PG DRIVES TECHNOLOGY

R-NET OMNI2

USER MANUAL

SK82613-01

ENGLISH (AMERICAN)

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ABOUT THIS MANUAL

This user manual provides an introduction to the R-net Omni2.

Throughout the manual, the following emphasis is used to draw the reader's attention.

NOTE: **A general point for best practice.**

CAUTION: **A point of safety which if ignored could result in damage to the control system or the vehicle.**

WARNING: **A point of safety which if ignored could cause injury to the individual.**

In addition to the OEM, these points are particularly aimed at the following stakeholders:

- Operator (OP) – the occupant and / or assistant.
- Healthcare Professional (HP) – the person assessing the occupant's needs (may also be the installer).
- Installer (IN) – the person fitting the Omni2 / SID(s) to the wheelchair and / or programming to suit the occupant (may also be a Healthcare Professional).

Curtiss-Wright accept no liability for losses of any kind if these cautions and/or warnings are ignored.

DEFINITION OF TERMS USED AND ABBREVIATIONS

The following terms and abbreviations are used throughout this manual.

DVD: Digital Video Disc.

HP: Healthcare Professional, i.e. the person assessing the occupant's needs (may also be the installer).

ID: Identification.

IN: Installer, i.e. the person fitting the Omni2 / SID(s) to the wheelchair and / or programming to suit the occupant (may also be a Healthcare Professional).

IR: Infra-Red.

ISM: Intelligent Seating/Lighting Module

OEM: Original Equipment Manufacturer, i.e. the original manufacturer of the wheelchair.

OP: Operator, i.e. the user or occupant of the chair or the assistant.

SID: Specialty Input Device. Any specialty type of Input Device for connection to the Omni2, e.g. head array, TASH switch panel or mini-joysticks.

TV: Television.

U1: User switch 1, used with port 1 SID.

U2: User switch 2, used with port 2 SID.

User Switch: The switch for the user that initiates profile/mode changes and emergency stopping.

1 GENERAL OVERVIEW

1.1 INTRODUCTION

This user manual covers the functions of the R-net Omni2 and is intended as an extension to the wheelchair's user manual.

Please read and follow all instructions and warnings in all manuals supplied with your wheelchair and its accessories. Incorrect use may both injure the user and damage the wheelchair. In order to reduce these risks, read all documentation supplied carefully, in particular the safety instructions and their warning texts.

It is also of the utmost importance that you devote sufficient time to getting acquainted with the various buttons, functions and steering controls; the different seat adjustment possibilities, etc. of your wheelchair and its accessories before you begin using it.

All information, pictures, illustrations and specifications are based upon the product information available at the time these operating instructions were created. Pictures and illustrations used in these operating instructions are representative examples and not intended to be exact depictions of the relevant parts.

We reserve the right to make changes to the product without prior notice.

WARNING (OP, HP, IN)

ENVIRONMENTAL CONDITIONS

Protect the control system from exposure to any type of moisture, including rain, snow, mud or spray.
If any of the shrouds or the joystick boot have cracks or tears, they must be replaced immediately. Failure to do so may allow moisture to enter the electronics and cause personal injury or property damage, including fire.

Curtiss-Wright accept no liability for losses of any kind if these conditions are not met.

2 CONTROLS AND CONNECTIONS

The Omni2 comprises of two sections – a 'Display Section' and an 'Input Section'.

2.1 DISPLAY SECTION

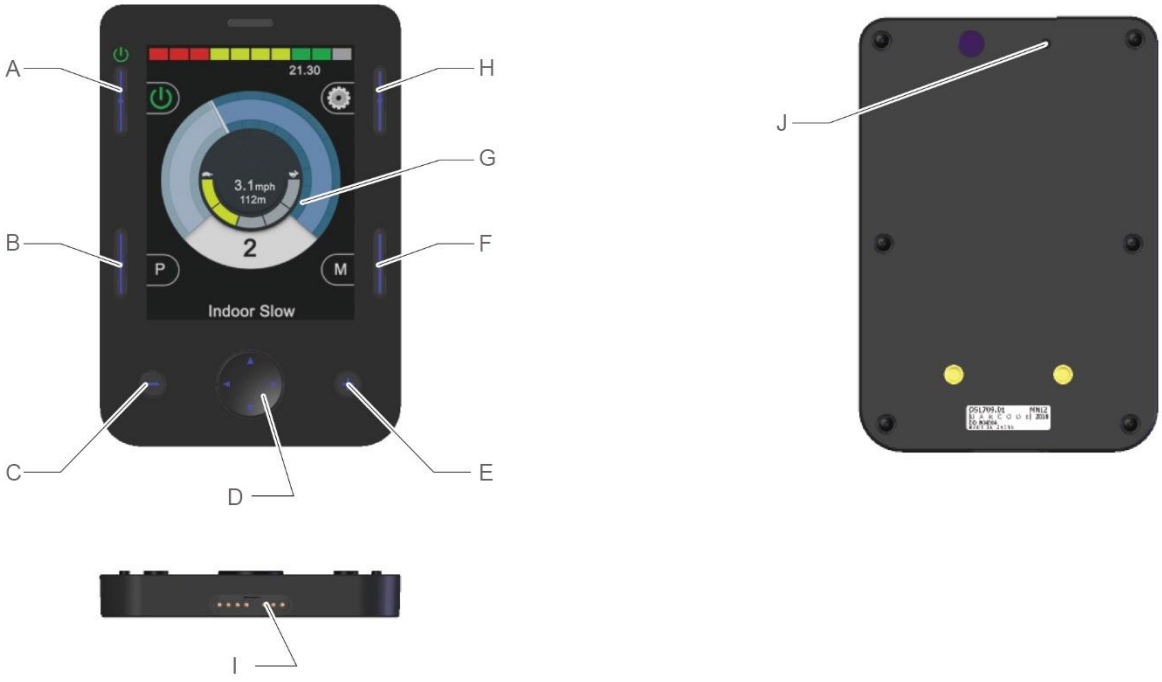


Figure 1 – An overview of the 'Display Section'.

The 'Display Section' consists of a full color, backlit LCD screen that can show Omni2 configuration details and operating information, and several function buttons.

A	On/off button	F	Mode button
B	Profile button	G	LCD screen
C	Minus (-) button	H	Settings button
D	Navigation buttons	I	Display / Input Section connector
E	Plus (+) button	J	Sounder

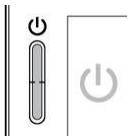
WARNING (OP, HP, IN)

Do not attempt to operate the wheelchair if the LCD screen is damaged or malfunctioning. Curtiss-Wright accept no liability for losses of any kind arising from failure to comply with this condition.

2.1.1 FUNCTION BUTTONS

The 'Display Section' has a total of 6 function buttons and 4 navigation buttons.

2.1.2 ON/OFF BUTTON

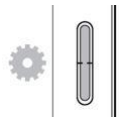


The on/off button switches on power to the complete control system electronics. See item (A) on figure 1.

2.1.3 PROFILE BUTTON

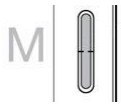
The profile button can be used to change between the available drive profiles. See item (B) on figure 1.

2.1.4 SETTINGS BUTTON



The settings button launches the settings menu screen. Refer to the settings menu section 3.6 for further details. See item (H) on figure 1.

2.1.5 MODE BUTTON



The mode button can be used to change between the available modes. See item (F) on figure 1.

2.1.6 MINUS (-) BUTTON

The minus (-) button can be used to reduce the speed within a drive profile. See item (C) on figure 1.

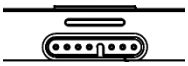
2.1.7 PLUS (+) BUTTON

The plus (+) button can be used to increase the speed within a drive profile. See item (E) on figure 1.

2.1.8 NAVIGATION BUTTONS

The array of four navigation buttons allows the settings and user menu screens to be navigated. See item (D) on figure 1.

2.1.9 DISPLAY / INPUT SECTION CONNECTOR



At the base of the 'Display Section', there is a connector for the cable which goes between the 'Display Section' and the 'Input Section'. See item (I) on figure 1.

CAUTION (OP, HP, IN)

Use only Curtiss-Wright supplied Omni2 connection cable.

2.2 INPUT SECTION

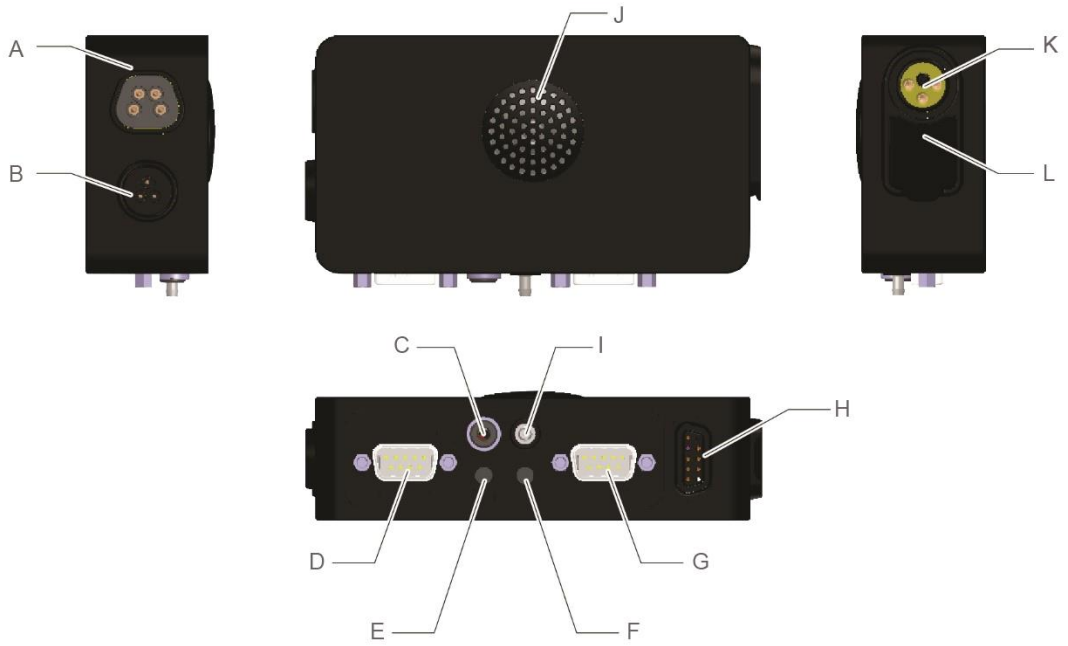
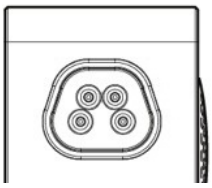


Figure 2 – An overview of the 'Input Section'.

The R-net Omni2 'Input Section' connects to the 'Display Section' using the Omni2 cable supplied, and provides the following connections:

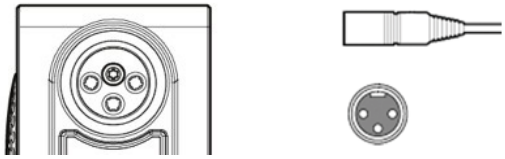
A	R-net communications connector	G	SID Port 2, 9-Way D-type connector
B	Reserved for future use	H	Display / Input Section connector
C	External on/off switch jack	I	Sip and puff input
D	SID Port 1, 9-Way D-type connector	J	Speaker
E	User 1 (U1) switch jack	K	Charging socket
F	User 2 (U2) switch jack	L	USB charging port

2.2.1 R-NET COMMUNICATIONS CONNECTOR



This connector is used to link the Omni2 to the R-net system. See item (A) on figure 2.

2.2.2 CHARGING SOCKET



This 3 pin socket may only be used for charging or locking the wheelchair. Do not connect any type of programming cable to this socket. Do not use the socket as a power supply for any other electrical device. Connecting other electrical devices may damage the control system or affect the wheelchair's electromagnetic compatibility (EMC) performance. See item (K) on figure 2.

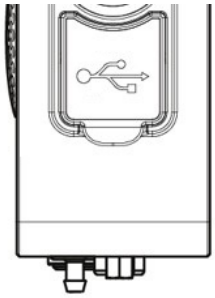
CAUTION (OP, HP, IN)

Use only the supplied battery charger.

WARNING (OP, HP, IN)

The wheelchair's warranty will be voided if any device other than the battery charger supplied with the wheelchair or the lock key is connected via the charging socket.

2.2.3 USB CHARGING PORT

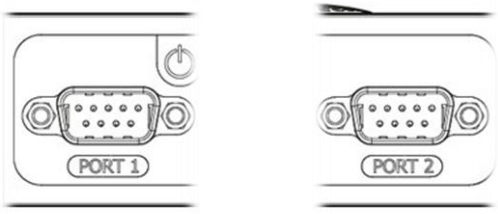


Located under the rubber seal, the 'type A' USB socket can be used to charge devices such as mobile phones. See item (L) on figure 2.

CAUTION (OP, HP, IN)

Only use for charging mobile devices. The USB charging port is rated at 5V, 2.1A.

2.2.4 9-WAY D-TYPE SID CONNECTORS, PORT 1 AND PORT 2

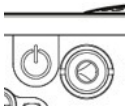


These provide connections to analogue (proportional) or digital SIDs. They can accept a range of third party input devices, such as switched or proportional head arrays, directional switched inputs, or proportional chin joystick controls. See items (D) and (G) on figure 2.

2.2.5 USER SWITCH JACKS, U1 AND U2

These provide connections to normally open or normally closed switches, via 3.5mm (1/8”) jack sockets. The switches are used for accessing the user menu, emergency stop during drive, sleep mode via a long press, or scanner input when programmed accordingly. See items (E) and (F) on figure 2.

2.2.6 EXTERNAL ON/OFF SWITCH JACK



This 3.5mm (1/8”) jack socket provides an external connection for an external on/off switch. See item (C) on figure 2.

2.2.7 SIP AND PUFF INPUT

This pneumatic switch input provides a connection to a saliva tube for a sip and puff input. The tube should be 3.5mm (1/8”) in diameter. See item (I) on figure 2.

2.2.8 DISPLAY / INPUT SECTION CONNECTOR

This connector is used to link the 'Input Section' to the 'Display Section', using the Omni2 cable supplied. See item (H) on figure 2.

CAUTION (OP, HP, IN)

Use only Curtiss-Wright supplied Omni2 connection cable.

3 DISPLAY SECTION SCREENS AND SYMBOLS

3.1 DRIVE SCREEN

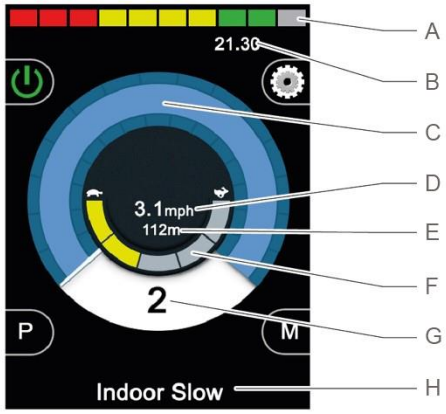


Figure 3 – Example of the drive screen.

When the Omni2 is powered on or awoken from sleep mode, then a screen such as above will appear.

The areas are as follows:

A	Battery voltage indicator	E	Total or trip distance (in miles or km)
B	Information bar	F	Maximum speed indicator
C	Speed indicator	G	Current profile
D	Digital speed display (in mph or km/h)	H	Profile/mode/axis name text bar

3.1.1 BATTERY VOLTAGE INDICATOR

This displays the approximate charge available in the battery and can be used to alert the user to the status of the battery. See item (A) on figure 3.

Steady (1 to 10 bars lit): This indicates that all is well.

Flashing slowly (1 or 2 bars lit): The control system is functioning correctly, but the batteries should be charged as soon as possible.

Stepping up (from 1 to 10 bars): The wheelchair batteries are being charged. It will not be possible to drive the wheelchair until the charger is disconnected and power has been cycled off and on again.

As a rough indication, the following applies:

Red, yellow and green	Fully charged
Red and yellow	Half charged
Red	Charge the batteries

3.1.2 INFORMATION BAR

This area contains information and warning symbols, as well as a clock. See item (B) on figure 3.

3.1.2.1 FOCUS

When the control system contains more than one method of direct control, such as a secondary SID, joystick module or a dual attendant module, then the module that has control of the wheelchair will display the focus symbol.

3.1.2.2 BLUETOOTH® SIGNAL ICON

This symbol appears when Bluetooth® wireless technology is enabled and the system is paired to an external Bluetooth® device. When the system has been placed into discovery mode, the icon will flash blue.

3.1.2.3 MOTOR TEMPERATURE

This symbol is displayed when the control system has intentionally reduced the power to the motors, in order to protect them against heat damage.

3.1.2.4 CONTROL SYSTEM TEMPERATURE

This symbol is displayed when the control system has intentionally reduced its own power, in order to protect itself against heat damage.

3.1.2.5 CLOCK

This displays the current time in a numeric format.

The clock is user adjustable. Adjustable options are:

- The time, the user can adjust the time.
- Visibility, whether the clock is displayed on screen.
- The display format, 12 or 24 hour.

These adjustments are made within the settings menu. Refer to the settings menu section 3.6 for further details.

3.1.2.6 PORT IDENTIFIER

1

If the Omni2 has been configured to accept two input devices, then the input device in command will be identified by either:

1 – Port 1

2 – Port 2

3.1.2.7 INDICATOR ICONS

 Off  On

The indicator icons will flash when the respective indicators are active.

NOTE (OP, HP, IN)

The indicator icons will only be visible when a module supporting lighting is connected to the system, regardless of whether the wheelchair has lights and indicators fitted or not.

3.1.2.8 HAZARD ICON

 Off  On

The hazard and indicator icons will flash when the 'hazards' option is activated.

NOTE (OP, HP, IN)

The hazard and indicator icons will only be visible when a module supporting lighting is connected to the system, regardless of whether the wheelchair has lights and indicators fitted or not.

3.1.2.9 LIGHTS ICON

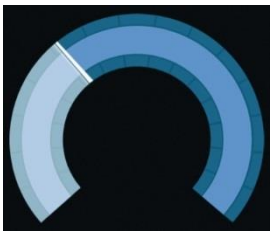
 Off  On

The lights icon will be switched on when the lights have been activated.

NOTE (OP, HP, IN)

The lights icon will only be visible when a module supporting lighting, e.g. ISM-L, is connected to the system.

3.1.3 SPEED INDICATOR



This gives a graphical display of the wheelchair's speed. See item (C) on figure 3.

As the speed increases, the needle will move around the arc, covering the background with the white highlight.

The display is scaled between zero speed and the maximum programmed speed of the wheelchair.

3.1.4 DIGITAL SPEED DISPLAY

This displays the actual speed of the wheelchair in digital form, in either mph or km/h depending upon programming. See item (D) on figure 3.

It can also be turned off via programming.

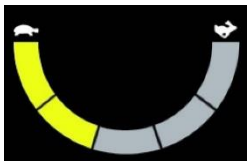
3.1.5 TOTAL OR TRIP DISTANCE (ODOMETER)

This displays the total distance the wheelchair has travelled or the trip distance since the last reset. See item (E) on figure 3.

This selection is made in the settings menu. Refer to the settings menu section 3.6 for further details.

The value will be in miles (m) or kilometers (km).

3.1.6 MAXIMUM SPEED INDICATOR



This displays the current maximum speed setting. See item (F) on figure 3.

When the segment on the left is illuminated, then the speed setting corresponds to the programmed minimum forward, reverse and turning speeds. The indicator will never show a lower setting, i.e. the segment on the left will always be fully illuminated.

When all segments are fully illuminated, then the speed setting corresponds to the programmed maximum forward, reverse and turning speeds.

3.1.7 CURRENT PROFILE

This denotes the currently selected profile, shown in numeric form. See item (G) on figure 3.

3.1.8 PROFILE/MODE/AXIS NAME TEXT BAR

This area of the screen displays text relevant to the operating condition of the control system. See item (H) on figure 3.

Example text strings would be profile name (in drive mode), mode name (e.g. ‘R-net Mouse 2’) or axis name (in seating mode).

3.1.9 INHIBIT

If the wheelchair is being inhibited from driving, then this red symbol will be flashing:

If the speed of the wheelchair is being limited, for example, by a raised seat, then this orange symbol will be displayed:

These turtle icons will be displayed on the left part of the speed indicator, see item (C) on figure 3.

3.1.10 LATCHED DRIVE

This symbol will be displayed if the control system is set for latched drive operation, and is displayed on the right part of the speed indicator, see item (C) on figure 3.

3.1.11 MOMENTARY SCREENS

Figure 4a – Speed momentary screen.

Figure 4b – Profile momentary screen

If the momentary screens are enabled (refer to programming section 3.6.6.1) then screens similar to those in figures 4a and 4b will be displayed when pressing the speed or profile buttons.

3.1.12 SELECTED DIRECTION INDICATOR

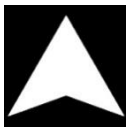
Forward / up

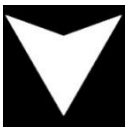
Reverse / down

These symbols are only displayed if the Omni2 has been configured to use a three direction SID. They will appear in the middle of the speed indicator, just above the digital speed display.

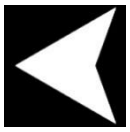
Refer to sections 6.3 and 6.4 for further details on operation with three direction SIDs.

3.1.13 SCANNER DRIVE SYMBOLS


Forward drive


Reverse drive


Right drive


Left drive

User menu

If the Omni2 is programmed to operate with a single switch scanner type SID, these symbols will be displayed in the drive screen, overlapping the top section of the speed indicator, alternating between symbols. Refer to section 6.5 for more details.

3.2 USER MENU SCREEN

Figure 5 – Example of the user menu screen

If the menu method of control is being used, then an operation of the user switch will initiate the user menu, and display a screen similar to figure 5.

Navigation of the user menu is performed by forward and reverse SID commands, or via a programmed automatic scanning sequence.

If a greater-than symbol (>) is shown in the far-right column, then a right SID command will change the selection for that function.

If a single switch scanner type SID is being used, then the switch will operate in the same way as a right SID command in the above instance.

3.3 SEAT FUNCTIONS SCREEN

Figure 6 – Example of the seat functions screen

The seat functions screen, figure 6, appears when seating mode is selected.

The seat functions screen displays symbols relevant to the seating control of the wheelchair.

The seat functions screen will display the sections of the chair currently selected for movement, the axis number, the name given to the selection and a direction arrow showing what short of movement is available.

Typical seat function adjustments can be achieved by moving the SID left or right to select the desired axis, or by moving the SID forwards or backwards to move the seat function.

3.4 BLUETOOTH® SCREEN

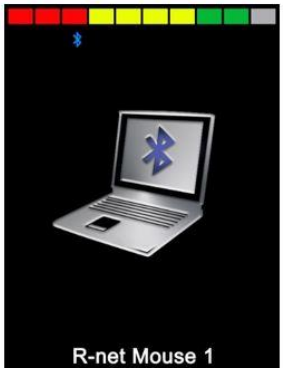


Figure 7 – Example of the Bluetooth® screen – one device.

The initial Bluetooth® mode screen will be dependent on whether the Omni2 has been set-up to control one or more devices.

If set-up to control just one device, a screen such as figure 7 will appear.

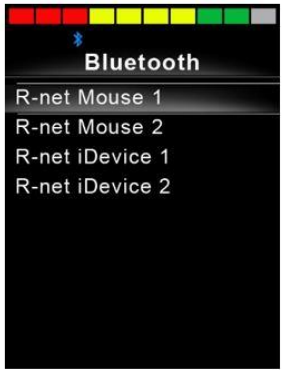


Figure 8 – Example of the Bluetooth® screen – multiple devices.

If set-up to control more than one device, a screen such as figure 8 will appear.

The SID should then be used to navigate the menu and select the device to control. Forward and reverse deflections navigate the menu, while a right deflection selects the highlighted device.

Refer to the Bluetooth® set-up in section 4 for further details.

3.5 INFRA-RED (IR) SCREEN

Figure 9 – Example of the IR screen.

The IR screen is accessed via the user menu. The IR screen will only be available if IR codes have been stored in the Omni2.

There are two ways to store IR codes in the Omni2:

- By 'learning' codes from IR handsets
- By programming from the PC-based 'IR Configuration Tool'.

Refer to IR set-up section 5 for details of the learning method.

Refer to your approved installer, health professional or dealer for the PC based method.

NOTE (HP, IN)

When an Omni2 is dispatched from Curtiss-Wright there are no stored IR codes.
If IR screen is not available and there are stored IR codes, then refer to IR set-up in section 5.
On entering IR screen, the user will be presented with a list of available IR appliances.

The IR mode menu is navigated in the usual way:

- Forward SID deflections will highlight the appliance above.
- Reverse SID deflections will highlight the appliance below.
- Left or right SID deflections will enter the highlighted appliance's sub-menu, which will contain all the IR commands for that appliance.
- Left or right SID deflections will then activate the highlighted IR command.

Figure 10 – Example of an IR command in use.

For each appliance there is a list of associated IR commands. Using the TV example, commands such as: 'On/Off', 'Channel Up', 'Channel Down', 'Volume Up' and 'Volume Down' may be displayed. When the Omni2 is transmitting the selected command, it is highlighted with a red background.

3.6 SETTINGS SCREEN

Figure 11 – Example of the settings menu screen.

The settings menu allows access to user-related adjustments. It can be accessed from the user menu or by pressing the top right soft-key on the 'Display Section' after the Omni2 has been switched on.

A typical settings menu display is shown in figure 11 above.

SID forward and reverse movements are used to navigate up and down the screen.

Each of the menu items are described in the following sections.

3.6.1 SET TIME

A right SID deflection when 'Time' is highlighted will enter a sub-menu with the following time-related function options:

Set Time	Allows the user to set the current time and date.
Display Time	This sets the format of the time display or turns it off. The options are 12hr, 24hr or off.
Exit	A right SID deflection when 'Exit' is highlighted will exit the 'Time' sub-menu and return to the settings menu.

3.6.2 DISTANCE

A right SID deflection when 'Distance' is highlighted will enter a sub-menu with the following odometer data and function options:

Total Distance	This is a value held in the power module and relates to the total distance driven using that power module.
Trip Distance	This is a value held in the Omni2 and relates to the total distance driven since the last reset.
Display Distance	Sets whether 'Total Distance' or 'Trip Distance' appears as the odometer display on the Omni2.
Clear Trip Distance	A right SID deflection will clear the 'Trip Distance' value.
Exit	A right SID deflection when 'Exit' is highlighted will exit the 'Distance' sub-menu and return to the settings menu.

3.6.3 BACKLIGHT

A right SID deflection when 'Backlight' is highlighted will enter a sub-menu with the following backlight-related function options:

Backlight	This sets the intensity of the LCD backlight. The adjustable range is 0% to 100%.
Auto Backlight	The Omni2 'Display Section' contains an ambient light sensor to automatically adjust screen brightness. The programmable options are on or off. If set to on, the display adjusts the screen brightness based on the light sensor reading. If set to off, the screen brightness will not change with changes in light intensity.
Backlight Timeout	This adjusts the period of time the backlight will remain active once no further instructions are received from a SID. The adjustable range is 0 to 240 seconds.
Exit	A right SID deflection when 'Exit' is highlighted will exit the 'Backlight' sub-menu and return to the settings menu.

3.6.4 BLUETOOTH®

A right SID deflection when 'Bluetooth®' is highlighted will enter a sub-menu to configure the Bluetooth® mode screen.

Refer to the Bluetooth® section 4 for further details.

3.6.5 IR SET-UP

A right SID deflection when 'IR Setup' is highlighted will enter a sub-menu for learning and deleting IR codes.

Refer to the IR set-up section 5 for further details.

3.6.6 PROGRAMMING

Figure 12 – Example of the 'Programming' menu screen.

A right SID deflection when 'Programming' is highlighted will enter a sub-menu for programming with access to two further sub-menus, 'Controls' and 'System'.

3.6.6.1 CONTROLS

A right SID deflection when 'Controls' is highlighted will enter a sub-menu for programming user experience functions as follows:

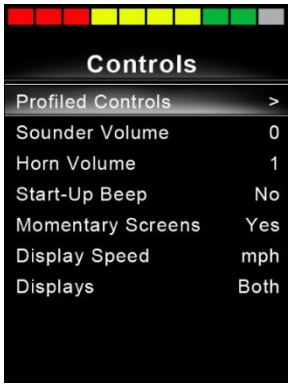


Figure 13 – Example of the 'Controls' menu screen.

Profiled Controls > Sleep	Sets the time after which the control system will go to sleep if a SID command is not received, in the selected profile.
Sounder Volume	Sets the volume of the sounder used to indicate button presses.
Horn Volume	Sets the volume of the horn when used.
Start-Up Beep	Sets whether a short beep occurs when the Omni2 is turned on.
Momentary Screens	Sets whether programmed momentary screens are displayed.
Display Speed	Sets how the wheelchair's speed is displayed. Options are mph, km/h or off.
Displays	Sets the format of the digital drive display. Options are odometer, speed or both.

3.6.6.2 SYSTEM

A right SID deflection when 'System' is highlighted will enter a sub-menu displaying system information, including 'Diagnostics' and 'Timers' options.

Figure 14 – Example of the 'System' menu screen.

3.6.6.2.1 DIAGNOSTICS

A right SID deflection when 'Diagnostics' is highlighted will enter a sub-menu displaying diagnostic information from the control system.

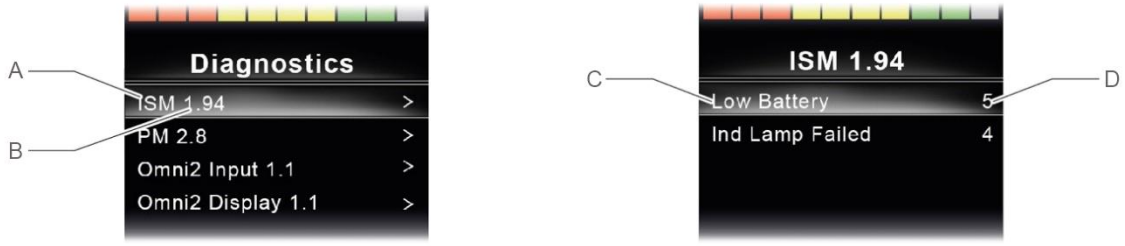


Figure 15 – Example of diagnostics and error data screens.

A	Module Type	C	Trip text description
B	Software Version within that Module	D	Occurrences

A right SID deflection on any module will display the error data, giving descriptions and occurrences of each error.

3.6.6.2.2 TIMERS

A right SID deflection when 'Timers' is highlighted enables the user to view how many hours the wheelchair has been driven.

3.6.7 EXIT

A right SID deflection when 'Exit' is highlighted will exit the settings menu and return to the user menu.

4 BLUETOOTH® SET-UP

4.1 INTRODUCTION

The Omni2 allows a wheelchair user to control multiple Bluetooth®-enabled devices. Typical applications include PC mouse control or operation of a smart device, such as a mobile phone or tablet.

Up to four devices can be controlled. Two of which can be Apple iOS devices and two of which can be Windows or Android devices.

NOTE (HP, IN)

The Omni2 Bluetooth® requires a mode to be configured for "Omni2 Bluetooth". This would normally be programmed by the wheelchair manufacturer.

4.2 BLUETOOTH® MENU

The 'Bluetooth®' menu is displayed when selecting 'Bluetooth®' from the settings menu (refer to section 3.6.4).

Choose a device, set it on or off with a right deflection of the SID, depending upon which devices are required to be paired.

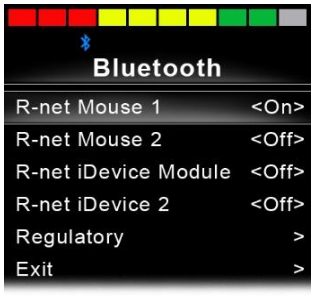


Figure 16 – Example of the 'Bluetooth®' menu screen.

NOTE (HP, IN)

The name of each device can be changed by using a computer with an installed R-net programming tool. Different screen graphics can also be programmed – PC, tablet or phone. It is recommended this is set-up to suit the user by an approved installer or dealer.

For the remainder of this section, it will be assumed the device names have been set per the following screen:

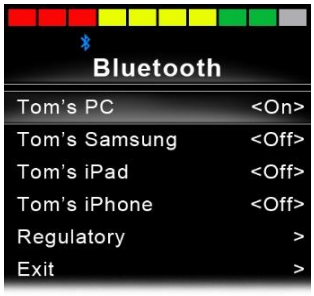


Figure 17 – Example of device names used for this section.

4.3 PAIRING WITH A BLUETOOTH® DEVICE

The Omni2 must first be put into discovery mode via the sequence below.

- Enter Bluetooth® mode and select the device you wish to pair with.
- Deflect the SID in the forward direction and hold until there is a beep. This will take approximately 10 seconds, then release.
- Deflect the SID in the reverse direction and hold until there is a beep. This will take approximately 10 seconds, then release.

A screen such as below will appear – the flashing blue icon (indicated by the arrow) confirming the Omni2 is in discovery mode.

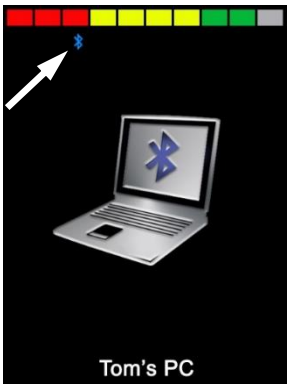


Figure 18 – Example of Bluetooth® discovery mode screen.

Depending on which type of device the Omni2 is being paired with – a Windows PC, an Android device or an iDevice – refer to one of the following three sections.

4.3.1 PAIRING WITH A WINDOWS PC

If the PC does not have integrated Bluetooth®, then a Bluetooth® receiver dongle must be used and its drivers installed.

Possible Bluetooth® dongles are as follows:

- Trust BT-2400 or later
- Belkin F8T012uk1 Version 1000 or later

Once a Bluetooth® connection is confirmed, the following process should be undertaken on the PC (example based on Windows 10):

From the ‘Start menu’, select ‘Settings’, then ‘Devices’. A window such as below should appear.

Figure 19 – Windows 10 ‘Bluetooth® and other devices’ settings window

Click on the ‘+ Add Bluetooth® or other device’ section in the ‘Bluetooth® & other devices’ menu and then select ‘Bluetooth®’:

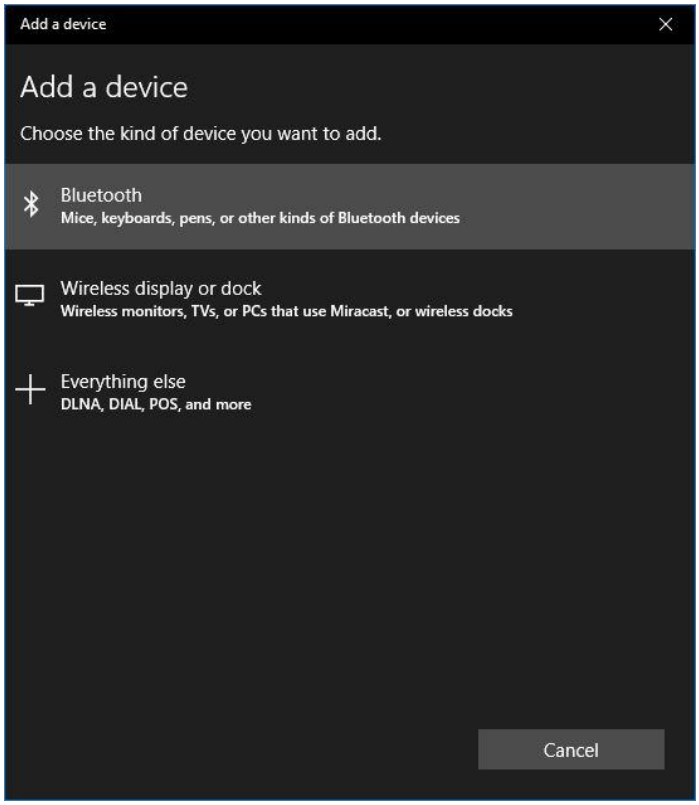


Figure 20 – Windows 10 ‘Add a device’ options window

The PC will now search for local Bluetooth® devices.

Select the name of the device to be paired, in this example, ‘Tom’s PC’.

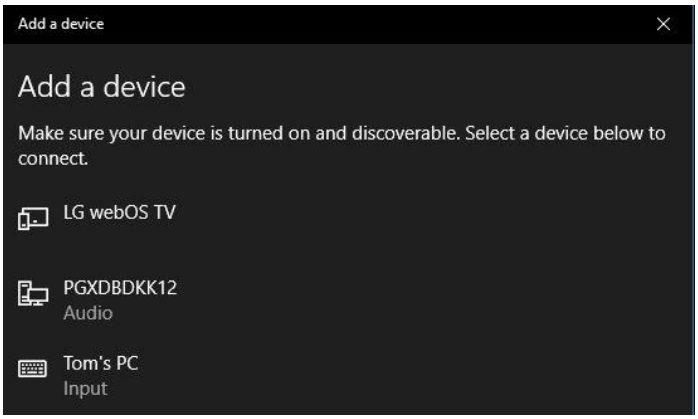


Figure 21 – Windows 10 list of available local Bluetooth® devices.

The PC will now attempt to connect. (If a passkey is requested use 1234).

After a short time, a window such as below should appear.

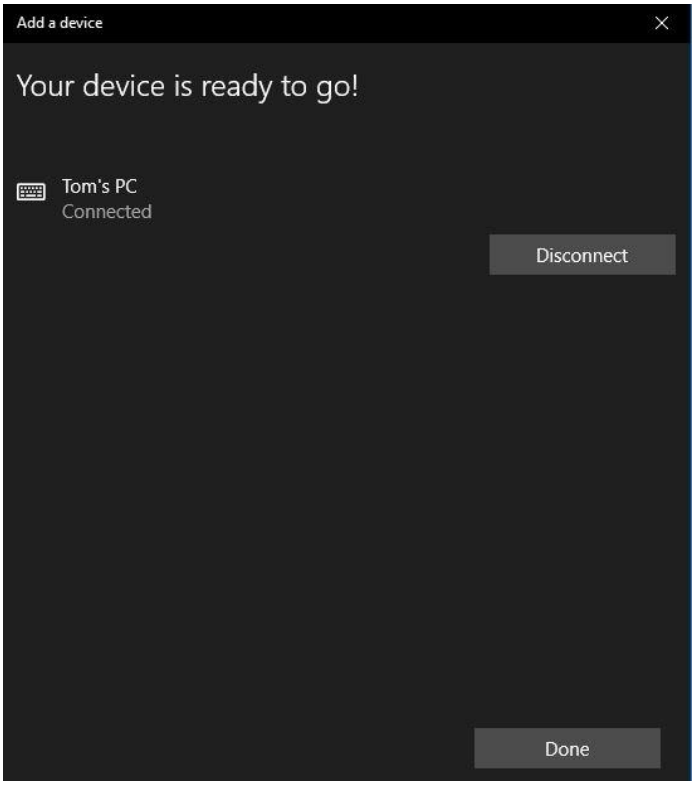


Figure 22 – Windows 10 ‘Your device is ready to go!’ window

The blue icon on the Omni2 should have stopped flashing.

If the process fails, click on ‘Tom’s PC’, then ‘Disconnect’ and repeat the process.

4.3.2 PAIRING WITH AN ANDROID DEVICE

The following process should be undertaken on the 'Android' device:

1. Select 'System Settings' and set 'Bluetooth®' to 'on'.
2. Select 'Tom's Samsung' (for example), from the list of available devices.
3. Enter the passkey '1234' if / when prompted on the screen.
4. 'Tom's Samsung' should appear as a paired device.

The blue icon on the Omni2 should have stopped flashing.

If the process fails, then the pairing of 'Tom's Samsung' will need to be removed, as follows:

1. From a Home screen, do one of the following:
   a. Navigate to 'Settings > Connected devices > Connection preferences > Bluetooth®'.
   b. Navigate to 'Settings > Connected devices'. (If necessary, tap 'Bluetooth®').
   c. Navigate to 'Settings > Bluetooth®'.
2. Tap the appropriate device name (in this example, 'Tom's Samsung') or the 'Settings icon' ⚙ (right).
3. Tap 'Forget' or 'Unpair'.
4. Then repeat the original pairing process.

4.3.3 PAIRING WITH AN APPLE IOS DEVICE (IDEVICE)

The following process should be undertaken on the iDevice:

1. Select 'Settings' and set 'Bluetooth®' to 'on'.
2. Select 'Tom's iPad' (for example), from the list of available devices.

'Tom's iPad' should appear as a paired device.

The blue icon on the Omni2 should have stopped flashing.

If the process fails, then the pairing of 'Tom's iPad' will need to be removed, as follows:

1. From a 'Home' screen, navigate to 'Settings > Bluetooth®'.
2. Tap on the little 'i' icon to the right of the device name (in this example, 'Tom's iPad').
3. Tap 'Forget this Device'.
4. Then repeat the original pairing process.

4.3.4 UPDATING THE LIST OF DEVICES

The Omni2 will remember the Bluetooth® ID of up to four devices. To replace an entry on the list of devices, one of the existing pairings must be terminated. This process is initiated from the paired device and will vary dependent on the type of device.

Once the device is unpaired a new device can be added.

5 INFRA-RED (IR) SET-UP

5.1 INTRODUCTION

The Omni2 'Display Section' includes an IR transmitter and receiver that allows it to replicate commonly used IR devices, such as remote controls for TVs, DVDs, cable/satellite or environmental controls such as automatic door openers.

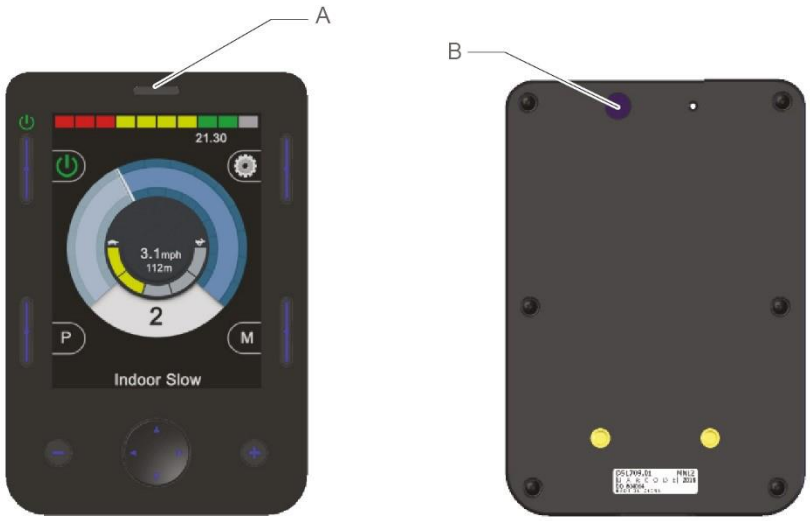


Figure 23 – IR components on the 'Display Section'

A IR receiver

B IR transmitter

Once an Omni2 with IR control is connected to an R-net system, then IR control can be from a conventional joystick module (or other input device) or from a SID that is connected to the Omni2.

5.2 IR MODE

IR mode is accessed via the user menu (see figure 24), or via several presses of the mode button, refer to item (F) on figure 1.

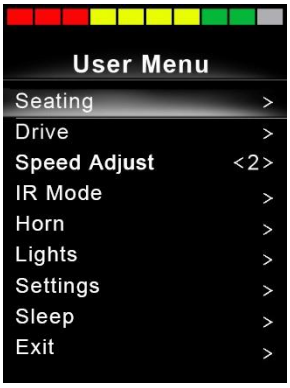


Figure 24 – Example of 'User Menu' with 'IR Mode' option.

NOTE (HP, IN)

When an Omni2 is dispatched from Curtiss-Wright there are no stored IR codes.

On entering 'IR Mode', the user will be presented with a list of available IR appliances.

Figure 25 – Example of 'IR Mode' screen

NOTE (HP, IN)

When an Omni2 is dispatched from Curtiss-Wright, it will contain a default menu as shown in section 5.8. An approved installer, health professional or dealer can use the PC based 'IR Configuration tool' to change this default menu to suit the wheelchair user.

The 'IR Mode' menu is navigated in the usual way:

- Forward SID deflections will highlight the appliance above.
- Reverse SID deflections will highlight the appliance below.
- Left or right SID deflections will enter the highlighted appliance's sub-menu, which will contain all the IR commands for that appliance.
- Left or right SID deflections will then activate the highlighted IR command.

For each appliance there is a list of associated IR commands. Using the 'TV1' example, commands such as: 'On/Off', 'Channel Up', 'Channel Down', 'Volume Up' and 'Volume Down' may be displayed.

When the Omni2 is transmitting the selected command, it is highlighted with a red background.

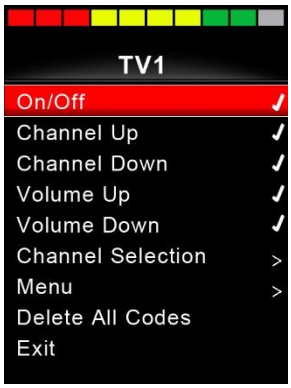


Figure 26 – IR code for 'TV1-On/Off' is being transmitted

5.3 IR SET-UP

The ‘IR Setup’ can be accessed, via the ‘Settings’ menu, either using the method in section 3.6, or via the user menu, if ‘Settings’ has been set-up as an option in the user menu.

Figure 27 – ‘Settings’ menu

Entering the ‘IR Setup’ menu will display the screen below:

Figure 28 – ‘IR Setup’ menu.

On entering the ‘IR Setup’ menu, the default appliances will appear. Refer to section 5.8 for a list of default IR appliances and commands . By selecting an appliance, then its commands will be shown. If a command is checked, this means it has a stored IR code. If there is not a check, then there is no stored IR code for that command.

Figure 29 – IR code stored for ‘On/Off’ command.

IR Codes can be stored or deleted as detailed in the following sections.

5.4 LEARNING AN IR CODE

Enter the 'IR Setup' menu and then select an appliance, e.g. 'TV1'. The commands for the appliance will appear on 'TV1' sub-menu, as shown below.

Figure 30 – List of 'TV1' IR command options

Select the command to be learnt. In this example, 'TV1' 'Channel Up'.

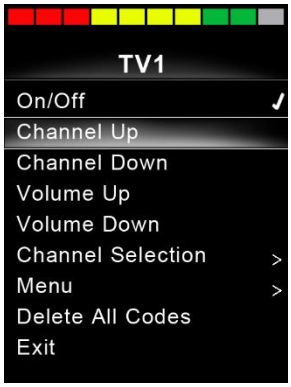


Figure 31 – 'TV1' 'Channel Up' selected.

Move the SID right, or use the right navigation button, to enter the sub-menu 'Channel Up'.

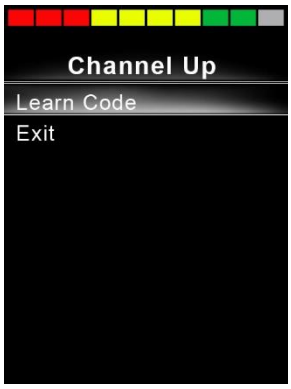


Figure 32 – 'Channel Up' sub-menu.

Whilst ‘Learn Code’ is highlighted, move the SID right, or use the right navigation button, to begin the ‘Learn Code’ process, and a screen as per figure 31 will appear:

Figure 33 – ‘Learn Code’ process screen, awaiting IR transmission from remote.

Point the TV remote control at the Omni2’s receiver and press the channel up button twice. Following each press of the button, there will be beep if the Omni2 received the IR code being transmitted.

At the end of the process, there will be a screen with either a check or a cross. A check denotes a successful learn operation, and a cross denotes an unsuccessful learn operation. Please retry the ‘Learn Code’ process if a cross occurs.

Figure 34 – A check denotes a successful learn.

Figure 35 – A cross denotes an unsuccessful learn.

NOTE (HP, IN)

The first time an IR code has been learnt, it is necessary to power the Omni2 off and on again. If other IR codes are already learnt, then this is not necessary.

5.5 LEARNING AN IR CODE - SEQUENCE

Multiple IR codes can be learnt against one command in the Omni2 'IR Setup' menu. This enables multiple IR codes to be transmitted through one command in the Omni2 when in IR mode. This is called a sequence of IR codes.

Examples:

1. The 'On/Off' function for multiple appliances (the TV and the DVD for example) can be learnt against one entry in the Omni2 'IR Setup' menu. The Omni2 will then transmit the codes for the learnt command in one burst or sequence. In this case turning the TV and the DVD recorder on or off, effectively simultaneously.

2. Previously selecting a TV channel required the user to select the individual channel's digits from a list. This could be quite cumbersome when trying to select a TV channel with multiple digits e.g. channel '143'. Now the individual codes for '1', '4' and '3' can be learned against one command in the Omni2 'IR Setup' menu. When this command is selected in IR mode, the IR codes are transmitted in a sequence '1', '4' and '3'.

To create a sequence:

- Select the command to use as the sequence initiator. In this example, 'TV1' > 'On/Off'.
- Select 'Learn Code', by using a right SID deflection, or the right navigation button, while the command is highlighted.
- Point the TV remote control at the Omni2's receiver and press the 'On/Off' button twice.
- After a successful learn operation a check momentarily appears on the screen. Now select 'Learn Code' again.
- Point the DVD remote control at the Omni2's receiver and press the 'On/Off' button twice.
- After a successful learn operation a check momentarily appears on the screen. Now select 'Exit'.

This time, the 'On/Off' command will have a check and three dots in the far right column, showing a learnt sequence, as displayed below in figure 34.

Figure 36 – 'On/Off' command has an IR sequence stored.

5.6 ENABLING AND DISABLING IR CODES

IR codes can be enabled or disabled in the 'IR Setup' menu. If a code is disabled it will not transmit and will not appear in the IR menu accessed in IR mode.

To disable an IR code, select the minus (–) key on the 'Display Section' of the Omni2. A disabled IR code appears with an 'X' against the highlighted command.

To enable an IR code, select the plus (+) key on the 'Display Section' of the Omni2. An enabled code appears with a check against the highlighted command.

Figure 37 – Showing minus (-) and plus (+) buttons and enabled/disabled IR codes.

5.7 DELETING IR CODES

To delete an IR code for a specific command, highlight the specific command in the appliance menu and move the SID right or press the right navigation button to enter the sub-menu.

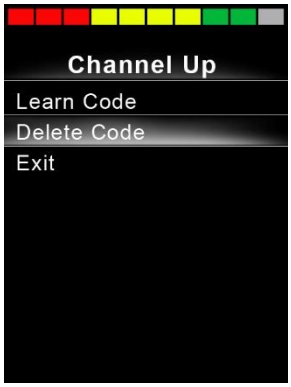


Figure 38 – Command sub-menu 'Delete Code' option.

Then select the 'Delete Code' option, and move the SID right or press the right navigation button to actually delete the IR code for that command.

To delete all IR codes for an appliance select 'Delete All Codes' within that appliance's sub-menu, and move the SID right or press the right navigation button to actually delete all the IR codes for that appliance.

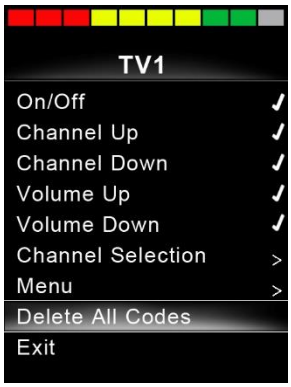


Figure 39 – Appliance sub-menu 'Delete All Codes' option.

NOTE (OP, HP, IN)

When deleting all learnt codes for a specific appliance, it is necessary to power the Omni2 off and on again to actually delete the codes.

To delete all IR codes stored in the Omni2, select ‘Delete All Codes’ within the ‘IR Setup’ menu, and move the SID right or press the right navigation button to actually delete all the IR codes.

Figure 40 – ‘IR Setup’ menu ‘Delete All Codes’ option.

NOTE (OP, HP, IN)

When deleting all learnt/stored IR codes, it is necessary to power the Omni2 off and on again to actually delete the codes.

5.8 CURTISS-WRIGHT DEFAULT IR MENUS

TV1
On/Off
Channel Up
Channel Down
Volume Up
Volume Down
Channel Selection
0
1
2
3
4
5
6
7
8
9
Menu
Input
Up
Down
Left
Right
Select/OK

Cable/Satellite
On/Off
TV Guide
Up
Down
Left
Right
Select/OK
Information
Page Up
Page Down
Red
Green
Yellow
Blue

DVD1
On/Off
Play
Stop
Pause
Fast Fwd
Fast Rev

DVD Recorder
On/Off
Play
Stop
Pause
Fast Fwd
Fast Rev
Menu
Up
Down
Left
Right
Select/OK
Record
Timer Record
Record Mode

Music
On/Off
Play
Stop
Volume Up
Volume Down
Pause
Fast Fwd
CD Changer
AM
FM
Search
Preset

Device 1
Command 1
Command 2
Command 3
Command 4
Command 5
Command 6
Command 7
Command 8

Device 2
Command 1
Command 2
Command 3
Command 4
Command 5
Command 6
Command 7
Command 8

Figure 41 – Curtiss-Wright default IR menus

6 BASIC OPERATION

6.1 JOYSTICK AND USER SWITCH

A joystick SID offers a proportional input control to the Omni2. Examples are chin control, foot control or heavy/light operating-force joysticks.

One example would be a 'Curtiss-Wright' chin control joystick e.g. D50064, or a 'Permobil Compact Joystick' connected to either port 1 or 2 of the Omni2.

In addition, a switch is connected to the Omni2 via the 3.5mm (1/8") jack socket, either U1, or U2, corresponding to the port being used, to provide the user with a user switch.

The joystick is used for driving the wheelchair in driving mode and the user switch is used to enter the user menu or to sequence through the other functions of the wheelchair. Refer to section 2.2.5.

In seating mode, the movement of seating functions is via a forward or a reverse command. A left or right command will select a different seat axis for each seat function.

In other modes, the joystick deflections will provide the relevant functions for that mode, such as Bluetooth® mode or IR mode.

For advanced functions available with this SID, refer to section 7.1.

6.2 THREE DIRECTION JOYSTICK AND USER SWITCH

A three direction joystick SID offers a three-way proportional control to the Omni2. Examples are head control mechanisms fitted with a joystick or similar proportional interface, such as those from 'Stealth Products' or 'Switch-It' or 'Adaptive Switch Laboratories (ASL)'.

The device provides a three-way proportional interface which is connected to the Omni2 via the 9-way D-type connector, port 1 or 2.

In addition, a switch is connected to the Omni2 via the 3.5mm (1/8") jack socket, either U1, or U2, corresponding to the port being used, to provide the user with a user switch.

These types of SID contain a forward/reverse command, left and right commands, as well as a user switch(es)*. Driving is performed via the forward/reverse, left and right commands, when in drive mode.

* Depending on the installation, there may be an additional user switch integrated into the head array. This switch would connect to the Omni2 via the fifth switch input on the 9-way D-type connector, and behave in the same way as the user switch.

User switch commands are then used to change drive direction and to enter the user menu or to sequence through the other functions on the wheelchair. Refer to the functionality commands section 7.5.

In seating mode, standard control of seating movement is via the forward/reverse command, while left and right commands will select a different seat axis for movement. The direction of movement is selected in the same way as that for changing drive direction, refer to section 7.5.

For advanced functions available with this SID, refer to section 7.2.

6.3 FOUR DIRECTION SWITCHES AND USER SWITCH

A four direction switch SID offers a four-way digital (switched) control to the Omni2. Examples are 'Tash Penta' switches, 'Buddy Button' switches connected via an adapter cable, or products from 'Switch-It' or 'Adaptive Switch Laboratories (ASL)'.

The SID will have four direction switches and may have a fifth switch (which operates in the same way as a user switch), all connected to the Omni2 via the 9-way D-type connector, port 1 or 2.

In addition, a switch is connected to the Omni2 via the 3.5mm (1/8") jack socket, either U1, or U2, corresponding to the port being used, to provide the user with a user switch. This switch, although functionally identical to the fifth switch input on the 9-way D-type connector, is required to provide a fail-safe emergency-stop system.

In drive mode, the SID's forward, reverse, left and right switches are used to perform drive commands, and the fifth switch or user switch is used to enter the user menu or to sequence through the other functions of the wheelchair.

In seating mode, standard control of seating movement is via forward and reverse commands, and left and right commands will select a different seat axis for movement.

For advanced functions available with this SID, refer to section 7.3.

6.4 THREE DIRECTION SWITCHES AND USER SWITCH

A three direction switch SID offers a three-way digital (switched) control to the Omni2. Examples are head control mechanisms fitted with switches or similar interface, such as those from 'Stealth Products' or 'Switch-It' or 'Adaptive Switch Laboratories (ASL)'.

The SID will have three direction switches and may have a fifth switch (which operates in the same way as a user switch), all connected to the Omni2 via the 9-way D-type connector, port 1 or 2.

In addition, a switch is connected to the Omni2 via the 3.5mm (1/8") jack socket, either U1, or U2, corresponding to the port being used, to provide the user with a user switch. This switch, although functionally identical to the fifth switch input on the 9-way D-type connector, is required to provide a fail-safe emergency-stop system.

These types of SID contain a forward/reverse command, left and right commands, as well as a user switch(es)*. Driving is performed via the forward/reverse, left and right commands, when in drive mode.

* Depending on the installation, there may be an additional user switch integrated into the head array. This switch would connect to the Omni2 via the fifth switch input on the 9-way D-type connector, and behave in the same way as the user switch.

User switch commands are then used to change drive direction and to enter the user menu or to sequence through the other functions on the wheelchair. Refer to the functionality commands section 7.5.

For advanced functions available with this SID, refer to section 7.4.

In seating mode, standard control of seating movement is via the forward/reverse command, while left and right commands will select a different seat axis for movement. The direction of movement is selected in the same way as that for changing drive direction, refer to section 7.5.

Refer to section 7.4 for the advanced functions available in seating mode.

6.5 SINGLE SWITCH SCANNER

A single user switch is connected to the Omni2 via the 3.5mm (1/8”) jack socket, either U1, or U2.

All functions, including drive, seating and user menu, can be accessed via this single user switch.

6.5.1 DRIVE

When the Omni2 is switched on, a screen like the one shown below will appear.

Figure 42 – Single switch scanner drive mode.

The Omni2 will scan through the following icons:

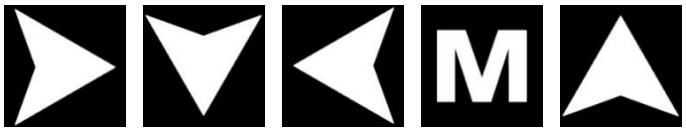


Figure 43 – Scanner symbols.

The method of driving is dependent on whether the R-net system is configured for ‘momentary’ or ‘latched’ operation.

In momentary operation, continuously pressing the user switch whilst one of the ‘arrow’ icons is shown will cause the wheelchair to drive in that direction until the switch is released. If the user switch is pressed when the ‘M’ icon is shown, the Omni2 will enter the user menu.

In latched operation, a single press of the user switch whilst one of the ‘arrow’ icons is shown will cause the wheelchair to drive in that direction for a period of time set by the R-net parameter, ‘Latched Timeout’.

In ‘latched’ drive operation, to ease control of the chair while driving forwards, the scan sequence will change to:

Forward, Right, Reverse, Left, Reverse, Right, Reverse, Left, Reverse, Right, Forward.

Figure 44 – Scanner sequence, ‘latched’ operation, driving forwards.

If the R-net system is configured for ‘latched’ operation in reverse as well as forwards, the scan sequence will change when driving in reverse to:

Reverse, Right, Forward, Left, Forward, Right, Forward, Left, Forward, Right, Reverse.

Figure 45 – Scanner sequence, ‘latched’ operation in reverse, driving in reverse.

6.5.2 SEATING CONTROL

Seating mode can be entered from the user menu via an operation of the user switch. The Omni2 will sequentially scan though each available actuator ‘axis’ and then finish with an ‘exit’ option to return to ‘drive’ mode, the user menu or the next sequential function.

If the user switch is operated when one of the actuator axes are shown, a new scanning sequence will begin. The Omni2 will step through, ‘up’, ‘down’ and ‘exit’ choices. Each option can then be selected with an operation of the user switch.

 Up.  Down.  Exit Axis.

Figure 46 – Seating scanner symbols

For advanced functions available with this SID, refer to section 7.6.

6.6 SIP AND PUFF

A Sip and Puff mouthpiece is connected to the Omni2 via the dedicated pneumatic sip and puff input.

In addition, a switch is connected to the Omni2 via the 3.5mm (1/8”) jack socket, either U1, or U2, corresponding to the port being used for sip and puff, to provide the user with a user switch. This switch is required to provide a fail-safe emergency-stop system.

In drive mode, drive commands can be performed via a tube connected to the Omni2’s pneumatic input. The user switch is used to enter the user menu or to sequence through the other functions of the wheelchair.

For this type of SID, a pneumatic user switch with an interface that is compatible with the user switch input U1 or U2 may be a better option.

There are four sip and puff commands, each of which relates to a drive direction. The table below shows the relationships.

Sip & Puff Command	**Direction**
Hard puff	Forward
Hard sip	Reverse
Soft sip	Left
Soft puff	Right

Figure 47 – Sip and puff commands

In addition, the Omni2 can be programmed so that two pneumatic operations, made within the period set by the parameter ‘Double Click Time’, will mimic a short operation of the user switch in standby. An authorized dealer, installer or health professional should be used to configure this if required.

In seating mode, standard control of seating movements is via a hard puff or sip and a soft puff or sip will select a different seat axis for movement.

For advanced functions available with this SID, refer to section 7.7.

7 ADVANCED FUNCTIONS

7.1 JOYSTICK AND USER SWITCH

There are several R-net programming features that may be useful when using this SID type. These include 'Joystick Throw', 'Joystick Orientation' and 'Joystick Deadband' and can be set-up to suit each user of the wheelchair, by an authorized dealer, installer or health professional.

If required, it is possible to re-program the Omni2 to control the seating movement in alternative ways. Again, this can be achieved through programming by an authorized dealer, installer or health professional.

An authorized dealer, installer or health professional will also be able to program a latched operation of the actuators in seating mode, or driving in drive mode, if required by the user.

7.2 THREE DIRECTION JOYSTICK AND USER SWITCH

Since there is only one input for the forward (up) / reverse (down) commands, there needs to be some indication of the current direction. Refer to section 3.1.12 for more details.

User switch commands provide the ability to toggle drive direction and enter the user menu or sequence through other functions of the chair.

There are three ways to program the Omni2 to provide this functionality and each is described in section 7.5.

As is often required in head array situations, it is possible to re-program the Omni2 to control the seating movement in alternative ways. An authorized dealer, installer or health professional should be used to achieve this.

There are several R-net programming features that may be useful when using this SID type. These include 'Joystick Throw', 'Joystick Orientation' and 'Joystick Deadband' and can be set-up to suit each user of the wheelchair, by an authorized dealer, installer or health professional.

An authorized dealer, installer or health professional will also be able to program a latched operation of the actuators in seating mode, or driving in drive mode, if required.

It is possible to set up the Omni2 so that the functions can be navigated audibly. This can be useful if the user cannot always easily see the Omni2's screen. An authorized dealer, installer or health professional should be used to configure this if required.

7.3 FOUR DIRECTION SWITCHES AND USER SWITCH

There are several R-net programming features that may be useful when using this SID type. These include 'Joystick Orientation', and can be set-up to suit each user of the wheelchair, by an authorized dealer, installer or health professional.

If required, it is possible to re-program the Omni2 to control the seating movement in alternative ways. Again, this can be achieved through programming by an authorized dealer, installer or health professional.

An authorized dealer, installer or health professional will also be able to program a latched operation of the actuators in seating mode, or driving in drive mode, if required.

7.4 THREE DIRECTION SWITCHES AND USER SWITCH

Since there is only one input for the forward (up) / reverse (down) commands, there needs to be some indication of the current direction. Refer to section 3.1.12 for more details.

User switch commands provide the ability to toggle drive direction and enter the user menu or sequence through other functions of the chair.

There are three ways to program the Omni2 to provide this functionality and each is described in section 7.5.

As is often required in head array situations, it is possible to re-program the Omni2 to control the seating movement in alternative ways. An authorized dealer, installer or health professional should be used to achieve this.

There are several R-net programming features that may be useful when using this SID type. These include 'Joystick Orientation' and can be set-up to suit each user of the wheelchair, by an authorized dealer, installer or health professional.

An authorized dealer, installer or health professional will also be able to program a latched operation of the actuators in seating mode, or driving in drive mode, if required.

It is possible to set up the Omni2 so that the functions can be navigated audibly. This can be useful if the user cannot always easily see the Omni2's screen. An authorized dealer, installer or health professional should be used to configure this if required.

7.5 FUNCTIONALITY COMMANDS

The following sections describe the programmable options available three direction SIDs.

7.5.1 DOUBLE CLICK CHANGE

A single user switch operation toggles the direction, while a double operation of the user switch will enter the user menu or sequence through the other functions of the wheelchair.

Forward (up) indication will toggle

to reverse (down) via a single operation of the user switch, and vice-versa.

This method is selected by having an authorized dealer, installer or health professional program the setting ‘Fwd / Rev Auto Toggle’ to ‘off’.

To enter the user menu, the user switch must be operated twice within a set time, similar to the double click of a mouse button on a computer.

7.5.2 AUTO TOGGLE CHANGE

A direction change will occur if a forward/reverse command is operated and released.

Forward (up) indication will toggle

to reverse (down) via single deflection and release of SID forward/reverse command, and vice-versa.

Once toggled, a further operation of the forward/reverse command will result in drive in the newly-selected direction.

This sequence must be completed within a given time period, typically 2 seconds. However, the parameter ‘Auto Toggle Time’, can be adjusted to give a different time period, by an authorized dealer, installer or health professional.

If the sequence is not completed within the time period, the selected direction will automatically revert to its previous state.

This method is selected by having an authorized dealer, installer or health professional program the setting ‘Fwd/Rev Auto Toggle’ to ‘on’.

The user switch is used to enter the user menu or sequence through the other functions on the wheelchair.

7.5.3 SWITCH MEDIUM CHANGE

A direction change occurs at the instant the user switch is operated, provided the parameter 'Double Click' has been set to zero seconds, by an authorized dealer, installer or health professional. If the user switch is released and a forward/reverse command is entered, then drive will commence in the newly-selected direction.

Forward (up) indication will toggle

to reverse (down) via a single press and release of the user switch, and vice-versa.

If the user switch is not released and is held for a time period set by the programmable parameter, 'Switch Medium', then this is interpreted as a conventional user switch operation, i.e. the user menu will be entered or the other wheelchair functions would be sequenced. There will be no direction toggle in this instance.

An authorized dealer, installer or health professional should program the setting 'Fwd / Rev Auto Toggle' to 'off', as well as the 'Switch Medium' and 'Switch Long' time settings.

As with the other two methods, if the user switch is operated for a period greater than the time set by the programmable parameter, 'Switch Long', then the Omni2 will go to sleep. Another operation of the user switch will awaken the Omni2 from sleep mode.

7.6 SINGLE SWITCH SCANNER

If the Omni2 is configured to operate with a single switch scanner type SID, the scan rate can be programmed to suit the user, by an authorized dealer, installer or health professional.

An authorized dealer, installer or health professional should be used to configure latched mode if required.

In seating mode, the scanning rate of the actuator axes is set to approximately 1 second, and cannot be changed.

An authorized dealer, installer or health professional will also be able to program a 'latched' operation of the actuators in seating mode, or driving in drive mode, if required.

It is possible to set up the Omni2 so that the functions can be navigated audibly. This can be useful if the user cannot always easily see the Omni2's screen. An authorized dealer, installer or health professional should be used to configure this if required.

7.7 SIP AND PUFF

The Omni2 can be programmed so that two pneumatic operations, made within the period set by the parameter 'Double Click Time', will mimic a short operation of the user switch in standby. An authorized dealer, installer or health professional should be used to configure this if required.

If required, in seating mode, it is possible to re-program the Omni2 to control the seating movement in alternative ways. Again, this can be achieved through programming by an authorized dealer, installer or health professional.

The standard R-net programming parameter 'Joystick Orientation' may also be useful when using this type of SID, and can be programmed by an authorized dealer, installer or health professional.

An authorized dealer, installer or health professional will also be able to program a 'latched' operation of the actuators in seating mode, or driving in drive mode, if required with this type of SID.