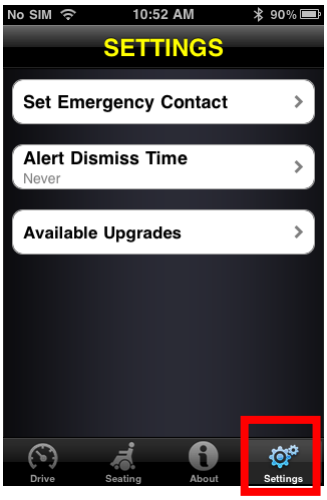
To inspect the Fault Log:

- in the **About** menu, tap **View Fault Log**;
- tap on a fault listing for more information about the fault.



The most recent fault is shown at the top of the fault list.

5.4. Settings menu



To enter the **Settings** menu, tap the Settings icon on the navigation bar along the bottom of your screen.

When in the Settings menu, the following options are available:

1. Set an Emergency Contact number ready to call for help in an emergency (iPhone only).
2. Adjust the length of time Alerts stay on screen.
3. Check for any new updates.

To set an Emergency Contact number (iPhone only):

- in the **Settings** menu, tap **Set Emergency Contact**;
- select one contact to be your Emergency Contact;
- select the number to call (a contact may have more than one listed number).

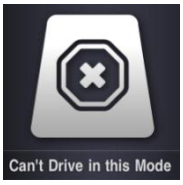
5.5. System messages

Unable to Connect

You need to set up your Bluetooth® connection: cycle the power on your chair, and allow 30 seconds for re-connection. If the message persists check that the iOS device is paired correctly with the iPortal2 (see ***Step 2 - pair the iPortal2 and the iOS device***, in the section ***Setting up the iPortal2 with your iOS device***).

No Drive Info Available

Your wheelchair battery may be charging. If you see this message momentarily, you can ignore it. If the message persists, contact an approved dealer.



Can't Drive in this Mode

Your Remote unit is in a mode that does not permit driving. On your Remote unit, select a drive profile. This screen will show when your wheelchair is charging.

OONAPU Detected

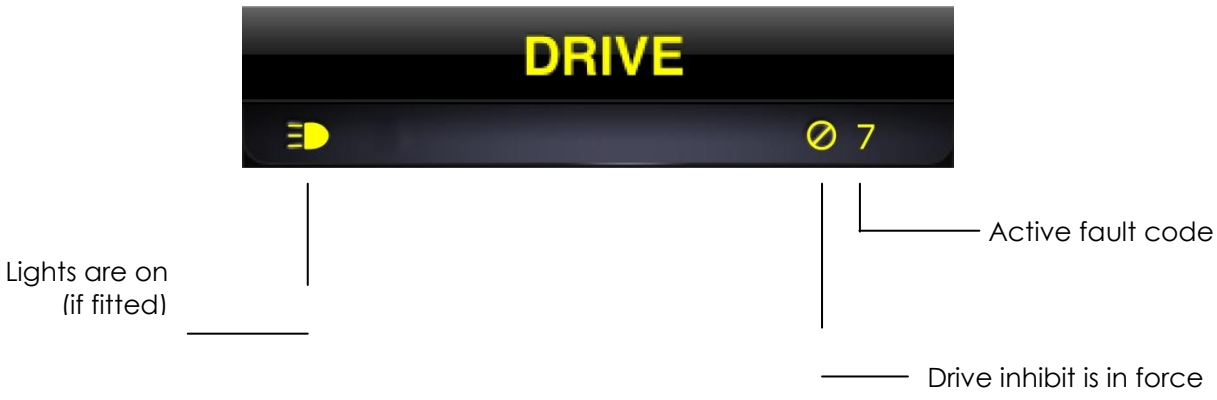
OONAPU means Out Of Neutral At Power Up. Your Remote is not in the neutral position, and you are trying to power up your system. This is a safety feature. Place your Remote in the neutral position, and try again.

Locked

Your wheelchair control system is locked. To unlock it, follow the normal procedure for your system.

5.6. Status icons

In Drive and Seating mode, three icons are visible at the top of the Dashboard screen. If inactive, the icons are greyed out. If active, they are yellow. Also, a number indicating a fault code appears if a fault is active on the wheelchair control system.



NOTE

Not every feature is available on every device. For example, the compass feature is only available on iPhone 3GS and later, and the Emergency Contact number is only available on iPhone, not on iPod touch or iPad. The chair lock status may not be available on some DX Remotes. For further information about a specific installation, contact an approved dealer or DYNAMIC CONTROLS.

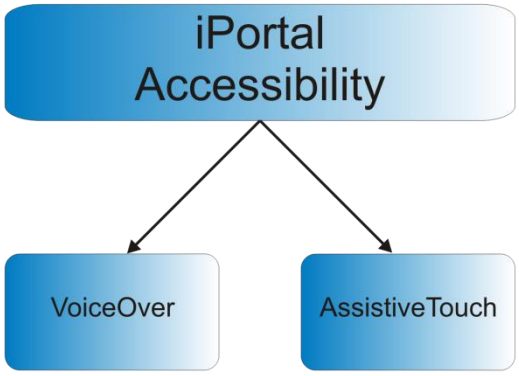
NOTE

Dashboard can only display information it receives from your wheelchair control system. Dashboard does not send any information back to your control system.

6. iPortal – Accessibility

The iPortal Accessibility feature is an optional upgrade* for the iPortal2 unit that provides you with the ability to navigate and control your iOS device using a DX/DX2, or Shark Remote. Wheelchair users with limited hand function can operate iOS devices using this feature. iPortal Accessibility is very easy to configure and operates in one of two modes:

- **with Apple's VoiceOver, or**
- **with Apple's AssistiveTouch**



Your iOS device can easily switch between the two modes of operation. The mode that you choose to work with depends on what you want to achieve and what you feel comfortable with.

NOTE

No Wizard reprogramming is required for the Accessibility feature.

* The iPortal Accessibility feature is an optional software upgrade for the iPortal2, which can be purchased from the AppStore via 'In App Purchase' within the Dashboard application. The iPortal2 is also available with the iPortal Accessibility feature already enabled from the factory (Dynamic Controls Part No: ***DJ-BTINT-ACC***). Please see your dealer / therapist for more details.

An upgrade to the iPortal2 firmware may be required to access the Accessibility feature. If this is the case, then first, go to iTunes and download the latest Dashboard version. After this, refer to the **After downloading** section on page 16 to upgrade the iPortal2 firmware.

If the firmware of the iPortal2 module is up-to-date and the iPortal Dashboard application does not ask to upgrade the firmware of the iPortal2 module, then proceed to the ***Activating iPortal Accessibility*** section (4.3.4).

6.1. Using iPortal Accessibility with Apple's VoiceOver

iPortal Accessibility with Apple's VoiceOver allows you to access most of the functionality of the iOS devices with the help of the Remote or speciality input device. With this feature, operating in conjunction with the iOS device's 'VoiceOver' accessibility feature, you can control the iOS device to navigate Left, Right, Enter, Home and operate alphanumeric text entry; iPhone users can even make calls with the help of this feature.

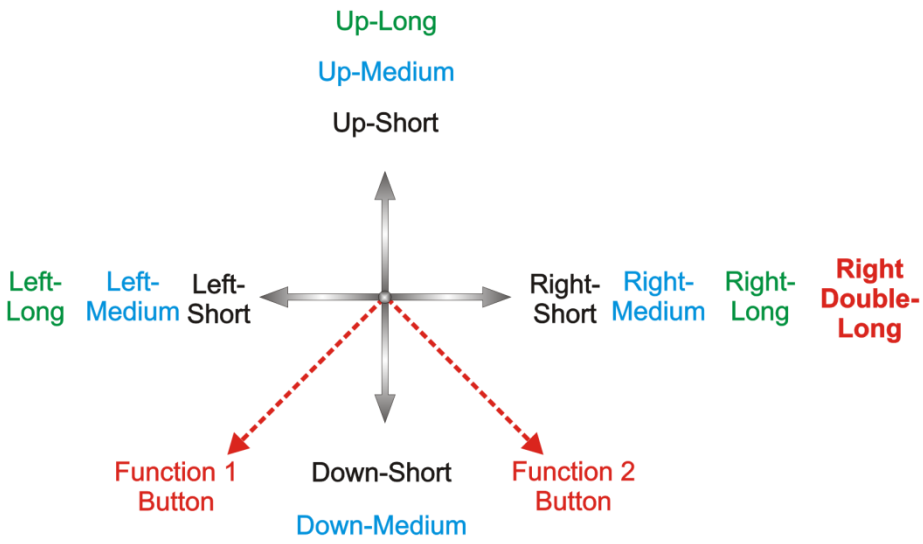
6.1.1. Joystick Commands

To use iPortal Accessibility with VoiceOver, there are four types of joystick commands to learn:

1) **Short**: with this command, the joystick position is held for less than 1s.
2) **Medium**: with this command, the joystick position is held for 1s to 2s.
3) **Long**: with this command, the joystick position is held for 2s to 4s.
4) **Double-long**: with this command, the joystick position is held for more than 4s.

These commands are shown in the image below. The purpose of each command changes depending on the Mode (Navigation, Text Entry, Number Entry) as described in the following sections.

Note that the commands shown with the diagonal red lines are not joystick commands – these are alternative mode actions, which are described in section **9.2 Alternative mode actions**.



NOTE

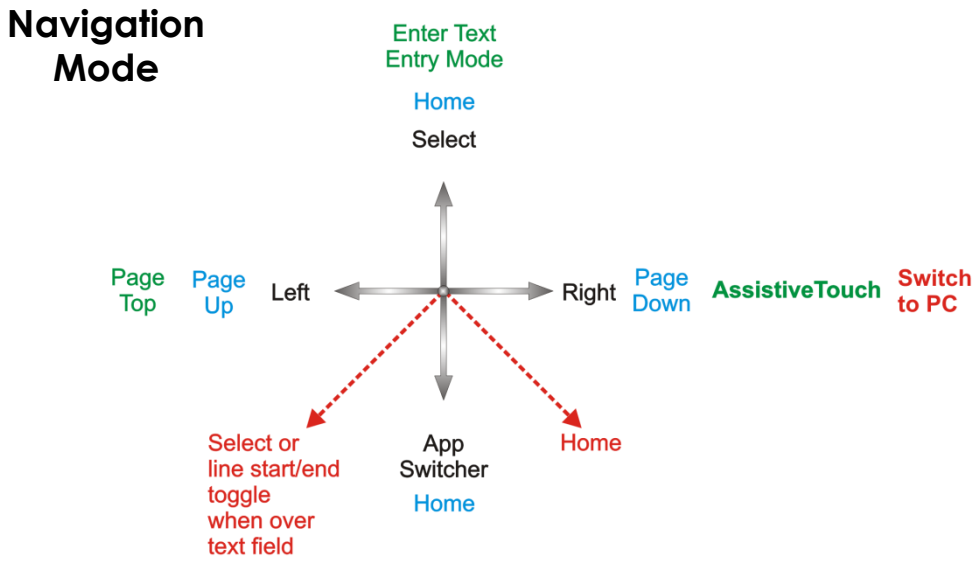
*To avoid the iOS device going to sleep, set the Auto-lock (**Settings->General**) to **Never**.*

6.1.2. Navigation mode

The **Navigation mode** allows you to navigate through the iOS device screens and access various applications on the iOS device. The joystick commands and iOS device actions for this mode are as below:

Joystick Command	iOS device Action
Left-Short	Move Cursor Left
Right-Short	Move Cursor Right
Up-Short	Select
Down-Short	App Switcher
Left-Medium	Page Up
Right-Medium	Page Down
Up-Medium	Home
Down-Medium	Home
Left-Long	Page top
Right-Long	AssistiveTouch
Up-Long	Enter "Text Mode"
Down-Long	No action
Right-Double Long	Switch to PC

The diagram below summarises the joystick movements for the table above. Note that the red actions refer to alternative 'Select' and 'Home' options depending on which mode you are in (navigation, text etc.), and which remote you are using. For more information, see section **9.2 Alternative mode actions**.



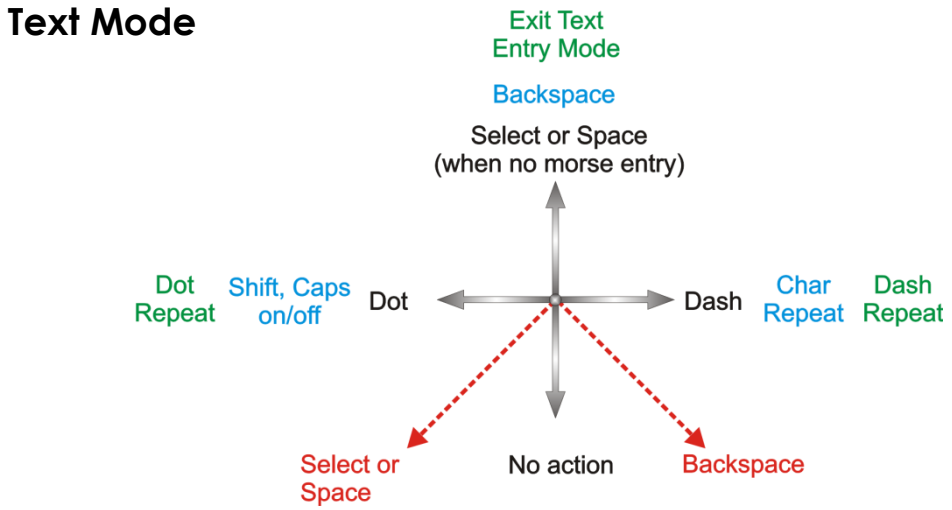
6.1.3. Text mode

Text mode is used for text input to various applications of your iOS device, such as writing messages, notes, iTunes search etc. This is a faster alternative to using the iOS device's on-screen keyboard. Morse code is used to enter text to your iOS device in Text mode. This mode is activated by holding the joystick "Up-Long". The joystick commands and iOS device actions for this mode are as below:

Joystick Command	iOS device Action
Left-Short	**Morse code dot**
Right-Short	**Morse code dash**
Up-Short	**Confirm character: enters current Morse entry, or space if no character selected**
Down- Short	**Delete last character**
Left-Medium	**Cycles : Shift, Caps lock on, Caps lock off**
Right-Medium	**Repeat last Morse character**
Up-Medium	**Backspace**
Down-Medium	**No action**
Left-Long	**Morse code dot repeat**
Right-Long	**Morse code dash repeat**
Up-Long	**Exit "Text Mode"**
Down-Long	**No action**
Centre-Long	Cancels current Morse character entry

Leaving the joystick centred for 1s-2s cancels the last Morse character entry, if it was not selected.

The diagram below summarises the joystick movements for the table above. Note that the red actions refer to alternative 'Select' and 'Home' options depending on which mode you are in (navigation, text etc.), and which remote you are using. For more information, see section **9.2 Alternative mode actions**.



The Morse code for entering text characters is given below:

Character	Code	Character	Code
a	●-	n	-●
b	-●●●	o	---
c	-●-●	p	●--●
d	-●●	q	--●-
e	●	r	●-●
f	●●-●	s	●●●
g	--●	t	-
h	●●●●	u	●●-
i	●●	v	●●●-
j	●---	w	●--
k	-●-	x	-●●-
l	●-●●	y	-●--
m	--	z	--●●
return (CR)	●-●-	Full stop (FS)	●-●-●-
comma	--●●--	$	-●●●-●
?	●●--●●	!	-●-●--
&	-●●--	/	-●●-●
“	●-●●-●	‘	●-----●
@	●--●-●	_	●●--●-
;	●●●-●	:	---●●●
-	-●●●-	=	-●●●-
+	●-●-●	*	●-●●●
(	●●●--●	)	-●●--●
1	●-----	6	-●●●●
2	●●----	7	--●●●
3	●●●--	8	---●●
4	●●●●-	9	----●
5	●●●●●	0	-----

6.2. Using iPortal Accessibility with Apple's AssistiveTouch

iPortal Accessibility with Apple's AssistiveTouch allows you to access all the functionality of the iOS devices with the help of the Remote or speciality input device.

iPortal Accessibility with AssistiveTouch provides an intuitive, easy-to-learn, cursor-driven approach to navigating, selecting and running applications on your iOS device.

AssistiveTouch with the AssistiveTouch cursor, the blue circle in the images to the right, can be used for:

- Navigating the screens up, down, left and right
- Simulating a touch event to select an item
- Performing a flick, or drag that uses 2, 3, 4 or 5 fingers
- Performing a pinch gesture – ideal for zooming in or out of maps and pictures
- Creating your own gestures
- Locking the screen
- Rotating the screen
- Adjusting the volume
- Simulating an iOS device shake
- Simulating a Home button press

The rest of this section will show you how to enable AssistiveTouch on your iOS device, and then how to use some of the functionality with the joystick or other speciality input device.

NOTE

AssistiveTouch is only available for iOS devices that have Apple's iOS 5 (or later) operating system installed. Please refer to Apple's documentation for more information (www.apple.com/support).

6.2.1. Enabling AssistiveTouch

To enable AssistiveTouch simply move and hold the joystick right for two seconds. To revert to VoiceOver, move and hold the joystick right for two seconds again.

6.2.2. Moving and selecting with the AssistiveTouch cursor

6.2.2.1. Cursor-click mode and cursor-move mode

The joystick can operate in two modes:

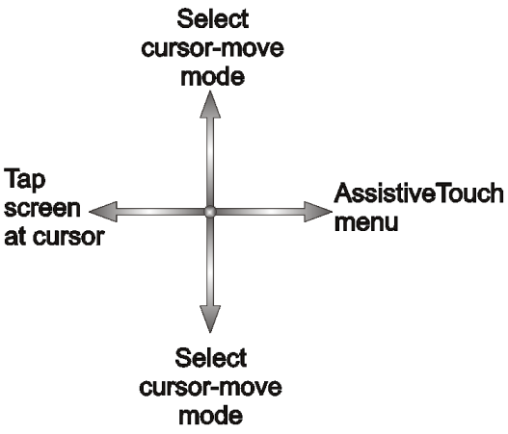
- Cursor-click
- Cursor-move

In cursor-click mode, which is the default mode, you can use the joystick to tap on the screen, open the AssistiveTouch menu, or change the mode to cursor-move mode. When cursor-move mode is selected, use the joystick to move the cursor around the screen. The joystick will automatically return to cursor-click mode from cursor-move mode when left in the neutral position for just under a second.

The tables below summarise the modes and iOS device actions.

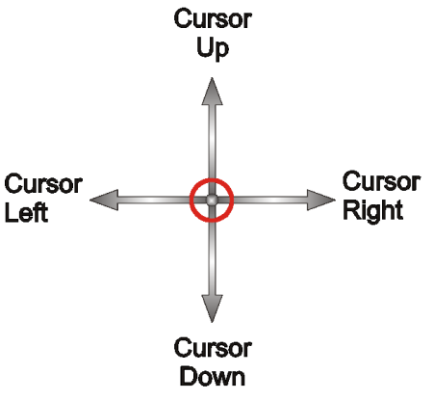
Cursor-click mode

Joystick Command	iOS device Action
Left for less than 1 second	Tap screen at cursor
Left for 2 seconds or greater	Select and hold
Right	Open AssistiveTouch menu
Right for 4 seconds or greater	Switch to MouseMover (if enabled and connected – see **7 iPortal – Mouse Mover** for more details)
Right for 2 seconds or greater	Switch between VoiceOver and AssistiveTouch
Up	Select cursor-move mode
Down	Select cursor-move mode



Cursor-move mode

Joystick Command	iOS device Action
Left	Move cursor left
Right	Move cursor right
Up	Move cursor up
Down	Move cursor down
Pause in neutral	Return to cursor-click mode



6.2.2.2. Moving the cursor

To move the cursor around the screen:

- change from cursor-click mode to cursor-move mode by starting your movement in either the up or down direction first
- move the joystick in the required direction

As long as you maintain moving the joystick, the cursor will continue to move. When you release the joystick back to the neutral position for more than the timeout (less than 1 second), the mode will revert to cursor-click mode.

NOTE

- *The cursor movement will accelerate in the held direction the longer the joystick is held out of neutral.*
- *The first time 'cursor-move' is activated following a power cycle, the iPortal2 will assume the presence of a 'Proximity Head Control' (see below), and until after cursor-move-down is used for the first time, 'cursor-move-up' will toggle directions as for 'Proximity head controls' below.*

6.2.2.3. Moving the cursor with a Proximity Head Control

To move the cursor around the screen with the Proximity Head Control:

- change from cursor-click mode to cursor-move mode by activating the centre pad momentarily
- move the cursor in the required direction by activating the centre, left or right pads
- the vertical direction of the cursor is toggled each time the centre pad is activated. For example, if the cursor is moving up, briefly move your head away from the centre pad and then back again to cause the cursor to move in the down direction.

As long as you maintain activating the centre, left and right pads, the cursor will continue to move. When you stop activating the pads for more than the timeout, the mode will revert to cursor-click mode.

6.2.2.4. Tracking speed

The speed at which the cursor moves around the screen depends on the **Tracking Speed** setting. If the speed of the cursor is not to your liking, then change the Tracking Speed setting by selecting from the Home page:

Settings → General → Accessibility → AssistiveTouch

Move the Tracking Speed slider to the desired cursor speed – left is slowest, right is fastest.

6.2.2.5. Tap / Select

To tap on, or select, an item, AssistiveTouch simulates a finger tap on the screen when you are in cursor-click mode (default) and when you momentarily move the joystick left (or activate the left pad on the proximity head control).

To indicate a tap, the cursor changes from a circle to a circle within a circle.

To tap on an item, simply position the cursor over the item and, after a second, tap on the item by moving the joystick left momentarily.

6.2.2.6. Scrolling

AssistiveTouch allows you to reposition and move items around your iOS device using a longer tap/select command. Repositioning and scrolling involves selecting and holding an item, moving the item, and then releasing the item. To hold an item, rather than just tapping it, hold the joystick left for longer than 2 seconds, and until an audible 'chirp' sound is heard.

In the example below, we will drag Page 3 of the Home page across to the right so that we can view Page 2:

1) **Move**: change the mode to cursor-move mode and position the cursor to the left of the screen – release the joystick back to the neutral position.
2) **Hold**: after a second or two, move the joystick to the left and hold for a couple of seconds.
3) **Drag**: drag the page to the right by moving the joystick to the right.
4) **Release**: return the joystick to the neutral position, and after a couple of seconds, move the joystick momentarily to the left.

6.2.2.7. Text Entry

Adding text is a straightforward task with AssistiveTouch. Using the on-screen keyboard, simply navigate the cursor to the appropriate key, and select it with a momentary left push of the joystick.

Remember to move the cursor in a vertical direction (to select cursor-move mode) after selecting a key so that you can start moving the cursor again.

6.2.3. The AssistiveTouch menu

NOTE

The following information is based on Apple's iOS 5. The screenshots for other versions may look slightly different, but the operation will be very similar.

6.2.3.1. Overview

The AssistiveTouch menu can be displayed by momentarily moving the joystick to the right (or activating the right pad on Dynamic Controls' Proximity Head Control). The menu is shown in the image, right, and provides the following further menus and actions:

- Gestures
- Home
- Device
- Favourites

Selecting a menu item

Use the AssistiveTouch cursor to select a menu item. Do not forget to move the cursor up or down first to select cursor-move mode. When the desired menu item turns blue, you can select it by returning the joystick to the neutral position for more than two seconds, and then moving the joystick momentarily left.

Closing the AssistiveTouch menu

To close the AssistiveTouch menu, simply move the joystick momentarily left or right.

6.2.3.2. Gestures

The Gestures menu offers a convenient way to simulate actions requiring more than one finger such as flicking or dragging.

When you select one of the gestures, as shown right, the AssistiveTouch cursor will display the corresponding number of circles on the screen, as shown below.

To drag or flick with the gesture, follow the **Move**, **Hold**, **Drag**, **Release** process described earlier in **6.2.2.6 Scrolling**.

6.2.3.3. Home

Select the Home icon in the AssistiveTouch menu to take you back to the Home page.

6.2.3.4. Device

When you select **Device** from the AssistiveTouch menu, a sub-menu is displayed with the following items:

- Rotate Screen* - rotate the screen left, right, portrait or upside down
- Lock Screen – lock the screen
- Volume Up – increase the volume
- Volume Down – decrease the volume
- Shake* - shake the device

* If the application permits the action.

6.2.3.5. Favourites

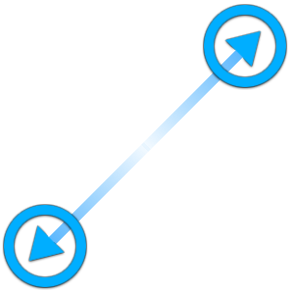
When you select **Favourites**, a sub-menu is displayed showing the Pinch action. The empty boxes with the addition (+) sign are used as placeholders for creating and storing your own gestures.

Using the Pinch action

The pinch action is used for zooming in or out in applications such as photos, maps or text documents.

It operates in two modes:

- Cursor-move mode
- Zoom mode



Cursor-move mode

Zoom mode

After selecting the Pinch action in Favourites, the screen cursor changes to the cursor-move mode cursor as shown above, left. When in this mode, you can position the cursor over the point at which to zoom in or out. When the cursor is in position, change to zoom-mode by momentarily moving the joystick left – the cursor will change as shown above, right.

- To zoom in, move the joystick up.
- To zoom out, move the joystick down.
- To change back to cursor-move mode, move the joystick left.
- To exit the pinch action, move the joystick right.

7. iPortal – Mouse Mover

The Mouse Mover feature allows you to control the mouse pointer on your laptop or PC from your wheelchair's joystick or other speciality input device.

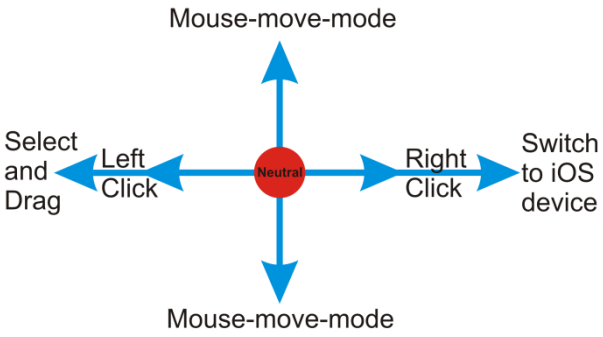
The feature operates over a wireless Bluetooth connection between your iPortal2 and your laptop or PC. Before using the Mouse Mover, you will need to enable it (if not enabled already) on your iPortal2 (a one-off procedure), and then set up a Bluetooth connection between the iPortal2 and your laptop/PC (a one-off procedure). If your laptop/PC does not support Bluetooth, then you can purchase a Bluetooth dongle that will simply plug into a spare USB slot on your laptop/PC. For more information on enabling iPortal Mouse Mover, see **Step 5 - optionally activate the iPortal Mouse Mover feature**.

7.1. Using Mouse Mover

The Mouse Mover feature enables you to control the mouse pointer on your PC or laptop. It works in two modes: **mouse-click**, and **mouse-move**.

7.1.1. Mouse-click mode

The mouse-click mode is the Mouse Mover's default mode.



In mouse-click mode you can perform the following mouse operations:

- left-click;
- right-click;
- select and drag;
- switch to iOS device;
- change to mouse-move mode.

Left-click

Flick the joystick left to perform a left-click.

Right-click

Flick the joystick right to perform a right-click.

Switch to iOS device

Move and hold the joystick right for >4 seconds to switch the operation to an iOS device. See **iPortal Mouse Mover & Accessibility** for more details.

Select and drag

Move and hold the joystick left for two seconds to perform a select and drag operation.

Change to mouse-move mode

To change to mouse-move mode, start your mouse movement in either the up or down direction first, and then continue in any direction until the cursor is where you want it to be.

7.1.2. Mouse-move mode

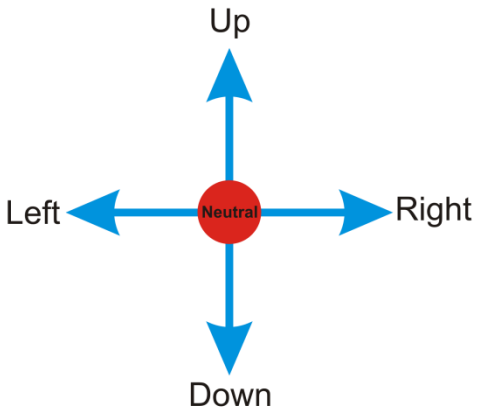
In mouse-move mode, your controller's joystick controls the position of the mouse pointer on your PC or laptop.

Enabling and using mouse-move mode

To enable and use mouse-move mode, start your mouse movement in either the up or down direction first, and then continue in any direction until the cursor is where you want it to be.

Change to mouse-click mode

To revert to mouse-click mode, simply let the joystick rest in the neutral position for one second or more.



8. iPortal Mouse Mover & Accessibility

iPortal Mouse Mover and iPortal Accessibility can be enabled on your iPortal2 simultaneously to give you unprecedented access to your PC, laptop and iOS devices.

When iPortal Mouse Mover and iPortal Accessibility are enabled on your iPortal2, a simple joystick movement allows you to swap from navigating and controlling one device to navigating and controlling another. For example, if you are using iPortal Mouse Mover to navigate and control your laptop, and you want to do something on your iPhone, simply move and hold the joystick right for 6 seconds to swap the iPortal2 to Accessibility. Similarly, if you are using Accessibility on your iPad and you want to do some work on your PC, simply hold the joystick right for 6 seconds and your iPortal2 will switch from Accessibility to iPortal Mouse Mover.

9. Appendices

9.1. Quick Start Guide to iPortal Accessibility

The following section provides a quick start guide for getting your particular Remote working with the iPortal Accessibility feature. Simply choose your type of Remote, and follow the instructions. For most cases, it's as simple as pressing the Drive, or Accessory button on your Remote, and waiting until a particular mode is displayed on your LED or LCD display.

If your wheelchair has been set up so that you do not get the required display, then contact your wheelchair specialist and ask them to enable the relevant mode using the Wizard notes that are detailed below each set-up instruction.

9.1.1. DX-ACU3B

Drive button

LED

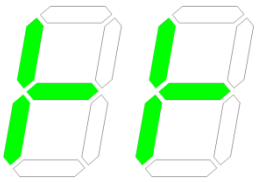
Instructions:

Press the **Drive** button until it displays '**0**' on the **LED**.

Wizard note: set **Allow Non-Driving Profile** to **Yes**

9.1.2. DX-REM24SD

Accessory button



LEDs

Instructions:

Press the **Accessory** button until the LEDs display the pattern as shown in the image to the left.

Wizard note: set **ECU1 Mouse Mode Enable** to **Yes**, and **ECU1 Enable** to **Yes**

9.1.3. DX-REM34, DX-REM34B, DX-REM41D, DX-REM41E

Drive button

LED

Instructions:

Press the **Drive** button until it displays '**0**' on the **LED**.

Wizard note: set **Allow Non-Driving Profile** to **Yes**

9.1.4. DX-REMG90

ASK button

ECU Icon

Instructions:

Press the **ASK** button until the **ECU** icon lights up.

Wizard note: set **ECU1 Mouse Mode Enable** to **Yes**

9.1.5. DX-REMG91

ESK button

ECU1 Mode Indicator

Instructions:

Press the **ESK** button until the **ECU1 Mode Indicator** lights up.

Wizard note: No Wizard setup

9.1.6. DX2-REMA-ACS2, DX2-REMB-ACS2, DX2-REM420, DX2-REM421

Drive Profile button

Drive Profile LEDs

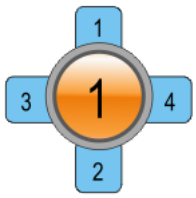
Instructions:

Press the minus (-) side of the **Drive Profile** button until the **Drive Profile LEDs** display the pattern as shown in the image to the left.

Wizard note: set **Allow Non-Driving Profile** to **Yes**

9.1.7. DX2-REM550, DX2-REM551

Accessory Mode



LCD display

Instructions:

Press the **Accessory Mode** button up until the LCD displays the **ECU1 mode** as shown in the image to the left.

Note: Accessibility will not operate with the REM550 in joystick-only mode.

Wizard note: set **ECU1 CH1-6 Mouse Mode Menu** to **Yes**

9.2. Alternative mode actions

The table below outlines the alternative mode actions (the diagonal red lines in the joystick movement diagrams in sections 6.1.2 , and 6.1.3) available for specific Remotes.

Remote	Alternative 'Select' options	Alternative 'Home' options
DX2-REM55x	- Function 1 - ECU1 - channel 7 (UCI programmed 'Alarm' option)	- Function 2
DX-REMG91	- Auxiliary Input switch	
DX-REMG90	- Left Indicator (only while in ECU1 Mode)	- Right indicator (only while in ECU1 mode)
DX-REM24SD/C	- Left Indicator (only while in ECU1 Mode)	- Right indicator (only while in ECU1 mode)

9.3. Tutorials for iPortal Accessibility with VoiceOver

This section demonstrates how to use the iPortal Accessibility with VoiceOver feature with a typical iOS device. Please note that, as all iOS devices are highly customisable, the screen shots may look slightly different to your own. However, the fundamentals of the Accessibility feature are the same. The tutorials are split into two main sections:

- Navigating the iOS device
- Using Applications

It is recommended that you begin with the **Navigating the iOS device** (9.3.1) section.

9.3.1. Navigating the iOS device

In this section, we'll learn how to do some basic navigation around the iOS device.

9.3.1.1. Basic Navigation – joystick

To move from one application icon to another on the **Home** screen, you have to move the screen cursor either left or right as shown in the image on the right – there is no ability to move through the icons vertically.

To move the screen cursor to the right by one application icon, move the joystick to the right (**Right-Short**) once.

Similarly, to move the screen cursor to the left by one application icon, move the joystick to the left (**Left-Short**) once.

As an example, in the image to the right (top screen), you can see that to get from the **Calendar** app, to the **App Store** app, you will have to move the screen cursor eleven (11) times to the right (that is: 11 x **Right-Short**).

9.3.1.2. Basic Navigation - function keys

A number of remotes support alternative shortcut navigation (**Select** and **Home**) through their function keys, or other input mechanisms.

As an example, the DX2-REM550, shown in the image to the right, uses the Function 1 button to **Select** an item or application, while the Function 2 button is used to take you to the **Home** page quickly.

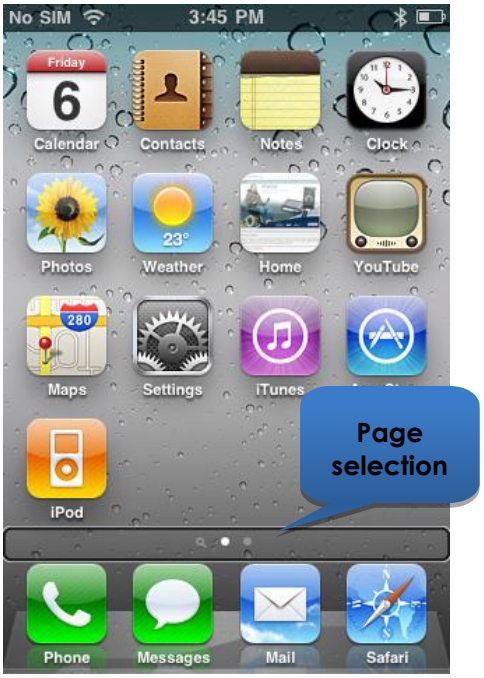
For a list of remotes and their alternative navigational abilities, see section Alternative mode actions (9.2).

9.3.1.3. Selecting another page

To select another page on your iOS device, simply navigate the screen cursor to the position shown in the image to the right.

Select the next page by either moving the joystick up once (**Up-Short**), or, if your remote supports alternative navigation functions, press the **Select** shortcut button.

To return to the Home page, either move the joystick **Up-Medium**, or, if your remote supports alternative navigation functions, press the **Home** shortcut button.

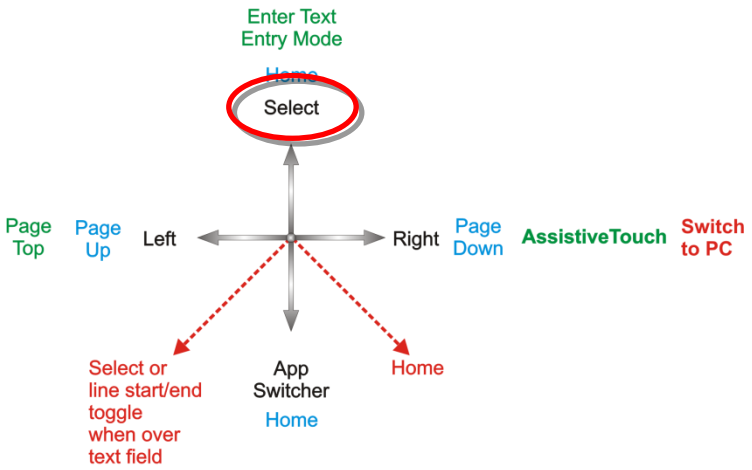


9.3.1.4. Page Up/Down

To scroll through list type displays, such as the **Settings > General** page, or playlists in your iPod application, use the **Page Up** (**Left-Medium**) and **Page Down** (**Right-Medium**) commands. Each command will scroll the page up or down, one page at a time.

9.3.1.5. Selecting an application

To select (open) an application, simply navigate the screen cursor to the appropriate application icon, and either move the joystick up for one second (**Up-Short**), or, if available, use the appropriate **Select** shortcut button (see section Alternative mode actions (9.2)).



NOTE

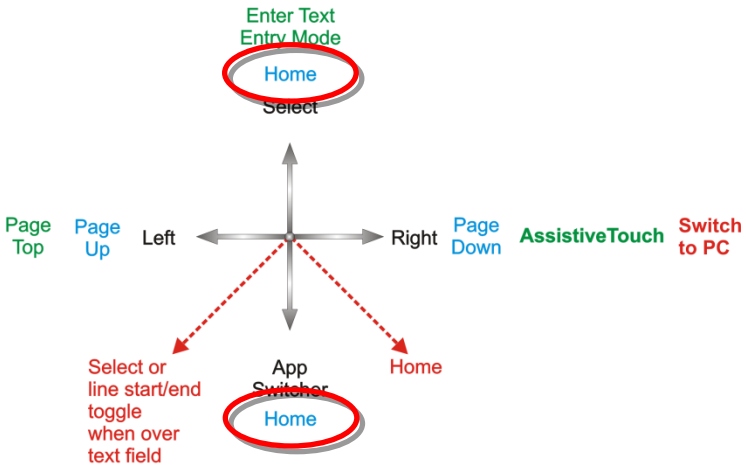
*The standard VoiceOver command "double-tap to open" refers to a double-tap on the iOS device screen – when using iPortal Accessibility, simply open or select with the **Up-Short** command as shown above.*

9.3.1.6. Exiting an application

To exit an application, use the **Home** command by either moving the joystick up for one-two seconds (**Up-Medium**), or moving the joystick down for one-two seconds (**Down-Medium**).

Alternatively, if your joystick supports

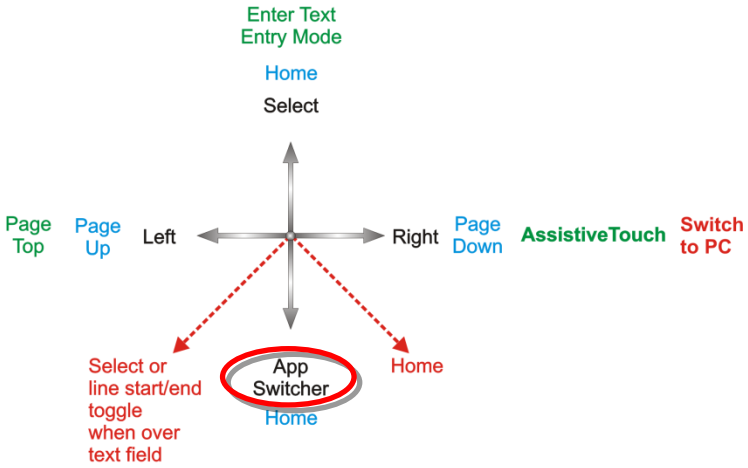
Alternative mode actions, then you can exit the application with the **Home** shortcut button. For example, on the DX2-REM550 right, pressing function button 2 will exit the application and return you to your **Home** page.



9.3.1.7. Using the application switcher

The application switcher provides a quick way of switching between open, or recently opened, applications.

To open the application switcher page, select the 'App Switcher' with a **Down-Short** command.



Navigate to the application you want to open, and select it with an **Up-Short** command. To exit the application switcher, enter a **Home** command (**Up-Medium**, or **Down-Medium**, or an appropriate function button).

9.3.1.8. Unlocking auto-lock mode

If the iOS device is asleep, then you can wake it up by moving the joystick up for two-three seconds (**Up-Long**) – this will wake up the iOS device, but it will still be locked. To unlock the iOS device, move the screen cursor to the unlock slider (move joystick three times to the right (3 x **Right-Short**)), and then slide the slider with a **Select** command (**Up-Short**).

9.3.2. Using Applications

In this section we'll see how we can accomplish some simple tasks with a few common applications.

9.3.2.1. Notes - adding a note

In this tutorial, we'll add a note in the Notes application as a reminder to "pick up bread". There are two ways to add alphanumeric text to your notes:

1. Using the keyboard
2. Using Morse code

Both methods will be shown in this tutorial. Although the keyboard method may be more familiar to you, we recommend that you use the Morse code entry as this can improve the speed of alphanumeric text entry. To add a new note in the Notes application, ensure that your joystick is in Navigation Mode, and from your **Home** page:

- Navigate to the Notes app
- Select the Notes app (**Up-Short**)

When the Notes app opens:

- Navigate to the 'Add' button
- Select the 'Add' button (**Up-Short**)

1. **Using the keyboard**
   - Navigate to the keyboard by moving the joystick to the right for less than one second (**Right-Short**); the screen cursor will be on the 'Q' key

To add text with the keyboard, simply navigate (left or right) to each character key, and select it with **Up-Short**. To write "*Pick up bread*", and with the screen cursor at the 'Q' key:

- Navigate to the 'P' key (**9 x Right-Short**)
- Select 'P' (**Up-Short**)
- Navigate to the 'I' key (**2 x Left-Short**)
- Select 'I' (**Up-Short**)
- Navigate to the 'c' key (**15 x Right-Short**)
- Select 'c' (**Up-Short**)
- Navigate to the 'k' key (**5 x Left-Short**)
- Select 'k' (**Up-Short**)

……and so on until the note is complete (Space,u,p,Space,b,r,e,a,d).

At this point, the screen cursor will be on the letter 'd' (last letter of *brea**d***). To complete the note, move the screen cursor to the '**Done'** button by sending the screen cursor to the top of the page with the **Page Top** command (**Left-Long**).

- Move the joystick left for two-three seconds (**Left-Long**) (**Page Top**)
- Navigate to the 'Done' button (**2 x Right-Short**)
- Select 'Done' (**Up-Short**)

That completes the note.

2. **Using Morse code**

To use the Morse code text input, change from **Navigation** mode to **Text** mode.

- Hold the joystick up for longer than two seconds (**Up-Long**)(Text mode)

To add the text, follow the table below:

Action	Code	Character/Operation
Left-Short Right-Short Right-Short Left-Short	• — — •	p
Up-S□ort		Select 'p'
Left-Short Left-Short	• •	I
Up-Short		Select 'I'
Right-Short Left-Short Right-Short Left-Short	— •— •	C

Up-Short		Select 'c'
Right-Short Left-Short Right-Short	— •—	K
Up-Short		Select 'k'
Up-Short		Space

……and so on until the note is complete (u,p,Space,b,r,e,a,d).

Note that if you are not entering Morse code, then the **Up-Short** command is used to add a **Space** character, as shown in the last row of the table above.

To complete the note, change the mode back to **Navigation** (**Up-Long**), and move the screen cursor to the '**Done'** button by sending the screen cursor to the top of the page with the **Page Top** command (**Left-Long**).

- Change mode to Navigation (**Up-Long**)
- Move the joystick left for two-three seconds (**Left-Long**)(**Page Top**)
- Navigate to the 'Done' button (**2 x Right-Short**)
- Select 'Done' (**Up-Short**)

That completes the note.

9.3.2.2. Calculator – using Text Entry mode

The calculator can be used with Navigation mode or standard Text Entry mode. In this tutorial, we'll find the product of two numbers using the Text Entry mode.

In Text Entry mode, each number is entered in Morse code. The two numbers that we'll enter are: **617.28**, and **200**. Follow the instructions and table below to enter the two numbers and see the result.

- From your Home page, navigate to the **Calculator** app (this is found under the Utilities folder), and select it with the **Up-Short** command.
- Set your iPortal2 to **Number Entry** mode by first selecting **Text** mode (**Up-Long**), and then followed by a **Down-Short** command.

The table below shows the number and function entries:

Action	Code	Character/Operation
Right-Short Left-Short Left-Short Left-Short Left-Short	— ●●●●	6
Up-Short		Select '6'
Left-Short Right-Short Right-Short Right-Short Right-Short	●— — — —	1
Up-Short		Select '1'
Right-Short Right-Short Left-Short Left-Short Left-Short	— — ●●●	7
Up-Short		Select '7'
Left-Short Right-Short Left-Short Right-Short Left-Short Right-Short	●—●—●—	. (decimal point)
Up-Short		Select '.'
Left-Short Left-Short Right-Short Right-Short Right-Short	● ● — — —	2
Up-Short		Select '2'
Right-Short	— — — ● ●	8

Right-Short Right-Short Left-Short Left-Short		
Up-Short		Select ‘8’
Left-Short Right-Short Left-Short Left-Short Left-Short Note: multiply is called “star”	●—●●●	* (multiply)
Up-Short		Select ‘*’
Left-Short Left-Short Right-Short Right-Short Right-Short	● ● — — —	2
Up-Short		Select ‘2’
Right-Short Right-Short Right-Short Right-Short Right-Short	— — — — —	0
Up-Short		Select ‘0’
Right-Short Right-Short Right-Short Right-Short Right-Short	— — — — —	0
Up-Short		Select ‘0’
Right-Short Left-Short Left-Short	— ●●● —	= (equals)

Left-Short Right-Short		
Up-Short		Select '='

That completes the calculation.

9.3.2.3. Camera - taking a picture

To take a picture or video navigate to the Camera app using **Left-Short** or **Right-Short** commands and select it with **Up-Short**.

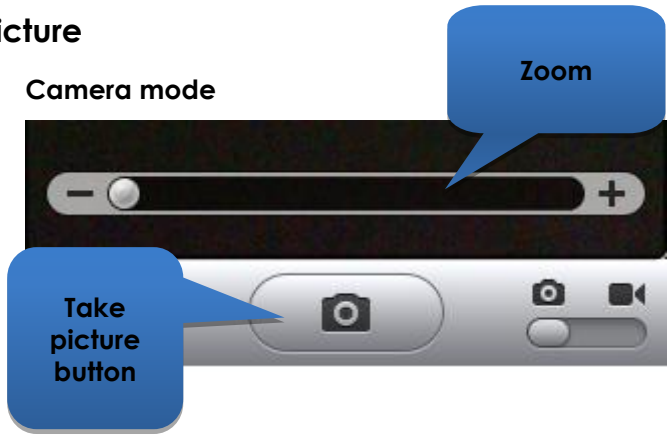
Take a picture

To take a picture, navigate to the '**Take picture**' button using **Left-Short** or **Right-Short** commands, and take the picture with **Up-Short**.

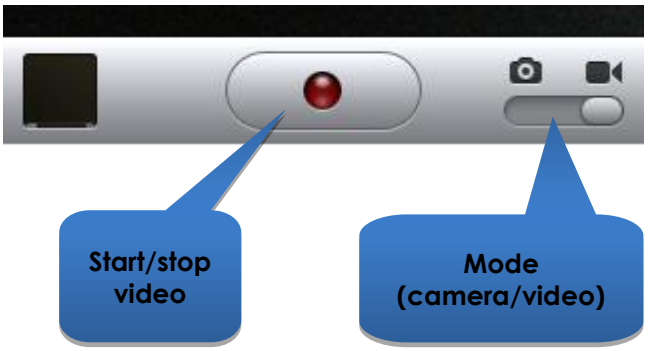
Zoom

To zoom in to your subject, navigate to the **Zoom** slider using **Left-Short** or **Right-Short** commands. When the slider is selected, increase the zoom by using the Up-Short command. Each **Up-Short** command will increase the zoom level by 1%.

Camera mode



Video mode



Start video

To record a video, navigate to the **Mode** slider and change the mode from camera to video using the **Up-Short** command. Navigate to the **Start/Stop** video button, and select start with an **Up-Short** command.

Stop Video

Stop recording a video by selecting the **Start/Stop** video button with the **Up-Short** command.

9.3.2.4. Photos - viewing your photos

To view your photos, navigate to the **Photos** app, and select it with the **Up-Short** command.

When the **Camera Roll** page opens, navigate to a photo and open it with the **Up-Short** command.

To view the next picture in the camera roll, navigate to the **Next** button, and select it with the **Up-Short** command.

Similarly, to view the previous picture, navigate to the **Previous** button and select it with the **Up-Short** command.

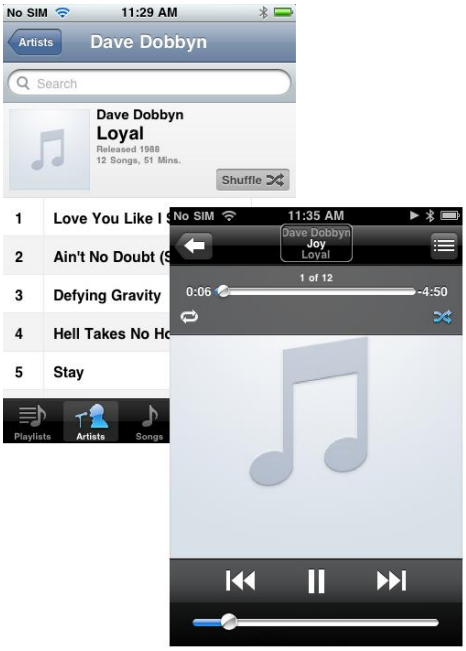
9.3.2.5. iPod - playing your music

Navigate to the iPod app (iPhone), or Music app (iPod), and select it with the **Up-Short** command.

Use the **Left-Short** and **Right-Short** commands to navigate through the playlists, artists, and songs. Select a song to play by using the **Up-Short** command.

Don't forget to use the **Page Down** (**Right-Medium**), and **Page Up** (**Left-Medium**) commands to navigate through long lists.

When a song is playing, you can move on to the next song or previous song by navigating to the **Next** and **Previous** buttons and selecting one of them with the **Up-Short** command.



9.3.2.6. Phone - making a call (iPhone only)

To make a phone call you can use the Navigation mode, Text Entry mode, or the Number Entry mode to enter the number. However, you will have to ensure that you are in Navigation mode to dial (call) the number.

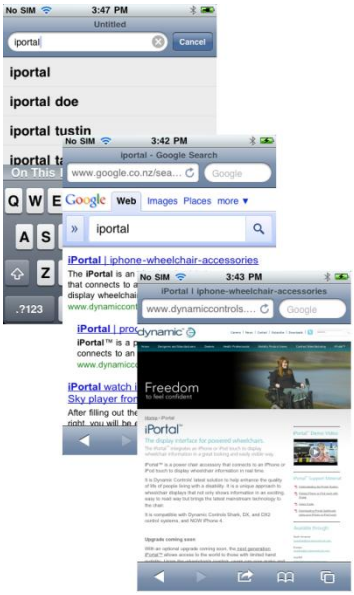
To enter and dial a number (using the Navigation mode):

- From your Home page, navigate to the Phone app.
- Navigate to each number and enter the number with the **Up-Short** command.
- When the number is complete, navigate to the Call button and select it with the **Up-Short** command.

9.3.2.7. Safari - searching the Internet

In this tutorial, we'll open the Safari application and use Google to search for the iPortal system.

- From your Home page navigate to the Safari application, and select it with the **Up-Short** command.
- Navigate to the Google search bar (**3 x Right-Short**), and select it with the **Up-Short** command.
- Enter "**iportal**" as a search term in the Google search box. Use either Text entry mode (Morse code), or alternatively use the Navigation mode to enter the text with the keyboard.
- Finally, navigate to the **Search** button, or select the search term from the suggestions list – select with the **Up-Short** command.



When Google presents its results, navigate to the appropriate link in the search results page and select with the **Up-Short** command.

9.4. Apple disclaimer

You agree that the use of this software together with an iPod, iPhone or iPad ("Apple Product") shall only be as a personal organization or supplemental data display tool and not as a source of medical advice. You agree that this software will never be used to replace the advice of a doctor, or your own common sense and independent judgment, and that you will not at any time rely on any information presented on your Apple Product as the basis for health care, medical or other decisions that may result in injury or other ill effects. You agree to take sole responsibility for your health care decisions, including contacting a physician or other health care professional regarding all medical conditions, tests, diagnoses and treatment options and agree that Apple shall have no liability for any action You or anyone using the software may take, regardless of the information received, displayed, calculated or transmitted by your Apple Product. Apple assumes no risk for your use of the software and makes no warranties whatsoever, express or implied, regarding the accuracy, completeness or usefulness of any information presented on your Apple Product as a result of using the software.

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