NOW TECHNOLOGIES LTD Product documentation



Switch-It® Vigo Drive Help

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Recommendations

When you use Switch-It® Vigo Drive for the very first time, we recommend to Calibrate your Vigo headset by placing it on a flat, stable surface until you see the right feedback from the Cubo's display.

Navigation

Navigation: Help

The Help documentation is always available on each screen of the Switch-It® Vigo Drive application by clicking the Help icon:



You can always access any part of the document by scrolling or using the Table of contents on top of the document.

Navigation: Main Menu

You can always get back to this screen by clicking the Now Technologies logo in the top left corner on any screen



Network Status – You can always find an up to date status of your system here, including the version numbers, the device that you currently control by your Vigo Headset, battery and calibration status.



Drive Profile – Here you can find different options to personalise and enhance your driving experience and set up Driving profiles (Link Profiles). For example: tremor filter, head movement angles for moving forward, reversing and turning, safety limits for your head movements, etc.



Network Status

3		Network Status	?
Dongle	<u></u>]	
Version:	1.6.0.506-N		
HW Version:	2.1		
Serial:	2021-28-010-0000		
Revision:	163		
Brand ID:	NowTech		
Headset	Ŷ		
Version:	1.12.7.0-N		
HW Version:	1.4		
Serial:	2023-02-000-0001		
Revision:	108		
Status:	passive		
Controls:	Link Drive		
BrandID:	Invalid		
Battery:	90%		
Cubo	Ŷ		
Version:	3.1.2.676-N		
HW Version:	1.2		
Serial:	2020-20-000-0001		
Revision:	112		
BrandID:	Joker/Any		
Link	?]	
Version:	1.5.9.1789-N		
HW Version:	2.3		
Serial:	DEV-Link02		
Revision:	163		
Back			Reset

You will need the majority of the information provided on this page when contacting Customer Support.

Dongle

Version, HW version and **revision numbers** are all indicators of the version of your Dongle. You will need this information when contacting Customer Support.

Serial is the unique identifier of your Dongle. You will also need this ID when contacting Customer Support.

Brand ID marks what functions are available on your device. If it says "NowTech", all features are available.



Headset

Version, HW version and **revision numbers** are all indicators of the version of your Headset. You will need this information when contacting Customer Support.

Serial is the unique identifier of your Dongle. You will also need this ID when contacting Customer Support.

Status shows you if the control is currently active, passive or disconnected.

Controls field shows you which device is your headset controlling at any given moment.

Brand ID marks what functions are available on your device. If it says "NowTech", all features are available.

Battery shows you the level to which the battery of your Headset is charged.

The large animated headset on the screen will imitate the movement of your headset, enabling you to check the reliability of the movement tracking.

Clicking the Reset button in the bottom right corner allows you to refresh the displayed information.

Cubo

Version, HW version and **revision numbers** are all indicators of the version of Cubo. You will need this information when contacting Customer Support.

Serial is the unique identifier of your Dongle. You will also need this ID when contacting Customer Support.

Brand ID marks what functions are available on your device. If it says "NowTech", all features are available.

Link

Version, HW version and **revision numbers** are all indicators of the version of Link. You will need this information when contacting Customer Support.

Serial is the unique identifier of your Dongle. You will also need this ID when contacting Customer Support.

Drive Profile

YOU WILL REQUIRE AN ASSISTANT TO COMPLETE THIS TASK.

Here you can set your personal preferences for driving your chair with Link. We strongly recommend to try all the settings in a safe environment.

Please note that during the first setup we will lead you through the recommended steps. If you want to change the settings later, you will be able to access any option you would like to change.

IMPORTANT NOTE: In order to enable you to safely experiment with settings without loosing a status in which your driving experience was satisfying, we provide a feature to be able to save your settings before modifying it. Please read about it later in the **Safely experiment with settings** section.

Please note that if you would like to try out the desired settings, you have press the *Apply* button and return to the <u>main menu</u>. You cannot initiate driving while you are in the Drive Profile menu.



Drive Profile: General

Orive p	rofiles ?
General Advanced Driving Straight Turning	
Set center: Here you can set what is your preferred method to (re-)center the po	sition of your headset. Profiles
Automatic Timer	Restricted
Jump to center after:	Demo
	+-
Tremor filter: If you ever experience tremors, this setting can help you make your di	riving experience smoother. The higher the setting, the less sensitive your headset will
e to smaller movements.	+ 77%
High tremor switch	
This setting allows for a significantly higher tremor filter value. Turning it ON is recommended if you feel your chair is bouncing when you	start driving at a slow speed (most likely to occur on Permobil chairs).
Previous	Next
Back	

Set center

- Automatic: After initiating driving by short-pressing the Headrest Sensor, this setting will only activate driving, when you arrive to a comfortable center point with your head and hold it steady.
- **Timer:** On a short push of the Headrest Sensor, you'll have a selected amount of time in the form of a countdown to move your head to the center in order to set your zero position.
- *Jump to center after:* you can set how many seconds (each marked by a beeping sound by the Link) need to pass until you can comfortably center your head.



Profiles window:

In this area you can see the factory default profiles that come with the software. You cannot delete these, but you can modify and save them.

Upon starting the software it will read the current drive settings and values off of your Link. You can choose to save these settings by pressing the plus (+) button in the bottom left corner of the Profiles window.

By creating a new, custom profile you can name the profile or you can leave it up to Switch-It® Vigo Drive to give it a generic name, like 'Profile 1' by pressing OK in the pop-up window.

You can delete your custom profiles any time by pressing the minus (-) button.

If you see a 'Reset' button it the bottom right corner of the main window, it means the selected profile has been modified since its creation. By pressing this button you can reset it to its original state.

Tremor filter:

You can adjust the tolerance of the headset to tremors and involuntary movements. Filter should be set proportionally to the amplitude of the tremors. Changing this setting affects the reaction time of your headset. If you experience a slight delay between head movement and drive control try to adjust the acceleration of the chair accordingly.

High tremor switch:

By checking this box you'll your base tremor value becomes significantly higher.

Turning it ON is recommended if you feel your chair is bouncing when you start driving at a slow speed (most likely to occur on Permobil chairs).



Drive Profile: Advanced

		Switch-It	Vigo Drive		
3		Drive p	profiles		?
	Genera	al Advanced D	riving Straight Turning		
Headrest Sensor se	nsitivity:				
🗹 Enable analog	button				
– Reset measu	rements +				
The blue bar is sh knob you can set Headrest Sensor,t record of the minin the red marks.	owing you the current p the desired sensitivity o hen release it to a point mum and maximum valu 	ressure value you f the Headrest Ser where your head les.We recommend	re exerting on the Headresi nsor.After pressing 'reset' e comfortably sits on the hea d grabbing and sliding the v	Sensor.By grabbin xert a firm pressure drest.The red triang vhite knob somewh	g the white on the les will mark a ere in-between
Fifth switch:					
Use face wink	as fifth switch				
💹 Long press li	mit on				
Gesture recognition	narameters				
Back Tilt Delay					
	Short		Normal		Long
🗹 Emergency Bra	ike:				
	Insensitive		Normal		Sensitive
	Previous			Next	

Advanced settings:

Enable analog button: You can enable or disable the use of an analog button, in this case, the Headrest Sensor.

Analog button threshold scale: Here you can monitor the value of your Headrest Sensor in real time when it is being pressed. This can help you set up a comfortable sensitivity for it by simply grabbing the white knob and sliding it to the middle of the average pressure value you see after pressing the Headrest Sensor 1-3 times. Alternatively you can nudge the white knob up and down the scale incrementally with the + and - buttons.

You can reset the measurement markers (red arrows) with the *Reset* measurements button.



Fifth switch:

To be able to use the Gesture Sensor as the Fifth switch, check this option.

IMPORTANT NOTE: If you have set a turn chair off function for the Fifth switch, but you would like to avoid accidentally turning off your chair by a held facial gesture or wink, you should increase the length of press in our system within the Omni's settings ('long press power off').

Gesture recognition parameters:

Back Tilt Delay: You can set the delay for the reversing gesture here (i.e. the time that passes between you tilting your head backwards and the chair starting to reverse).

Emergency Brake: You can set the sensitivity of your emergency brake here. The Emergency brake feature makes the chair stop when a head tilt that is still within the safety angles happens too fast (e.g. due to a collision).



Drive Profile: Driving Straight



Here you can personalise driving forward and backward parameters according to your abilities to achieve a comfortable and safe driving style.

Set drive properties

Reverse forward drive: check this if you would like to drive forward by tilting your head backwards and reversing by tilting your head forward.

Reversing:

If you check the **Play sound when reversing** checkbox, we will provide you an audio feedback as soon as you activate reversing mode, soon before you actually



start going backwards. This helps to avoid accidental reversing and also notifies others.

We recommend you to turn off the reversing audio feedback in the PG software if you prefer to use the Link's sound alone.

Set forward movement range

Here you can set the range in which you would like to tilt your head in order to make the chair move forwards.

We provide an interactive display to help you set the correct angles for this range. For the display to work correctly, please set a central position for your head first. This is only for displaying purposes, it is not going to be stored. Try to position your head in a way that you would during driving. When you find a comfortable center for your movements, click the **Set center** button.

After that, **try** the movement in which you feel comfortable for driving forward. Make sure that you can keep up clear sight of the environment. When you find a comfortable and safe range, check where the pink line is at the end position. Your assistance shall **drag and position the knob** to that angle.

Set forward safety limit

Here you can set a maximum limit for head tilting. Above this angle the Link is going to prevent the chair from keeping up with moving forward and acts as an emergency stop. Between the maximum angle for driving forward and the safety limit, the system will simply ignore movements.

You can try the angle by tilting your head.

You can reset the central position of your head with the Set center button.

When you find the appropriate angle, your assistance can **drag and position the knob** to there.

Set backward movement range

Here you can set the range in which you would like to tilt your head in order to make the chair reverse.

We provide an interactive display to help you set the correct angles for this range. For the display to work correctly, please set a central position for your head first.



This is only for displaying purposes, it is not going to be stored. Try to position your head in a way that you would during driving. When you find a comfortable center for your movements, click the **Set center** button.

After that, **try** the movement in which you feel comfortable for driving backwards. Make sure that you can keep up clear sight of the environment. When you find a comfortable and safe range, check where the pink line is at the end position. Your assistance shall **drag and position the knob** to that angle.

Set backward safety limit

Here you can set a maximum limit for head tilting. Above this angle the Link is going to prevent the chair from keeping up with moving backwards and acts as an emergency stop. Between the maximum angle for driving forward and the safety limit, the system will simply ignore movements.

You can try the angle by tilting your head.

You can reset the central position of your head with the Set center button.

Set slowspeed deadzone

Dead-zones are simply ranges where there shall be no action taken by the system to your head movements. As head angles are proportional to the speed of the chair one can picture that the reaction to turns should be decreased at higher speeds while driving slowly with small head movements require bigger sensitivity to achieve higher maneuverability.

Slowspeed deadzone is the range in which you don't want the chair to react to the small movements of your head when you use your chair with slow or medium speed tied to smaller left-right head angles. This is the range within no turn signals are interpreted. When setting this zone, consider driving on a not perfectly smooth surface.

Please note that setting this value will also set the minimum value of the high speed deadzone as moving with maximum speed requires a higher tolerance for head movements.



Set highspeed deadzone

Highspeed deadzone is the range in which you don't want the chair to react to the small movements of your head when you use your chair with maximum or close to maximum speed tied to larger left-right head angles when the chair reaches near the maximum speed of its current profile. Again this is the range within no turn signals are interpreted. As moving with maximum speed requires a higher tolerance for head movements we recommend to set it slightly higher than the slow speed dead-zone value. When setting this zone, consider driving on a not perfectly smooth surface.

Please note that if you want to lower the value further than its current minimum, you have to lower the slow speed deadzone value first.



Drive Profile: Turning

Here you can set the personalised values for turning left and right when driving accordingly to your abilities to achieve a comfortable and safe driving style.

Set turning right

Here you can set the range in which you would like to tilt your head in order to make the chair turn right.

We provide an interactive display to help you set the correct angles for this range. For the display to work correctly, please set a central position for your head first. This is only for displaying purposes, it is not going to be stored. Try to position your head in a way that you would during driving. When you find a comfortable center for your movements, click the **Set center** button.

After that, **try** the movement in which you feel comfortable for turning right. Make sure that you can keep up clear sight of the environment. When you find a comfortable and safe range, check where the pink line is at the end position. Your assistance shall **drag and position the knob** to that angle.

Set safety limit to the right

Here you can set a maximum limit for head tilting to the right to prevent the chair from keeping up the movement when you tilt your head more than it is allowed by this setting. The chair will stop if it ever happens. Between the maximum angle of tilting right and the safety limit, the system will simply ignore the movement.

You can try the angle by tilting your head.

You can reset the central position of your head with the Set center button.

When you find the appropriate angle, your assistant can **drag and position the knob** to there.

Set turning left

Here you can set the range in which you would like to tilt your head in order to make the chair turn left.

We provide an interactive display to help you set the correct angles for this range. For the display to work correctly, please set a central position for your head first. This is only for displaying purposes, it is not going to be stored. Try to position your



head in a way that you would during driving. When you find a comfortable center for your movements, click the **Set center** button.

After that, **try** the movement in which you feel comfortable for turning left. Make sure that you can keep up clear sight of the environment. When you find a comfortable and safe range, check where the pink line is at the end position. Your assistance shall **drag and position the knob** to that angle.

Set safety limit to the left

Here you can set a maximum limit for head tilting to prevent the chair from keeping up the movement when you tilt your head more than it is allowed by this setting. The chair will stop if it ever happens. Between the maximum angle of tilting left and the safety limit, the system will simply ignore the movement.

You can try the angle by tilting your head.

You can reset the central position of your head with the Set center button.

Set slowspeed deadzone

Dead-zones are simply ranges where there shall be no action taken by the system to your head movements. To turn the chair in place forward/backward head movements must be ignored within a range of head angles.

Slowspeed deadzone is the range in which you don't want the chair to react to the small movements of your head when you use your chair with slow or medium speed. When setting this zone, consider driving on a not perfectly smooth surface.

Please note that setting this value will also set the minimum value of the high speed deadzone as moving with maximum speed requires a higher tolerance for head movements.

Set highspeed deadzone

Highspeed deadzone is the range in which you don't want the chair to react to the small movements of your head when you use your chair with maximum or close to maximum speed tied to larger head angles when the chair reaches near the maximum speed of its current profile. Again this is the range within no turn signals are interpreted. As moving with maximum speed requires a higher tolerance for head movements we recommend to set it slightly higher than the slow speed dead-zone value. When setting this zone, consider driving on a not perfectly smooth surface.



Please note that if you want to lower the value further than its current minimum, you have to lower the slow speed deadzone value first.

Applying settings

When you change any setting, the application will offer you 2 options: You can **save** them (*Apply*) or you can **revert** to a state you saved last on the Link (*Revert to Link*).

Once you've applied the changes, you can try them out on your chair, and if you're not happy with these settings you can always **Reset** all settings: you can choose not only the default settings, but we provide 4 different factory settings to pick from, depending on your abilities: **Restricted**, **Very Restricted** (limited range of movements), **Normal** (Default) and **Demo**(for showcasing the Switch-It® Vigo Head Drive).

The network

Network: Pairing

YOU WILL REQUIRE AN ASSISTANT TO COMPLETE THIS TASK.

Your devices have already been paired in the factory, but if any of your devices get reset or they 'forget' their pairing data for whatever reason, the following pop-up window will present itself in Switch-It® Vigo Drive:



In that case the Dongle and the Cubo needs to be paired again, which can easily be done by entering the pairing code seen on the Cubo's display. After pressing OK, the Dongle and the Cubo are paired and your Network is back to normal. Note that Switch-It® Vigo Drive has to run in order for the pairing process to be successful!

Network: Switching in Channel Map

If the user has a system of at least the following connected devices: Link, Cubo, Vigo and Dongle (i.e. the potential to use 'drive mode' or 'mouse mode'), then they can switch between the modes these devices provide by long-pressing (1-5 seconds) the Headrest Sensor (switching in the Channel Map). You will see the current mode on the Cubo's display (e.g.: LINK drive, MOUSE).

PLEASE CONSIDER LEAVING YOUR OPINION / FEEDBACK VIA EMAIL ON OUR WEBSITE: WWW.NOWTECH.HU.