

Switch-It® Vigo Toolbox
HELP DOCUMENT

SWITCH-IT
SMART TECHNOLOGIES

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First time use

Welcome to Switch-It® Vigo Toolbox!

This mobile application is here to help you manage your Head Drive & Mouse Networks, to add and/or remove new Switch-It® Vigo devices, and to keep your devices up to date with the latest firmware.

The use of this application is not essential for your Switch-It® Vigo systems to work properly.

Customer Support

If you can't find the answer to your question neither in this document nor in the **Manual** (of which the digital version is available from our website:

<https://nowtech.hu/downloads/vigo/latest/>) or you're experiencing any trouble with our products please send us an email to **support@nowtech.hu** with your product's serial number (found on the product stickers) and a short description of the issue.

Navigation

You can always go back one screen at a time by pressing the back button in the top left corner of the screen. The name of the screen to which the back button leads is always written on the button.

Help

The Help documentation can be accessed on every screen by clicking the Help icon in the top right corner:



You can always access any part of the document by scrolling or using the Table of contents on top of the document. If you're accessing this document via the application it will automatically jump to the part of the document that is relevant to the screen on which you pressed the Help button, it is context sensitive.

Guidance

We provide guidance and explanation of what is happening every step of the way throughout the entire application. This can come in different forms:

Notifications

These are pop-up boxes informing you whether an action or process has been successful or not. They always appear on the left side of the screen stacking from the top in case of multiple notifications.

There are 4 types of notifications:

- Info (marked by blue) - containing useful information about an action.
- Success (marked by green) - confirming the success of an action.
- Warning (marked by yellow) - information to be aware of regarding an action.
- Error (marked by red) - explanation of why an action was not successful.

If there is only one notification on the screen, you'll see it in an expanded view (not just its title/collapsed form) and it automatically disappears after a few seconds. The Error messages/notifications are exceptions, they stay on screen until you tap on them.

In case of multiple notifications only the last one/bottom one will be expanded, all the rest stays in a collapsed (i.e. title only) form until you tap on them. When you tap on them they disappear.

Pop-up windows

All pop-up windows will contain some information about the action you're about to take. They usually appear in the middle of the screen.

Instructions panels

These are collapsible boxes containing a set of steps you need to perform to successfully finish a process (i.e. setting up or updating a network).

There are 2 types of Instruction panels:

- Step-by-step instructions - each step marked by numbers.
- Bullet point instructions - a list of actions you can take on a given screen.

You can always hide the Instructions throughout the entire app by pressing 'Hide instructions':

Hide instructions 

The instructions can be made visible again by pressing 'Show instructions':



The app will store this setting, so you don't have to hide or unhide them every time you enter a screen with instructions.

This panel becomes scrollable if it contains too much information, which is marked by an animated hand icon when you first see such a panel.

Info boxes

Similarly to the [Instruction panels](#) these boxes contain extra information related to the current screen or menu item.

You can always hide the Info box throughout the entire app by pressing the 'X' button in the top right corner of the box:



The Info box can be made visible again by pressing the Info icon under the Help button in the top right corner:



The app will store this setting, so you don't have to hide or unhide them every time you enter a screen with instructions.

Bluetooth

Several elements of your Switch-It® Vigo system use Bluetooth signals as a way of communicating and so does your phone. Please, make sure that the Bluetooth connection of your phone is ON.



For Android users: Please make sure Location Data is enabled on your phone! The application will warn you in the form of a pop-up message if it is not.



For iOS users: At times (e.g.: during firmware update or password change) the app may ask you to enter your phone's Bluetooth menu and remove Cubo from the list of connected/paired bluetooth devices! A pop-up notification will direct you to the right settings.

This is necessary to maintain Bluetooth communication between your iPhone and Cubo.

Devices

If this is your first time using the application please make sure your Switch-It® Vigo devices are all **plugged in, connected and in range**:



The Link is connected to a PGDT Omni or IOM equipped wheelchair as a specialty input device (SID). You can read more about it in the [Manual](#).



The Cubo is powered by and connected to the Link via cable.



The Vigo headset is ON and connected to the Cubo via bluetooth communication.

When that happens the LED in the “head” of the device is blinking in a turquoise color and you see a highlighted Bluetooth symbol and a checkmark on the Cubo display, above a piece of text saying ‘LINK Drive’ .



The Dongle is plugged into your computer and connected to the Cubo. The LED emits a solid blue light once the communication has automatically been set up between Dongle and Cubo.

You can check whether everything is connected by trying out your system, initiating a driving and a mousing session.

Restarting your devices manually

The application will automatically restart your devices if it is needed for certain processes (e.g. Firmware update).

However, in some cases (e.g. failed firmware update process) you may be required to restart your devices manually. This means you have to power them down and power them back up again.

You can do this several ways:

- by unplugging and replugging the device in question (e.g. in the case of Dongle)
- by unplugging and replugging the MicroUSB cable connecting the Link and Cubo
- by powering down the main control module (or the entire chair) the Link is connected to and powering it back up again

Important:

- If the firmware update process terminates at any point and you need to restart your devices manually, restarting or re-plugging your Cubo and Dongle will suffice.
- Once you've restarted your Network and every device is connected, re-try the firmware update process.
- Depending on where the process was terminated, the App may offer a different update sequence than before (e.g.: The app has updated your Vigo, but the Cubo update failed. After restarting the Cubo and the Dongle manually, in the list of devices waiting to be updated the Cubo will be the first one).

Pairing instructions

In order to communicate securely, Bluetooth devices need to be paired.

This process might be familiar from using other Bluetooth devices.

Scenarios where pairing might be needed:

- Phone - Dongle: Make sure the Switch-It® Vigo Mouse application is running on your computer. When the phone offers the pairing code, type it in the pairing window that appeared on the screen of your computer.
- Phone - Cubo: A 6 digit passkey will appear on the screen of the Cubo, enter into the input field that has just appeared on your phone.
- Cubo - Dongle: Make sure the Switch-It® Vigo Mouse application is running on your computer. A 6 digit passkey will appear on the screen of the Cubo, enter the code in the input field that has just appeared on the screen of your computer.

Important:

- Pairing the Dongle with your phone or the Cubo will require Switch-It® Vigo Mouse (or Switch-It® Vigo Drive) to run on the computer the Dongle is plugged into. This is to provide the Dongle with a platform through which it can communicate with your phone or the Cubo.
- If Switch-It® Vigo Mouse (or Switch-It® Vigo Drive) is not running on your computer, no Pairing pop-up window will appear in which you can input the pairing code provided by your phone or the Cubo and the Network cannot be set up. Moreover, Cubo may get stuck in this state of offering to pair with the Dongle and no other device can connect to it, until this is resolved.
- If you're adding a second Dongle to your network, it will need to be paired with your Cubo as well, through the same process described above.
- When changing network password, please make sure to remove Cubo from the list of connected/paired bluetooth devices in your phone's Bluetooth menu!
A pop-up notification will direct you to the right settings.
- If connection issues persist or you repeatedly encounter an error with the code E166, removing the device mentioned in the notification (either the Dongle or the Cubo) from the list of paired devices of your phone's Bluetooth menu might solve the problem!

Networks

A network is [a connected set](#) of compatible, paired Switch-It® Vigo [devices](#).

Important:

- A network has to have at least one Dongle or Cubo to be viable.
- The following are the only supported device constellations which result in viable networks:
 - Vigo+Dongle+Cubo+Link - Full network
 - Vigo+Dongle - Mouse only network
 - Vigo+Cubo+Link - Drive only network
 - Vigo+2xDongle+Cubo+Link - Full network with an extra Mouse

Welcome screen

Help

The Help documentation can be accessed on every screen by clicking the Help icon in the top right corner:



You can always access any part of the document by scrolling or using the Table of contents on top of the document. If you're accessing this document via the application it will automatically jump to the part of the document that is relevant to the screen on which you pressed the Help button, it is context sensitive.

Instructions panel

We provide guidance on every screen. Here you'll find all the necessary steps needed for you to successfully set up your first network. These steps have been detailed above, under the [Devices](#) section.

To see more details about the behavior of this element, please refer to the following section: [Instructions panels](#)

List of active devices

Scanning for available devices may take some time.

If all your devices are ON, connected and in range you'll find your network's active device marked by a light green background. The first time you see this, there should only be one device in the list and that device should be a Dongle. If there is a Dongle in the network that will always be your active devices as far as the application is concerned.

If you see a Cubo in the list it means there is no Dongle connected to it, or the Dongle is not plugged in. If that happens you can either plug in your Dongle or you can create a 'Drive only' network by choosing the Cubo from the list and going through with the network creation process. This way you'll only be able to use your network for driving your chair, until you add a Dongle to the Network.

The **active device** is the one through which the application is communicating with your entire network. It will be marked by a light green background in any device list you meet throughout the application.

Select device to connect



Dngl 2021-01-010-0003 <-> -68 dBm
40:2C:76:AF:00:03

The icon is the first indicator of the type of the device, it can be a Dongle, a Cubo, a Vigo or a Link.

This fact will also be reflected in the device's name and serial number, found in the first line in green.

The second, dimmer line is marking the device's unique MAC address, which is necessary for Bluetooth communication.

The dBm value tells you how far the device is. Each device has a different range within which it can still communicate with other devices.

We recommend keeping these devices within a 2m range of each other when in use.

To carry on, choose your active device from the list OR skip this process entirely!

[Skip setup](#) button - it allows you to skip the process of having to set up your first network before using the app. This may be useful in cases where you cannot create your first network, because of a faulty device. In these cases you can go ahead without having any Networks in the app, then you can create your first network [while adding](#) in the replacement for the faulty device into your network.

Device check screen (first time)

The application is double- checking whether all devices are On and connected.

Here, a device can have 3 states:

- If a device is present, you'll see a green tick mark next to its icon:



- If a device is not present but you have the option to add it:



- If a device is not present, you'll see a red X next to its icon:



There are several different outcomes you may see on this screen (see below).

A full network

(1 Dongle , 1 Cubo, 1 Vigo and 1 Link)

The Dongle being the active device, through which all other devices communicate with the application. Hence the Dongle icon is not displayed in this list.

All set!



Vigo



Cubo



Link

To carry on, press Continue!

'Mouse only' network

(1 Dongle , 1 Vigo)

The Dongle being **the active device**, through which the Vigo communicates with the application.
Hence the Dongle icon is not displayed in this list.

Mouse only network!

To create a full network, turn on your controller
and press "Refresh".



Vigo



Cubo



Link

To carry on with this setting, press Continue!

If you decide you'd like to create a Full network after all, power on your chair, your Link and your Cubo and press Refresh.

'Drive only' network

(1 **Cubo**, 1 Vigo and 1 Link)

In this case the Cubo being **the active device**, through which all other devices communicate with the application. Hence the Cubo icon is not displayed in this list.

Drive only network!

To create a full network, press "Cancel" and (re)insert Dongle into the computer.



To carry on with this setting, press Continue!

Missing device

Where one or more devices (apart from the Dongle) in your network are off or out of range. The Dongle as the active device was the one through which the entire process was initiated, hence the Dongle icon is not displayed in this list.

Missing device!

Please turn on all your devices, and refresh



Vigo



Cubo



Link

To solve the problem, turn on all your devices or bring them in range and press Refresh!

Set up network screen - Name your network

Here you can name your network for easier identification in case you'll be using more networks. Type in your preferred name. It may contain alphanumeric characters and special characters and symbols. The length of the name has to be between 3 and 32 characters.

To carry on, press Set name!

Change Password screen

You can set a password for your network here. This option is only available for networks with a Cubo in them, as Cubo is the hub of more complicated networks (e.g. a full network). It is responsible for storing and displaying the password when needed.

Having a password for a network of many elements is necessary for security reasons and is a technical requirement for Bluetooth communication based networks, such as the Switch-It® Vigo Head Drive.

In smaller networks, like a [‘Mouse only network’](#), no password is required, as the security the Dongle provides for those networks is sufficient.

Info box

To see more details about the behaviour of this element, please refer to the following section:

[Info boxes](#)

Password input fields

Please enter a 6 digit passkey then confirm it in the 2nd field. It doesn't have to be a memorable number, as you'll always be able to read it off of Cubo's display whenever it is needed.

You can make the passkey visible (or invisible) by pressing the eye icon:



To carry on, press Set new password!

Home screen

This is the main screen of the application, this is where it returns to most often and from where you'll start most of your processes.

Once you've set up your first network, this screen will greet you upon every launch of the application.

You can find all your main menu elements on this screen.



[Network menu](#)

[Networks](#) can be managed here.



[Firmware Update menu](#)

Your devices can be updated here.

The red badges mark how many of your networks have updates.



[Drive Settings menu](#) (Available for authorized dealers only)

If it's enabled, you can edit your drive settings here and fine tune your system (e.g. set head angles, headrest sensor sensitivity, etc.)



[App Settings menu](#)

Certain settings of the application can be changed here.

To carry on, choose a menu item!

Networks menu

In this menu you can manage your [networks](#) - you can create new ones and remove old ones. You can have/manage multiple networks.

Important:

- We advise you to use Switch-It® Vigo Toolbox with only one phone at a time. Its safe usage on multiple phones is not supported.
- The networks you create on one phone are not transferable to another one. If you get a new phone you have to recreate all your networks on that device.

Edit and remove

You can switch between 'Edit mode' and 'Remove mode' by tapping the corresponding tab on the top of the screen.

 Edit Remove

Edit mode

Tap on the name of the Network you wish to edit or manage.

To add a new network, press the '+ Add new network' button!

Remove mode

Tap on the checkbox next to the Network(s) you wish to remove.

To remove a network, press the 'Remove selection' button!

Instructions panel

To see more details about the behaviour of this element, please refer to the following section:

[Instructions panels](#)

List of your Networks



*It may take some time for the application to read your network.
Loading bars will always indicate its progress throughout the app.*



Available network:

A network is *available* if all its elements are present, all the devices are ON, and within range. Tapping on an *available network* will take you to the Manage Network menu where you can access more settings regarding that network.

Unavailable network:

A network is unavailable if one or more of its elements are not present. They are either turned OFF, out of range or they may be [broken](#).

IF you're experiencing this effect because your active device (either Dongle or Cubo depending on what kind of network is affected) is broken, then please contact [Customer Support](#).

Tapping on an *unavailable network* will take you to the [Show Network menu](#).

Once you have a replacement for the device in question, you press Repair in the Notification window, which will navigate you to the [Repair Network menu](#).

Show Network menu

Here you can see what elements the network is made of and which elements are missing at the moment.

Edit Network name

You can edit the name of your network any time you see an edit icon next to it: By tapping this icon the Network name field becomes editable.



If you'd like to cancel editing your network's name just tap away or press the bin icon:



If you're happy with the chosen name press 'Return' or 'Done' on the keyboard and the name will be saved.

Info box

To see more details about the behaviour of this element, please refer to the following section: [Info boxes](#)

Devices in the Network

Underneath the Info box you'll see the list of devices your network is composed of. You may see the following types of devices:



The Link, which is connected to a PGDT Omni or IOM equipped wheelchair as a specialty input device (SID). You can read more about it in the [Manual](#).



The Cubo, which is powered by and connected to the Link via cable. This may be the unavailable device in the case of a 'Drive only network'.



The Vigo, which is connected to the Cubo via bluetooth communication.

When working correctly the LED in the "head" of the device is blinking in turquoise and you see a highlighted Bluetooth symbol and a checkmark on the Cubo display, above a piece of text saying 'LINK Drive'.



The Dongle is usually plugged into your computer and connected to the Cubo. The LED emits a solid blue light when the communication is stable between Dongle and Cubo, but this may not be the case if this is the missing/broken Active device that made your entire network unavailable.

It is possible to have two of these devices in one network (*e.g. one in the home computer and one in your work computer*).

You'll also notice a **little yellow warning sign** next to the unavailable/broken devices.



Tapping it will inform you of your options in the form of a [Notification](#).

To go back to the Networks menu, press the 'Back' button!

Repair Network menu

Once you've powered on your replacement device it will show up in the list of devices you see on this screen.

Edit Network name

You can edit the name of your network any time you see an edit icon next to it: By tapping this icon the Network name field becomes editable.



If you'd like to cancel editing your network's name just tap away or press the bin icon:



If you're happy with the chosen name press 'Return' or 'Done' on the keyboard and the name will be saved.

Info box

To see more details about the behaviour of this element, please refer to the following section: [Info boxes](#)

Devices in your Network

Underneath the Info box you'll see the list of devices your existing network is composed of. The list may be hidden by default. In this case just press 'Show your network'.

In this device list, if a device is OFF, disconnected or out of range, you'll see the info icon next to the device in question greyed out. Tapping it will bring up a pop-up message, saying the device is not present.

List of Available new devices

You should see all the available devices in range in this list, but it may just be your one replacement device. It has to be ON and within range for it to show up in the scan.

Simply press the checkbox next to the replacement device and press the 'Replace Active Device' button.

A confirmation pop-up message will appear making sure you want to replace the device. After choosing 'Yes' the application will automatically make the replacement device your network's active device.

Add Network menu

You can start the process of adding a new network here. A network made of devices already paired up.

For example, if you've gotten a new, replacement set which you'd like to access and manage the same way you did your other network. Or in case you have many kits and you'd like to manage them and keep them all up to date in one place.

Instructions panel

We provide guidance on every screen. Here you'll find all the necessary steps needed for you to successfully set up another network. These steps have been detailed above, under the [Devices](#) section.

To see more details about the behaviour of this element, please refer to the following section:

[Instructions panels](#)

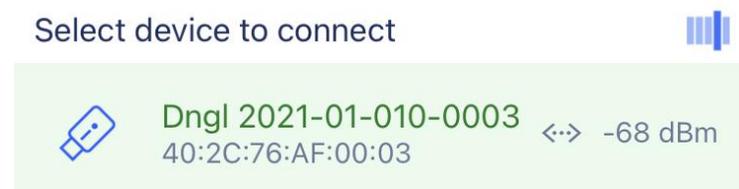
List of active devices

Scanning for available devices may take some time.

If all your devices are ON, connected and in range you'll find your network's active device marked by a light green background. The first time you see this, there should only be one device in the list and that device should be a Dongle. If there is a Dongle in the network that will always be your active device as far as the application is concerned.

If you see a Cubo in the list it means there is no Dongle connected to it, or the Dongle is not plugged in. If that happens you can either plug in your Dongle or you can create a 'Drive only' network by choosing the Cubo from the list and going through with the network creation process. This way you'll only be able to use your network for driving your chair, until you add a Dongle to the Network.

The **active device** is the one through which the application is communicating with your entire network. It will be marked by a light green background in any device list you meet throughout the application.



The icon is the first indicator of the type of the device, it can be a Dongle, a Cubo, a Vigo or a Link.

This fact will also be reflected in the device's name and serial number, found in the first line in green.

The second, dimmer line is marking the device's unique MAC address, which is necessary for Bluetooth communication.

The dBm value tells you how far the device is. Each device has a different range within which it can still communicate with other devices.

We recommend keeping these devices within a 2m range of each other when in use.

To carry on, choose your active device from the list!

Device check screen (in case of more than 1 network)

This screen looks exactly the same as the [Device check screen](#) upon setting up your first network with one exception, which is an extra 'Customize' button.

Customize

After having created your first network via the [Welcome screen](#), creating more networks via the Add Network menu, you'll have the option to customize it during the creation process. You'll see a new 'Customize' button on this screen with which you can do exactly that. Pressing Customize will take you to the [Modify Network menu](#) where you can [remove elements](#) of your network you're about to create or [add new ones](#).

Set up network screen - Name your network

This screen is exactly the [same](#) as the one you encountered creating your first Network.

Change Password screen

This screen is exactly the [same](#) as the one you encountered creating your first Network.

Manage Network menu

Edit Network name

You can edit the name of your network any time you see an edit icon next to it:
By tapping this icon the Network name field becomes editable.



If you'd like to cancel editing your network's name just tap away or press
the bin icon:



If you're happy with the chosen name press 'Return' or 'Done' on the keyboard and the name
will be saved.

Info box

To see more details about the behaviour of this element, please refer to the following section:
[Info boxes](#)

Devices in the Network

Underneath the Info box you'll see the list of devices your network is composed of.

You may see the following types of devices:



The Link, which is connected to a PGDT Omni or IOM equipped wheelchair as a specialty input device (SID). You can read more about it in the [Manual](#).



The Cubo, which is powered by and connected to the Link via cable.



The Vigo, which is connected to the Cubo via bluetooth communication.

When working correctly the LED in the “head” of the device is blinking in turquoise and you see a highlighted Bluetooth symbol and a checkmark on the Cubo display, above a piece of text saying ‘LINK Drive’ .



The Dongle is plugged into your computer and connected to the Cubo. The LED emits a solid blue light when the communication is stable between Dongle and Cubo.

It is possible to have two of these devices in one network (*e.g. one in the home computer and one in your work computer*).

The icon is the first indicator of the type of the device. It can be a Dongle, a Cubo, a Vigo or a Link.

This fact will also be reflected in the device's name and serial number, found in the first line.

The second, dimmer line is marking the device's unique MAC address, which is necessary for Bluetooth communication.

If a device is OFF, disconnected or out of range, you'll see a **little yellow warning triangle** next to the device in question.



Tapping it will inform you of your options in the form of a [Notification](#).

You'll see one device in the list highlighted by a light green background. This is the **active device** through which the application is communicating with your entire network.



Dngl 2021-01-010-0003
40:2C:76:AF:00:03



Tapping the info icon next to each device will give you more detailed information about it. You may need this information when contacting [Customer Support](#).



From here you can choose 3 menu items:



Change
password

Change password menu

The Network password can be reset here.



Change device
order

Change Device Order menu

By default, the Network is in drive mode at startup. You can change it to mouse mode here.



Modify
network

Modify Network menu

Devices can be added, replaced or removed in this menu.

To carry on, choose a menu item!

Change Password menu

Here you can reset the password of your network. This option is only available for networks with a Cubo in them, as Cubo is the hub of more complicated networks (e.g. a full network). It is responsible for storing and displaying the password when needed.

Having a password for a network of many elements is necessary for security reasons and is a technical requirement for Bluetooth communication based networks, such as the Switch-It® Vigo Head Drive.



For iOS users: When changing network password, please make sure to remove Cubo from the list of connected/paired bluetooth devices in your phone's Bluetooth menu!

A pop-up notification will direct you to the right settings.

Edit Network name

You can edit the name of your network any time you see an edit icon next to it:
By tapping this icon the Network name field becomes editable.



If you'd like to cancel editing your network's name just tap away or press the bin icon:



If you're happy with the chosen name press 'Return' or 'Done' on the keyboard and the name will be saved.

Info box

To see more details about the behaviour of this element, please refer to the following section:
[Info boxes](#)

Password input fields

Please enter a 6 digit passkey then confirm it in the 2nd field. It doesn't have to be a memorable number, as you'll always be able to read it off of Cubo's display whenever it is needed.

You can make the passkey visible (or invisible) by pressing the eye icon:



On

Off

To carry on, press Set new password!

Change Device Order menu

There is an order in which the devices providing different functionalities (or modes) are queued. This simply means that there is a list, stored by Cubo, which tells you which functionality (i.e. drive mode or mouse mode, or another mouse) comes first.

By default, the Network is in drive mode at startup. You can change it to mouse mode here.

If you have **two Dongles** in your network, meaning you essentially have 2 mouse modes, you can re-order them in the list by grabbing the element you wish to move by the 3 dots next to the number and dragging it up or down.



You can also **enable/disable** each mode/functionality/element by pressing the slider button on the right hand side. This way, the element you disabled will not show up on the Cubo's display when you cycle through them by long-pressing the Headrest Sensor or buddy button.

You can edit the name of each element the same way you can edit the Network name, by pressing the edit icon:



By tapping this icon the Device name field becomes editable.

If you wish to remove the entire name with just one tap, press the small 'x' button appearing in the place of the edit icon.

The **Standby mode** can also be enabled here. It's only accessible if the Dongle has been removed or it's out of range. Long-pressing the Headrest Sensor will switch from Drive mode to Standby mode in this case. This mode has no active state.

The purpose of this mode is to act as filler, in case the user doesn't need the Drive mode (not even in its passive state), but doesn't have a Dongle nearby to switch to Mouse mode as a stand in.

To carry on, set the desired order of the devices and press Apply!

Modify Network menu

Devices can be added, replaced or removed under this menu.

Edit Network name

You can edit the name of your network any time you see an edit icon next to it:
By tapping this icon the Network name field becomes editable.



If you'd like to cancel editing your network's name just tap away or press
the bin icon:



If you're happy with the chosen name press 'Return' or 'Done' on the keyboard and the name
will be saved.

Info box

To see more details about the behaviour of this element, please refer to the following section:
[Info boxes](#)

Devices in the Network

Underneath the Info box you'll see the list of devices your network is composed of.

You may see the following types of devices:



The Link, which is connected to a PGDT Omni or IOM equipped wheelchair as a specialty input device (SID). You can read more about it in the [Manual](#).



The Cubo, which is powered by and connected to the Link via cable.



The Vigo, which is connected to the Cubo via bluetooth communication.

When working correctly the LED in the “head” of the device is blinking in turquoise and you see a highlighted Bluetooth symbol and a checkmark on the Cubo display, above a piece of text saying ‘LINK Drive’ .



The Dongle, is plugged into your computer and connected to the Cubo. The LED emits a solid blue light when the communication is stable between Dongle and Cubo.

It is possible to have two of these devices in one network (*e.g. one in the home computer and one in your work computer*).

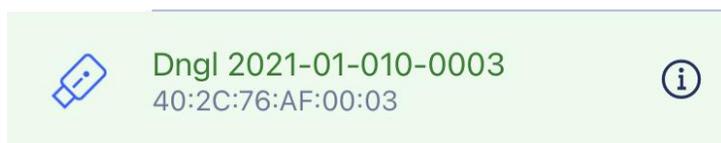
The icon is the first indicator of the type of the device. It can be a Dongle, a Cubo, a Vigo or a Link.

This fact will also be reflected in the device's name and serial number, found in the first line.

The second, dimmer line is marking the device's unique MAC address, which is necessary for Bluetooth communication.

In this device list, if a device is OFF, disconnected or out of range, you'll see the info icon next to the device in question greyed out. Tapping it will bring up a pop-up message, saying the device is not present.

You'll see one device in the list highlighted by a light green background. This is the **active device** through which the application is communicating with your entire network.



Tapping the info icon next to each device will give you more detailed information about it. You may need this information when contacting [Customer Support](#).



Removing devices

You have the option to **Remove** devices from the network, by pressing the 'Remove' button. Now you can check the boxes next to the devices you wish to remove from the network.

Important:

- Devices with grey backgrounds are essential to a valid network so they cannot be removed.
- A network has to have at least one Dongle or Cubo to be viable.
- The following are the only supported device constellations which result in viable networks:
 - Vigo+Dongle+Cubo+Link - Full network
 - Vigo+Dongle - Mouse only network
 - Vigo+Cubo+Link - Drive only network
 - Vigo+2xDongle+Cubo+Link - Full network with an extra Mouse

To carry on, check the devices you wish to remove and press 'Remove selection'!

If you wish to add or replace devices, press 'Add/Replace', which will take you to the next screen!

Add device menu

You can add new devices to your network in this menu, or you can replace them with new ones (in case they break and you get replacements).

Edit Network name

You can edit the name of your network any time you see an edit icon next to it: By tapping this icon the Network name field becomes editable.



If you'd like to cancel editing your network's name just tap away or press the bin icon:



If you're happy with the chosen name press 'Return' or 'Done' on the keyboard and the name will be saved.

Info box

To see more details about the behaviour of this element, please refer to the following section: [Info boxes](#)

Devices in your Network

Underneath the Info box you'll see the list of devices your existing network is composed of. The list may be hidden by default. In this case just press 'Show your network'.

The icon is the first indicator of the type of the device. It can be a Dongle, a Cubo, a Vigo or a Link.

This fact will also be reflected in the device's name and serial number, found in the first line.

The second, dimmer line is marking the device's unique MAC address, which is necessary for Bluetooth communication.

In this device list, if a device is OFF, disconnected or out of range, you'll see the info icon next to the device in question greyed out. Tapping it will bring up a pop-up message, saying the device is not present.

If you manage more than one network with the application you'll see an extra option here:

Show devices from other networks

If you tick this box all devices from those other networks will be listed as available devices in the 'Available new devices' list below.

List of Available new devices

All the available devices you can add to your current network are listed here. They have to be ON and within range for them to show up in the scan.

To carry on, simply check the box next to the devices you wish to add to your network and press 'Add selected devices'!

The pop-up notification will inform you whether the chosen device(s) will simply be added to your network OR, if the option is presented, the chosen device(s) can replace an existing device in your network.

For example:

- If the chosen device is a Cubo it will replace the one in your network as there can only be one Cubo per network.
 - If your original network is a Mouse only network (i.e. a network without a Cubo), choosing a Cubo from the list will simply add a Cubo and make it a Full network.
- If the chosen device is a Dongle, you can choose to replace the one you have or add a second dongle to your network.
- If it's Vigo the application will replace the one you have as there can only be one Vigo per network.
- You can have the same Vigo assigned to multiple Networks as long as you only use one of those Networks at a time. We cannot guarantee the proper functioning, if more than one network is using the same Vigo.

Firmware Update menu



The app may have to 'read' your network before it can notify you of possible updates. It does that upon selecting your network in the Networks menu or in the Firmware Update menu.

You can update your devices in this menu.

The red badge over the menu icon on the [Home screen](#) marks how many of your networks have updates.

List of your Networks



It may take some time for the application to read your network. Loading bars will always indicate its progress throughout the app.



Available network:

A network is *available* if all its elements are present, all the devices are ON, and within range. Tapping on an *available network* will take you to the next screen (Update Instructions screen) where you can check which devices of that network need an update.

Unavailable network:

A network is unavailable if one or more of its elements are not present. They are either turned OFF, out of range or they may be [broken](#).

Tapping on an *unavailable network* will yield no result on this screen.

Tap on the name of the Network to see which devices are in need of an update!

Update instructions screen

Instructions panel

To see more details about the behaviour of this element, please refer to the following section:

[Instructions panels](#)

Devices in the Network

Underneath the Instructions panel you'll see the list of devices your network is composed of and a red badge/icon will indicate which device is ready to update.

You may see the following types of devices:



The Link, which is connected to a PGDT Omni or IOM equipped wheelchair as a specialty input device (SID). You can read more about it in the [Manual](#).



The Cubo, which is powered by and connected to the Link via cable.



The Vigo, which is connected to the Cubo via bluetooth communication.

When working correctly the LED in the "head" of the device is blinking in turquoise and you see a highlighted Bluetooth symbol and a checkmark on the Cubo display, above a piece of text saying 'LINK Drive' .



The Dongle is plugged into your computer and connected to the Cubo. The LED emits a solid blue light when the communication is stable between Dongle and Cubo.

It is possible to have two of these devices in one network (*e.g. one in the home computer and one in your work computer*).

The icon is the first indicator of the type of the device. It can be a Dongle, a Cubo, a Vigo or a Link.

The 'update icon' can be found in the top right corner of this icon.

	 Cubo 2021-01-010-0002 40:2C:76:AF:00:02	
	 Dngl 2021-01-010-0003 40:2C:76:AF:00:03	
	 Link 2020-50-000-1002 40:2C:76:AF:00:02	
	 Vigo 2021-01-010-0001 40:2C:76:AF:00:01	 

The name of the device will also be visible next to its serial number, found in the first line.

The second, dimmer line is marking the device's unique MAC address, which is necessary for Bluetooth communication.

Tapping the info icon next to each device will give you more detailed information about it. You may need this information when contacting [Customer Support](#).



If a device is OFF, disconnected or out of range, you'll see a **little red warning triangle** next to the device in question.



Tapping it will inform you of your options in the form of a [Notification](#).

Important:

- You will not be able to initiate the update process as long as you see a red triangle warning (i.e. you're missing a Cubo or Vigo).
- If your network has two Dongles and one of those is not present, the usual yellow triangle will appear next to it. This does not inhibit the update process, you will be able to update the absent Dongle later (in case the computer it's plugged in is not in the vicinity).

To carry on, press the 'Start' button!

Firmware update process

The application automatically goes over every single device that needs an update and updates them one by one. The progress of this is indicated by progress bars.



You will be reminded by a pop-up message in the beginning of the update process to put the Link into 'Service mode' in order to update it. You can do that by long-pressing the touch interface on the device (the one with the GyroSet™ logo ). You'll hear a beep sound and the light will turn orange to indicate it's in Service mode.

The set of icons on the top of the screen indicate the overall progress:

1. The application is downloading the necessary firmware(s)



2. The application is getting the devices ready for the update



3. During this phase the application is updating each device one by one.



4. The update process has finished successfully



Pop-up notifications will also inform you of the success of the process.



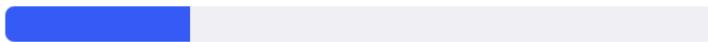
The firmware update process can fail sometimes due to Bluetooth interference and you may need to [restart your devices manually](#).

If that happens, restart all your devices and retry the update process. Depending on where the update process has been terminated the App may offer device updates in a different sequence than the first time, this is normal, just continue with the devices the App offers to update.

You'll see other details of the update process:

Updating devices 2/4

CUBO_1.2 - 2.2.27.613-R



The picture above is an example of an update process of 4 devices.

You see how many devices are being updated and which one of those is currently running.

'2/4' means the 2nd device is currently being updated of the 4 devices that need updating.

The second line of info shows you the name and hardware number of the exact device that is being updated and to which version it is being updated.

In this case a Cubo with 1.2 hardware version number is getting updated with a firmware whose version is 2.2.27.613-R.

Below that you see the progress bar of that device's update.

The update happens automatically at this point. You don't have to do anything for it to finish.

You can cancel the process any time by pressing the Cancel button.

Important:

- Updating the Link happens via the Cubo:
 - First, the Link firmware gets downloaded to the Cubo, this is what you can see on the progress bar in the app and follow along on the Cubo's display.
 - Once that is done the app is moving on to updating the Dongle whilst the Cubo begins to upload the Link firmware onto the Link itself, the progress of which can be observed on the Cubo display.
 - You may find that the overall Firmware update process finishes before the Cubo finishes updating the Link. That is absolutely normal, just wait for the Cubo to finish the process. When this happens, both Cubo and Link restart automatically and the Network is restored and ready to use.

Successful firmware update screen

This screen only comes up if you have more than one network created in the application.
(OR if the one network you have is a Two-Dongle network and you've not had a chance to update both Dongles in one go.)

Important:

- You will also end up on this screen:
 - if you only have one network and that network is a Two-Dongle network (a.k.a. 'Full network with an extra Mouse') and you've not had a chance to update both Dongles in one go.
 - if you have multiple networks but the network you just updated is a Two-Dongle network and you've not had a chance to update both Dongles in one go.
- In these cases an extra 'Update remaining devices' button appears, allowing you to update your other Dongle right away in case you have it at hand.

If you only have one network, you'll be redirected to the Home screen after a successful firmware update.

To carry on with updating another network, press the 'Update another network' button!

To set up a reminder in your calendar for running the update on other devices or other networks on a later date, press 'Set up a reminder'!

Press 'Back to home' to return to the Home screen!

Drive Settings menu

To enable this option you have to be an authorized dealer. If you are and you do not have the password to [enable](#) this setting in the [Settings menu](#), then please contact our [Support](#).

Once this setting is enabled, you'll have access to the Drive Settings menu from the [Home Screen](#).

You'll have to have at least one working Network made in Switch-It® Vigo Toolbox (i.e. in the Networks list) with all of its devices turned on, connected and within range, to enter this menu. If you cannot enter the menu, an appropriate notification will inform you why. It's usually to do with a missing/switched off device.

Upon entering the Drive Settings menu you'll be presented with two main tabs of settings:

- General settings
- Head Angles settings

You'll find an info button next to each setting. By pressing it you'll get a detailed explanation of what that setting is.

General - 1st page

Set centre

You can choose your preferred method for (re-)centering the position of your headset.

Automatic: Driving activates when your head stays still and the center point will be set in that position.

Timer: Driving activates at the end of the countdown. Try to find a comfortable center position with your head by that time.

You can set the timer from 1 second to 5 seconds.

Tremor filter and high Tremor switch

Tremor Filter: If you ever experience tremors, this setting can help you make your driving experience smoother. The higher the setting, the less sensitive your headset will be to smaller movements.

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)

General - 2nd page

Analog button

Here you can enable/disable the use of an analog button (Headrest Sensor in the case of a Head Drive kit).

Headerst sensor sensitivity scale: The blue bar is showing you the current pressure value you're exerting on the Headrest Sensor. By grabbing the **blue** knob you can set the desired sensitivity of the Headrest Sensor.

After pressing 'reset', exert a firm pressure on the Headrest Sensor, then release it to a point where your head comfortably sits on the headrest. The triangles will mark a record of the minimum and maximum values. We recommend grabbing and sliding the **blue** knob somewhere in-between those marks.

Fifth switch/wink sensor

Here you can enable/disable the use of the fifth switch (also called wink sensor or blink sensor) in the headset.

Set a **Long press limit** for this function if you want to avoid the accidental turning off of your chair. Please make sure you set a cut-off point for this function, at which point the fifth switch deactivates even if you are still winking. Set this time limit to be lower than the setting for turning off the chair in the PG software.

General - 3rd page

Gesture recognition parameters

Back Tilt: You can set the delay of the reversing gesture here, which may be necessary if you want to avoid accidental reversing whilst deactivating Drive mode. This delay (if set) occurs between you tilting your head backwards and the chair starting to move backwards.

Emergency Brake: The Emergency brake means the chair will stop at a sudden, irregular head movement. For example during an abrupt head backtilt due to a collision.

Sensitive: emergency stop will trigger in case of a slower backwards head movement.

Normal: emergency stop will trigger in case of a quick backwards head movement.

Insensitive: emergency stop will trigger in case of a fast and long backwards head movement.

Reversed forward drive

Tilt your head backwards in order to move the chair forwards.

Reversing

The Link will play a beeping sound during reversing. Turn off reversing audio feedback in the PG module to avoid multiple sound signals.

Head Angles

Calibration

On this page you can calibrate your device by finding a neutral head position first, then pressing the 'Center' button. You can do this for both axes (forward-backward and left-right) by switching between front view and rear view.

Important:

- This origin point will give you a reference to which all head angles necessary to control your chair can be set.
- You can always return to this screen in case you need to reset your center point.

Movement ranges forward and backward

Use the sliders in the bottom of the screen to set the desired range of head movement for moving the chair forward and backward. You can gauge the actual angles of the head relative to its origin point (defined by the calibration process) by checking the position of the orange needle (the one with a triangle at the end).

Safety limits forward and backward

Find the angles above which you want the driving to automatically terminate. This should be slightly outside the usual movement range of the head.

The function helps to avoid involuntary chair movements during sudden or irregular head movements (e.g. fainting).

Deadzones forward and backward

Dead-zones are simply ranges within which no action will be taken by the system to your head movements.

Slowspeed deadzone is the range within which you don't want the chair to react to small head movements at slow or medium speed.

Highspeed deadzone is the range within which you don't want the chair to react to small head movements at maximum or close to maximum speed.

Important:

- As moving with maximum speed requires a higher tolerance for head movements we recommend to set it slightly higher than the slow speed deadzone value.
- 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.

Head-tilt ranges left and right

Use the sliders to set the desired range of head movement for turning with the chair. You can gauge the actual angles of the head relative to its origin point (defined by the calibration process) by checking the position of the orange needle (the one with a triangle at the end).

Safety limits left and right

Find the angles above which you want the driving to automatically terminate. This should be slightly outside the usual movement range of the head.

The function helps to avoid involuntary chair movements during sudden or irregular head movements (e.g. fainting).

Deadzones left and right

Dead-zones are simply ranges within which no action will be taken by the system to your head movements.

Slowspeed deadzone is the range within which you don't want the chair to react to small head movements at slow or medium speed.

Highspeed deadzone is the range within which you don't want the chair to react to small head movements at maximum or close to maximum speed.

Important:

- As moving with maximum speed requires a higher tolerance for head movements we recommend to set it slightly higher than the slow speed deadzone value.
- 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.

Settings menu

You have a few settings you can change here regarding the application.

Analytics & Statistics

You can enable or disable the tracking of your usage data here.

The data collection is completely anonymous and the data collected is strictly regarding the usage of the application. This helps us to improve the user experience.

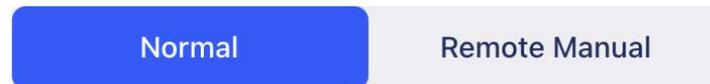
Your data will only be stored for 18 months.

Firmware update settings

You can enable an extra setting in the Firmware update menu.

Enabling the firmware update mode selection will allow you to downgrade your devices to previous versions by choosing the 'Remote manual' option under the Firmware update menu and manually choosing an older firmware for devices you wish to downgrade.

Select mode



Important:

- Please make sure you only use this option if it's absolutely necessary or you're asked to do so by [Customer Support](#).
- Please be advised, by using this option you may end up with incompatible devices!

Drive settings

You can enable the Drive Settings here. It requires a password which, as an authorized dealer, you can request by contacting our [Support](#).

Once enabled, you can access [Drive Settings](#) on the [Home screen](#) and customize your driving experience.

Developer settings



This setting is for developers only!

Do not enable it, unless you're instructed otherwise by our [Customer Support](#) team and you're provided with the password to enable it by Now Technologies Ltd or your distributor.

Please consider leaving your opinion/feedback via email on our website:
www.nowtech.hu