

3 SWITCH HEAD ARRAY FITTING AND PROGRAMMING





Step 1

Order the 3 Switch Head Array Retro Fitting Kit - Part Number 20011204

Within this kit you get the following:

Omni

Omni Mounting (Flexible arm)

3 Switch Head Array

Lower headrest Assembly

Distribution Block

Bus cables (150cm and 30cm)

Kit Contents







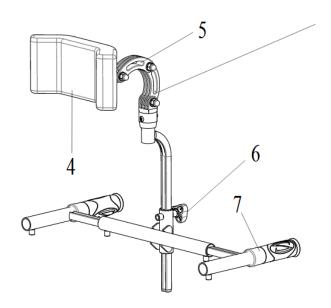




Step 2

Ensure that the chair you are fitting the controls to already has a headrest mounted to the push handles. If not, then you will need to order the headrest mounting kit before hand.

Part number for the kit is 21103001





Step 3

Unplug the bus cable connecting the joystick from the power module.

Step 4

Fit the Omni mounting bracket to the armrest on the side of the chair you want the Omni visual display to be on. Use the bolts provided to fix into the armrest bracket.





Step 5

Attach the Omni to the Flex Mount and attach to the chair via the bracket previously mounted to the armrest.







Step 6

If the chair already has a headrest mounted to the push handles then remove the headrest.

If the chair does NOT have a headrest then you will need to fit the headrest mounting frame as

previously mentioned.



Note: To fit this you will first need to cut off the push handle covers.



Step 7

Fit the 3 Switch Head Array to the mounting bracket on the push handles





Step 8

The wire coming from the Head Array will have a D-Type connector on the end. This will need to be plugged into Port 1 on the Omni.

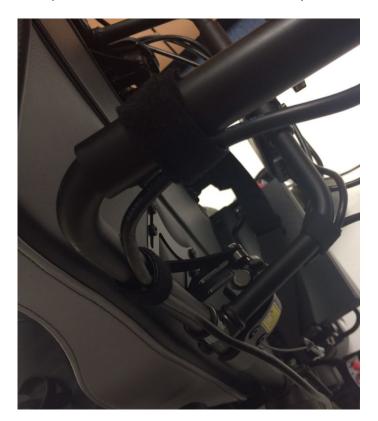






Step 9

Use Velcro strips or cable ties to secure the cable from the Head Array to the mounting frame and the Omni Flex Mount. It is important to do this so that you do not have any loose cables.





Step 10

The next step is to wire the bus cables. The diagram below should give you a good idea of how





Step 11

You will have noticed the distribution block on the previous wiring diagram. The reason this is needed is because the Power Module only has ONE bus socket. Therefore, the distribution block will always be required if using a secondary controller.

Mount the Distribution block close to the power module. The position shown below on the inside rear of the chassis is favourable. Use strong double-sided Velcro to secure the distribution block in position.







Step 12

Use your 30cm bus lead to connect from the bus connector on the power module to one of the 4 bus ports on the distribution block.







Step 13

Connect the bus cable from the R-Net joystick to the distribution block using the same bus lead that you unplugged from the power module earlier.

Step 14

Use the additional 150cm Bus cable from the kit to run from the Omni to the distribution block.







Step 15

Use cable ties to secure the cables under the top shroud. Make sure that none of the cables get trapped when the seat is lowered. You should now have everything wired up correctly. Refer back to Step 10 to check.

Just a few simple programming steps left and the chair will drive using the Head Array.



The next step is to program the chair to work with the newly fitted 3 Switch Head Array.

You can do this by using our Programming Website <u>Web IQ</u>. You will need a User Name and Password to access this website. You will also need the PC Programming software and programming Dongle to connect your PC to the chair. These can be purchased from Sunrise Medical if you don't already have them.

If you don't have one then please contact our Technical Service Centre at technical@sunmed.co.uk

They will set this up for you.

Once you have your username and password, use the link below to access Web IQ.



Once logged on to Web IQ you will see the following screen





Step 1

To access the drive profile on Web IQ you will need:

- The chair Serial Number
- The Sunrise Sales Order number (if you don't have this you can get from Customer Services)

Input the Serial Number and the Sales Order Number as shown below. Then click on Accept Terms.





Step 2

You will then be able to see the chair details. The current build specification will be on the left......

Chair Details for "SM2UK17012819"

After reviewing chair details, please select an option below.

- Salsa R-net controlled Chair
- Mid Wheel Drive (MWD)
- Revision 2 (M2 / R2)
- 6 kph (4 mph) MTM or Linix Motors
- without Intellidrive
- and 33 cm (13 inch) Wheels
- No Lights
- Actuators controlled via ISM
- Tilt
- Groove Standard power recline
- LCD Hand Control
- PM90 Motor Controller
- Using the English Language
- for the United Kingdom Market

- Download the Current R-net Profile
 To download the current profile for R-Net System
- Modify Chair Details

 Answer questions provided altering chair details to synchronize with current chair mechanics.
- <u>View Archived Profiles</u>

 This option will allow you to choose from a list of previously saved profiles.



Step 3

And 3 options on the right. Download Current Drive Profile, Modify Chair Details and View Archived Profiles.

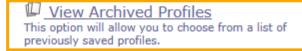
Chair Details for "SM2UK17012819"

After reviewing chair details, please select an option below.

- Salsa R-net controlled Chair
- Mid Wheel Drive (MWD)
- Revision 2 (M2 / R2)
- 6 kph (4 mph) MTM or Linix Motors
- without Intellidrive
- and 33 cm (13 inch) Wheels
- No Lights
- Actuators controlled via ISM
- Tilt
- Groove Standard power recline
- LCD Hand Control
- PM90 Motor Controller
- Using the English Language
- for the United Kingdom Market









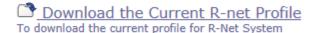
Step 4

Click on Modify Chair Details.

Chair Details for "SM2UK17012819"

After reviewing chair details, please select an option below.

- Salsa R-net controlled Chair
- Mid Wheel Drive (MWD)
- Revision 2 (M2 / R2)
- 6 kph (4 mph) MTM or Linix Motors
- without Intellidrive
- and 33 cm (13 inch) Wheels
- No Lights
- Actuators controlled via ISM
- Tilt
- Groove Standard power recline
- LCD Hand Control
- PM90 Motor Controller
- Using the English Language
- for the United Kingdom Market



Modify Chair Details

Answer questions provided altering chair details to synchronize with current chair mechanics.

View Archived Profiles

This option will allow you to choose from a list of previously saved profiles.



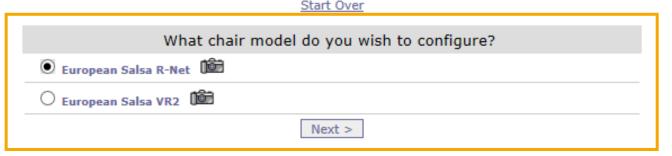
Step 5

You will be asked a series of questions regarding the specifications of the chair. Answer the questions accurately to reflect the actual build of the chair. Click Next to go to the next question.

Create New Profile for "SM2UK17012819"

Return to Chair Details

Answer questions to build a chair profile. Please note that current options are pre-selected. Once selections below are correct, click next or start over.





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Step 6

You will eventually come to a question that asks if the chair has a Special Controls Module (Omni). This will need to be changed if you are fitting special controls.

Change to YES and click NEXT.

Create New Profile for "SM2UK17012819"

Return to Chair Details

Answer questions to build a chair profile. Please note that current options are pre-selected. Once selections below are correct, click next or start over.

Start Over

Does the Chair have a Special Control Module (OMNI)?
● No
○ Yes 🏙
Next >
What chair model do you wish to configure? (European Salsa R-Net) Please select a drive wheel position (MWD - Mid Wheel Drive)%
Please select model type (MWD - Mid Wheel Drive Mk2)
Please select speed and drive wheel combination (6 kph (4 mph) 33 cm (13 inch) wheels & No Synchrodrive Linix)
Does the Chair have an LED or LCD Joystick Hand Control ? (LCD)
Does the Chair have Lights? (Without any Lights)
Does the Chair have an ISM 6/8 Actuator Controller (Yes ISM 6)
Please select applicable powered option (Tilt)
Please select applicable seat depth (Sedeo Ergo) (All chairs without Sedeo Ergo seating system) Please select powered Recline option (Salsa / Groove Standard Seat Power Recline)
Please select powered Legrest option (None)
Which motor controller does the chair have ? (EL90)
Please select applicable powered option (None (e.g. Sedeo Ergo))
Does the Chair have an Environmental Control Module (IOM)? (No)



Step 7

The next question gives you the option to select which type of Special Input Device you are using. In this case select the Head Array (3 Switch Control) option and click NEXT.

Create New Profile for "SM2UK17012819"

Return to Chair Details

Answer questions to build a chair profile. Please note that current options are pre-selected. Once selections below are correct, click next or start over.

Start Over

Please select the input device used with the Special Control Module (OMNI) P1

None

Other third party input device

OMNI in scanning mode

Wafer Board (4 Switch Control)

Head Array (3 Switch Control)

Proportional Head Control (e.g. Dual Pro)

HMC Mini Joystick; MicroPilot 0-way Joystick (Proportional Hand Control)

HMC Compact joystick; Versaguide joystick

HMC Compact Chin; Versaguide Chin

Proportional Chin Image:

Sip & Puff

Proportional Chin Image:

None

Start Over.

Start Ove

Next >

	O Wafer Board (4 Switch Control)					
7	O Head Array (3 Switch Control)	3				
	O Proportional Head					
	O HMC Mini Joystick;	(Proportional Hand				
	O HMC Mini Chin; Mic	rtional Chin Control				
	O HMC compact joystick; Versaguide j	joystick 節				



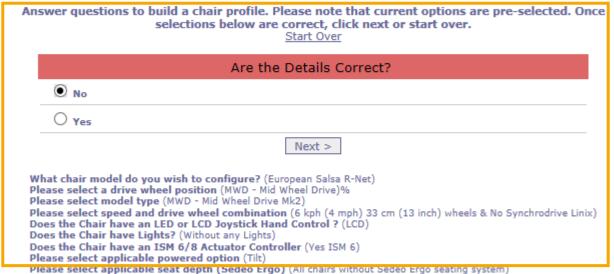
Step 8

Continue to answer the questions with accurate information regarding the chair specifications.

Once you get to the last question it will ask you Are the Details Correct. Select YES and click NEXT.

Create New Profile for "SM2UK17012819"

Return to Chair Details



Please select powered Recline option (Salsa / Groove Standard Seat Power Recline)



Step 9

You will now see the chair details screen again. You will see the changes you have made are reflected in the Build Specifications on the left side.

Chair Details for "SM2UK17012819"

After reviewing chair details, please select an option below.

- Salsa R-net controlled Chair
- Mid Wheel Drive (MWD)
- Revision 2 (M2 / R2)
- 6 kph (4 mph) MTM or Linix Motors
- without Intellidrive
- and 33 cm (13 inch) Wheels
- No Lights
- Actuators controlled via ISM
- Tilt

Groove Standard power recline

- Special Control Module (OMNI)
- Head Array (Adult/Paediatric)
- LCD Hand Control
- PM90 Motor Controller
- Using the English Language
- for the United Kingdom Market



Modify Chair Details

Answer questions provided altering chair details to synchronize with current chair mechanics.

View Archived Profiles

This option will allow you to choose from a list of previously saved profiles.



Step 10

Click on Download the Current R-Net Profile. Then click OPEN. The drive profile will now open in PC programmer automatically.

Chair Details for "SM2UK17012819"

After reviewing chair details, please select an option below.

- Salsa R-net controlled Chair
- Mid Wheel Drive (MWD)
- Revision 2 (M2 / R2)
- 6 kph (4 mph) MTM or Linix Motors
- without Intellidrive
- and 33 cm (13 inch) Wheels
- No Lights
- Actuators controlled via ISM
- Tilt
- Groove Standard power recline
- Special Control Module (OMNI)
- Head Array (Adult/Paediatric)
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Modify Chair Details

Answer questions provided altering chair details to synchronize with current chair mechanics.

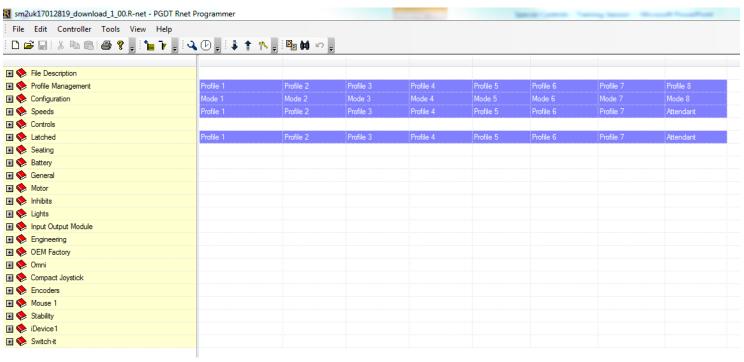
View Archived Profiles

This option will allow you to choose from a list of previously saved profiles.



Step 11

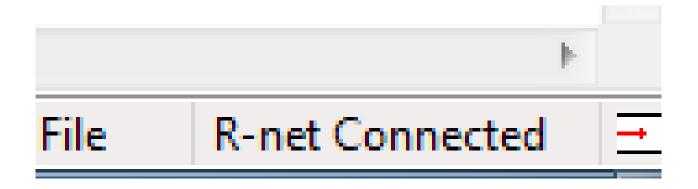
Connect your chair to your PC using the programming dongle and USB cable. You should now see the PC programming software with the drive profile for the chair.





Step 12

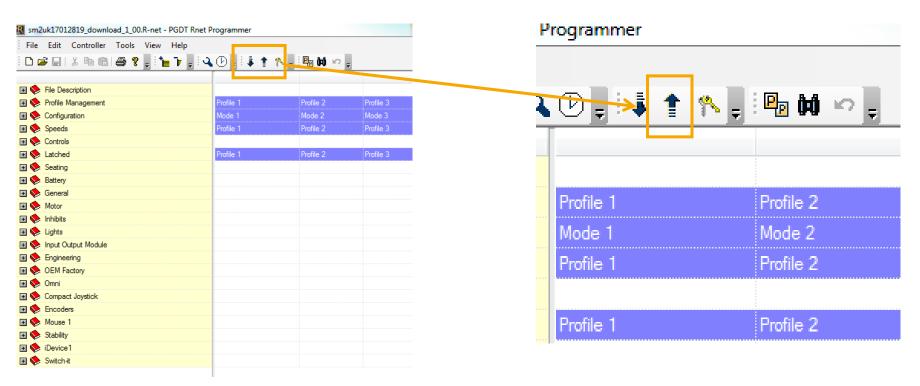
Once you have connected your chair to your PC you should see this in the bottom right hand corner of the PC programming screen.





Step 13

Once you are connected, click on the "program" button at the top of the screen.





Step 14

The software will now write the updated drive profile to the chair.

You will now be able to control the chair with the 3 Switch Head Array.

If you want to customise the controls even further then please refer to the next section where we will cover additional programming for the 3 Switch Head Array giving the client even more control and reducing the amount of movement required to access modes and functions.



3 SWITCH HEAD ARRAY FINE TUNING



Profiles and Speeds

It is advisable to customise the Profiles and Speed settings on the chair to suit the clients needs. If the client is using a special input device then reducing the speeds and acceleration parameters using the PC programmer is strongly advised but to what extent this is done will be dependent on the clients driving ability and also the different environments that they will be using the chair in on a daily basis.



Profiles and Speeds

To add and remove drive profiles.

Click on the Profile Enable parameter under the profile you want to add or remove. Change to Yes or No accordingly.

Profile Management	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5
Profile Name	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5
Profile Enable	Yes	Yes	Yes	Yes	No
Mode Enable	[12345678]	[12345678]	[12345678]	[12345678]	Yes [12343070]
Input Device Type	Universal	Universal	Universal	Universal	Universal
Input Device Subtype	All	All	All	All	All
Seat Reversal Profile	No	No	No	No	No
Allow Grab	Yes	Yes	Yes	Yes	Yes



Profiles and Speeds

To Rename Drive Profiles

Double click on the Profile Name Parameter – Type in the field what you would like the Profile to be called. This will then appear on the Omni display.

Profile 1	Profile 2	Profile 3	Profile 4	Profile 5
Profile 1	Profile 2	Profile 3	Profile 4	Outdoor
Yes	Yes	Yes	Yes	Yes
[12345678]	[12345678]	[12345678]	[12345678]	[12345678]
Universal	Universal	Universal	Universal	Universal
All	All	All	All	All
No	No	No	No	No
Yes	Yes	Yes	Yes	Yes
	Profile 1 Yes [12345678] Universal All No	Profile 1 Profile 2 Yes Yes [12345678] [12345678] Universal Universal All All No No	Profile 1 Profile 2 Profile 3 Yes Yes Yes [12345678] [12345678] [12345678] Universal Universal Universal All All All No No No	Profile 1 Profile 2 Profile 3 Profile 4 Yes Yes Yes Yes [12345678] [12345678] [12345678] [12345678] Universal Universal Universal Universal All All All All No No No No



Profiles and Speeds

Mode Enable

It's worth switching off all modes apart from Drive in all profiles apart from Profile 1. This makes things more straight forward when using buddy buttons for certain functions as you won't need to press the button multiple times.

File Description File Description				
Profile Management	Profile 1	Profile 2	Profile 3	Profile 4
Profile Name	Profile 1	Profile 2	Profile 3	Profile 4
Profile Enable	Yes	Yes	Yes	Yes
Mode Enable	[12345678]	Drive	[12345678]	[123450
Input Device Type	Universal	Seating Mouse 1	Universal	Univers
Input Device Subtype	All	Mouse 2	All	All
Seat Reversal Profile	No	iDevice IR Control	No	No
Allow Grab	Yes	Mode 5 Programming	Yes	Yes
★ Configuration	Mode 1	Mode 3	Mode 4	
→ Speeds	Profile 1	Profile 2	Profile 3	Profile 4



Profiles and Speeds

Mode Enable

Step 1 — Double Click on the Mode Enable parameter in Profile 2. Deselect all modes apart from Drive.

Profile Management	Profile 1	Profile 2	Profile 3	Profile 4
Profile Name	Profile 1	Profile 2	Profile 3	Profile 4
Profile Enable	Yes	Yes	Yes	Yes
Mode Enable	[12345678]	Drive	[12345678]	[123450
Input Device Type	Universal	Seating Mouse 1	Universal	Univers
Input Device Subtype	All	Mouse 2 iDevice	All	All
Seat Reversal Profile	No	IR Control	No	No
Allow Grab	Yes	Mode 5 Programming	Yes	Yes
★ Configuration	Mode 1	i rogramming	Mode 3	Mode 4
■ Speeds	Profile 1	Profile 2	Profile 3	Profile 4



Profiles and Speeds

Mode Enable

Step 2 – Repeat this for all the other Drive Profiles that are set to the same Input Device Type. The programming screen should look like this once done.

File Description						
☐ 🚇 Profile Management	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Prof
Profile Name	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Prof
Profile Enable	Yes	Yes	Yes	Yes	Yes	No
Mode Enable	[12345678]	[1]	[1]	[1]	[1]	123
Input Device Type	Universal	Universal	Universal	Universal	Universal	Jniv
Input Device Subtype	All	All	All	All	All	
Seat Reversal Profile	No	No	No	No	No	
Allow Grab	Yes	Yes	Yes	Yes	Yes	Yes



Profiles and Speeds

Mode Enable

Step 3 — You may want certain Drive Profiles to only be available for specific input devices. For example Profile 1 & 2 for a Device connected to the Omni, and Profile 3, 4 & 5 for an additional Joystick Module. To do this first click on the Input device type parameter under the specific profile that you want to define.

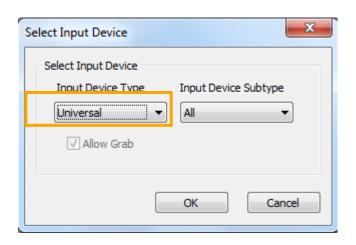
Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Prof
Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Prof
Yes	Yes	Yes	Yes	Yes	No
[12345678]	[1]	[1]	[1]	[1]	[123
Universal	Universal	Universal	Universal	Universal	Univ
All	All	All	All	All	
No	No	No	No	No	
Yes	Yes	Yes	Yes	Yes	Yes
	Profile 1 Yes [12345678] Universal All	Profile 1 Profile 2 Yes Yes [12345678] [1] Universal Universal All No No No	Profile 1 Profile 2 Profile 3 Yes Yes Yes [12345678] [1] [1] Universal Universal Universal All All All No No No	Profile 1 Profile 2 Profile 3 Profile 4 Yes Yes Yes Yes [12345678] [1] [1] [1] Universal Universal Universal Universal All All All No No No No No	Profile 1 Profile 2 Profile 3 Profile 4 Profile 5 Yes Yes Yes Yes Yes [12345678] [1]



Profiles and Speeds

Mode Enable

Step 4 — When you click into this parameter the following box will pop up. Click on the drop down menu under Input device type.



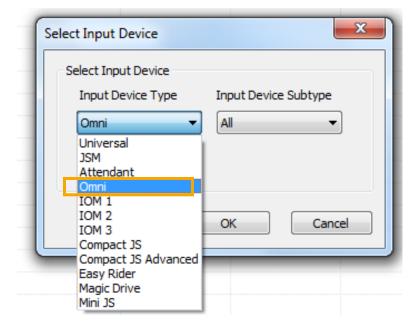


Profiles and Speeds

Mode Enable

Step 5 — When you click into this parameter the following box will pop up. Click on the drop down menu under Input device type. Select which input device you would like to use this

profile for.





Profiles and Speeds

Mode Enable

Step 6 – Repeat this process for all profiles. The example below shows this set up for Profile 1 & 2 for Omni only, then Profile 3, 4 & 5 for the Joystick Module. You need to have all the modes enabled on the first drive profile allocated to a specific input device. Then just Drive in the subsequent profiles for this input device.

File Description File Description					
Profile Management	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5
Profile Name	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5
Profile Enable	Yes	Yes	Yes	Yes	Yes
Mode Enable	[12345678]	[1]	[12345678]	[1]	[1]
Input Device Type	Omni	Omni	JSM	JSM	JSM
Input Device Subtype	All	All	All	All	All
Seat Reversal Profile	No	No	No	No	No
Allow Grab	Yes	Yes	Yes	Yes	Yes
Configuration	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5



Profiles and Speeds

Change Speeds and Accelerations

This is important to ensure that the client can drive the chair with safety in mind. Reducing the speeds and accelerations especially in the profiles that the client will use for indoor driving is vital but this will need to be done on a case by case basis. The turn speeds and accelerations also need to be taken into account as well as forwards and reverse.

Speeds	Profile 1	Profile 2	Profile 3	Profile 4	Outdoor
Maximum Forward Speed	30 %	40 %	50 %	75 %	100 %
Minimum Forward Speed	10 %	15 %	20 %	15 %	15 %
Maximum Reverse Speed	30 %	35 %	40 %	40 %	40 %
Minimum Reverse Speed	10 %	15 %	15 %	15 %	15 %
Maximum Turning Speed	10 %	12 %	17 %	20 %	22 %
Minimum Turning Speed	10 %	10 %	15 %	15 %	15 %
Maximum Forward Acceleration	20	20	20	20	20
Minimum Forward Acceleration	10	10	10	10	10
Maximum Forward Deceleration	40	45	45	45	45
Minimum Forward Deceleration	20	25	25	30	30
Maximum Reverse Acceleration	20	20	25	25	25
Minimum Reverse Acceleration	15	20	20	20	20
Maximum Reverse Deceleration	30	30	40	40	40
Minimum Reverse Deceleration	15	20	20	20	20
Maximum Turn Acceleration	15	20	25	25	25
Minimum Turn Acceleration	15	15	15	15	15
Maximum Turn Deceleration	30	35	40	40	40
Minimum Turn Deceleration	20	20	25	30	30
Power	100 %	100 %	100 %	100 %	100 %
Torque	60 %	60 %	60 %	60 %	60 %
Tremor Damping	0 %	0 %	0 %	0 %	0 %
Fast Brake Rate	20	20	20	20	20
Switched Input Smoothing	0 %	0 %	0 %	0 %	0 %



Profiles and Speeds

Power Settings

Power is basically the chairs ability to climb a hill or overcome an obstacle. It would be worth reducing this parameter to help minimize damage to doorways and furniture.

Speeds	Profile 1
Maximum Forward Speed	30 %
Minimum Forward Speed	10 %
Maximum Reverse Speed	30 %
Minimum Reverse Speed	10 %
Maximum Turning Speed	10 %
Minimum Turning Speed	10 %
Maximum Forward Acceleration	20
Minimum Forward Acceleration	10
Maximum Forward Deceleration	40
Minimum Forward Deceleration	20
Maximum Reverse Acceleration	20
Minimum Reverse Acceleration	15
Maximum Reverse Deceleration	30
Minimum Reverse Deceleration	15
Maximum Tum Acceleration	15
Minimum Tum Acceleration	15
Maximum Tum Deceleration	30
Minimum Tum Deceleration	20
Power	100 %
Torque	60 %
Tremor Damping	0 %
Fast Brake Rate	20
Switched Input Smoothing	0 %



Profiles and Speeds

Torque Settings

This parameter can be used to boost the power of the motors at low drive speeds. This can be useful to overcome obstacles such as door thresholds and thick carpet.

Speeds	Profile 1
Maximum Forward Speed	30 %
Minimum Forward Speed	10 %
Maximum Reverse Speed	30 %
Minimum Reverse Speed	10 %
Maximum Turning Speed	10 %
Minimum Turning Speed	10 %
Maximum Forward Acceleration	20
Minimum Forward Acceleration	10
Maximum Forward Deceleration	40
Minimum Forward Deceleration	20
Maximum Reverse Acceleration	20
Minimum Reverse Acceleration	15
Maximum Reverse Deceleration	30
Minimum Reverse Deceleration	15
Maximum Tum Acceleration	15
Minimum Tum Acceleration	15
Maximum Tum Deceleration	30
Minimum Tum Deceleration	20
Power	100 %
Torque	60 %
Tremor Damping	0 %
Fast Brake Rate	20
Switched Input Smoothing	0 %



Profiles and Speeds

Tremor Damping

This parameter can be used to reduce the effects of a users hand tremor.

Note: Does not have any affect if used with a switch device.

WARNING: If using high values of tremor damping pay particular attention to the stopping distances of the wheelchair as it will be increased.

☑ Speeds	Profile 1
Maximum Forward Speed	30 %
Minimum Forward Speed	10 %
Maximum Reverse Speed	30 %
Minimum Reverse Speed	10 %
Maximum Turning Speed	10 %
Minimum Tuming Speed	10 %
Maximum Forward Acceleration	20
Minimum Forward Acceleration	10
Maximum Forward Deceleration	40
Minimum Forward Deceleration	20
Maximum Reverse Acceleration	20
Minimum Reverse Acceleration	15
Maximum Reverse Deceleration	30
Minimum Reverse Deceleration	15
Maximum Turn Acceleration	15
Minimum Tum Acceleration	15
Maximum Turn Deceleration	30
Minimum Tum Deceleration	20
Power	100 %
Torque	60 %
Tremor Damping	0 %
Fast Brake Kate	20
Switched Input Smoothing	0 %



Profiles and Speeds

Switched Input Smoothing

This parameter smooths rapid changes of command from The Input Device which can lead to a jerky drive feel.

Normally this will not need to be adjusted but some configurations such as switched-type input devices may need additional smoothing.

Note: This smoothing will be applied to acceleration and braking, so it is important to ensure the wheelchairs Stopping distance is not adversely affected.

2 Speeds	Profile 1
Maximum Forward Speed	30 %
Minimum Forward Speed	10 %
Maximum Reverse Speed	30 %
Minimum Reverse Speed	10 %
Maximum Turning Speed	10 %
Minimum Turning Speed	10 %
Maximum Forward Acceleration	20
Minimum Forward Acceleration	10
Maximum Forward Deceleration	40
Minimum Forward Deceleration	20
Maximum Reverse Acceleration	20
Minimum Reverse Acceleration	15
Maximum Reverse Deceleration	30
Minimum Reverse Deceleration	15
Maximum Tum Acceleration	15
Minimum Turn Acceleration	15
Maximum Tum Deceleration	30
Minimum Tum Deceleration	20
Power	100 %
Torque	60 %
Tremor Damping	0 %
Fast Brake Rate	20
Switched Input Smoothing	0 %



Accessing Reverse

When using 3 Switch Input Devices there are 3 different ways of toggling the forward and reverse function.

Method 1 – By using a buddy button plugged into the U1 jack port on the Omni.

Method 2 — Auto Toggle by means of a short tap to change the forward/reverse direction followed by a long command to drive in that direction.

Method 3 — Timed Toggling by means of programming a set time which flips between forward and reverse.

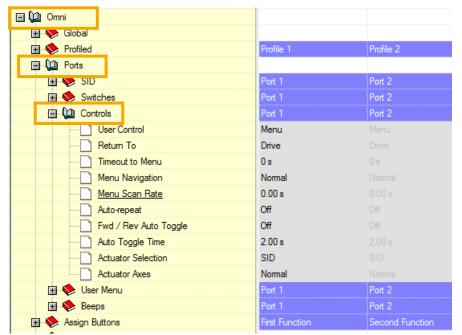


Accessing Reverse

Method 1 – By using a buddy button plugged into the U1 jack port on the Omni.

Step 1

Go to the Omni Parameter on the R-Net PC Programmer. Then open Ports then Controls.





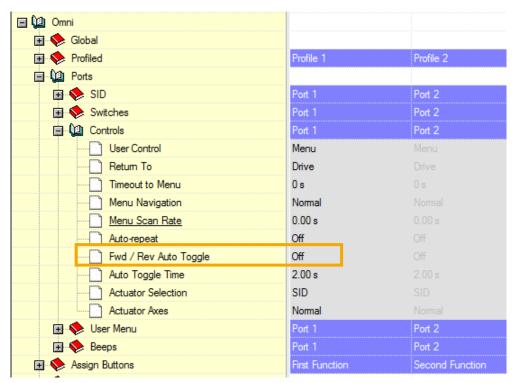
Accessing Reverse

Method 1 – By using a buddy button plugged into the U1 jack port on the Omni.

Step 2

Ensure the Fwd/Rev Auto Toggle parameter is set to OFF.

In this setting forward and reverse toggle can be done by a short press on the buddy button plugged into the U1 port on the Omni. The press time can be set in the Switches parameter.





Accessing Reverse

Method 2 — Auto Toggle by means of a short tap to change the forward/reverse direction followed by a long command to drive in that direction.

Forward/Reverse toggle is set by giving a short operation of the drive direction (the back pad on a head array). This will then toggle the direction arrow on the Omni screen between forwards and reverse. There is then a delay to allow the system to determine if this is a required toggle command or simply and error. Once the delay time has elapsed the direction will revert back to its original direction if the chair is not driven.

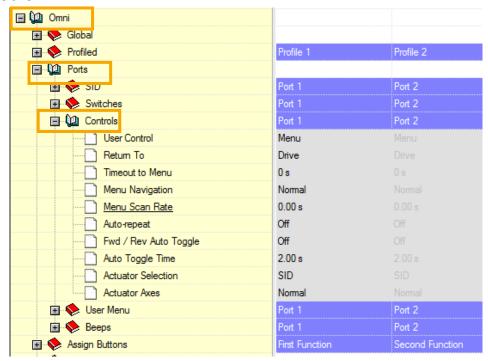


Accessing Reverse

Method 2 — Auto Toggle by means of a short tap to change the forward/reverse direction followed by a long command to drive in that direction.

Step 1
Go to the Omni parameter on the R-Net

PC programmer, open ports then controls.



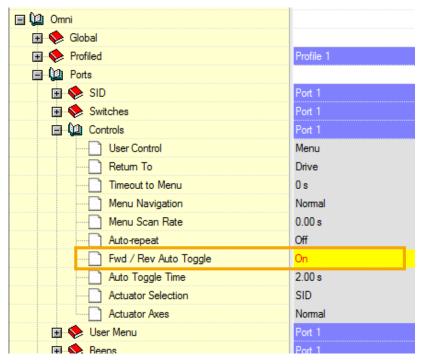


Accessing Reverse

Method 2 — Auto Toggle by means of a short tap to change the forward/reverse direction followed by a long command to drive in that direction.

Step 2

Change the FWD/REV Auto Toggle parameter to ON.

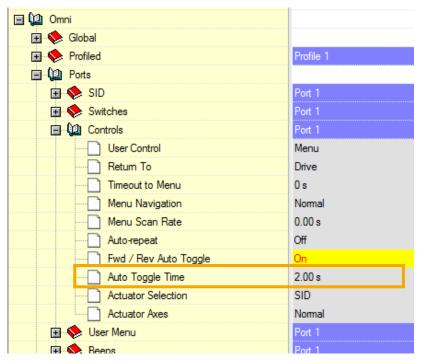




Accessing Reverse

Method 2 — Auto Toggle by means of a short tap to change the forward/reverse direction followed by a long command to drive in that direction.

Step 3 – You can change the delay time by clicking on Auto Toggle Time Parameter and changing the time accordingly. The time programmed will provide the delay between a short drive command to toggle forward and reverse and a long command to drive the chair.





Accessing Reverse

Method 3 — Timed. This is when the forward/reverse toggle is set on a time function, where the driving directions will toggle on the Omni screen whilst the chair is in "neutral". When the arrow is in the direction of required driving, simply give a drive command and the chair will drive in that direction. Once driving is completed, the driving direction arrow will re-commence toggling. The toggle time can be programmed to suit the client.

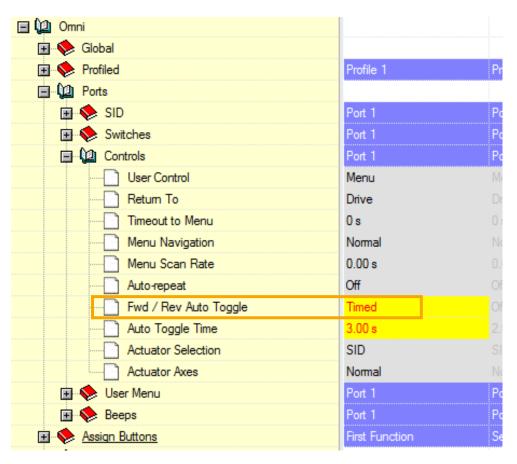


Accessing Reverse

Method 3 - Timed.

Step 1

Select the Fwd/Rev Auto Toggle parameter and change this to "Timed"



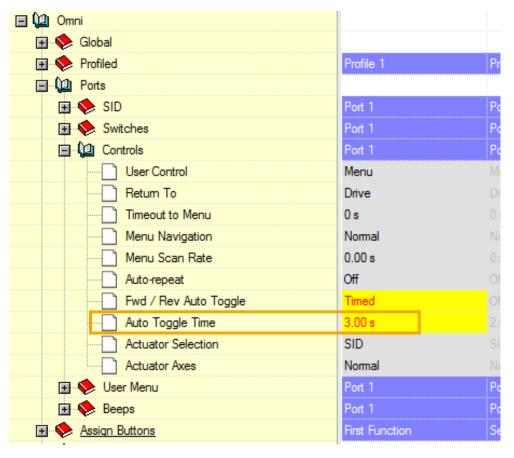


Accessing Reverse

Method 3 - Timed.

Step 2

Select the Auto Toggle Time parameter and change to the required time for the forward and reverse directions to toggle.





Accessing Reverse

Important Note:

When using the chair in Forward / Reverse auto toggle mode (Setting to ON), there will be a delay in driving introduced by the Auto tog time. This can be construed as an issue with the device if the delay is too long. It is important to understand this delay, and to minimise it as much as possible. It must be explained to the user at the point of wheelchair handover.

SPECIAL CONTROLS

3 SWITCH HEAD ARRAY



3 SWITCH HEAD ARRAY SETTING UP FUNCTIONS ON MODE SWITCHES



Setting Functions on Mode Switches.

This section explains how to set up the Omni external mode jack switches to perform multiple functions. The mode switch can carry out 3 different functions and are carried out using a buddy button plugged into the U1 jack port on the Omni.



Setting Functions on Mode Switches.

Short Press

To swap forward and reverse driving options when using a 3 switch input device.

Medium Press

To access the mode screen on the Omni so that other chair functions can be controlled e.g. seating, Bluetooth.

Long Press

To enable the chair to be put to sleep. This enables the client to rest without fear of accidentally driving the chair. The chair can be re-awakened with a short press on the mode switch.



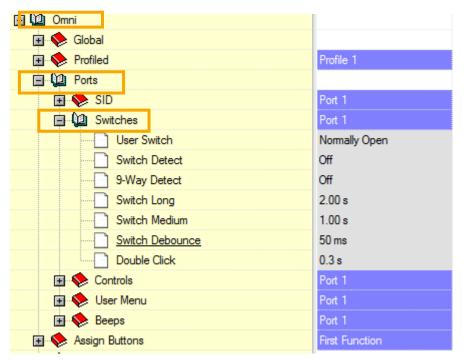
Setting Functions on Mode Switches.

It is important to program the chair according for the thresholds for the difference between

short, medium and long presses.

Step 1

Enter the Omni programming option, select Ports and then Switches

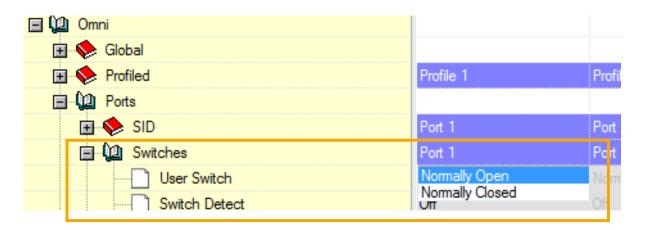




Setting Functions on Mode Switches.

Step 2

Set the User Switch parameter to Normally Open or Normally Closed depending on the type of switch used.

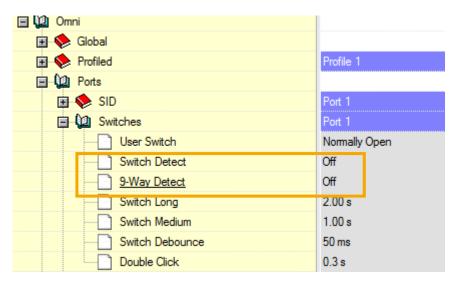




Setting Functions on Mode Switches.

Step 3

Switch Detect and 9 Way Detect parameters need to be switched OFF unless some form of switch detect is required.

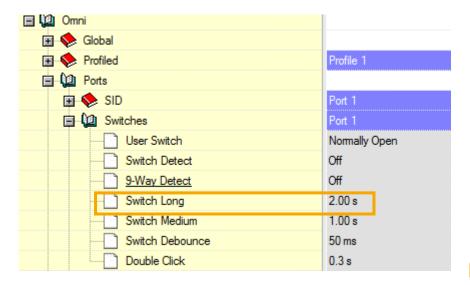




Setting Functions on Mode Switches.

Step 4

Switch Long to be set for a threshold time for a medium press to become a long press.

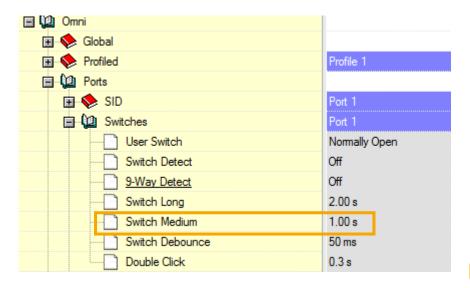




Setting Functions on Mode Switches.

Step 5

Switch Medium to be set to a threshold time for a short press to become a medium press.





Setting Functions on Mode Switches.

Step 6

The Debounce and Double Click Time parameters are not relevant to simple set up.

Switch Debounce	50 ms
Double Click	0.3 s

Note — When using a 3 input device, short press mode function will only work when this is set up in the Forward / Reverse toggling section. If alternate methods of toggling are used, the short press option on the mode switch becomes redundant



3 SWITCH HEAD ARRAY MODE SCREEN ACCESS AND NAVIGATION



Mode Screen Access and Navigation.

This section explains the method on how to access mode screens for the Omni and also how to control Mode Screen Navigation.

There are two ways to access the mode screen on the Omni. These are:

By direct switch access using a medium switch press via a buddy button plugged into the U1 external jack socket on the Omni

OR

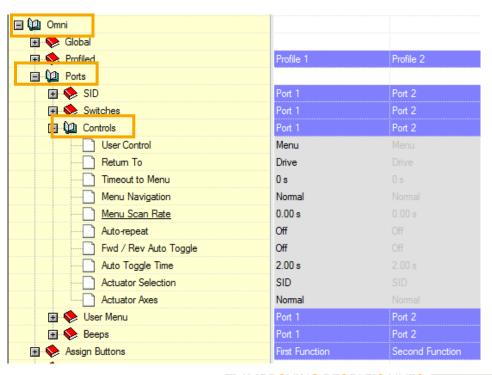
By timed access to the mode screen.



Direct Switch Access

Step 1

First enter the Omni parameter using the in the R-Net PC programming software. Then select the Ports and then Controls parameters.



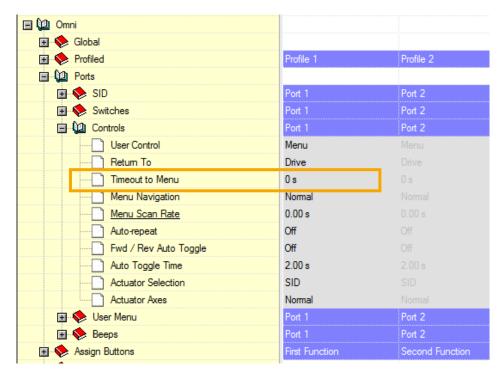


Direct Switch Access

Step 2

Once you have entered the Controls menu, look for the parameter "Timeout to Menu".

For Direct switch access into the mode screen, this parameter must be set to zero.

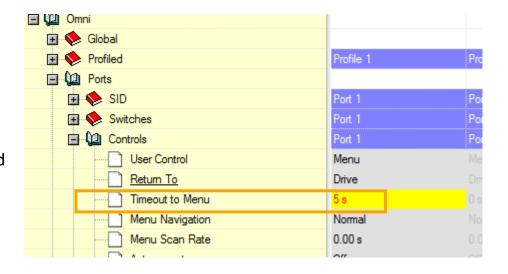




Timed Access

Step 1

For automatic timeout to the menu screen, set "Timeout to Menu" to the time delay that you require. The time is set in seconds. After a period of no input on the driving device for the time delay set, the chair will automatically drop into the mode screen.



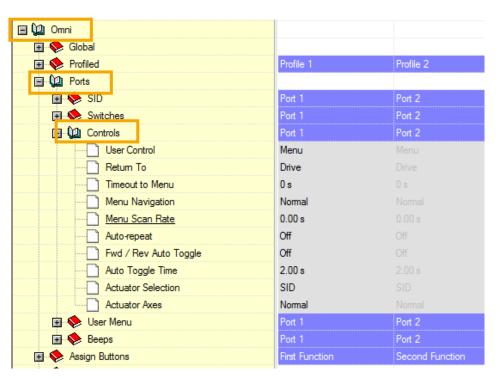


Menu Navigation

Method 1 – Manual, one item at a time.

Step 1

To set up the chair so that the mode screen menu can be navigated one line at a time go to "Omni", then "Ports" then "Controls" on the PC Programming software.



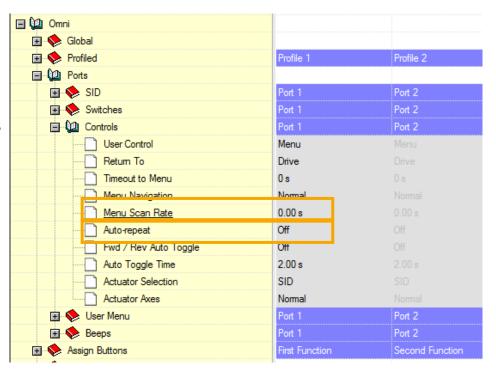


Menu Navigation

Method 1 – Manual, one item at a time.

Step 2

Ensure that "Menu Scan Rate" is set to 0 seconds and that "Auto Repeat" is set to OFF.





Menu Navigation

Method 1 – Manual, one item at a time.

Step 3

With this setup, each operation of the input device forwards or backwards will move the menu line by line.

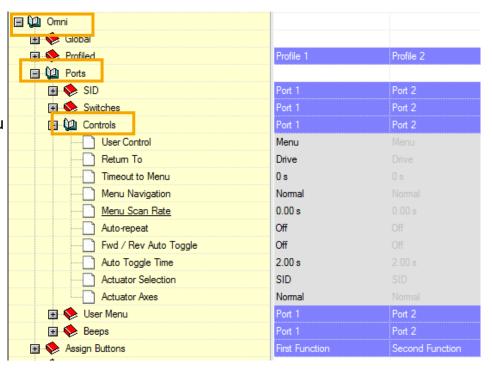


Menu Navigation

Method 2 - Manual navigation in Repeat Mode.

Step 1

To set up the chair so that the Mode screen menu can be navigated in "Repeat Mode" go to "Omni" then "Ports" then "Controls" in the PC Programmer.



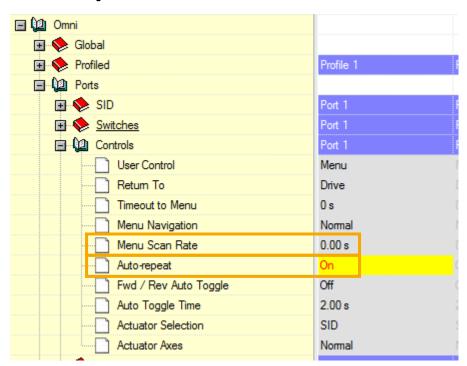


Menu Navigation

Method 2 - Manual navigation in Repeat Mode.

Step 2

Ensure that "Menu Scan Rate" is set to "0" and the "Auto-Repeat" function is set to ON.





Menu Navigation

Method 2 - Manual navigation in Repeat Mode.

Step 3

With this setup, holding the input device forward or backwards will move the line by line until the desired menu option is reached.

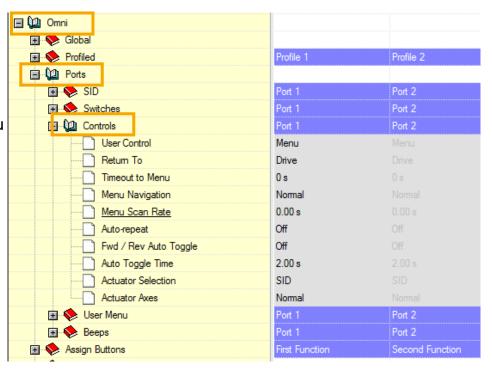


Menu Navigation

Method 3 - Scanning Menu Navigation.

Step 1

To set up the chair so that the Mode screen menu navigates by continuous scanning, go to "Omni", "Ports" then "Controls" on the PC Programmer.



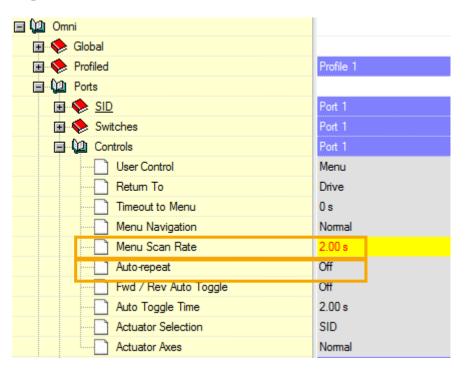


Menu Navigation

Method 3 – Scanning Menu Navigation.

Step 2

Ensure that the "Menu Scan Rate" is set to a value other than "0" and the "Auto-Repeat" option is set to OFF.





Menu Navigation

Method 3 - Scanning Menu Navigation.

Step 3

With this set up them, the menu will scan continuously at a scanning rate that is determined by the value you have set as the "Menu Scan Rate".

NOTE: It is important to ensure that scan rates are set so that the user has enough time to accurately select an option whilst not introducing excessive time delays which can frustrate the user.



3 SWITCH HEAD ARRAY ACTUATOR AXIS



Actuator Axis

This parameter sets which direction commands are used to select the available actuator axis.

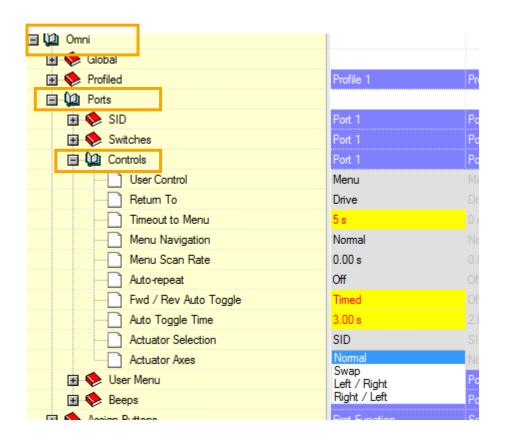
The programmable options are Normal, Swap, Left/Right and Right/Left.



Actuator Axis

Step 1

To change this setting go the Omni parameter in the PC programming software. Then select "Ports" and then "Controls"

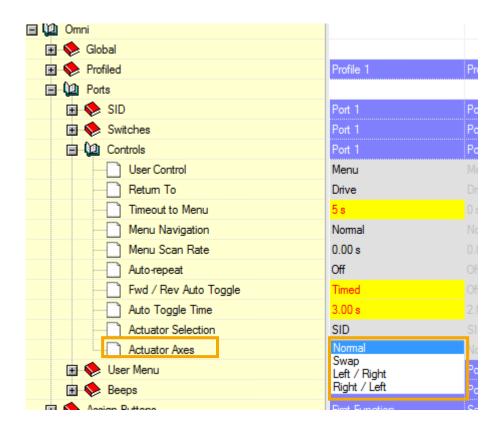




Actuator Axis

Step 2

Use the Actuator Axes parameter to select which option you would like to program the chair with.





Actuator Axis

Normal

If this parameter is set to "Normal", then left and right commands from the Special Input Device (SID) will select the available actuator axis. Forward and reverse commands will move the selected actuator.



Actuator Axis

Swap

If set to "Swap" then forward and reverse SID commands will select the available actuator axis, left and right commands will move the selected actuator.



Actuator Axis

Left/Right

If set to "Left/Right" then a left command from the SID will select the available actuator and a right command will move the actuator. The direction of movement is changed via a short operation of the right command on the SID within the period defined by the "Auto Toggle Time" parameter.



Actuator Axis

Right/Left

If set to "Right/Left" then a right command from the SID will select the available actuator and a left command will move the actuator. The direction of movement is changed via a short operation of the left command on the SID within the period defined by the "Auto Toggle Time" parameter.



3 SWITCH HEAD ARRAY CUSTOMISING MENU STRUCTURE



Customising Menu Structure

This sets the position of menu items within the user menu. The user menu can have up to 16 lines.

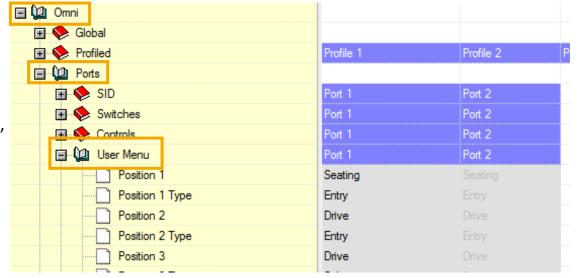




Customising Menu Structure

Step 1

Go to the "Omni" parameter in the PC
Programming software. Then open "Ports",
then "User Menu".

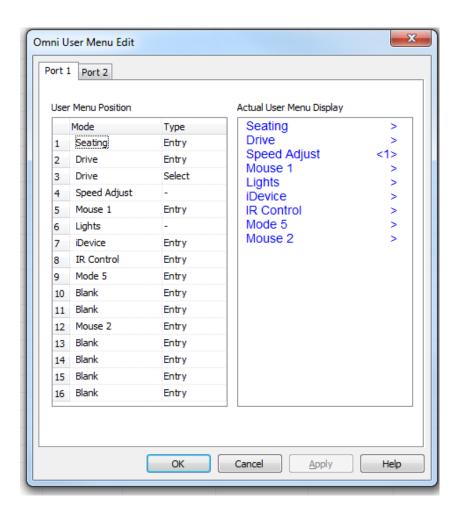




Customising Menu Structure

Step 2

You can now double click anywhere in this section and it will open the Omni User
Menu Edit screen.





Customising Menu Structure

Step 3

You can drag and drop the modes until you have them in an order that best suits the client. As you move the various modes you can see the Actual User Menu Display on the right hand side in blue. If set to "Blank" then there will be no menu item displayed. It is possible to set items to appear multiple times in the menu.

