STEPS
Sunrise Training & Education Programs

SUNRISE MEDICAL

# DUAL PRO HEAD ARRAY FITTING AND PROGRAMMING

IMPROVING PEOPLE'S LIVES

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 1

Order the Dual Pro Head Array Retro Fitting Kit – Part Number 20011220

Within this kit you get the following:

Omni

Omni Mounting (Flexible arm)

Dual Pro Head Array

Kit Contents

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 2

The Dual Pro Head Array comes with Whitmyer mounting brackets that work best when mounted directly to a backrest. You can mount it to the push handles is required.

## 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.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 5

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

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 6

Mount the Dual Pro using the Whitmyer mounting bracketry.

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

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 7

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.

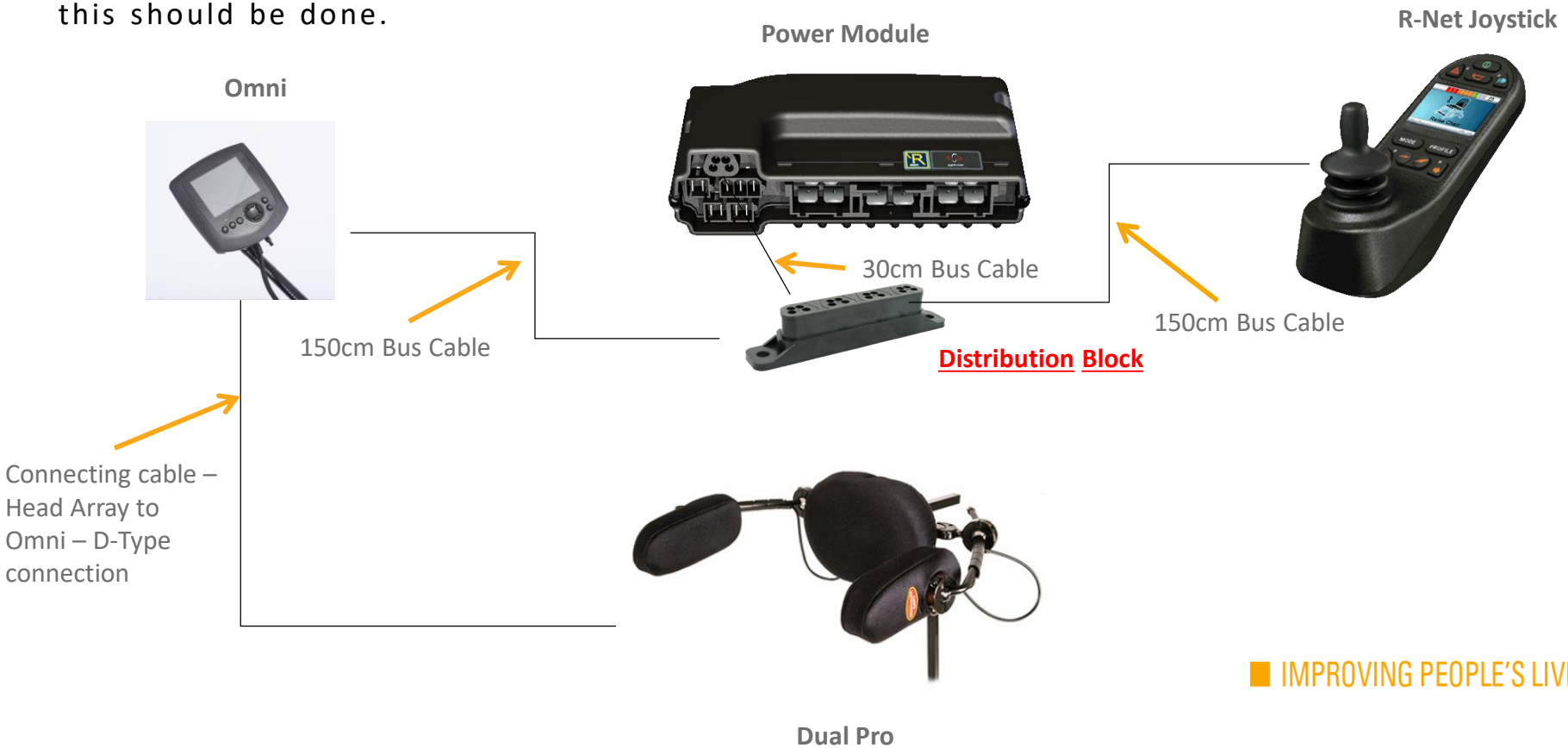
## Step 8

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.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 9

The next step is to wire the bus cables. The diagram below should give you a goo idea of how this should be done.

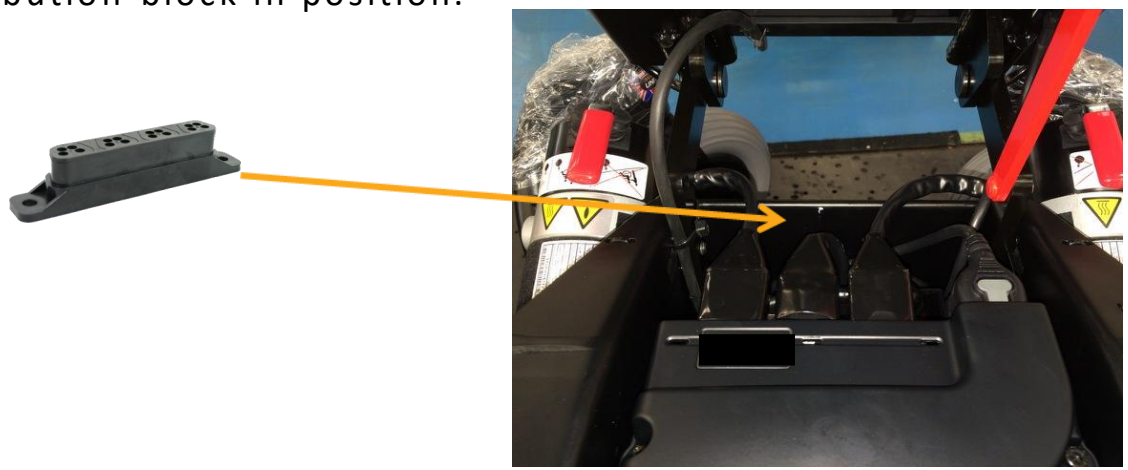


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 10

The 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.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 11

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 12

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 13

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

## Step 14

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.**

# SPECIAL CONTROLS
# DUAL PRO 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 **Web IQ**. 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 help.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.

http://www.sunmedwebiq.com/

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

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

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 1

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

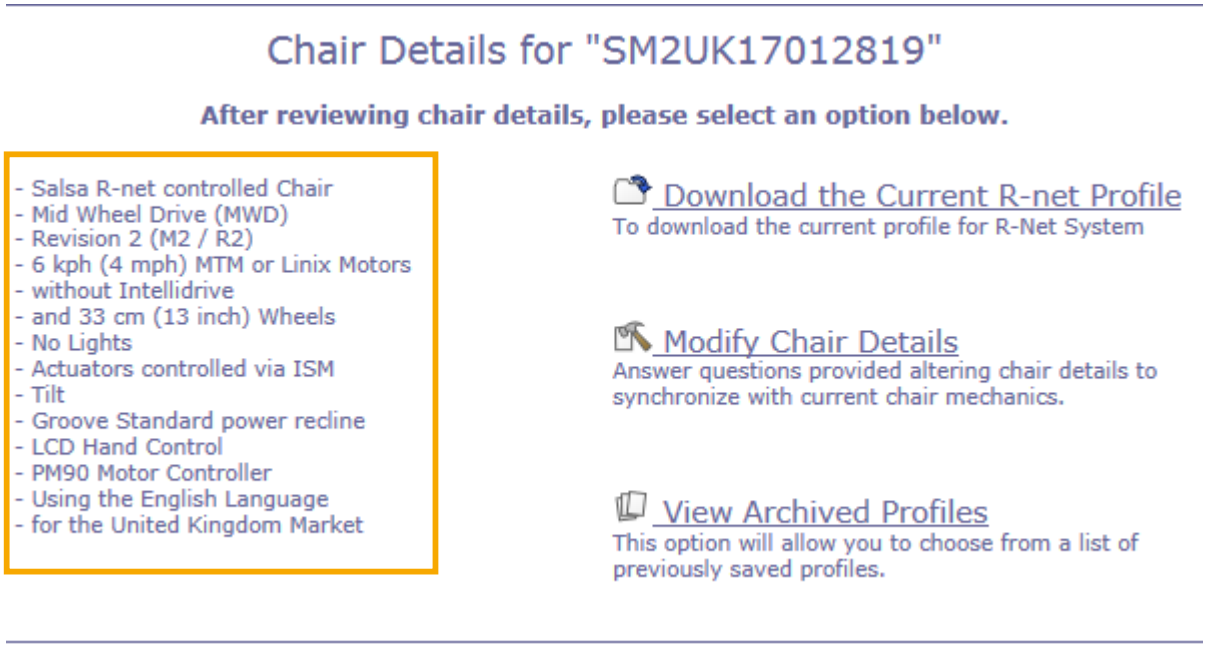
- The chair Serial Number
- The Sunrise Sales Order number (if you don't have this you can get from Customer Services)

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

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 2

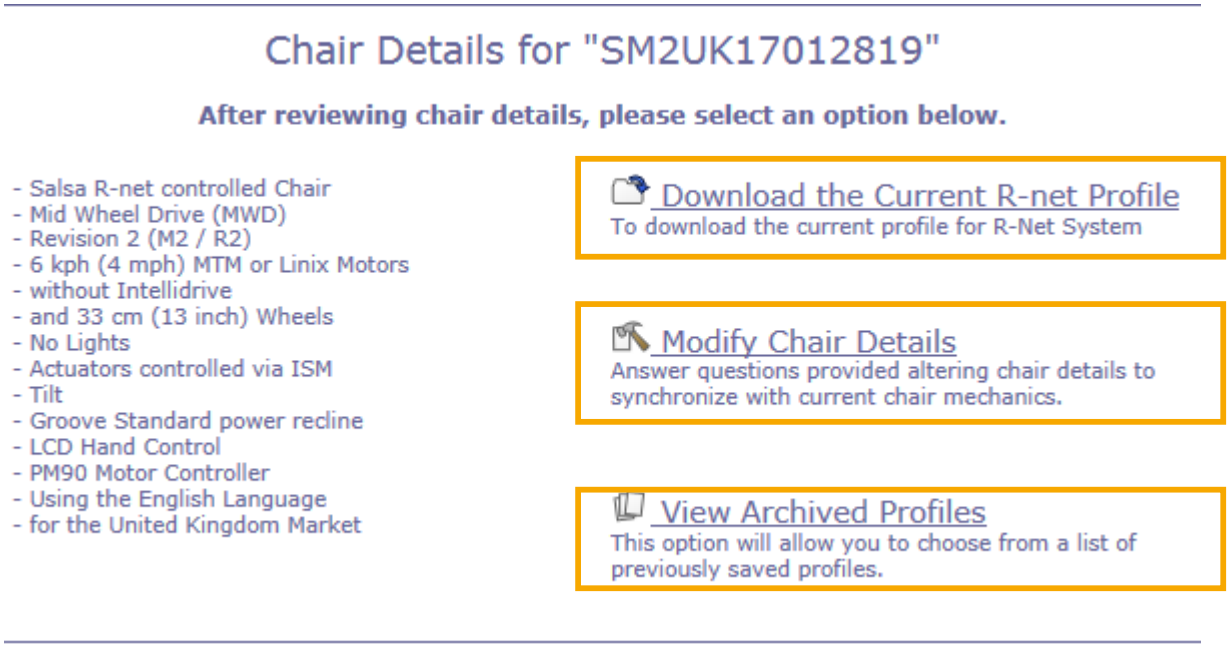
You will then be able to see the chair details. The current build specification will be on the left…….



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 3

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



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

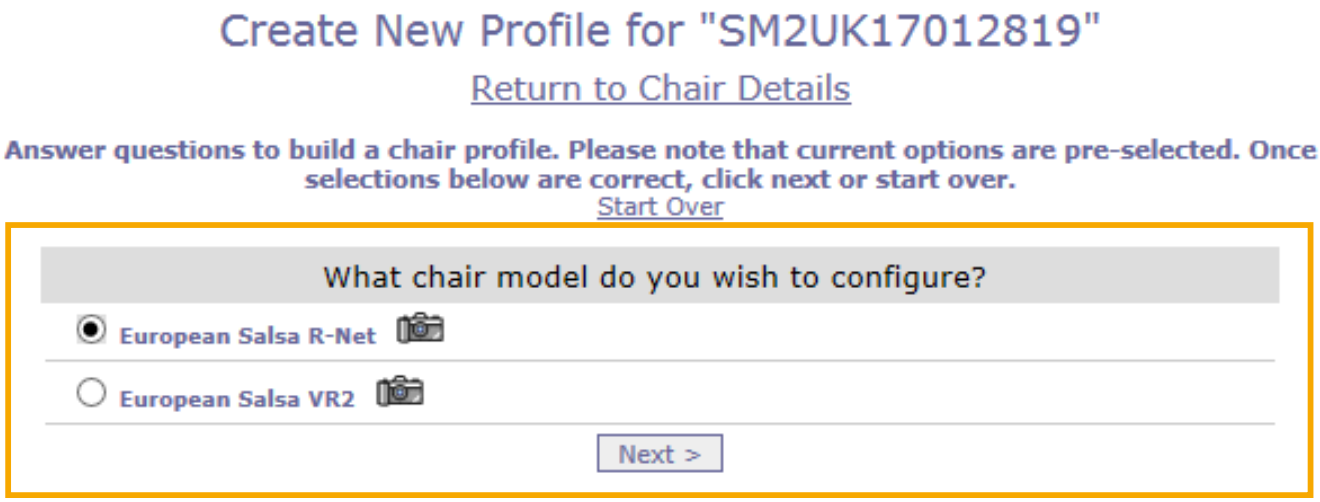
## Step 4

Click on Modify Chair Details.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

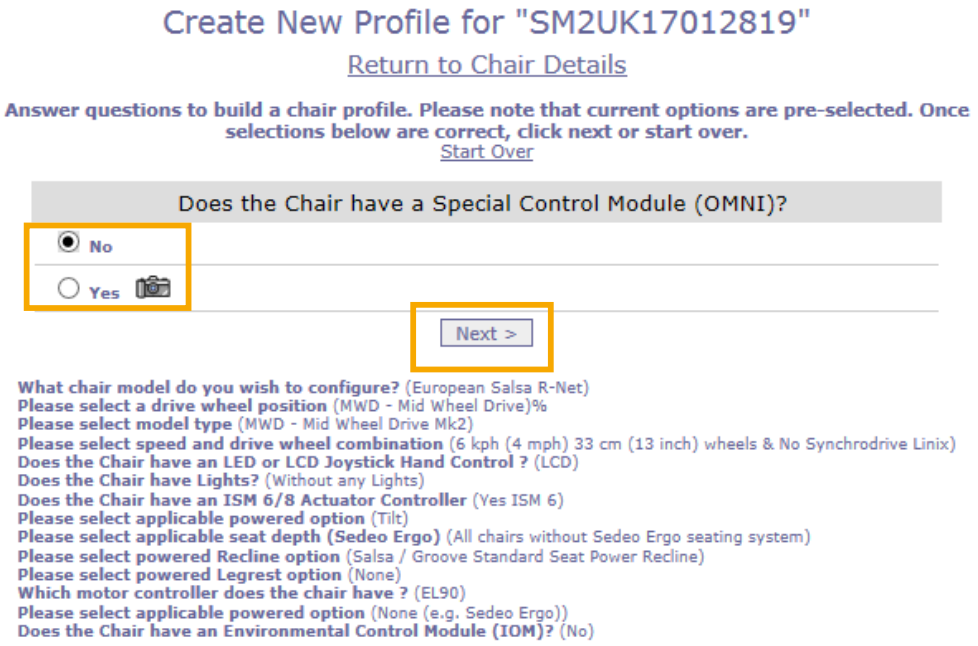


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

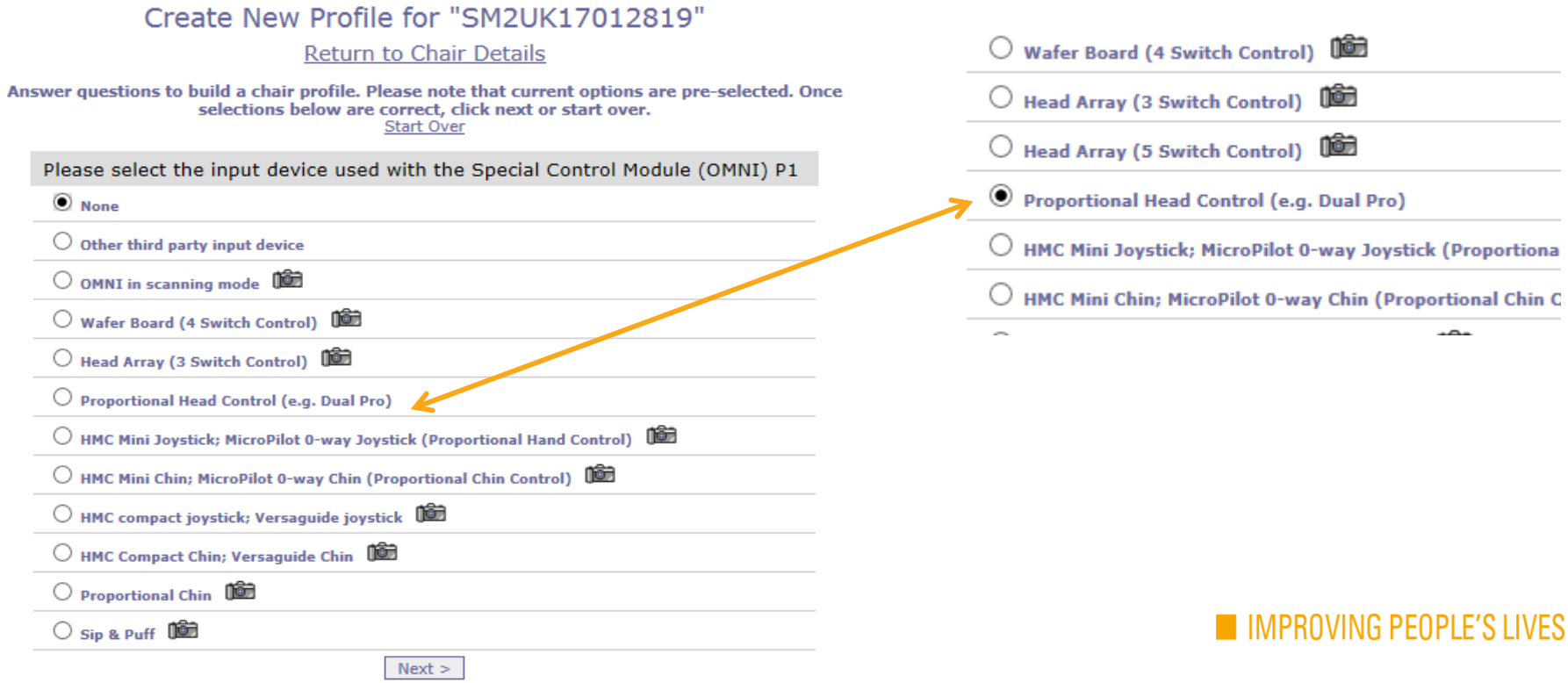
Change to YES and click NEXT.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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 Proportional Head Control (Dual Pro) option and click NEXT.

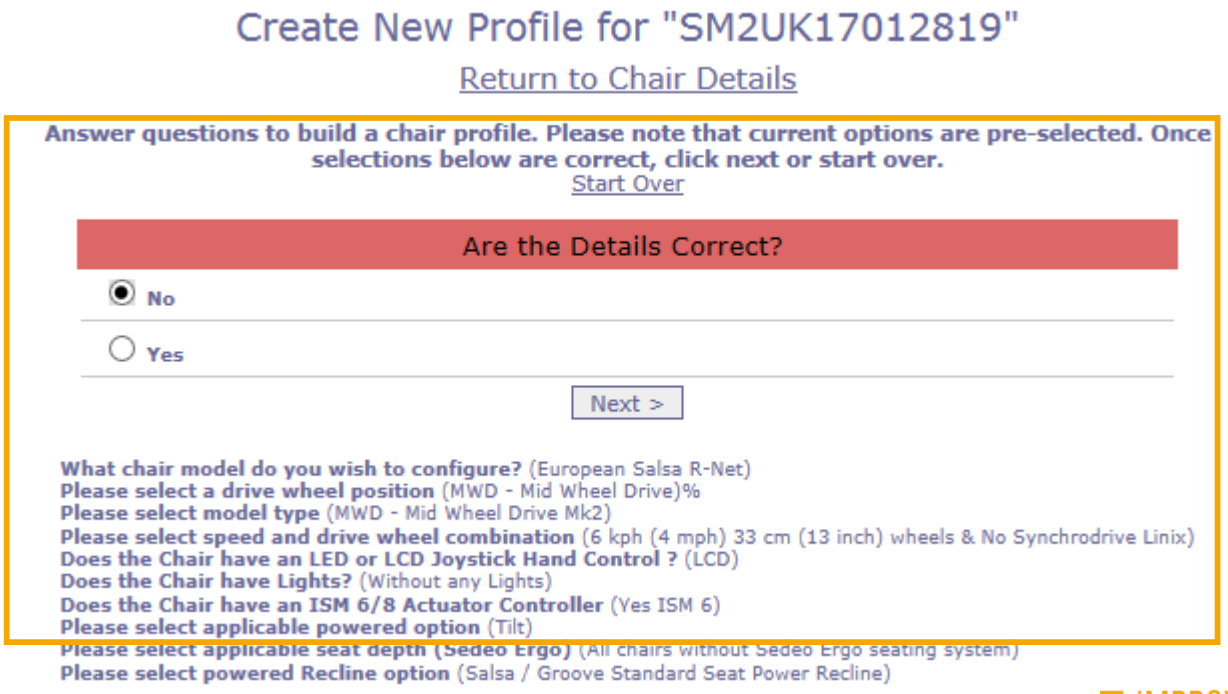


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

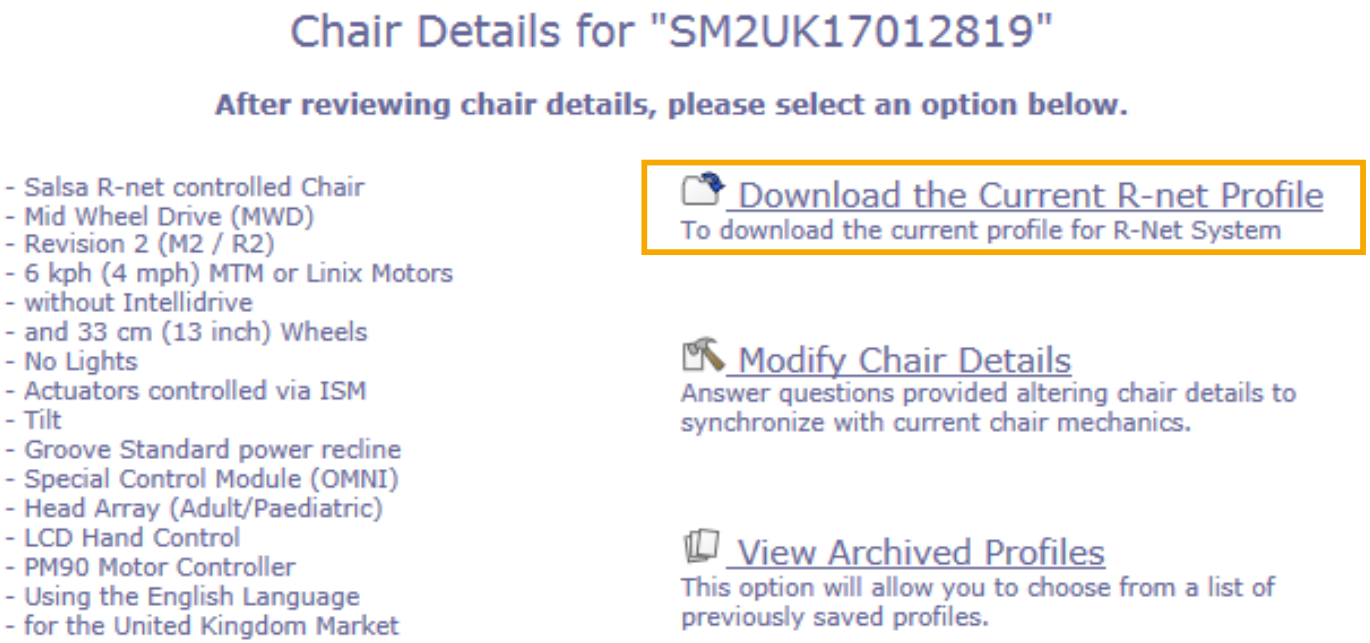
## Step 9

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.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 10

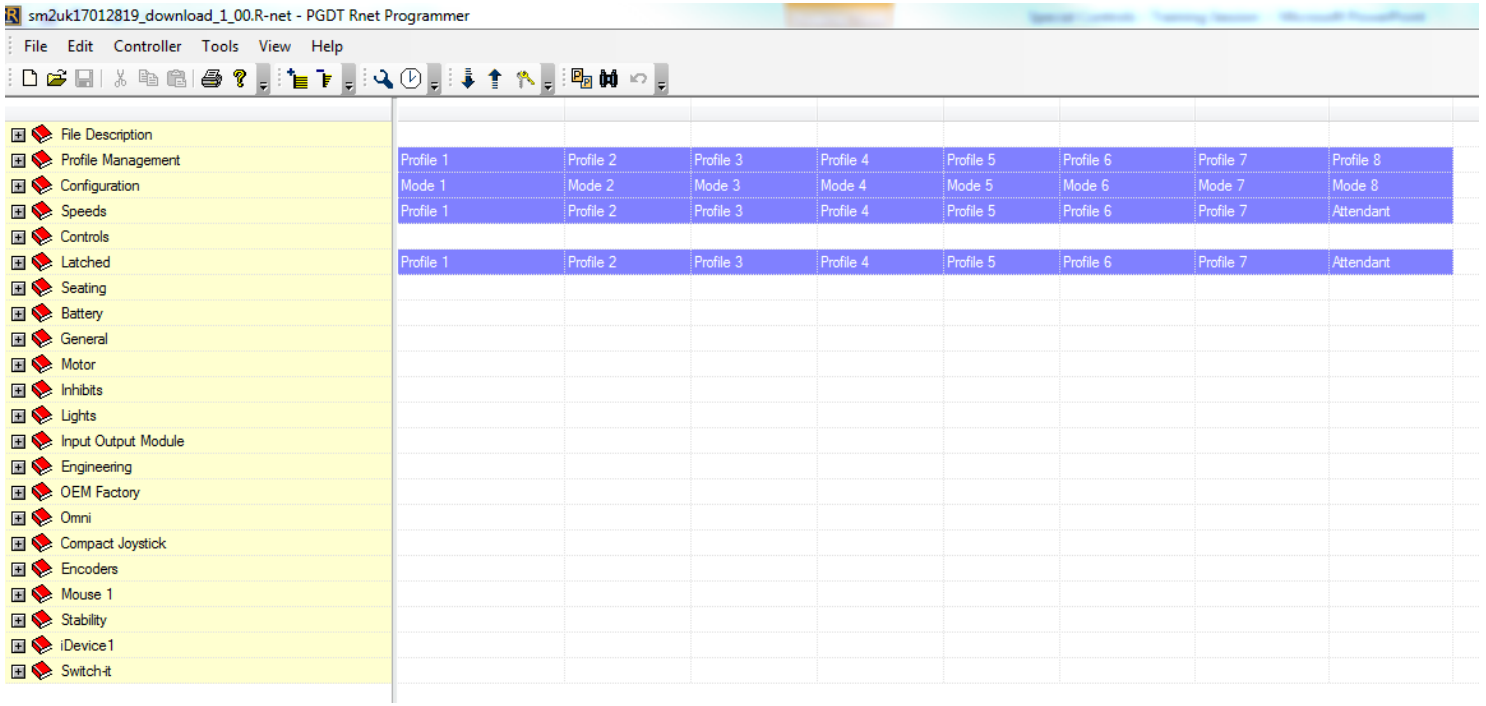
Click on Download the Current R-Net Profile. Then click OPEN. The drive profile will now open in PC programmer automatically.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 11

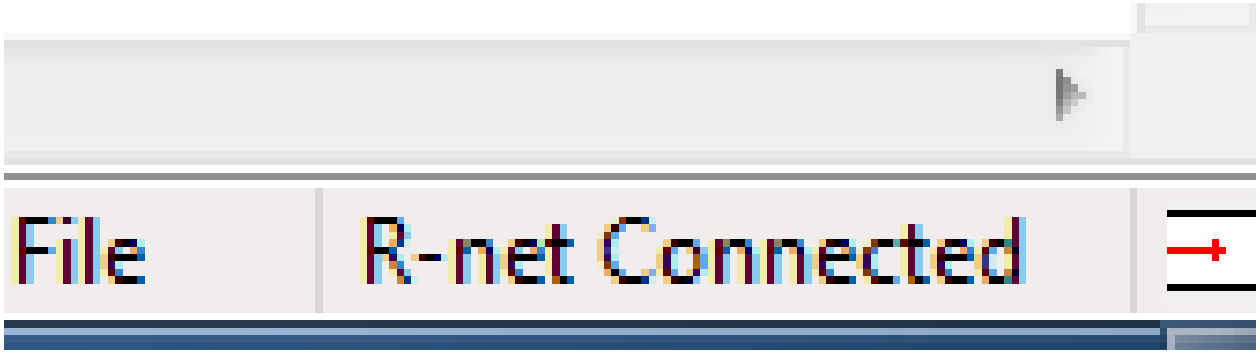
Connect your chair to your PC using the programming dongle and USB cable. You should now see the PC programming software with the drive profile for the chair.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Step 12

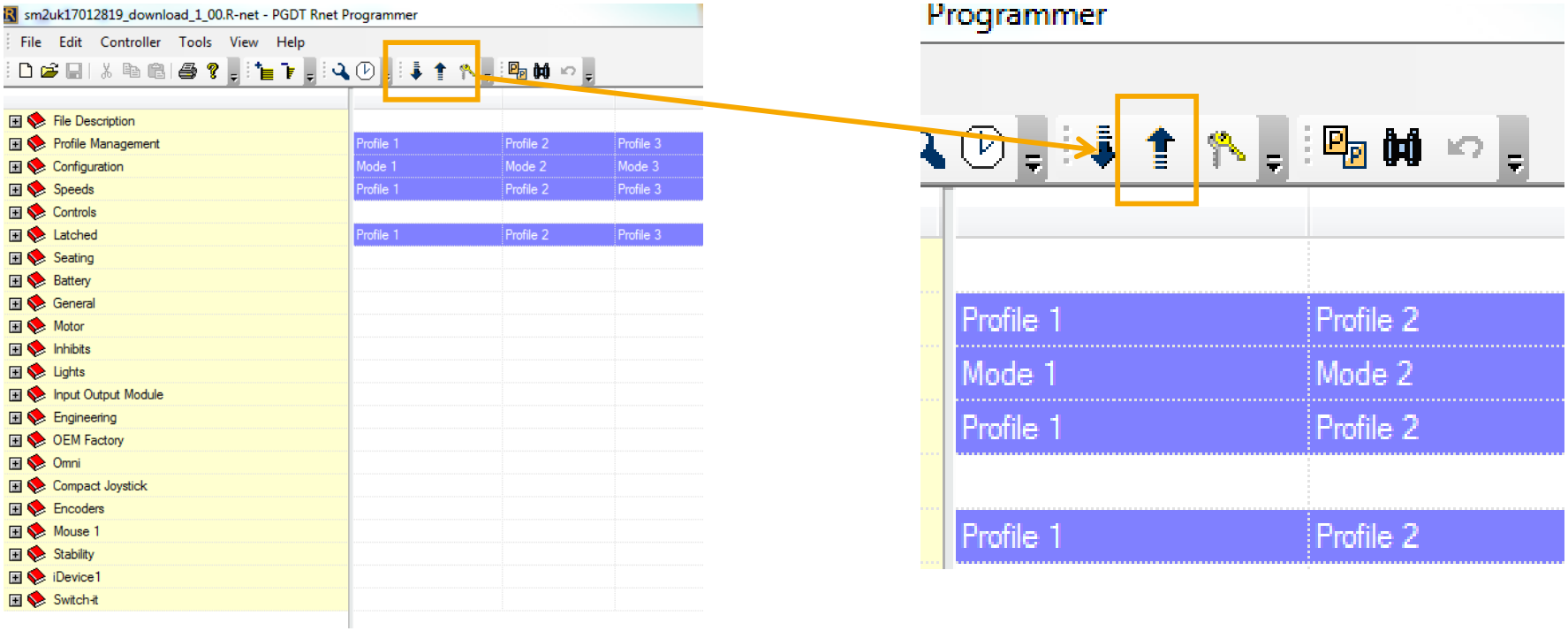
Once you have connected your chair to your PC you should see this in the bottom right hand corner of the PC programming screen.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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 Dual Pro Head Array giving the client even more control and reducing the amount of movement required to access modes and functions.

# DUAL PRO HEAD ARRAY
# FINE TUNING

IMPROVING PEOPLE'S LIVES

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Profiles and Speeds

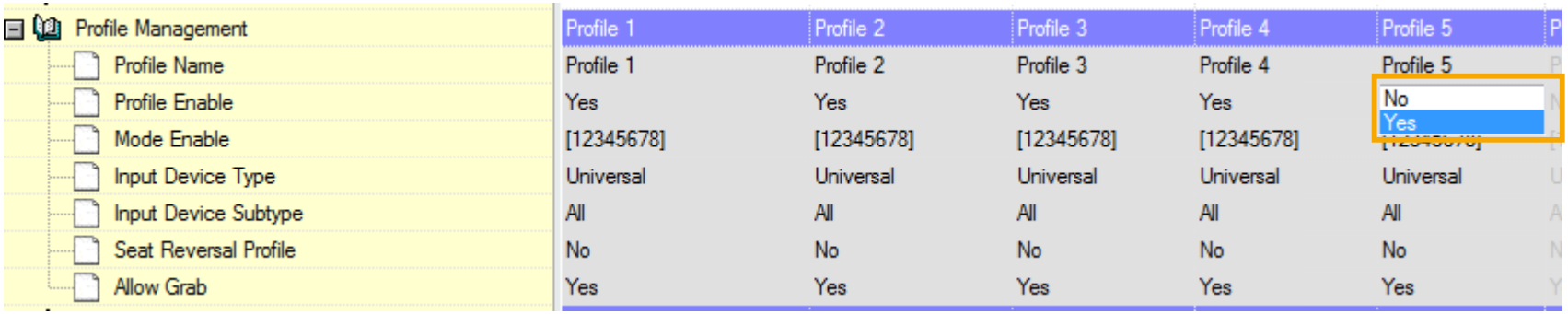
It is advisable to customise the Profiles and Speed settings on the chair to suit the clients needs. If the client is using a special input device then reducing the speeds and acceleration parameters using the PC programmer is strongly advised but to what extent this is done will be dependent on the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

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Profiles and Speeds

To add and remove drive profiles.

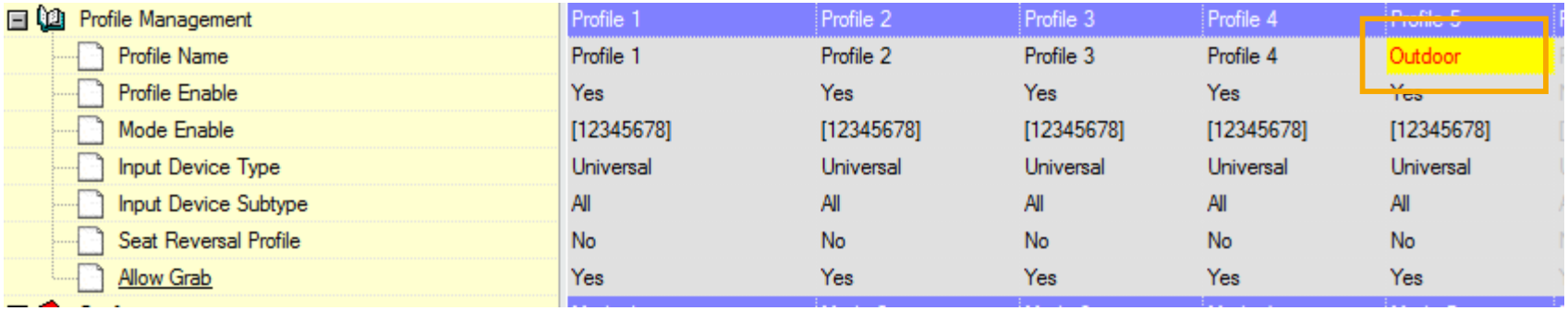
Click on the Profile Enable parameter under the profile you want to add or remove. Change to Yes or No accordingly.



## Profiles and Speeds

To Rename Drive Profiles

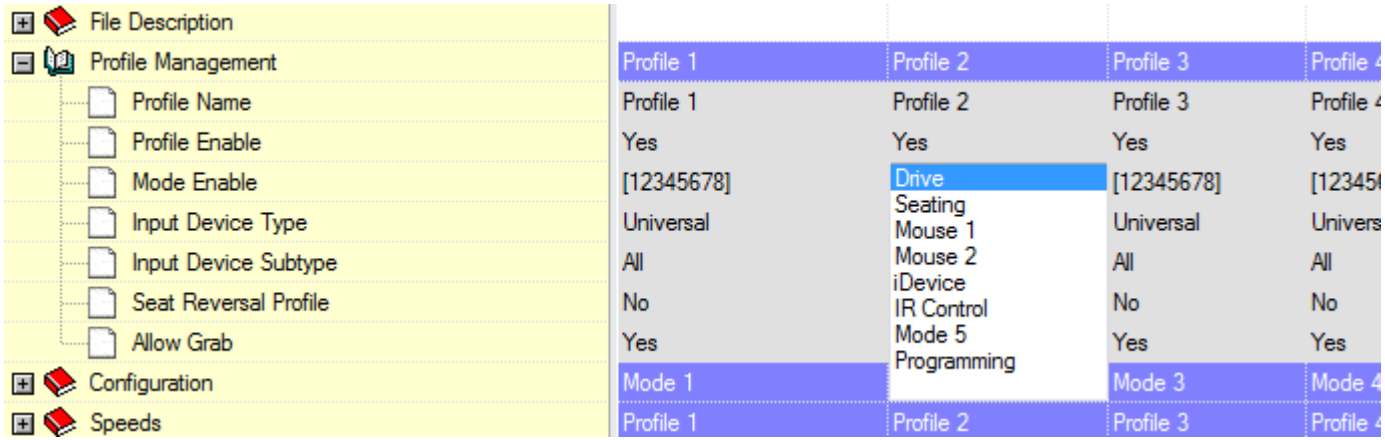
Double click on the Profile Name Parameter – Type in the field what you would like the Profile to be called. This will then appear on the Omni display.



## Profiles and Speeds

Mode Enable

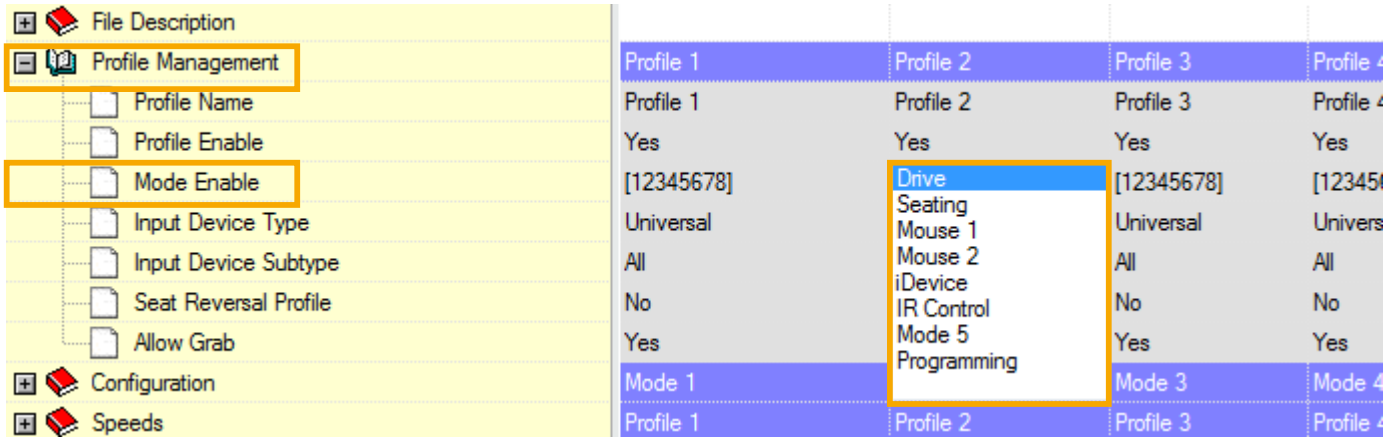
It’s worth switching off all modes apart from Drive in all profiles apart from Profile 1. This makes things more straight forward when using buddy buttons for certain functions as you won’t need to press the button multiple times.



## Profiles and Speeds

Mode Enable

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

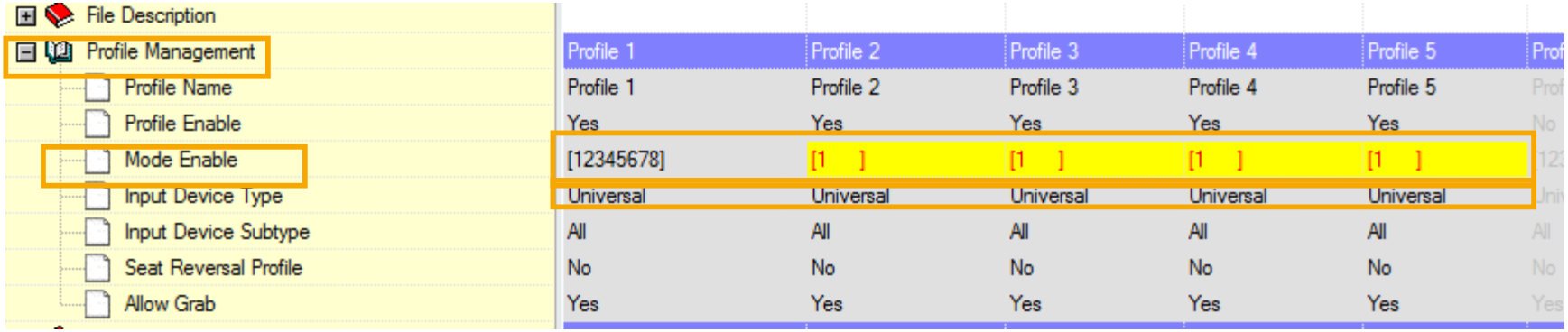


## Profiles and Speeds

Mode Enable

Step 2 – Repeat this for all the other Drive Profiles that are set to the same Input Device Type.

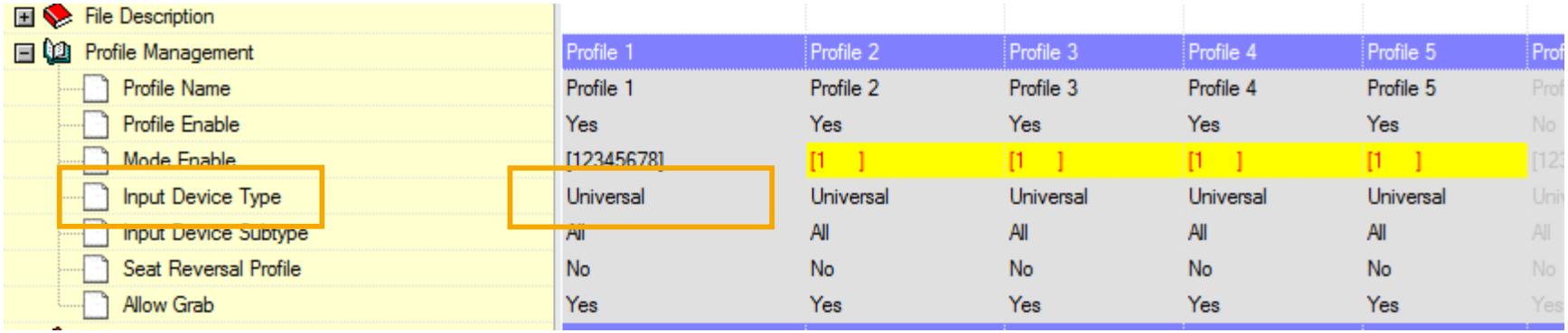
The programming screen should look like this once done.



## Profiles and Speeds

Mode Enable

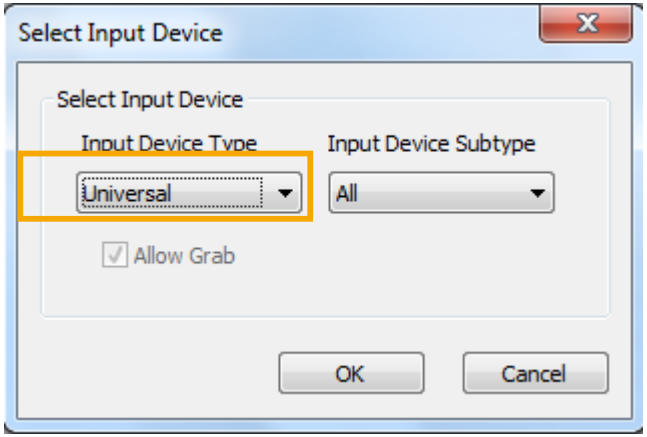
Step 3 – You may want certain Drive Profiles to only be available for specific input devices. For example Profile 1 & 2 for a Device connected to the Omni, and Profile 3, 4 & 5 for an additional Joystick Module. To do this first click on the Input device type parameter under the specific profile that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



## Profiles and Speeds

Mode Enable

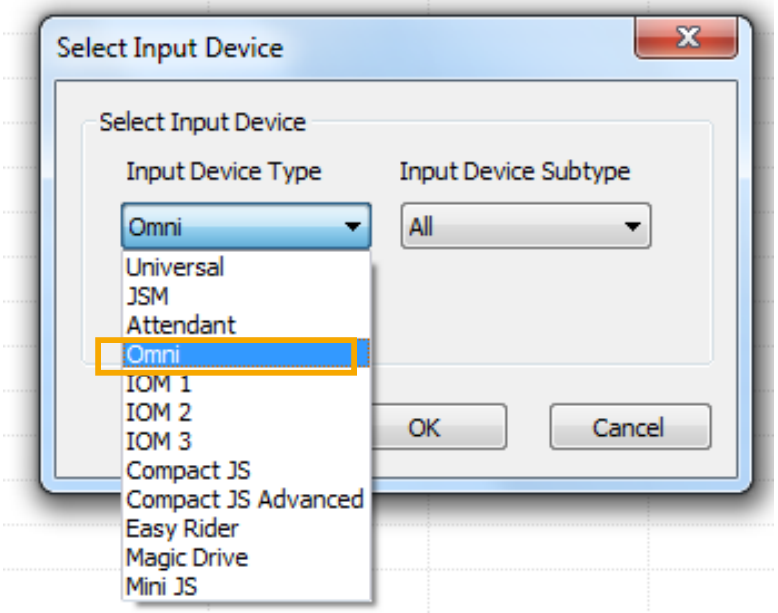
Step 4 – When you click into this parameter the following box will pop up. Click on the drop down menu under Input device type.



## Profiles and Speeds

Mode Enable

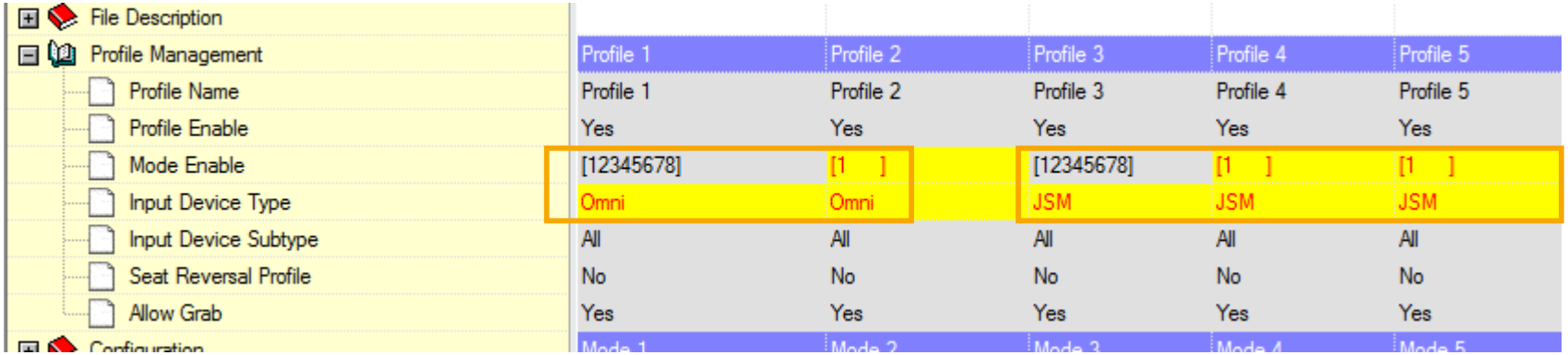
Step 5 – When you click into this parameter the following box will pop up. Click on the drop down menu under Input device type. Select which input device you would like to use this profile for.



## 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.



| | Profile 1 | Profile 2 | Profile 3 | Profile 4 | Profile 5 |
|---|---|---|---|---|---|
| File Description | | | | | |
| Profile Management | | | | | |
| 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 |

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

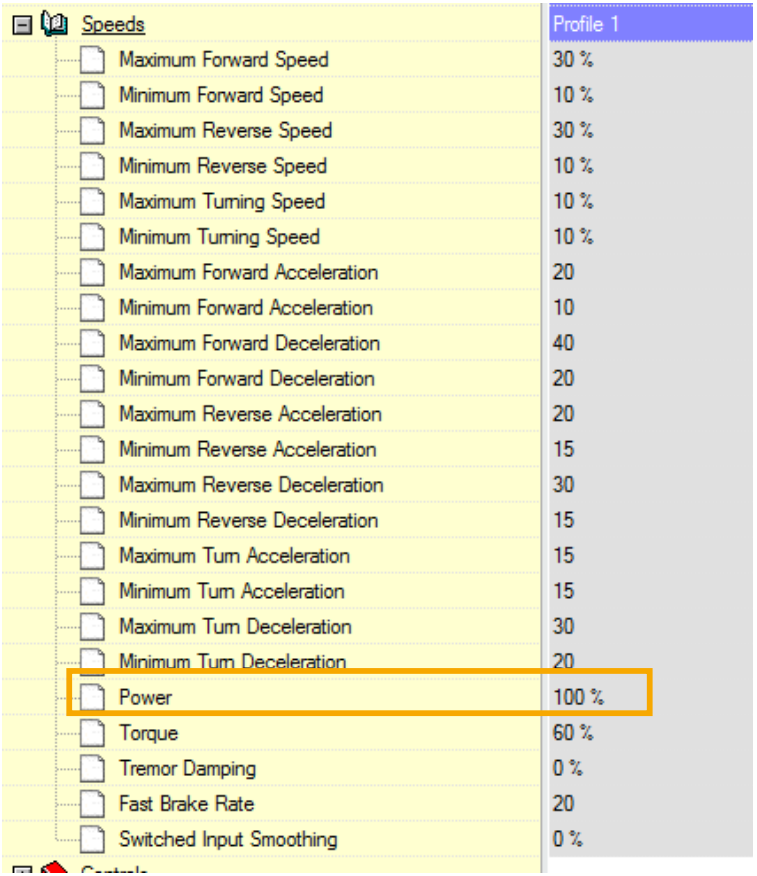
| Speeds | Profile 1 | Profile 2 | Profile 3 | Profile 4 | Outdoor |
|---|---|---|---|---|---|
| Maximum Forward Speed | 30 % | 40 % | 50 % | 75 % | 100 % |
| Minimum Forward Speed | 10 % | 15 % | 20 % | 15 % | 15 % |
| Maximum Reverse Speed | 30 % | 35 % | 40 % | 40 % | 40 % |
| Minimum Reverse Speed | 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 % |

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

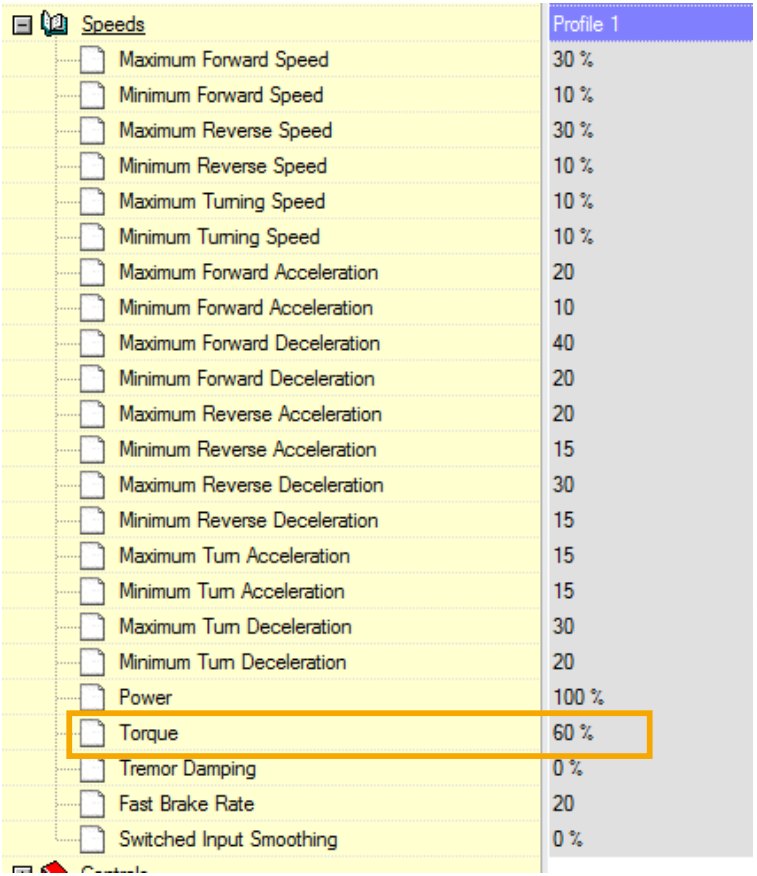


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

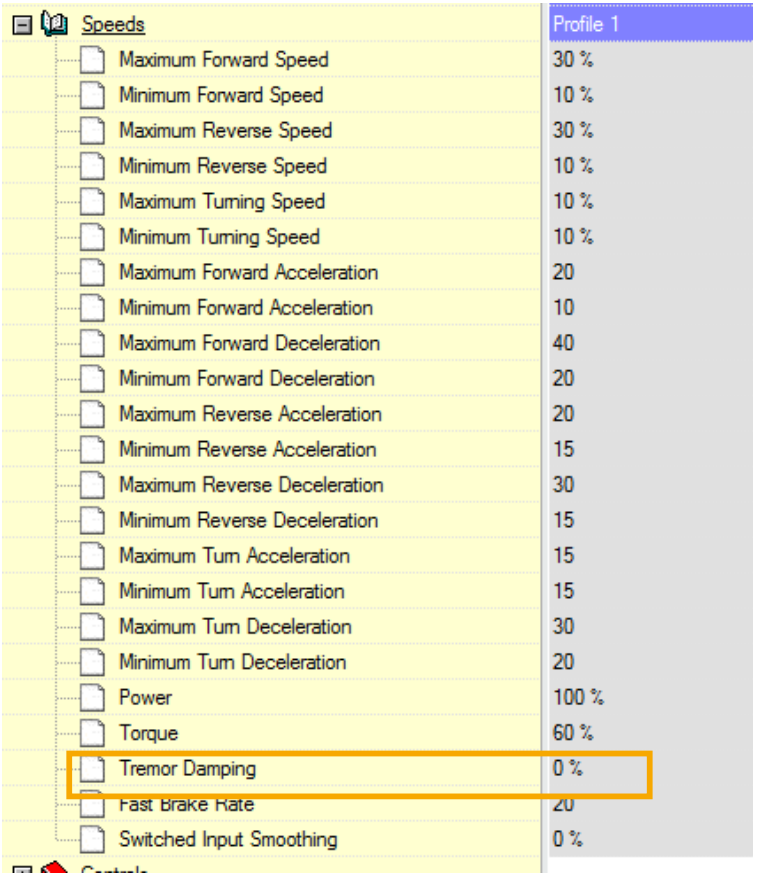
## Profiles and Speeds

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.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

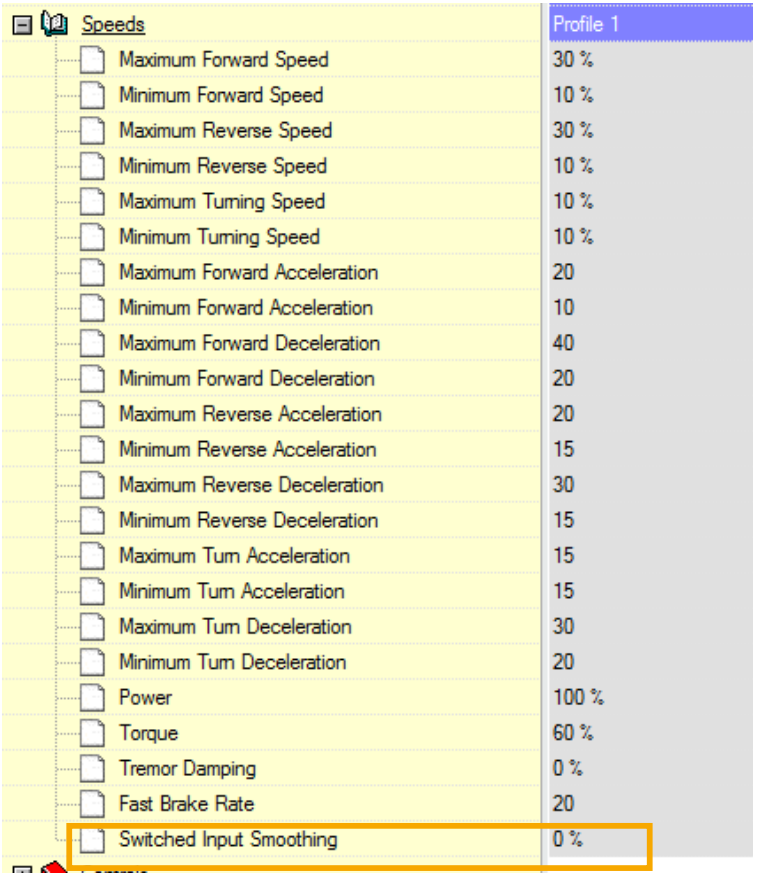
## Profiles and Speeds

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.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

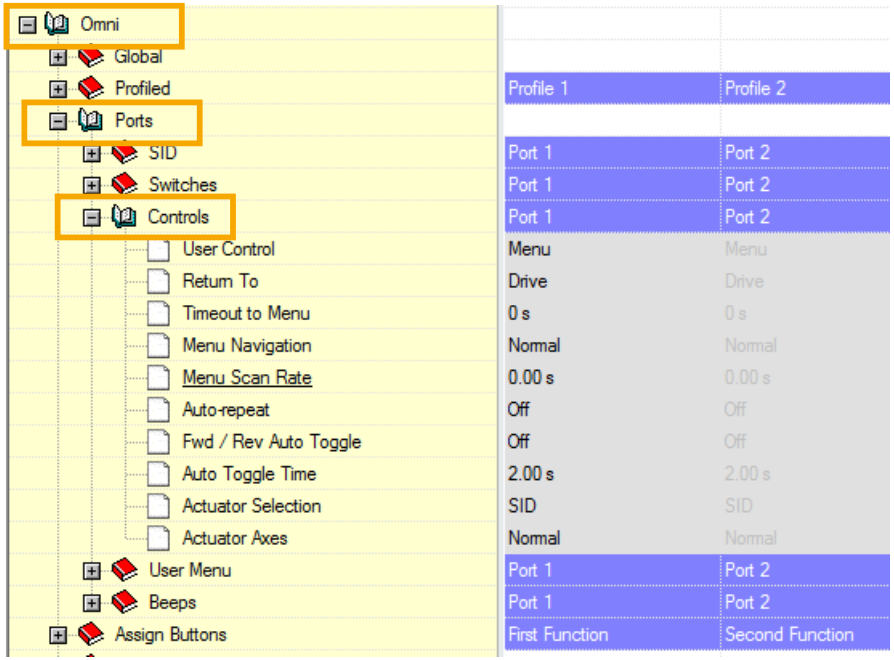
Method 3 – Timed Toggling by means of programming a set time which flips between forward and reverse.

## 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

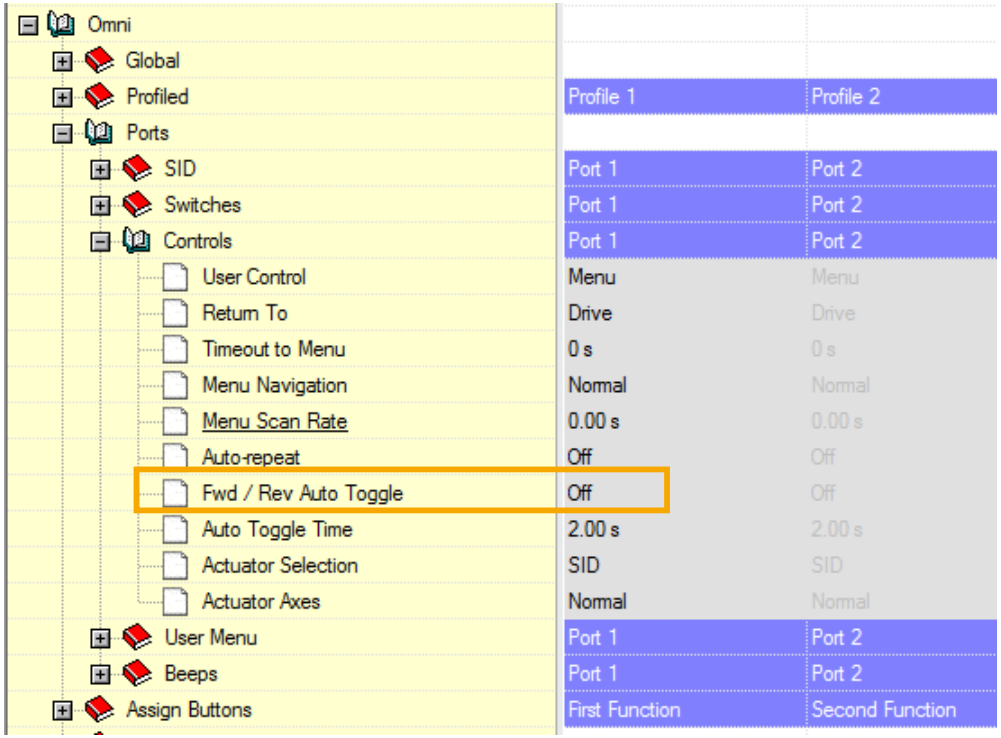
Method 1 – By using a buddy button plugged into the U1 jack port on the Omni.

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.

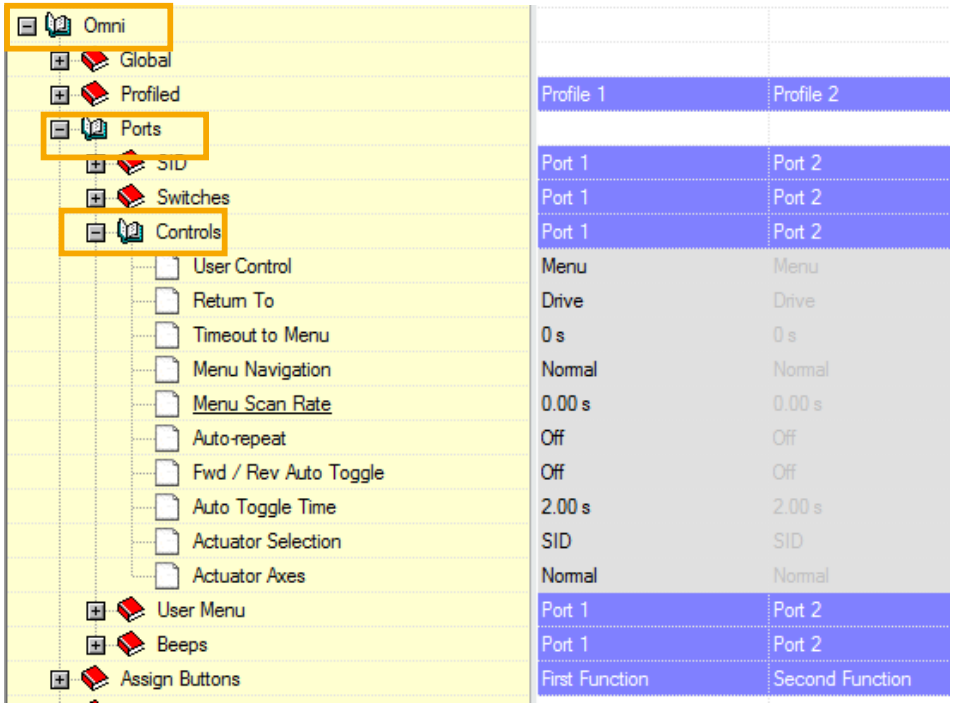
Forward/Reverse toggle is set by giving a short operation of the drive direction (the back pad on a head array). This will then toggle the direction arrow on the Omni screen between forwards and reverse. There is then a delay to allow the system to determine if this is a required toggle command or simply 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. Then open ports then controls.

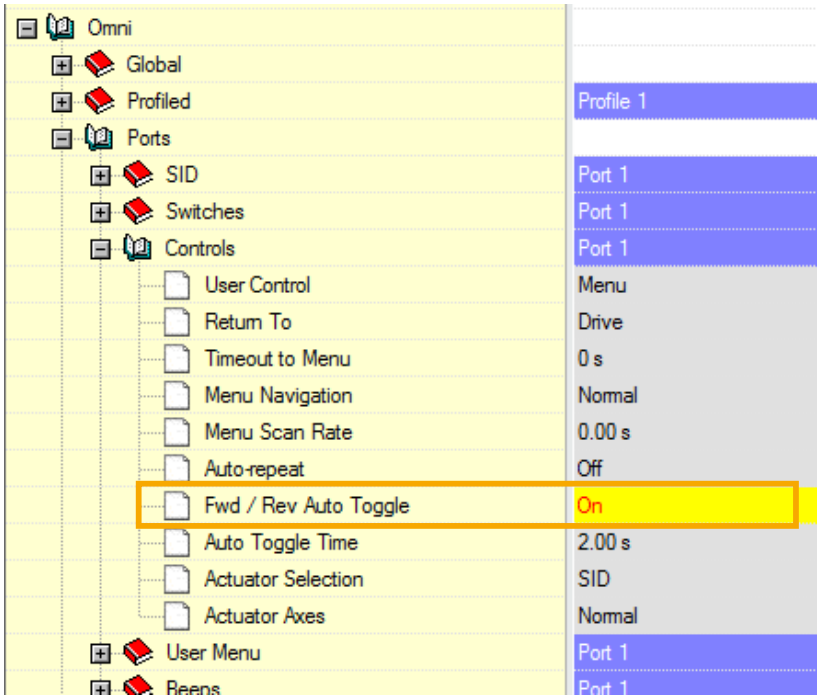


## Accessing Reverse

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

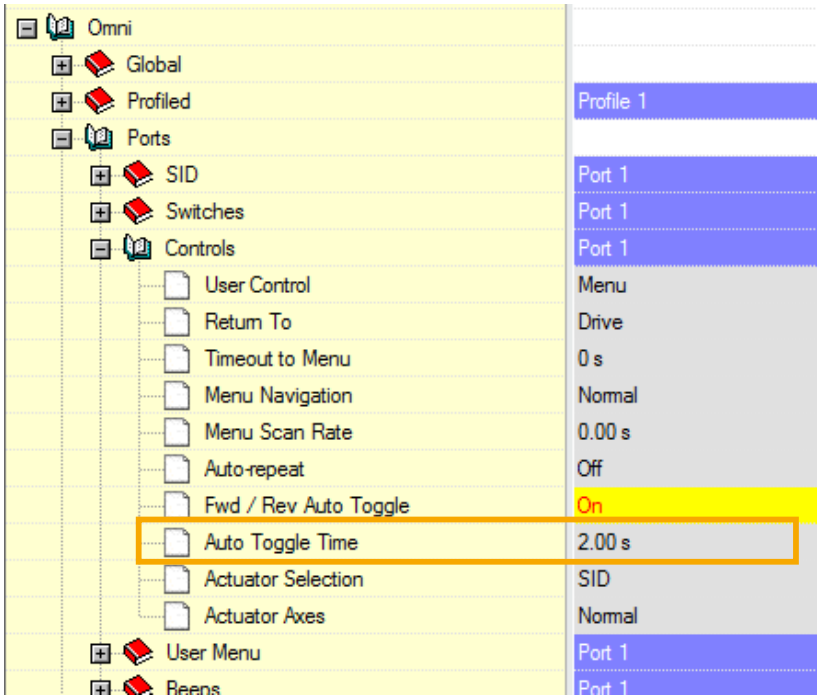
Change the FWD/REV Auto Toggle parameter to ON.



## 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.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

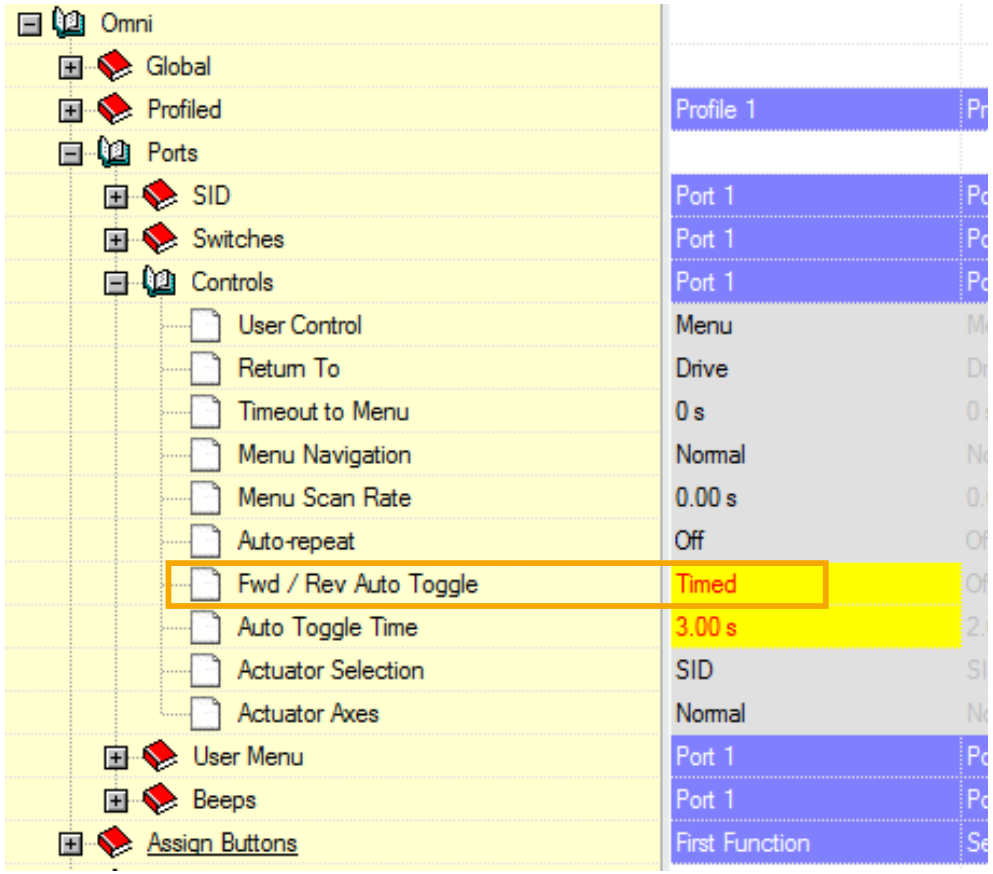
# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Accessing Reverse

Method 3 – Timed.

Step 1

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

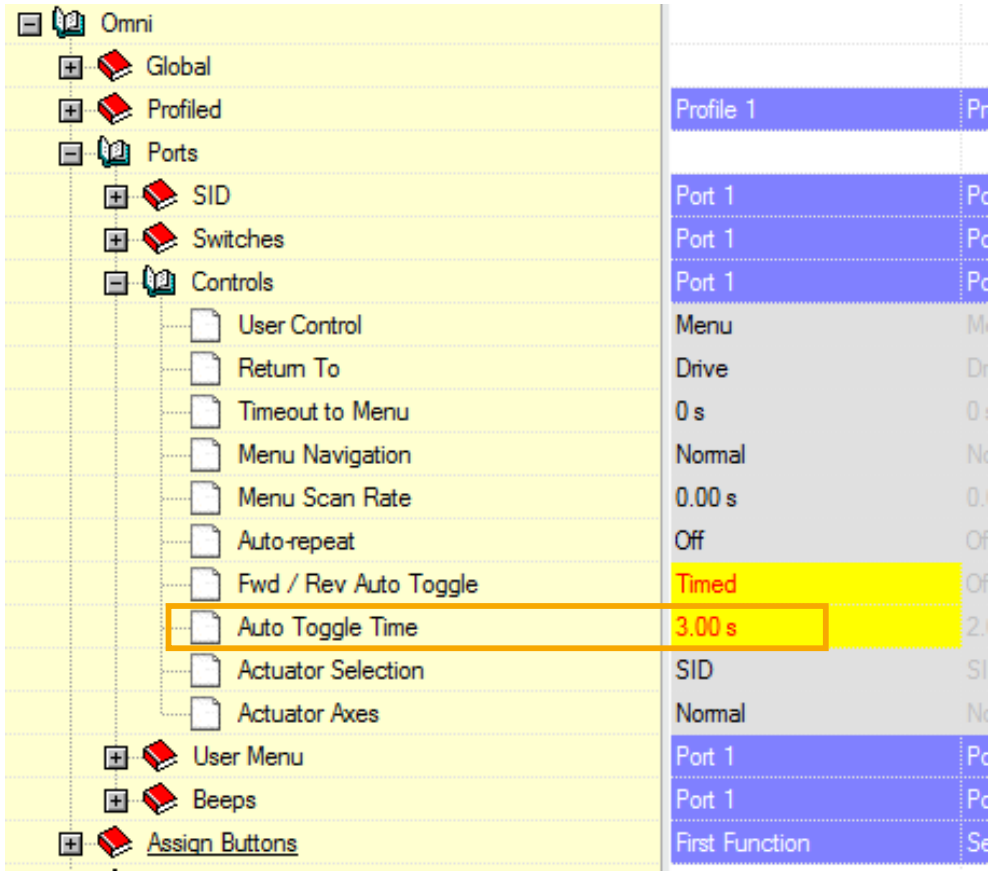


## Accessing Reverse

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.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

# 3 SWITCH HEAD ARRAY
# SETTING UP FUNCTIONS ON MODE SWITCHES

IMPROVING PEOPLE'S LIVES

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

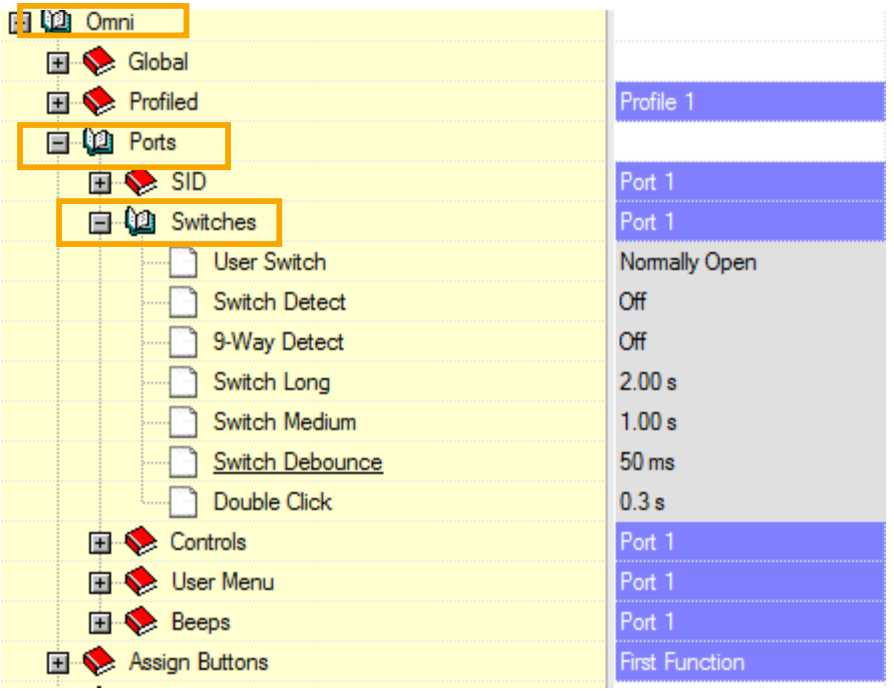
# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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**

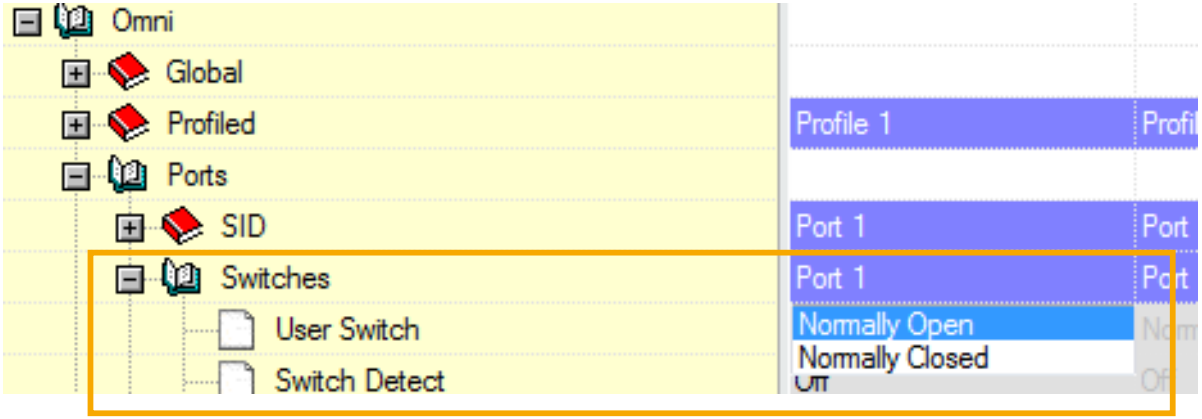
Enter the Omni programming option. Then select Ports and then Switches



## Setting Functions on Mode Switches.

**Step 2**

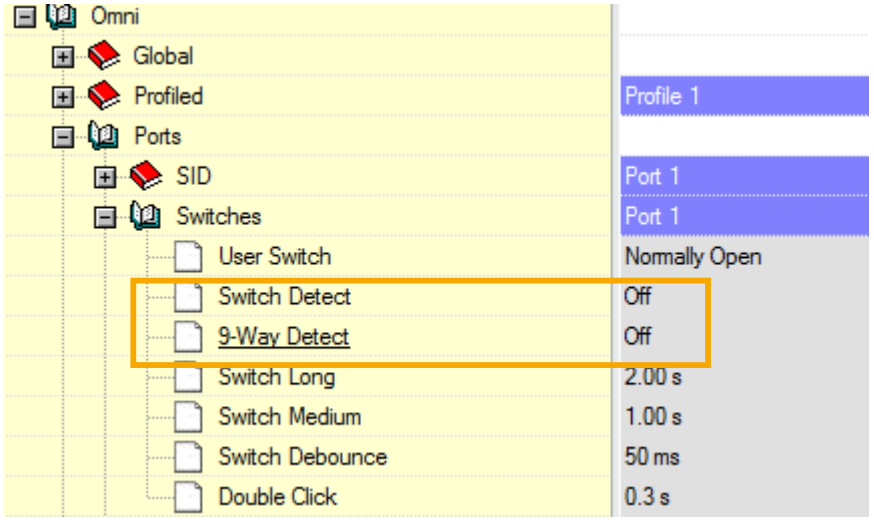
Set the User Switch parameter to Normally Open or Normally Closed depending on the type of switch used.



## 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.

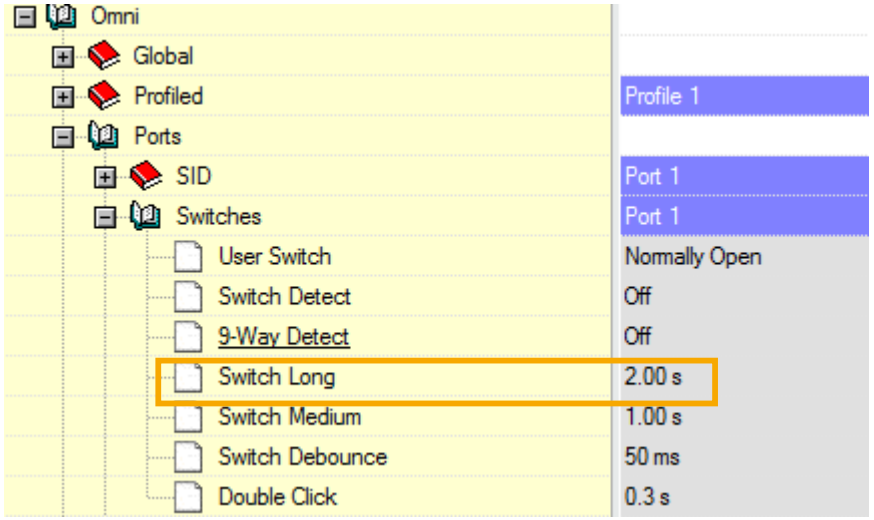


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

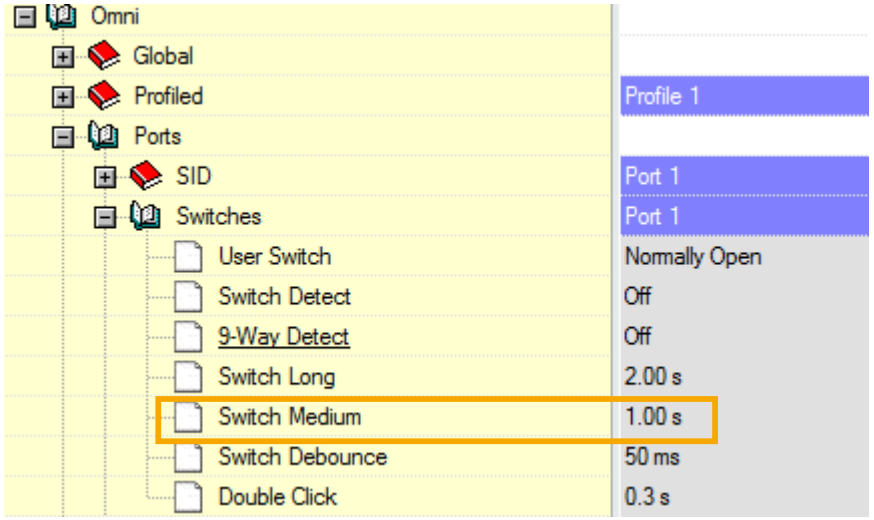


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Setting Functions on Mode Switches.

**Step 5**

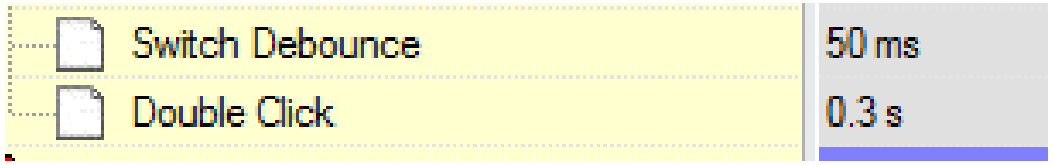
Switch Medium to be set to a threshold time for a short press to become a medium press.



## Setting Functions on Mode Switches.

**Step 6**

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




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

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Mode Screen Access and Navigation.

This section the method for how to access mode screens on 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**

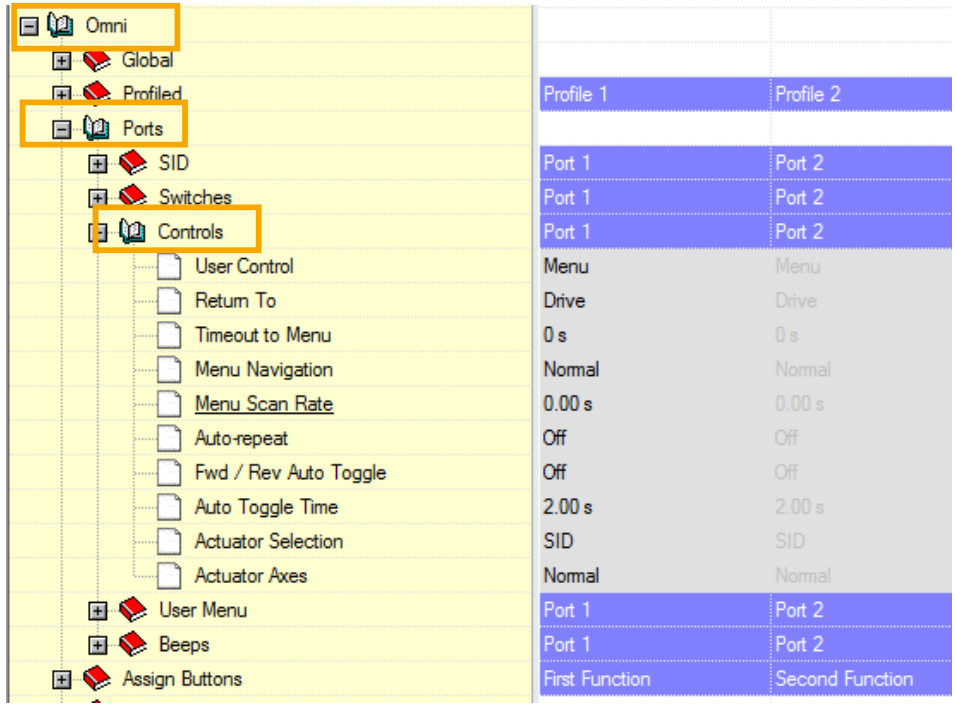
By timed access to the mode screen.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.



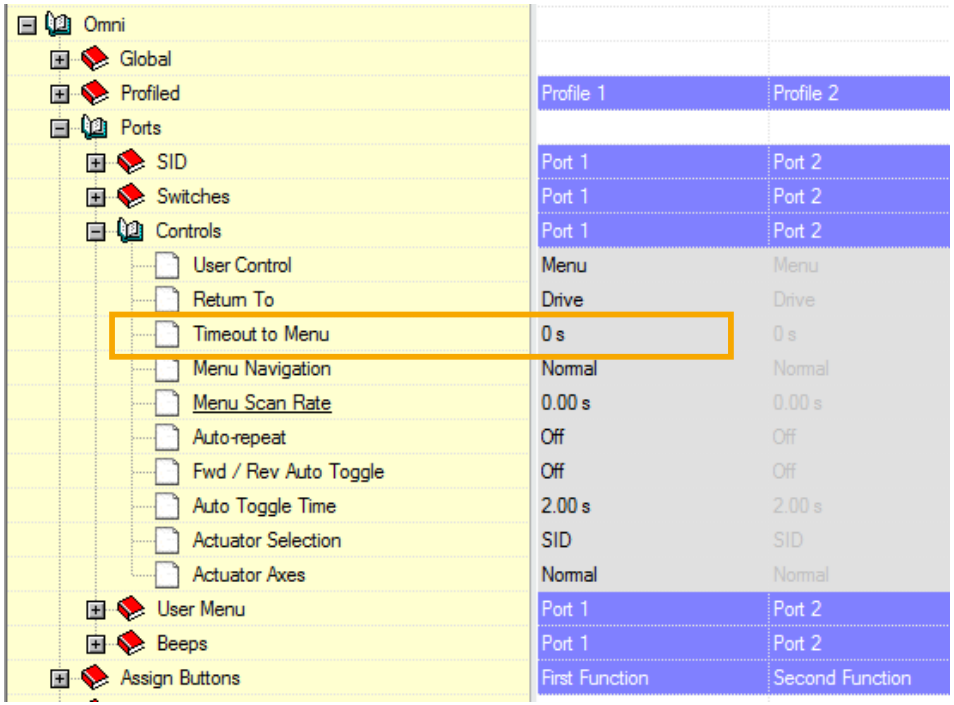
# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

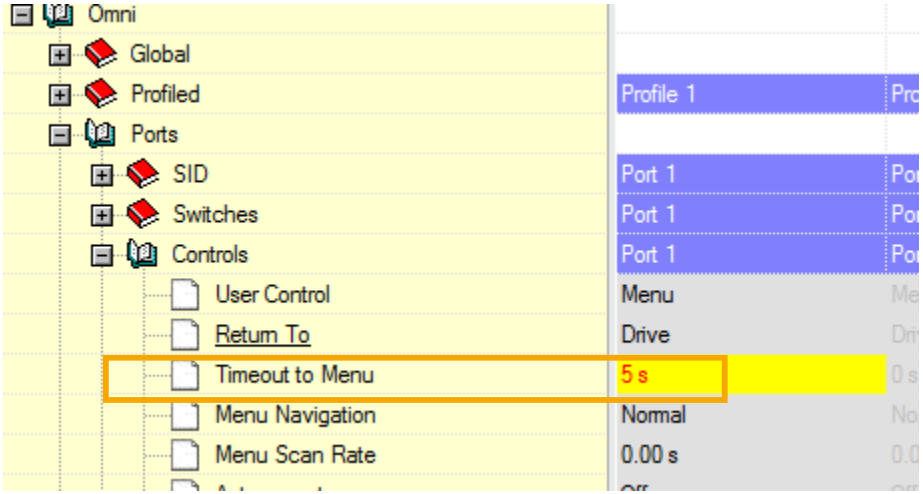


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.



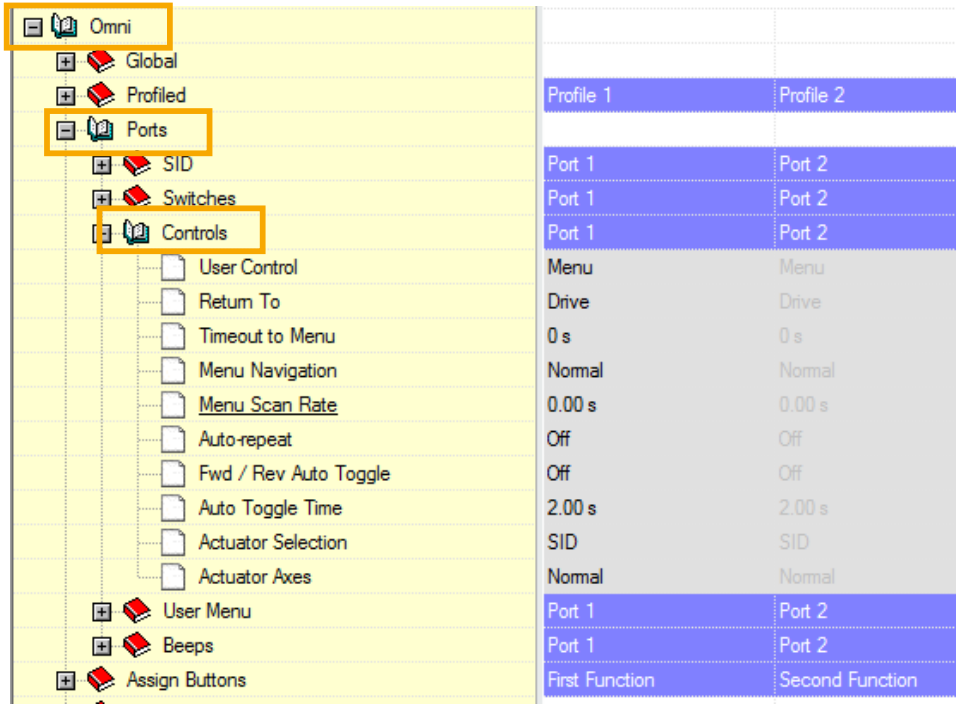
# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.



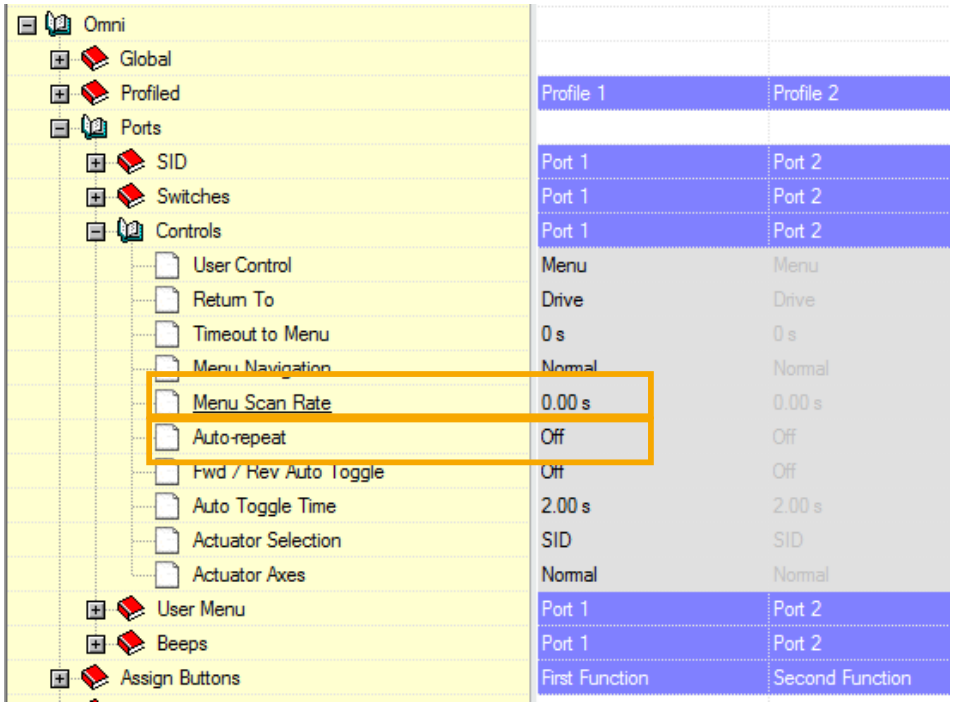
SUNRISE MEDICAL

# 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.

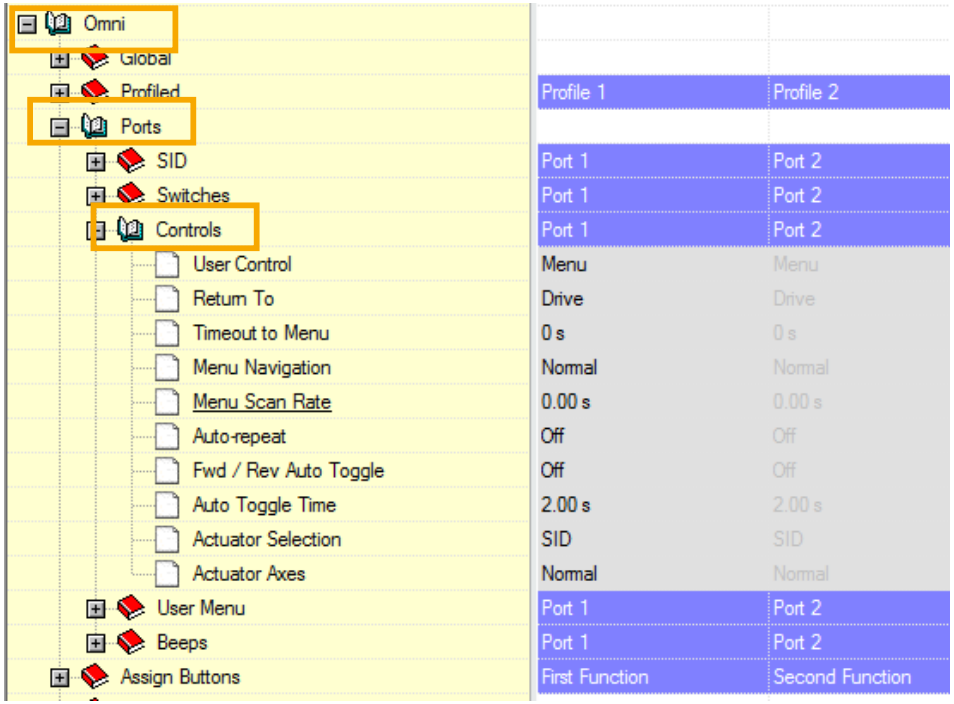
# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.

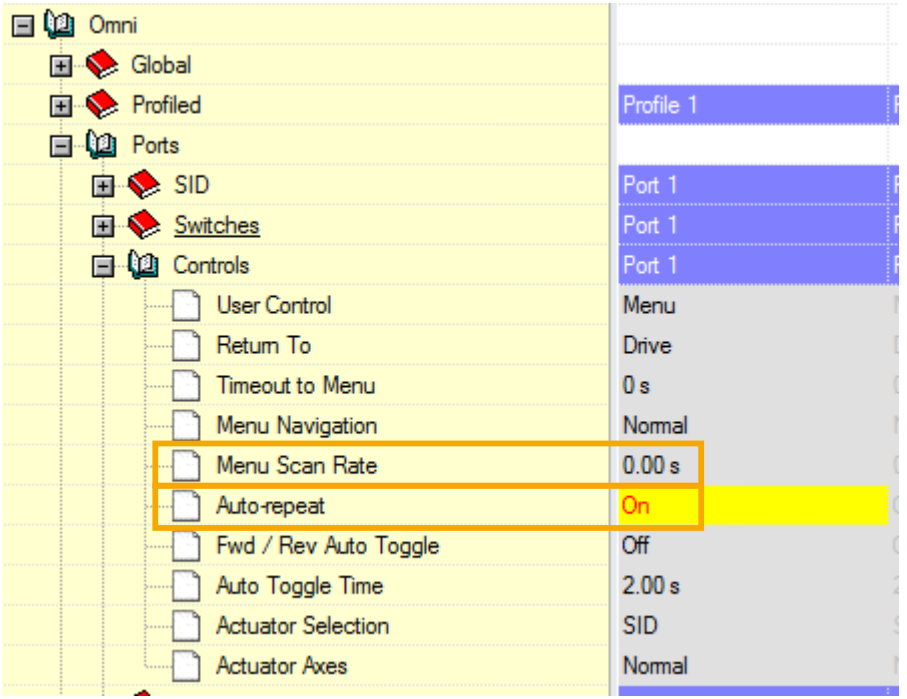


## Menu Navigation

## 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.

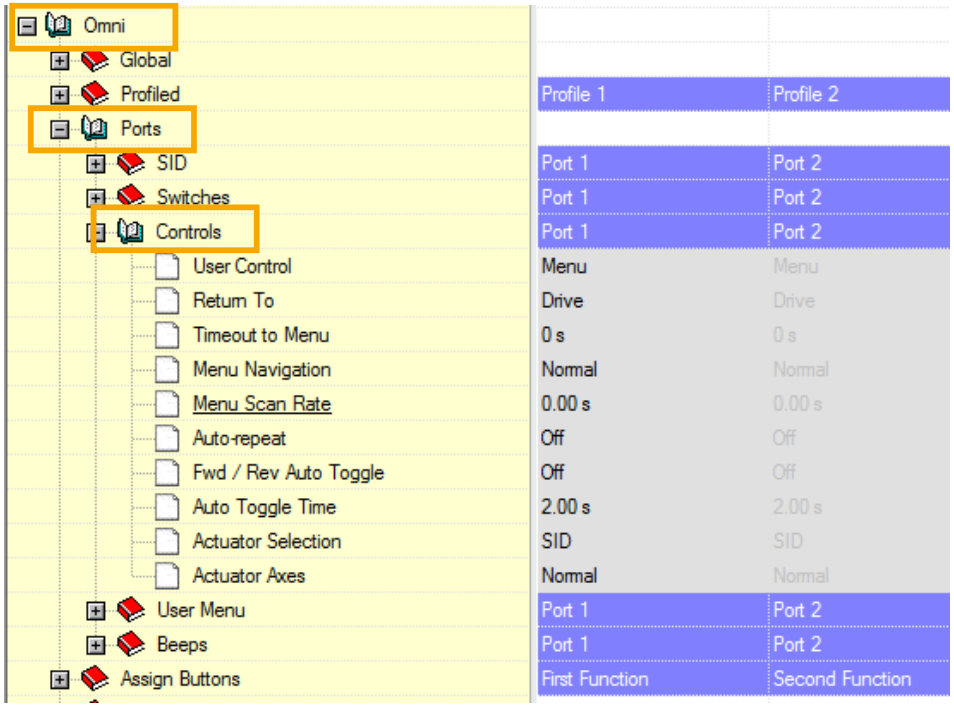
# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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”, then “Ports” then “Controls” on the PC Programmer.

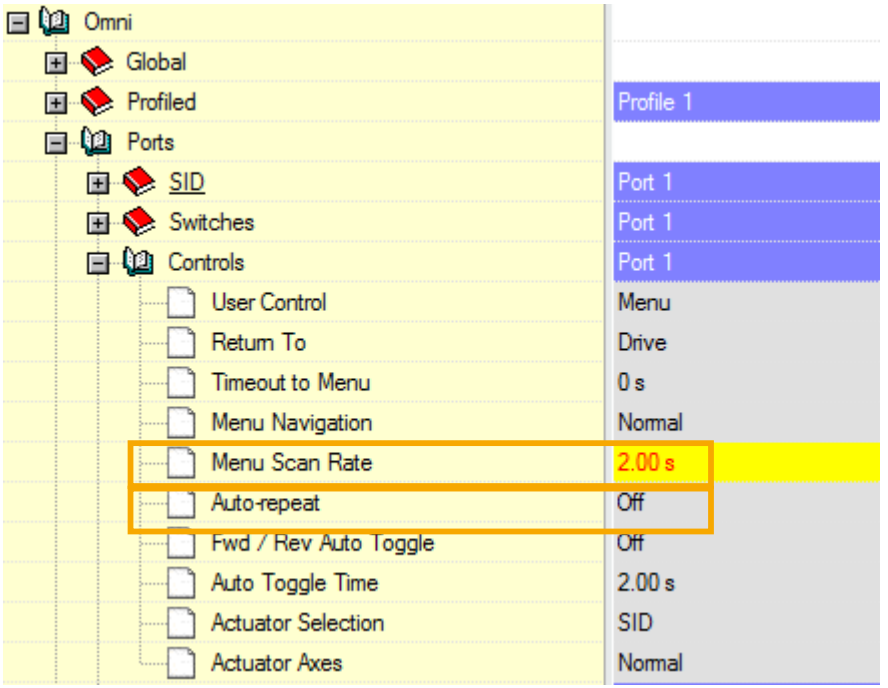


# Menu Navigation

## 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

IMPROVING PEOPLE'S LIVES

## Actuator Axis

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

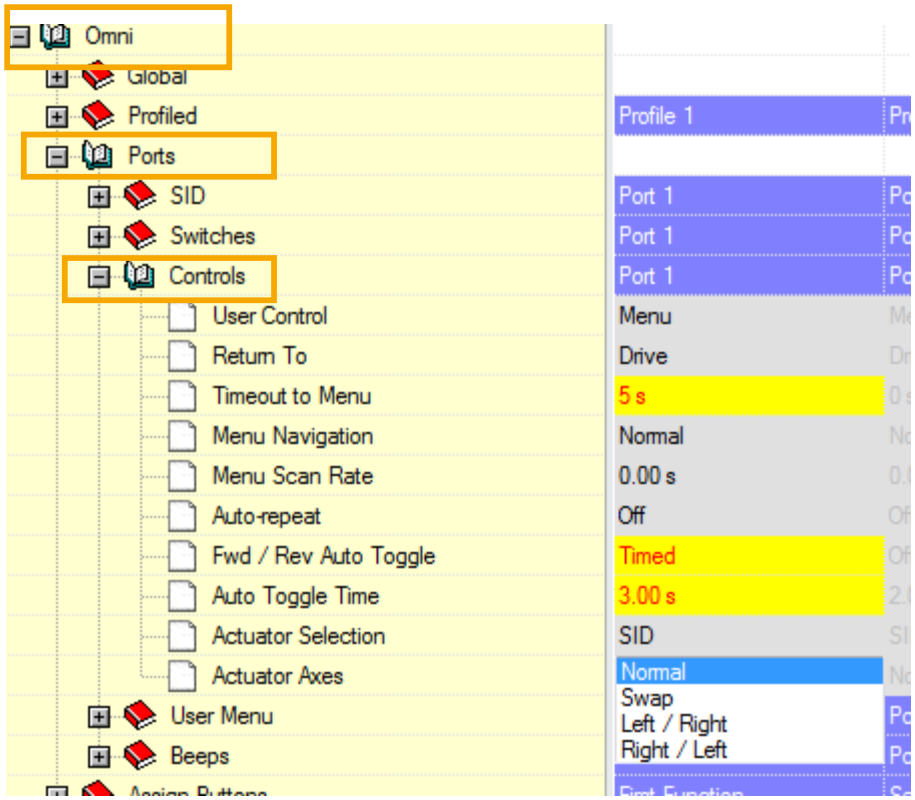
The programmable options are Normal, Swap, Left/Right and Right/Left.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Actuator Axis

**Step 1**

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

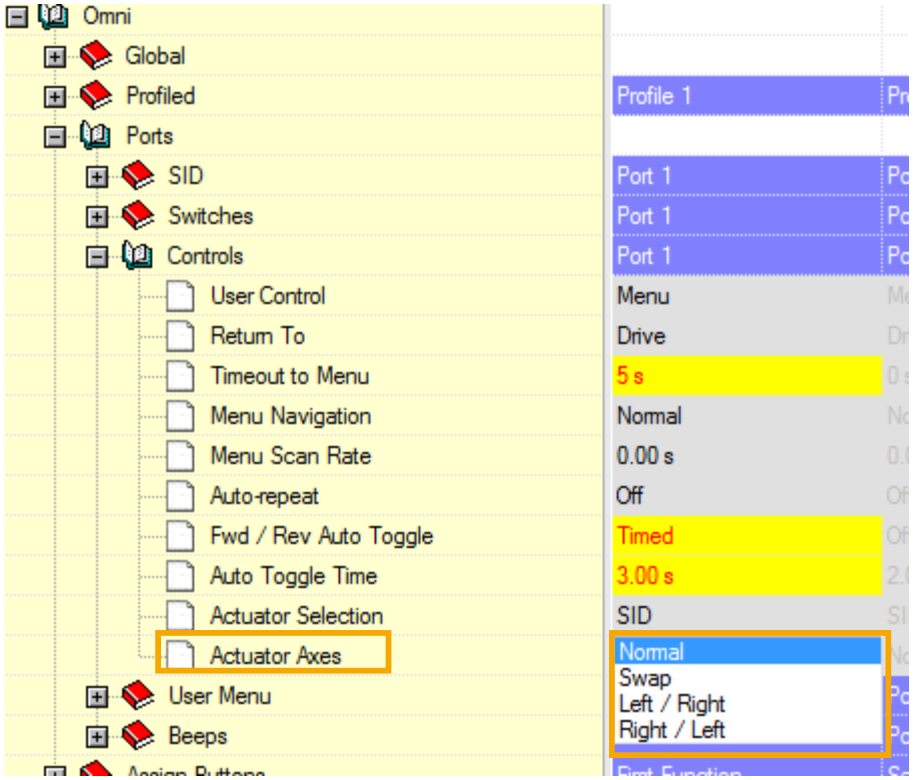


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Actuator Axis

**Step 2**

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



SUNRISE MEDICAL

# 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.

SUNRISE MEDICAL

## 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.

SUNRISE MEDICAL

# 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.

SUNRISE MEDICAL

## 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

IMPROVING PEOPLE'S LIVES

## Customising Menu Structure

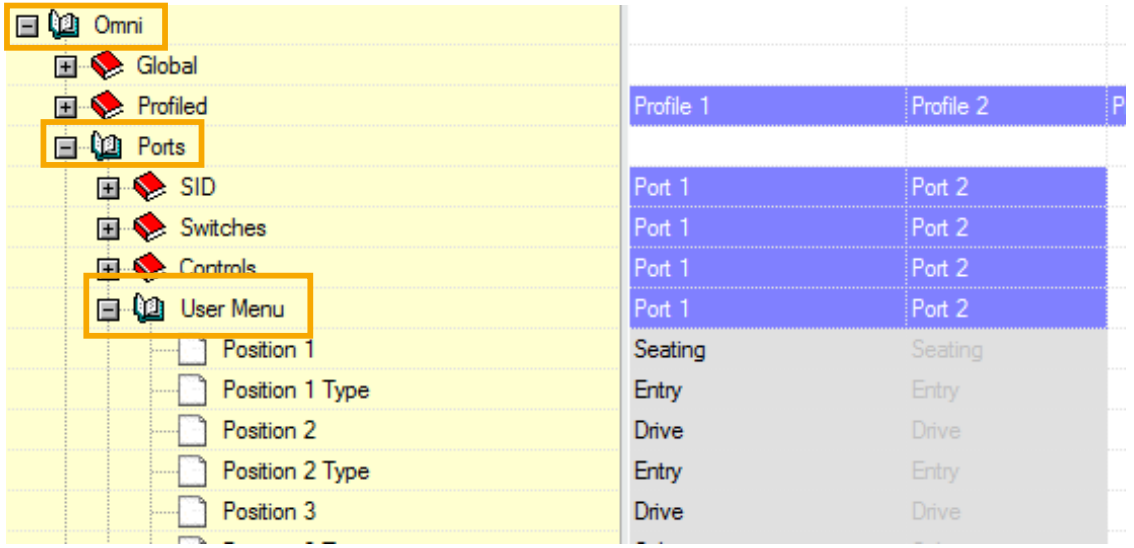
This sets the position of menu items within the user menu. The user menu can have up to 16 lines.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Customising Menu Structure

**Step 1**

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

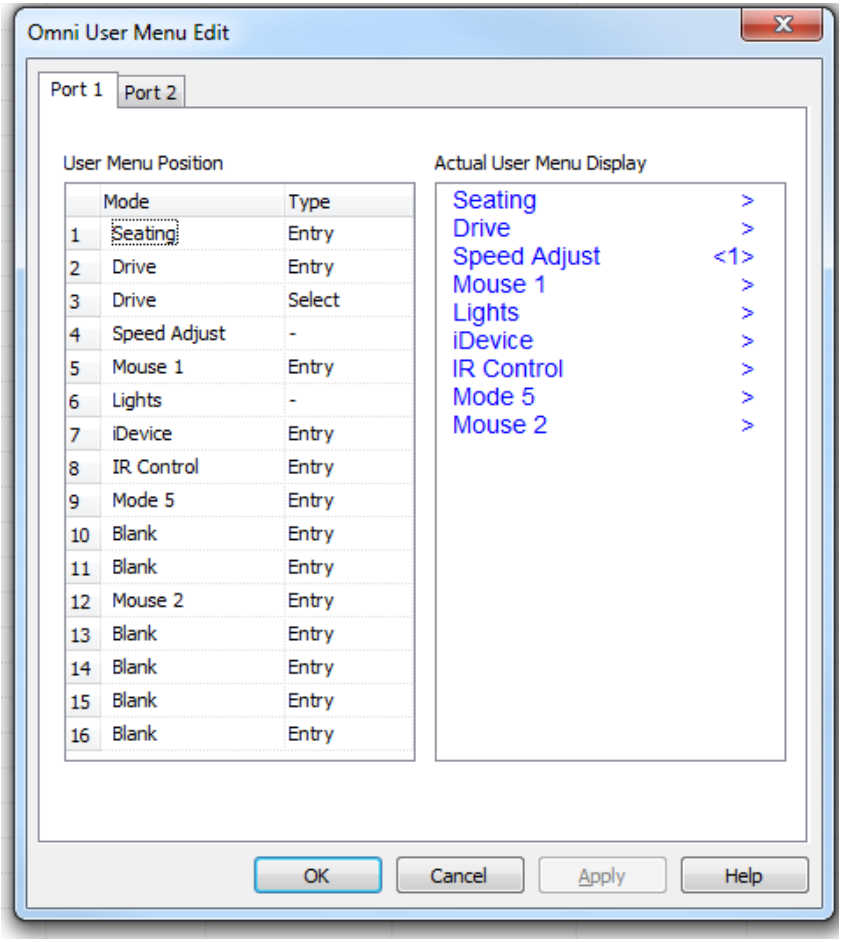


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## Customising Menu Structure

**Step 2**

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

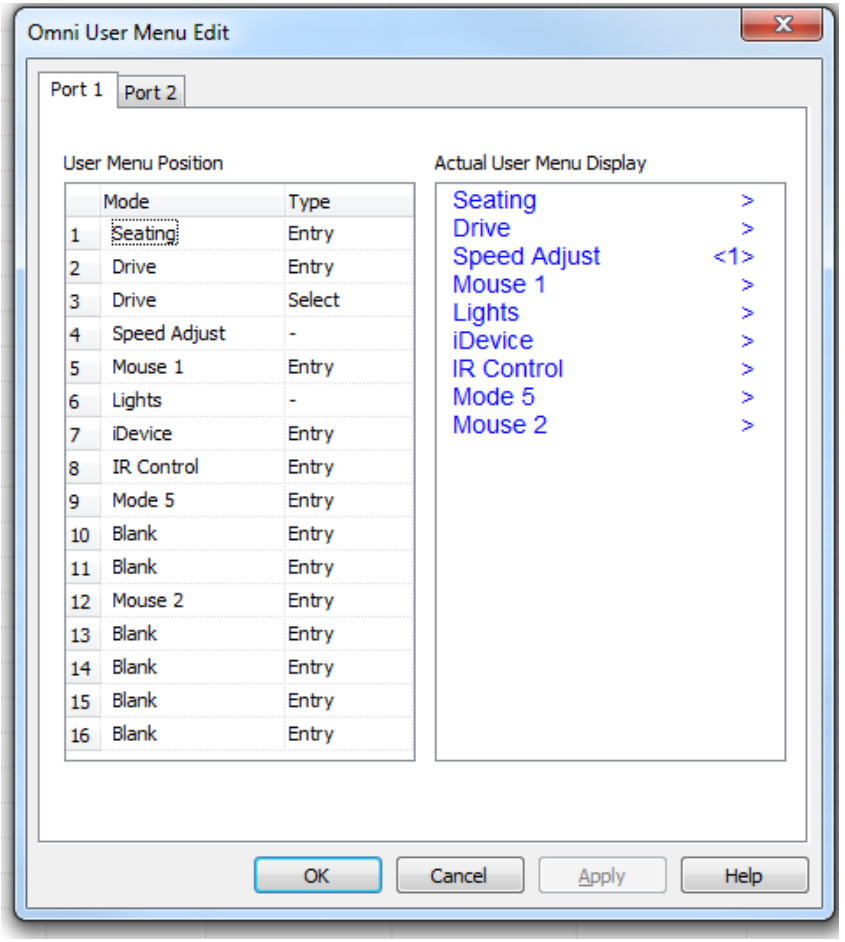


# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## 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.



# DUAL PRO HEAD ARRAY
# ON BOARD PROGRAMMING

IMPROVING PEOPLE'S LIVES

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

**Now you are ready to program the individual Dual Pro pads.**

**Tips**

Each Dual pro pad has a force and proximity (crawl) sensitivity setting, and both settings can be adjusted individually through the Dual Pro back pad.

It is recommended that the chair be set at 100% and percentages be adjusted through the Dual Pro profile functions because the Dual pro will send a signal to the chair as a percentage of full speed.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

For Instance…….

If the chair is set to 100% forward speed and the Proximity (crawl) sensor is set to 20% (1 light) then the chair will only move at 20% of full speed in the Proximity (crawl) mode.

If the Force is set to 20% (1 light), the maximum speed with pressure applied to the force sensor will be 20% of the chair settings.

Similarly, if the chair is set to 50% maximum speed, the percentages will drop accordingly. At 50% chair speed, a 20% setting of the proximity or force sensor in the Dual Pro will result in 10% of maximum speed (20% sent by head array to a chair setting of 50% will equate to 10% of maximum drive).

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

SUNRISE MEDICAL

On Board Programming

Each pad has a force and proximity (crawl) sensitivity setting, and both settings can be adjusted individually through the on-board programmer. To configure the different pads follow these easy steps.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

Step 1

Press the “**Set**” and “**Force**” at the same time for 1 second.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

Step 2

This will allow you to select the pad you would like to configure as indicated by the light corresponding with each pad.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

Step 3

Press the set button to scroll through and select the pads you would like to configure.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

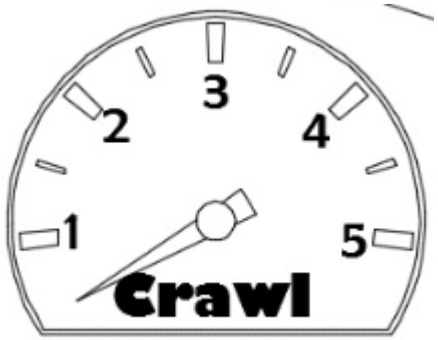
Step 4

You can set the "**Force**" by pressing the "**Force**" button. More Force lights means more force is required to reach full speed. This is indicated through the series of lights on the right side of the keypad.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

Step 5

You can set the Proximity setting by pressing the "**Crawl/Prox**" button. More "**Crawl/Prox**" lights means more speed when within range of the proximity sensor. This is indicated through the series of lights on the right side of the keypad.



# SPECIAL CONTROLS
## DUAL PRO HEAD ARRAY

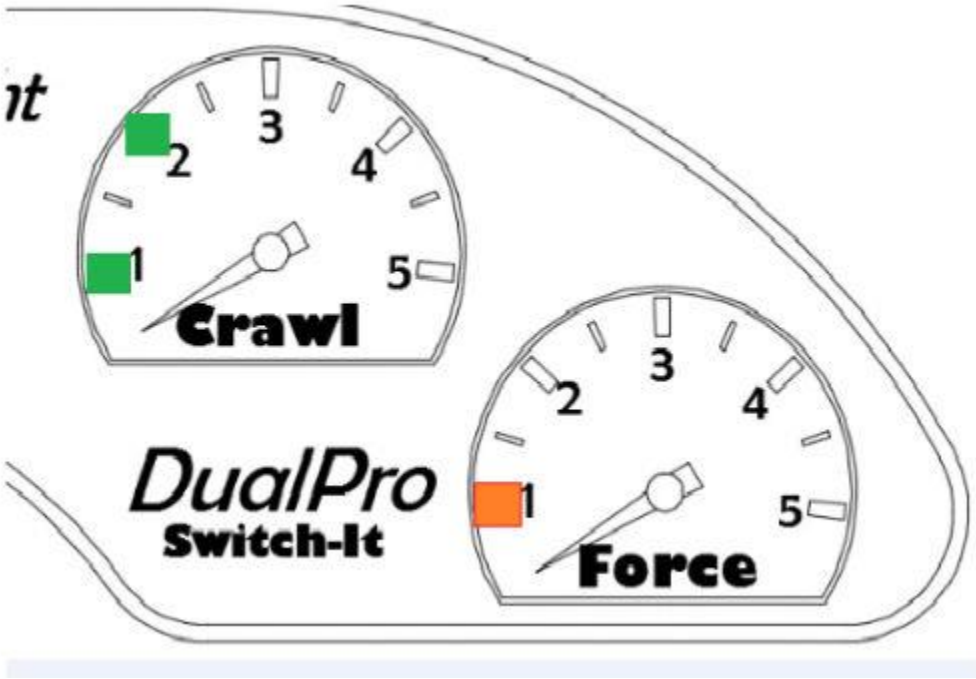
Note…….

Once the maximum sensitivity is reached, the lights will reset to the left indicating you have reached the maximum setting. The sensitivity will cycle through the lights until the desired setting is reached. Once the sensitivity of both switches is set as desired , scroll through the pads until no pad indicators are lit.

# SPECIAL CONTROLS
## DUAL PRO HEAD ARRAY

Programming Interface Examples.

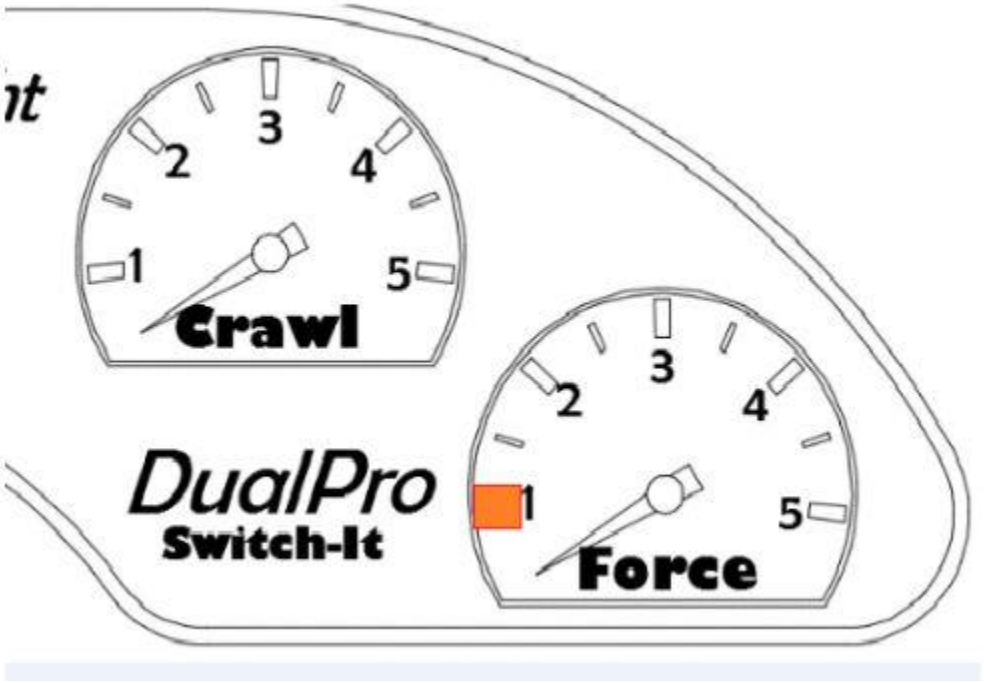
1 – 40% speed within proximity (crawl) and light force for full speed.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

Programming Interface Examples.

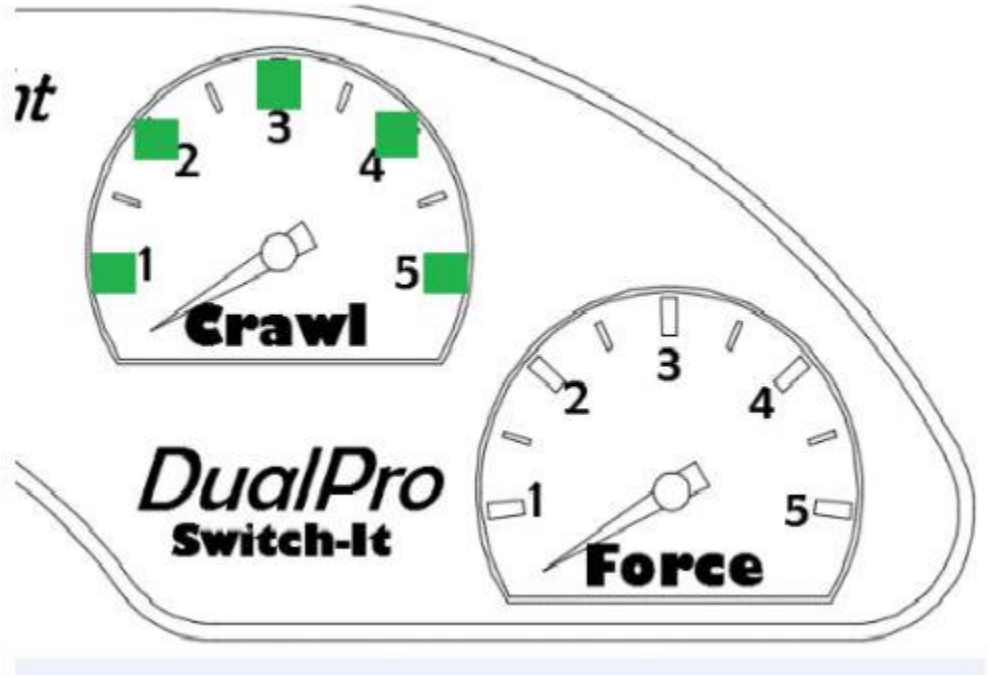
2 – Light force on pad for full speed, no proximity (crawl) speed.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

Programming Interface Examples.

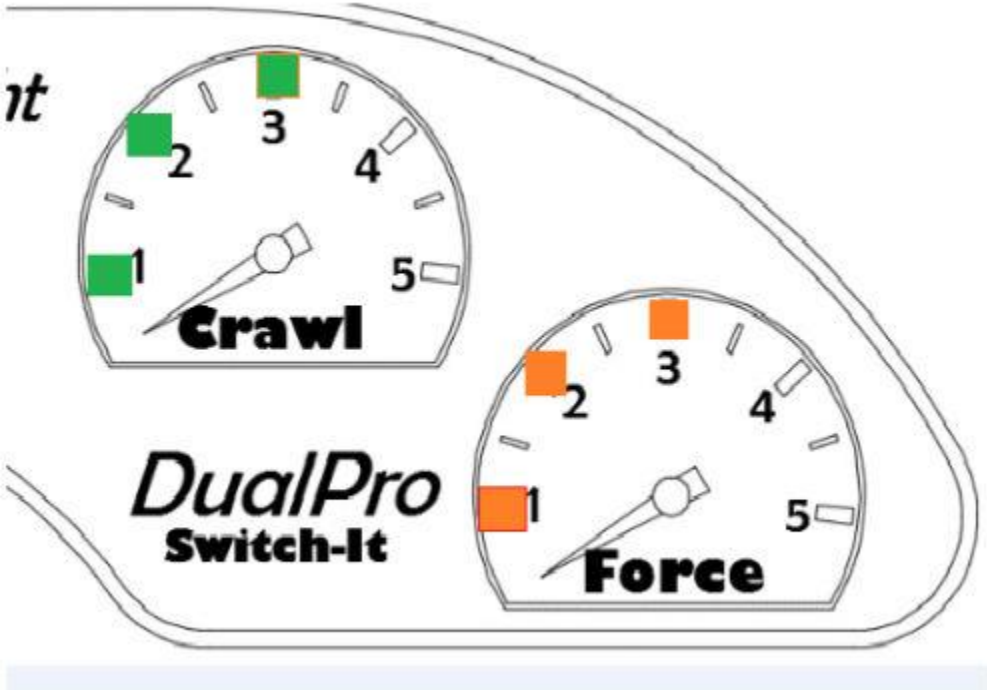
3 – Fully proximity switched head array.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

Programming Interface Examples.

4 – 60% speed within proximity (crawl) switch and then reach full speed with medium force.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

**Now you are ready to calibrate the tilt sensor**.

Setting the tilt sensor disables the back pad when in a pressure relief tilt position. This allows the user to come out of a tilted position by deactivating the back pad.

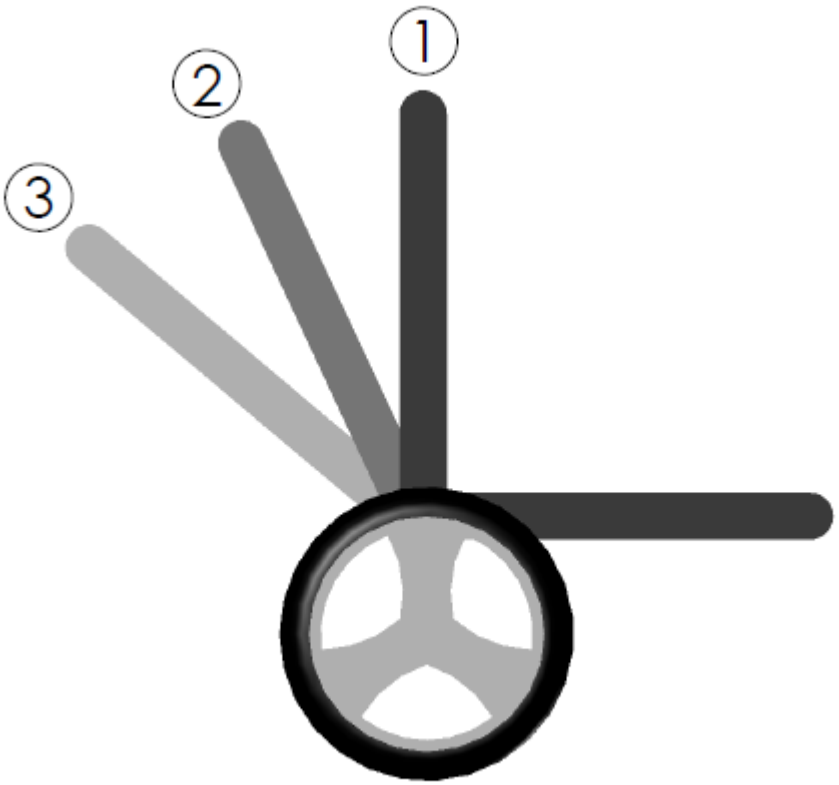
The degree of tilt should be set at a point between a good driving position and a good tilt position., and where the user can lift their head off the back pad. How far off the back pad the need to come in order to engage the back pad sensor depends on how sensitive the Dual Pro back pad is programmed.

# SPECIAL CONTROLS
## DUAL PRO HEAD ARRAY

1. Regular Driving angle

2. Settable inactivate back pad angle

3. Pressure relief angle.



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## To set the inactive back pad angle

Step 1

Tilt the chair back to the angle where you would like the back pad to become inactive.

Step 2

Hold down the "**Set**" button on the Dual Pro and cycle the power on the chair, then release the "**Set**" button. The two Dual Pro speedometers should cycle through with green and red lights, indicating that the calibration was successful.

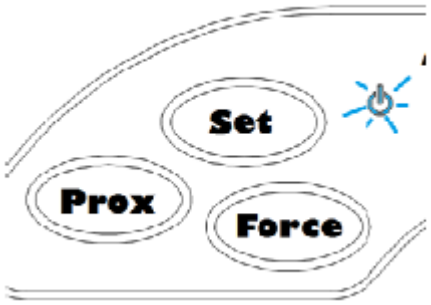
# SPECIAL CONTROLS
## DUAL PRO HEAD ARRAY

Step 3

Now, when the chair tilts back past this angle the back pad will become inactive.

Step 4

When the back pad is inactive the blue power symbol will blink



# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

**To deactivate the Dual Pro tilt sensor**.

Step 1

Press and hold either the "**Prox/Crawl**" or "**Force**" button of the Dual Pro.

Step 2

Turn the Omni OFF

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

**To deactivate the Dual Pro tilt sensor**.

Step 3

Turn the Omni ON

Step 4

Release the "**Prox/Crawl**" or "**Force**" button

The Blue power LED should now be solid and the tilt sensor will be inactive.

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## TROUBLESHOOTING TOP TIP!!!

If the back pad is not working and the blue power light is blinking, follow the Deactivating Dual Pro tilt sensor steps, then reset the “Active Angle” if desired.

# SPECIAL CONTROLS
## DUAL PRO HEAD ARRAY

SUNRISE MEDICAL

**Common Dual Pro Adjustments**

1. If user leans to one side more or is able to apply more force to one pad than the other. Set the appropriate side to a high force setting and the opposite side pad to a proximity setting with low or no force.

2. If user needs to sit in slight tilt. Increase force requirement and set proximity to zero (no lights) for back pad to avoid activating the drive while in contact with the pad

# SPECIAL CONTROLS
# DUAL PRO HEAD ARRAY

## On Board Smart Jacks

There are 3 ports on the bottom of the back pad. These ports incorporate Patented smart jack technology. These ports can accept Mechanical or Electronic switches.

Port 1: Reverse

Port 2: Mode

Port 3: On/Off Switch