Tobii Dynavox I-Series+
User's Manual

I–12+
I–15+

tobii dynavox

User's manual Tobii Dynavox I-Series+

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The following products are protected by U.S. Patent 7,572,008:

- I–12+ ETR
- I–15+ ETR

You can locate the Type of Tobii Dynavox I-Series+ device on the label on the back side.

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1 Introduction

Thank you for purchasing a Tobii Dynavox I-Series+ device from Tobii Dynavox!

To ensure the optimal performance of this product, please take the time to read this manual carefully.

The Tobii Dynavox I-Series+ device is available in two different sizes: the Tobii Dynavox I–12+ with a 12.1" screen and the Tobii Dynavox I–15+ with a 15.0" screen. The Tobii Dynavox I-Series+ is a Gaze Interaction device but can be ordered without the Gaze Interaction function.

This User's Manual covers:

- The Tobii Dynavox I-Series+ device, models Tobii Dynavox I–12+ and Tobii Dynavox I–15+.
- The I-Series Control Center (for controlling the device and the I-Series Product Key).
- The Gaze Interaction functions

1.1 Explanation of Admonitions

In this manual we use five (5) levels of admonitions as follows:

Is used for notifying the user of something important or of something that needs special attention.

Is used to inform of something that could cause harm to, or malfunction of, the equipment.

Is used to inform of something in which there is a conceivable risk of harm to the user if the Warning is ignored.

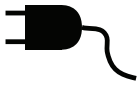
Is used to inform of something that can cause damage to hearing.

Is used to inform of something that cause permanent bodily harm with prolonged skin contact if the Warning is ignored.

1.2 Symbols and Markings

This section provides information about the symbols that are used on the Tobii Dynavox I-Series+, its accessories or packaging.

Symbol or Markings	Description
	USB 3.0 Port
	USB 2.0 Ports
	Power On
	RJ 45 Ethernet Port
	3.5 mm Switch port 1

Symbol or Markings	Description
SW2	3.5 mm Switch port 2
	Power Connector
	Head phone jack 3,5 mm
	Connector for an HDMI 1.3 cable
	To release the right battery
	To release the left battery
	Dispose of in accordance with your country's requirements.
	CE is the abbreviation of the European Communities and this mark tells customs officials in the European Union that the product complies with one or more of the EC Directives
	This mark is a certification mark employed on electronic products manufactured or sold in the United States which certifies that the electromagnetic interference from the device is under limits approved by the Federal Communications Commission.
	UL Classification Marks for Canada and the United States
	RoHS Compliant
	Consult User´s Manual
	Li-Ion rechargeable battery. Must be recycled or disposed properly
	Recyclable material
	Type L and Type R Listing Marks for Canada and the United States
	Conforms to relevant Australian EMC requirements
	Japanese certification for electrical/electronic appliances and components

Symbol or Markings	Description
	Dispose of in accordance with your country's requirements.
	Safety Class II equipment (reinforced insulation)
	This mark show the pin out polarity on the AC/DC Power Adapter.
	Recognized component mark for Canada and the United States
	The most recognized International Safety mark. This safety listing signifies that the product was tested to IEC 60601–1
IP43	Enclosure ingress protection code per IEC 60529

1.3 Intended Use

The Tobii Dynavox I-Series+ is an Augmentative and Alternative Communication (AAC) product, a purpose built Speech Generating Device (SGD) designed to provide to its users increased communication ability and greater independence.

The Tobii Dynavox I-Series+ is intended primarily to provide, and act as, a compliment to everyday communication for people that have challenges in their ability to speak due to injury, disability or illness. This intended use is reflected in design features such as long lasting batteries, superior sound quality, high durability, built in environmental control and connectivity features.

The Tobii Dynavox I-Series+ is a Gaze Interaction device with a built-in Tobii Eye Tracker (optional) and a capacitive touch screen for touch access. The device is intended to be used in two orientations: one, upright and mounted (or standing upright, vertically, on an appropriate surface) for Gaze Interaction use, and two, lying flat (resting in a horizontal orientation) for touch access optimization. Gaze Interaction and touch can be used in combination with switches, keyboard and/or scanning as additional input methods.

The Tobii Dynavox I-Series+ is designed primarily for face-to-face communication and secondarily for long distance communication, computer access and on-line social interaction. The Tobii Dynavox I-Series+ allows the user to communicate via text or symbols to generate synthesized (computer voice) or digitized (recorded voice) speech for face-to-face communication. The variety of communication methods allows Tobii Dynavox I-Series+ users the ability to realize their full potential.

The Tobii Dynavox I-Series+ allows its user many options of communication through text message, chat and voice calls via Bluetooth® to cell phone, WiFi to Skype®, Internet to E-mail and other third party applications such as Facebook®.

With the Tobii Dynavox I-Series+, users have the freedom and flexibility provided via the Microsoft® Windows environment, as well as the option to control TV's and other household appliances via the GEWA Programmable IR Remote Control.

The Tobii Dynavox I-Series+ meets the definition for durable medical equipment; and is registered as a Class 1 medical device. The Tobii Dynavox I-Series+ is available in two (2) sizes; and is available as a dedicated (locked) Speech Generating Device.

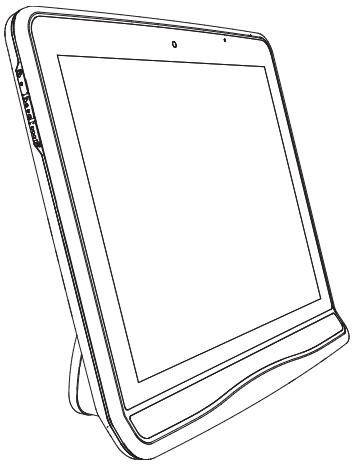
The Tobii Dynavox I-Series+ device does not sustain or support life.

In case of failure of the Tobii Dynavox I-Series+ device, the user cannot communicate using it.

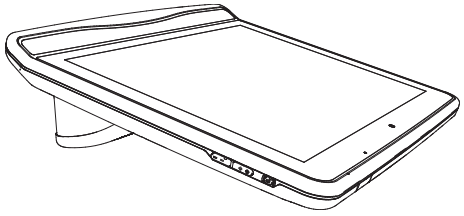
1.3.1 Portable Use

A portable Tobii Dynavox I-Series+ can be used in two (2) different positions.

- Upright orientation
- Resting orientation



Upright Orientation



Resting Orientation

The **Upright** orientation is optimized for Gaze Interaction users and the **Resting** orientation is optimized for Touch or Scan users.

1.3.2 Mounted Use

The Tobii Dynavox I-Series+ can be mounted on to several mounting systems. Mount the Tobii Dynavox Quick Release (QR) adapter plate on to the device. The Tobii Dynavox QR adapter plate can be attached to the following support systems:

- Daessy
- REHAdapt

For more information, see *3.6 Tobii Dynavox Quick Release Adapter Plate, page 20* and *Appendix F Approved Accessories, page 91*.

1.4 Package Contents

Keep the original packaging materials for the Tobii Dynavox I-Series+.

In case the device needs to be returned to Tobii Dynavox for Warranty related issues or repair, it is required that the original packaging (or equal equivalent) is used for shipping.

1.4.1 Tobii Dynavox I-Series+ with Tobii Dynavox Communicator

The items below are included with your Tobii Dynavox I-Series+ package:

- 1 Device (12″ or 15″)
- 1 Eye tracker (built in)
- 1 Tobii Dynavox QR adapter plate
- 2 Batteries
- 1 Power Supply
- 1 Windows 8.1Home Premium license
- 1 Tobii Dynavox Communicator (pre-installed)
- 1 Tobii Dynavox Sono Suite (pre-installed)
- 1 Tobii Dynavox I-Series+ User's Manual (on the device as a PDF document)
- 1 Quick Start Manual (printed)
- Safety and Compliance documents
- Warranty Document

1.4.2 Tobii Dynavox I-Series+ with DynaVox Compass

The items below are included with your Tobii Dynavox I-Series+ package:

- 1 Device (12″ or 15″)
- 1 Eye tracker (built in)
- 1 Tobii Dynavox QR adapter plate
- 2 Batteries
- 1 Power Supply
- 1 Windows 8.1 Home Premium license
- 1 Tobii Dynavox Compass (pre-installed)
- 1 Tobii Dynavox I-Series+ User's Manual (on the device as a PDF document)
- 1 Quick Start Manual (printed)
- Safety and Compliance documents
- Warranty Document

2 Safety

The Tobii Dynavox I-Series+ device has been tested and approved as compliant to all the Specifications and Standards listed in *Appendix B Compliance Information, page 79* of this manual and in the *Appendix E Technical Specifications, page 88* -- including, but not limited to, the Medical Device Standard (Class 1/Type B). Nevertheless, in order to ensure safe operation of your Tobii Dynavox I-Series+ device, there are a few safety warnings to bear in mind:

No modification of this equipment is allowed

The Tobii Dynavox I-Series+ is not to be used as a life supporting Device, and it shall not be relied on in case of loss of function due to power loss or other causes.

There could be a choking hazard risk if small parts detach from the Tobii Dynavox I-Series+ device.

The Tobii Dynavox I-Series+ device shall not be exposed to or used in heavy rain or weather conditions outside the Technical Specification of the Tobii Dynavox I-Series+ device.

The Tobii Dynavox I-Series+ device shall only be used with Tobii Dynavox I-Series+ specific Accessories that have a mounting instruction included with the accessory.

Young children or people with cognitive disabilities should not have access to, or the use of, the Tobii Dynavox I-Series+ device without parental or guardian supervision.

Do no attach any decorations, post it notes or similar on the screen side of the Tobii Dynavox I-Series+ device, that may interfere with the Gaze Interaction or touch screen performance.

2.1 Avoiding Hearing Damage

Permanent hearing loss may occur if earphones, headphones or speakers are used at high volume. To prevent this, the volume should be set to a safe level. You can become desensitized over time to high sound levels which may then sound acceptable yet still could be damaging your hearing. If you experience symptoms such as ringing in your ears, please lower the volume or stop using the earphones/headphones. The louder the volume, the less time is required before your hearing could be affected.

Hearing experts suggest the following measures to protect your hearing:

- Limit the amount of time you use earphones or headphones at high volume.
- Avoid turning up the volume to block out noisy surroundings.
- Turn the volume down if you cannot hear people speaking near you.

To establish a safe volume level:

- Set your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, without distortion.

2.2 Temperature

This device can be made to operate in two different modes, Portable and Mounted. When the device is in Mounted mode it is allowed to run at a higher temperature; it sets the maximum allowable environmental temperature to its highest level. The risk with running the device in this mode is that it can reach temperatures in which prolonged use with direct skin contact may cause permanent bodily harm. Portable mode sets the maximum device temperature shut down limit to a lower temperature, reducing the risk for permanent bodily harm caused by prolonged exposure to the skin. Only choose Mounted mode when the device is mounted on a wheelchair, table, etc, with a proper mounting system.

Due to use in direct sunshine or in any other hot environment the Tobii Dynavox I-Series+ device may have hot surfaces. There is a built in temperature sensor that monitors the temperature. If the sensor detects temperatures above the temperature specified in *Table D.1 Maximum Allowed Temperature, page 87* for portable mode and mounted mode the device will automatically trigger a Windows Shut Down or Hibernate (depending on Windows Power Button configuration) to not cause the User any risk of harm. It may take a while before Tobii Dynavox I-Series+ device can be restarted as the unit may first need time to cool down.

2.3 Power Supply and Batteries

The Tobii Dynavox I-Series+ device uses Lithium Ion batteries. These batteries have a storage temperature range of between -20 °C/-4 °F and 40 °C/104 °F within 6 months.

If you are in a hot environment, be aware that it can affect the ability to charge the batteries. The internal temperature has to be between 0 °C/32 °F and 45 °C/113 °F for the batteries to charge. If the internal battery temperature raises above 45 °C/113 °F the batteries will not charge at all.

Move the Tobii Dynavox I-Series+ device and the batteries to a cooler environment to let the batteries charge properly.

Avoid exposing the batteries to fire or to temperatures above 50 °C/122 °F. These conditions may cause a battery to malfunction, generate heat, ignite or explode. Be aware that it is possible, in a worst case scenario, for temperatures to reach greater than those stated above in, for example, the trunk of a car on a hot day. So, storing the device, with batteries installed, in a hot car trunk could conceivably lead to a malfunction.

Do not disassemble or harm the battery. Pay attention to the environmental laws and regulations which apply in your area when disposing of batteries.

For safe operation of the Tobii Dynavox I-Series+ device, use only charger, batteries and accessories approved by Tobii Technology.

Do not open, or modify, the metal casing of the Tobii Dynavox I-Series+ device or of the power supply, since you may be exposed to potentially hazardous electrical voltage. The device contains no serviceable parts. If the Tobii Dynavox I-Series+ device or it's accessories are mechanically damaged, **do not to use them**.

If the batteries are not charged or the Tobii Dynavox I-Series+ is not powered up by the power supply, the Tobii Dynavox I-Series+ device will shut down.

If the Power Supply Cord is damaged, replaceable by Service Personnel only

Do not connect any devices with a non-medical grade power supply to any connector on the Tobii Dynavox I-Series+ device.

The appliance coupler of the power supply or separable plug is used as the Mains Disconnection Device, please do not to position the Tobii Dynavox I-Series+ device so that it is difficult to operate the disconnection device.

Special regulations apply to shipping Lithium-ion batteries. If dropped, crushed, or short-circuited, these batteries can release dangerous amounts of heat and may ignite, and are dangerous in fires.

Please reference IATA regulations when shipping lithium metal or lithium ion batteries or cells: http://www.iata.org/whatwedo/cargo/dangerous_goods/Pages/lithium_batteries.aspx

2.4 Mounting

The Tobii Dynavox I-Series+ should be mounted according to MANUFACTURER instructions of approved mounts. Tobii Dynavox or its agents are not liable for damage or injuries to a person or its property due to a Tobii Dynavox I-Series+ falling from a mounted configuration. The mounting of a Tobii Dynavox I-Series+ is done entirely at the user's own risk.

2.5 Emergency

Do not rely on the device for emergency calls or banking transactions. We recommend having multiple ways to communicate in emergency situations. Banking transactions should only be carried out with a system recommended by, and approved according to the standards of, your bank.

2.6 Infrared

The Tobii Dynavox I-Series+ emits pulsed infrared (IR) light both from the eye tracker and from the Environmental Control Unit. Other devices controlled by IR or susceptible to disturbance by IR light might be affected by the IR light emitted from the Tobii Dynavox I-Series+. Do not use the Tobii Dynavox I-Series+ in the vicinity of such devices if their functionality is of critical importance.

2.7 Epilepsy

Some people with **Photosensitive Epilepsy** are susceptible to epileptic seizures or loss of consciousness when exposed to certain flashing lights or light patterns in everyday life. This may happen even if the person has no medical history of epilepsy or has never had any epileptic seizures.

A person with Photosensitive Epilepsy would also be likely to have problems with TV screens, some arcade games, and flickering fluorescent bulbs. Such people may have a seizure while watching certain images or patterns on a monitor, or even when exposed to the light sources of an eye tracker. It is estimated that about 3-5% of people with epilepsy have this type of Photosensitive Epilepsy. Many people with Photosensitive Epilepsy experience an "aura" or feel odd sensations before the seizure occurs. If you feel odd during use, move your eyes away from the eye tracker.

2.8 Electricity

Do not open the casing of the Tobii Dynavox I-Series+ device, since you may be exposed to potentially hazardous electrical voltage. The device contains no serviceable parts.

2.9 Child Safety

The Tobii Dynavox I-Series+ are advanced computer systems and electronic devices. As such they are composed of numerous separate, assembled parts. In the hands of a child certain of these parts have the possibility of being separated from the device, possibly constituting a choking hazard or another danger to the child.

Young children should not have access to, or the use of, the device without parental or guardian supervision.

2.10 Environmental Control

The GEWA Programmable IR Remote Control — Environmental Control Unit (ECU) is not to be relied on as the only method of interaction with IR controlled devices.

2.11 Gaze Interaction

Some people may experience a certain amount of fatigue (due to intentional eye focusing and hard concentration) or even a dryness of the eyes (due to less frequent blinking) when first getting used to Gaze Interaction. If you are experiencing fatigue or dry eyes start off slowly and limit the length of your Gaze Interaction sessions to your comfort level. Remoisturizing eye drops can be helpful to combat dryness.

3 Overview of the Tobii Dynavox I–12+ and I–15+

3.1 Key Features

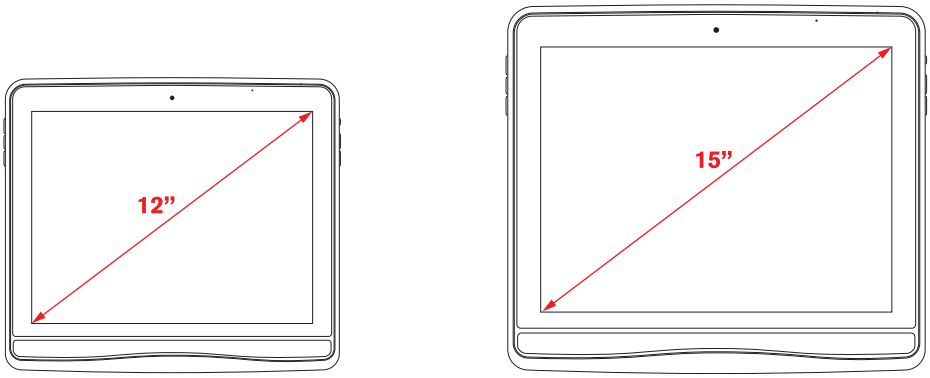
The Tobii Dynavox I-Series+ has several built-in features. Some of these come standard and some can be ordered as additional features.

Standard features: 2 × Camera, 1 × microphone, 2 × speakers, 1 × ECU (Environmental Control Unit), 1 × Bluetooth® (for mobile phones etc) and 1 × WLAN (Wireless Local Area Network)

3.2 Product Layout

A Tobii Dynavox I-Series+ device has a color Capacitive touch, LED Backlight screen. The Tobii Dynavox I–12+ has a 12.1″ screen with a 1024 × 768 pixel resolution. The Tobii Dynavox I–15+ has a 15.0″ screen with a 1024 × 768 pixel resolution.

3.2.1 The Tobii Dynavox I–12+ and Tobii Dynavox I–15+



3.2.2 Ports, Sensors and Device Buttons

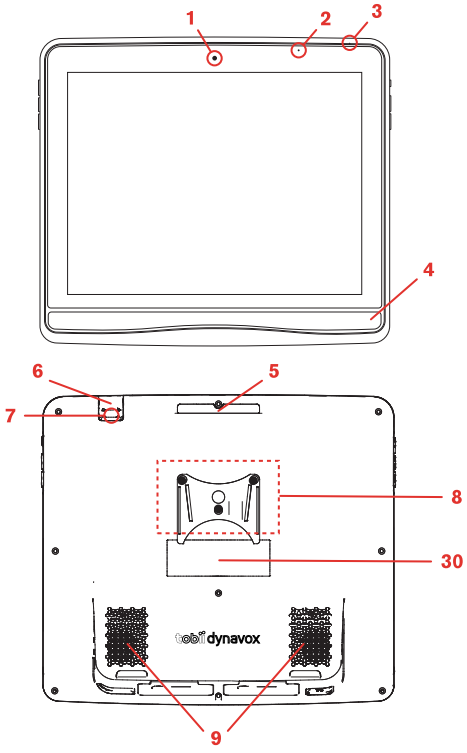


Figure 3.1 Front and Back

Position	Description	Position	Description
1	Webcam 2 MP Fixed Focus (FF)	6	GEWA Programmable IR Remote Control (Transmitter) This port is just for Transmitting IR Signals. To program the device, use port in Position 27 in *Figure 3.2 Bottom, Left and Right Side, page 17*
2	Light sensor	7	Camera 5 MP Auto Focus (AF)
3	Microphone	8	Mounting
4	Eye Tracker	9	Speakers
5	Carrying grip	30	Label

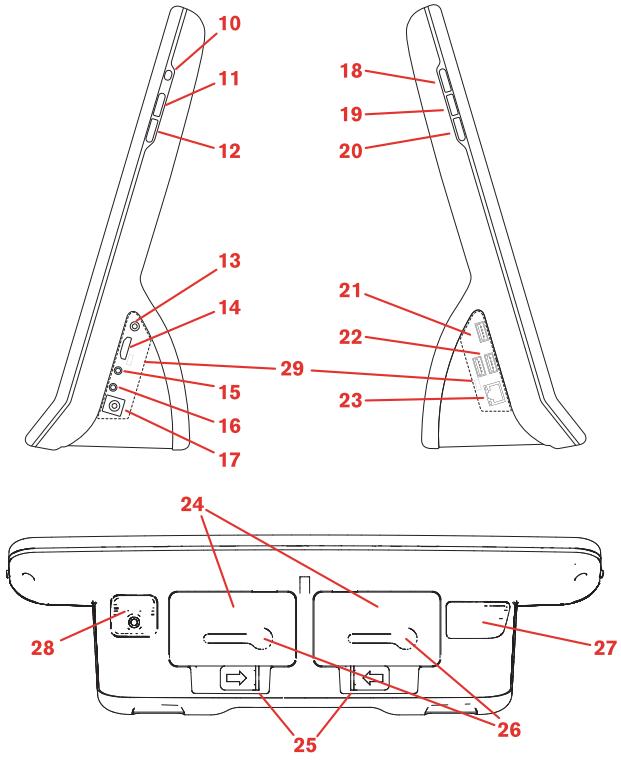


Figure 3.2 Bottom, Left and Right Side

Position	Description	Position	Description
10	Power button	20	Menu button
11	Volume Up button	21	USB 3.0 connector
12	Volume Down button	22	2× USB 2.0 connector
13	Head phone jack 3,5 mm	23	RJ45 Network connector
14	Connector for an HDMI 1.3 cable	24	Battery
15	Switch Port 1	25	Slide lock for battery
16	Switch Port 2	26	Battery indicator
17	Power Connector	27	GEWA Programmable IR Remote Control (Transmitter and Receiver) Use this port when programming the GEWA from within Tobii Dynavox Communicator /Tobii DynaVox Compass.
18	Quick Access Button 1 (Configurable)	28	microSD-card (under lid)
19	Quick Access Button 2 (Configurable)	29	I/O covers (for fulfilling IP43)

Never force a connector into a port. If the connector and port do not join with reasonable ease, they probably do not match. Make sure that the connector matches the port and that you have positioned the connector correctly in relation to the port.

Be extra careful with the USB connectors.

3.3 Preinstalled Software

The Tobii Dynavox I-Series+ device is delivered with all preordered and required software installed and ready to use. Should a reinstallation become necessary at any stage perform a Factory Recovery. For more information, see *5.11 Performing a Factory Recovery, page 44*.

The product number for Windows® can be found on the back of the Tobii Dynavox I-Series+ device.

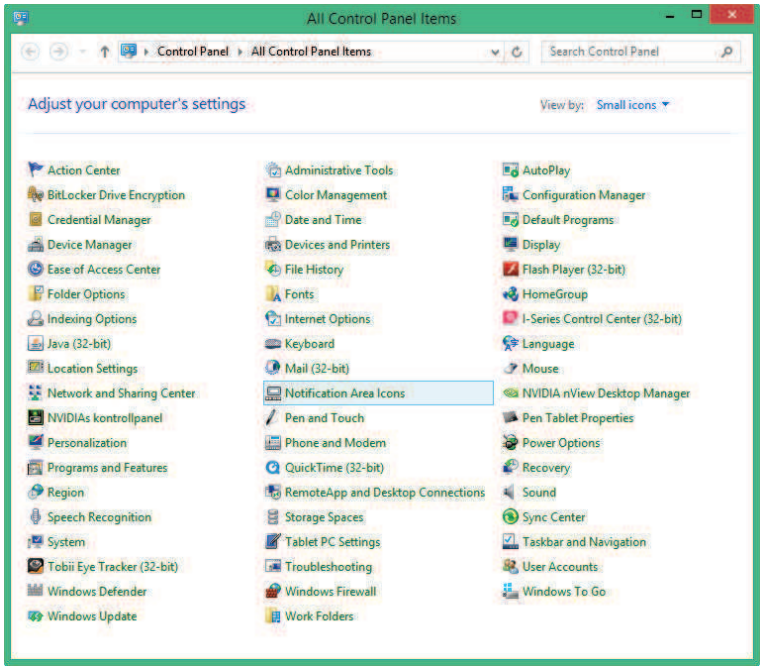
3.4 Configuring the Device

Use the preinstalled **I-Series Control Center** to configure the hardware functions on the device. You can access **I-Series Control Center** in one of the following ways:

- Double-click on the **I-Series Control Center** shortcut on the desktop, .

or

1. Go to **Start menu** > **Control Panel**.



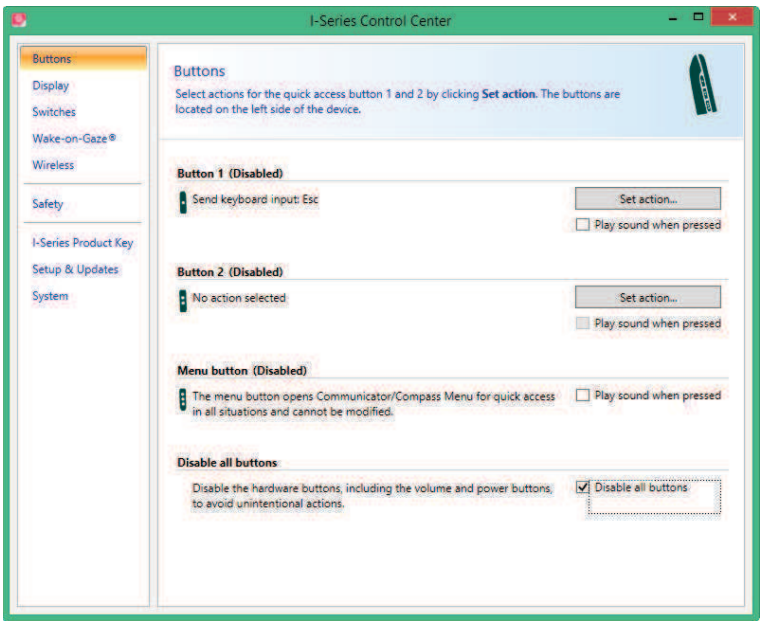
2. Double-click **I-Series Control Center**, , if the Control Panel is in Classic View.
   If the Control Panel is in Category view, select **View by: > Small icons or Large icons**, and Double-click **Tobii Dynavox I-Series+ Control Center**

or

1. Go to **Start menu > Tobii Dynavox >**.
2. Click **I-Series Control Center,** .

or

- Through the communication software installed on the device.



In the list to the left, select which hardware configuration you want to change. In the area to the right, the different settings will be revealed. The changes are instantly executed.

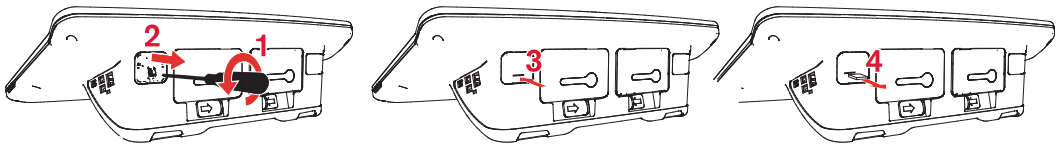
For more information about configuring the Tobii Dynavox I-Series+ with the I-Series Control Center, see *6 Configuring the Tobii Dynavox I-Series+ with the I-Series Control Center , page 46*.

Anywhere you see this icon, , an information box is displayed when you briefly rest the mouse pointer on the icon or by touching the icon on the screen.

3.5 Accessing the microSD-Card

The microSD-Card (position 28 in *Figure 3.2 Bottom, Left and Right Side, page 17*) is installed in the Tobii Dynavox I-Series+ device by default.

3.5.1 Removing the microSD-card

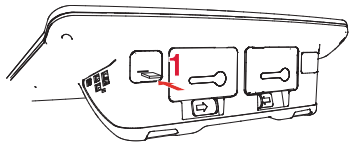


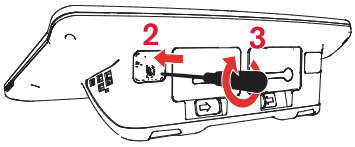
To remove the microSD-card:

1. Place the Tobii Dynavox I-Series+ device face down on a flat surface.
2. Use a Phillips screwdriver to remove the screw that fastens the lid in place.
3. Remove the lid.
4. Press to release the microSD-card.
5. Pull the card out of the socket.
6. Replace the lid.

7. Tighten the screw with a Phillips screwdriver to fasten the lid in place.

3.5.2 Inserting the microSD-Card





To install the microSD-card:

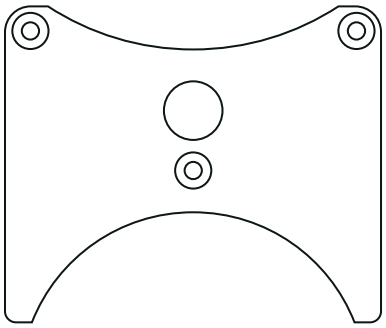
1. Place the Tobii Dynavox I-Series+ device face down on a flat surface.
2. Use a Phillips screwdriver to remove the screw that fastens the lid in place.
3. Remove the lid.
4. Carefully push the microSD-card into the socket.

> Do not use force when pushing in the microSD-card. If the microSD-card and socket do not join with reasonable ease, they probably do not line up.

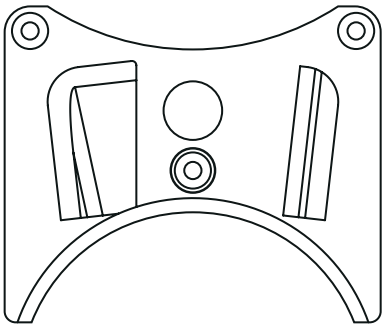
5. Replace the lid.
6. Tighten the screw with a Phillips screwdriver to fasten the lid in place.

3.6 Tobii Dynavox Quick Release Adapter Plate

Tobii Dynavox QR adapter plate has two sides:



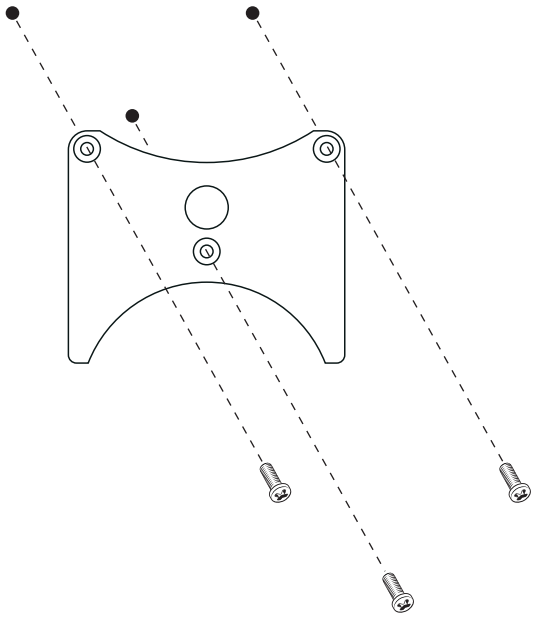
Daessy



REHAdapt

Make sure the required side of the Tobii Dynavox QR adapter plate is face away from the Tobii Dynavox I-Series+ for the mounting system to use.

3.6.1 Mounting the Tobii Dynavox QR Adapter Plate



To mount the Tobii Dynavox QR adapter plate:

1. Place the Tobii Dynavox I-Series+ device face down on a flat surface.
2. Select the required side of the plate, see *1.3.2 Mounted Use, page 10*.
3. Place the plate onto the device with the required side facing away from the unit.
4. Tighten the three (3) screws using a Torx T20 screwdriver to that fasten the plate to the unit.

3.6.2 Removing the Tobii Dynavox QR Adapter Plate

To remove the Tobii Dynavox QR adapter plate:

1. Place the Tobii Dynavox I-Series+ device face down on a flat surface.
2. Use a Torx T20 screwdriver to remove the three (3) screws that fasten the plate to the unit.
3. Remove the plate.

4 Batteries in the Tobii Dynavox I-Series+

4.1 Batteries

The Tobii Dynavox I-Series+ device has two battery compartments. The batteries are of the same size and capacity for both the Tobii Dynavox I–12+ and I–15+, see *Appendix E Technical Specifications, page 88*.

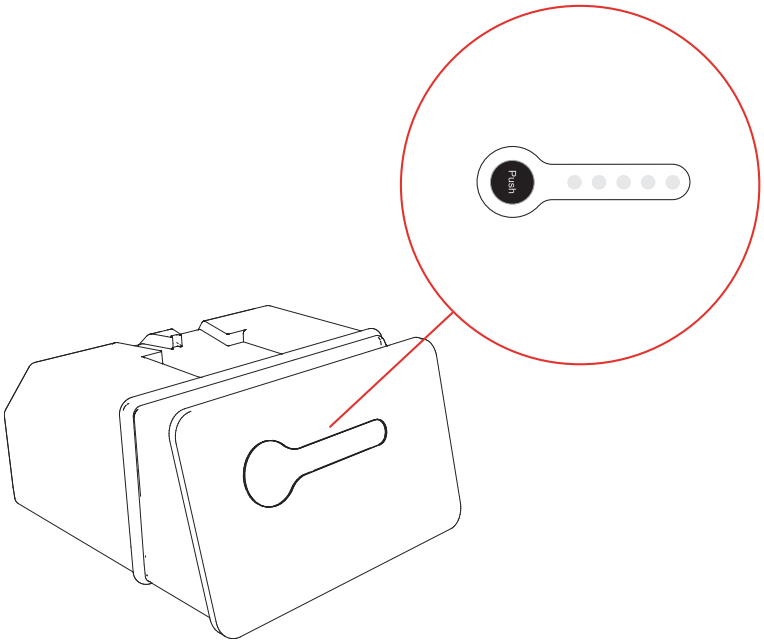


Figure 4.1 Battery with Indicator for Remaining Capacity

4.1.1 Hot Swappable

You can remove/replace one battery without switching off the Tobii Dynavox I-Series+ device, providing that the remaining battery is sufficiently charged. The remaining battery requires being at least ~10% charged to maintain device operation.

Please allow the Tobii Dynavox I-Series+ device a few seconds to detect the newly inserted battery before removing the other battery.

4.2 Charging

The batteries shall only be charged using the included adapter, or by using theI-Series Table Charger (not included, separate purchase required). When the Tobii Dynavox I-Series+ device is shut down and the adapter is plugged in, the charging of completely discharged batteries may take up to 5 hours. The device can be used while the batteries are being charged, though this may affect the time a battery takes to reach full capacity.

To be sure that charging takes place in both the Tobii Dynavox I-Series+ device and when using the I-Series Table Charger, be sure to plug the adaptor into both the wall socket and the device or Charger BEFORE you insert the batteries.

The batteries will only charge when its capacity is 95% or lower.

The expected battery lifetime is 500 charge/discharge cycles. After that, the capacity of the battery will decrease by about 20% in usage time.

For battery storage and charging temperatures, see *2 Safety, page 12* .

4.2.1 Checking Charge Level

Click on the battery icon, , in the Notification area to see the remaining charge of the battery, which is installed in the device.

You may also, at any time, check the status of a battery by pressing the indicator button on the face of the battery. Five LEDs (light-emitting diodes) will indicate the remaining charge level. For example, three lit LEDs indicate a 60% remaining charge, see *Figure 4.1 Battery with Indicator for Remaining Capacity, page 22*.

When charging, the highest capacity LED indicator will be blinking.

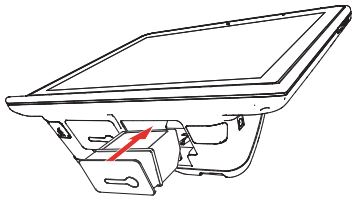
The lowest capacity LED indicator (the "20" LED), will also blink when the indicator button is pressed if the battery's capacity has dropped below 10%. So don't rely upon the blinking of the 20% indicator as a guarantee for charging.

If the batteries have been deeply discharged (this can happen by leaving an empty battery inserted in the Tobii Dynavox I-Series+ device without the power adapter connected) you may not see any indication of charging when you reconnect the adapter properly to the Tobii Dynavox I-Series+ device or the Table Charger. It may take some time (even up to 20 minutes) before you see an LED indication that any charging is taking place. The battery IS being charged during this duration though it is a recovery charge raising the level enough to begin normal charging.

4.3 Inserting and Releasing the Batteries

For safety reasons, the Tobii Dynavox I-Series+ device is delivered without the batteries inserted. The batteries are delivered only partially charged. The Tobii Dynavox I-Series+ device can be used right away. It is nevertheless recommended that the batteries are charged for at least two hours before using the device.

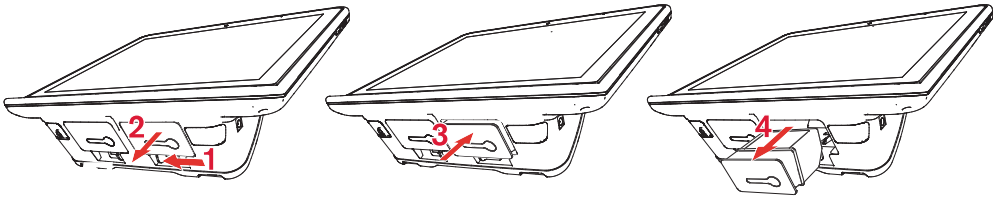
4.3.1 Inserting the Batteries



To insert the batteries:

1. Insert a battery in the battery compartment.
2. Press the battery until it locks in place. You should hear a click that confirms that the battery is in a locked place.

4.3.2 Releasing the Batteries



If the Tobii Dynavox I-Series+ is in Upright orientation:

1. Press the battery slide lock to the side.

2. Pull the battery out (the battery will stop after ~1 cm / 0.4″).
3. Push the battery up a little bit (Do not push the battery all the way in again).
4. Pull the battery out of the battery compartment..

If the Tobii Dynavox I-Series+ is in Resting orientation:

1. Place the Tobii Dynavox I-Series+ device face down on a flat surface.
2. Press the battery slide lock to the side.
3. Pull the battery out of the battery compartment.

5 Using the Tobii Dynavox I-Series+

No skill other then reading is necessary for setting up the Tobii Dynavox I-Series+ device. Follow this User´s Manual and the Quick Start Manual.

5.1 Starting the Device

Start the device in one of the following ways:

- Press the power button on the right side of the device. (Position 9 in *Figure 3.2 Bottom, Left and Right Side, page 17*)
- Activate a configured Switch (see *6.3 Switches*).

When you have started the device, the Power LED will shine blue or green depending on if the device is connected to AC or on batteries. For more information about the LED Behavior, see *Appendix C Computer Device States of Operation, page 85*.

5.1.1 Password Information

The Tobii Dynavox I-Series+ device is configured to start up, using the operating system present, without a password. Though unusual, there are situations in which the password window could plausibly pop up; for example, when creating a new user in the operating system, when returning from the operating system's sleep mode or when downloading software updates from the internet.

Creating a new windows user and downloading updates from the internet could possibly compromise the system and software settings of the operating system that have been set and installed at Tobii Technology.

Should the password window pop up, requiring a password, the default password on all Tobii Dynavox I-Series+ devices is, " **Tobii Dynavox**" (case sensitive). In order to type in the password use the Windows On-Screen Keyboard or an external USB keyboard (not included).

If you decide to change the password, be sure to write it down in a safe place for later use.

Suggested place to keep new password: _____

Without the operating system's access password, Tobii Dynavox Support may be unable to assist you with any future difficulties.

5.1.2 Tobii Dynavox I-Series+ Welcome Guide

When you start your Tobii Dynavox I-Series+ Device for the first time you will be greeted by the Tobii Dynavox I-Series+ Welcome Guide. The guide is a setup wizard that will walk you through some steps that will help you make the most of your device.

Follow the instructions and select on **Next** to get to the next page of the Guide.

5.2 Shutting Down the Device

The device should be shut down using one of the following ways:

- Use the start menu in Windows (recommended when possible).
- Press a configured Switch for two to seven seconds.

  Pressing the Switch for more than 7 seconds will shut down the device immediately, disregarding any unsaved changes.

- Through the communication software installed on the device

Should you be unable to shut the device down using either of the above, you can hold the power button on the right side of the device down for seven seconds. The device will consequently shut down immediately, without waiting for open applications to close.

This will not work if the side buttons have been disabled in the Tobii Dynavox I-Series+ Control Center. For more information, see *6.1.2 Disable All Buttons, page 47*.

This is not considered a "clean" Windows shut down and is thus not recommended unless completely necessary.

5.3 Using Gaze Interaction

The Tobii Dynavox I-Series+ operate with precision regardless of glasses, contact lenses, eye color or light conditions. Gaze Interaction enables you to control the computer with your eyes using either Gaze Enabled applications (like Tobii Dynavox Communicator /Tobii DynaVox Compass) or through the two types of Windows Control. See *5.4.1 Windows Control Type, page 28*.

5.3.1 Positioning

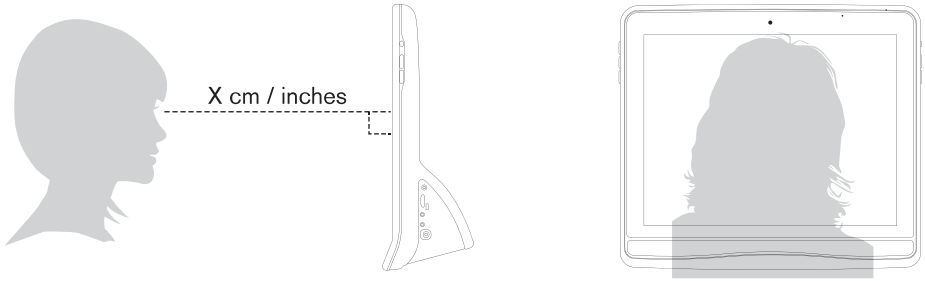


Figure 5.1 Positioning

The Tobii Dynavox I-Series+ is designed to work optimally when it is parallel to the user's eyes at a distance of about 60 cm (23.5 inches), see *Figure 5.1 Positioning, page 26*.

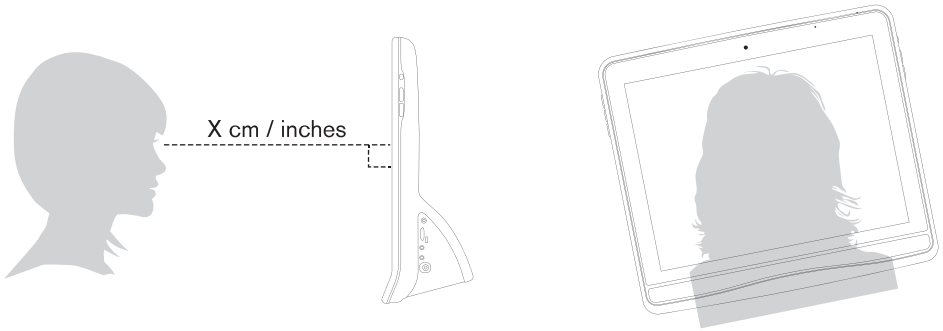


Figure 5.2 Positioning when Users Leaning Sideways or Those Lying Down

This means that for those users leaning sideways or those lying down the Tobii Dynavox I-Series+ also needs to be tilted in order to keep the users eyes parallel to the screen and at the optimal distance, see *Figure 5.2 Positioning when Users Leaning Sideways or Those Lying Down, page 26*.

Make sure the user is placed comfortably in relation to the optimal positioning of, and distance from, the unit. Be aware also that the user's comfort, as well as the Gaze Interaction performance, will be enhanced if the sun is not shining directly on the screen or into the user's eyes.

The user should be positioned at the optimal distance to allow for the best possible Gaze Interaction.

5.3.2 Track Box

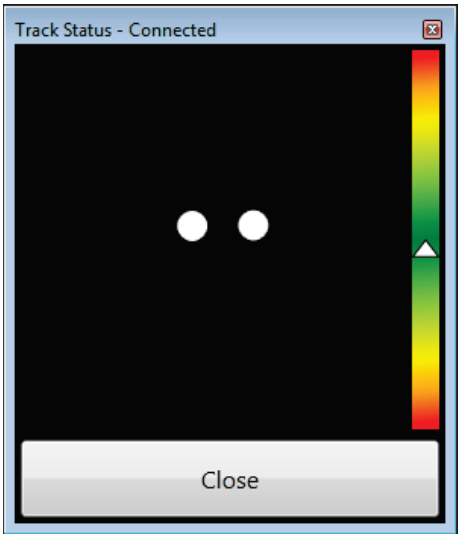
The Tobii Dynavox I-Series+ allows for extensive Freedom of Head Movement. Once the Tobii Dynavox I-Series+ is properly calibrated and placed in front of the user, no further adjustments are required.

The Tobii Dynavox I-Series+ produces an industry leading sized track box with the approximate dimensions of 30 cm × 20 cm × 20 cm / 11.8 in × 7.9 in × 7.9 in (Width × Height × Depth). The Track Box is an invisible box positioned approximately 60 cm (23.5 in) straight out from a point just above the middle of the screen.

At 70 cm (27.5 in) the Tobii Dynavox I-Series+ allows for lateral Freedom of Head Movement in an area of about 50 × 36 cm (20 × 14 in).

In order to function properly for Gaze Interaction the user needs at least one eye in the track box at all times.

5.3.3 Track Status Viewer



Use the Track Status viewer (see *5.3.3.1 Showing Track Status , page 27* for more information on how to open the Track Status viewer) to help determine the optimal height and horizontal positioning for Gaze Interaction with the Tobii Dynavox I-Series+.

- Ideally, the two dots that represent the user's eyes should be in the middle of the Track Status viewer.
- Use the distance meter on the right hand side of the Track Status viewer to determine the optimal distance the user should be from the Tobii Dynavox I-Series+.
- The white triangle in the distance meter should hover near the center, within the green, when the optimal distance from the Tobii Dynavox I-Series+ is reached.

For information about calibration of the Tobii Dynavox I-Series+ see *7.2 Calibration, page 62*. Also check the lighting conditions, related to what is mentioned above, when calibrating.

5.3.3.1 Showing Track Status

The track status viewer is a window/dialog where you can verify that the Gaze Interaction recognizes your eyes and that you are well positioned in front of the device.

Open the track status viewer in one of the following ways:

- Open **Tobii Dynavox Gaze Interaction Settings > Calibration** and select the **Track status** button.
- Right-click (long-hold finger on icon for touch screen right clicking) on the **Tobii Dynavox Gaze Interaction Settings** icon, , in the Notification area and select **Show track status**.

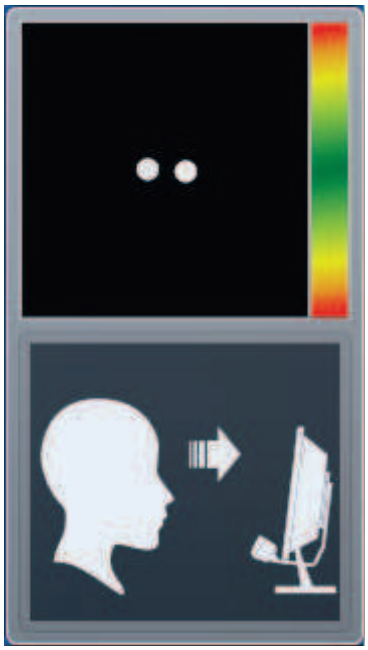
5.3.4 Positioning Guide

For extra assistance in positioning, there is a **Positioning guide** that will show itself automatically in the bottom-right corner of your monitor.

The **Positioning guide** is a visual guide that combines the function of the Track Status viewer with six different image based instructions to help the user with correct positioning.

The 6 instructions direct the user to:

1. Move head down.
2. Move head up.
3. Move head to the right.
4. Move head to the left.
5. Move head closer to the monitor.
6. Move head farther away from the monitor



Move head closer to the monitor.

Move head to the right.

The **Positioning guide** will automatically disappear when the user's positioning is improved in the way that is directed by the guide.

Some users may not want the **Positioning guide** to pop up every time their eyes leave optimal positioning.

To turn On or Off the automatic **Positioning guide**, see *7.6 System Settings, page 71*

5.4 Using Windows Control

Windows Control allows you to access the desktop and all applications of your Windows computer with Gaze Interaction.

5.4.1 Windows Control Type

Windows Control can be used in two different modes

- Gaze Selection
- Mouse Emulation

To select which type of Windows Control you wish to use and to customize Windows Control:

- Open **Tobii Dynavox Gaze Interaction Settings > Windows Control**, see *7.5 Windows Control, page 68*
- Select your preferred type of Windows Control under **Windows Control Type**

5.4.2 Starting and Disabling Windows Control

To start Windows Control, right-click on the **Tobii Dynavox Gaze Interaction Settings** icon, , in the Notification area and select **Enable Windows Control**.

Or

Double-click on the **Windows Control** shortcut on the desktop, , This will immediately start Windows Control.

To disable Windows Control, right-click on the **Tobii Dynavox Gaze Interaction Settings** icon, , in the Notification area and select **Disable Windows Control**.

You can also start Windows Control from Tobii Dynavox Communicator /Tobii DynaVox Compass or alternative communication software, which has implemented the functions provided by the Tobii Dynavox Eye Control SDK 2

Auto start

- Open **Tobii Dynavox Gaze Interaction Settings > Windows Control**.
- Check the **Auto start windows control at boot** check box if you want Windows Control to auto start when the Tobii Dynavox Gaze Interaction Software starts.

5.4.3 Using Gaze Selection

The Gaze Selection mode of Windows Control makes it possible for the user to control a standard Windows desktop operating system with a two step selection method which reduces the risks of unwanted clicks. It also prevents the following of the mouse cursor with your gaze as opposed to the controlling of it (there is no floating mouse cursor in Gaze Selection).

1. The first step is to select the desired Task from the docked Taskbar by looking at it.
2. The second step is to look at the desired portion of the screen (or icon on the screen) where you want to execute the Task. An automatic zoom function is enabled, ending in the selection of the icon or execution of the task.

All functions in Gaze Selection are Touch and Mouse enabled which makes it easier for a Caregiver or Assistant to help the user if needed. The Caregiver or Assistant can select a Function/Task or change the settings for the user much easier.

5.4.3.1 Gaze Selection Taskbar

At the top of the Gaze Selection Taskbar there is a Track Status viewer. It allows you to verify that the eye tracker recognizes your eyes and that you are well positioned in front of the device.

The Task Buttons in the Gaze Selection Taskbar can be in three different modes as shown in *Figure 5.3 The Modes for the Gaze Selection Taskbar, page 30*.

- **Normal (Unselected)** - No Task Button for Gaze Selection is chosen.
- **Primary Selection (Blue/black)** - The marked Task Button is selected and the Task will be executed after the automatic zoom when the user looks at the desired position on the screen or icon on it. If the selection method is set to Switch in the Gaze Selection Settings Dialog, the chosen Task Button will still remain active after executing the Task.

  The Functions Overlay Task will not perform any zooming. When selecting Functions Overlay with Primary Selection, the Functions Areas/Commands will be active but not visible.

- **Secondary Selection(Blue/white)** - Same as **Primary Selection** but with a higher precision. **Primary Selection** means that the zoom will progress deeper before the final execution of the Task, making the desired portion of the screen bigger and easier to select within. Activate this mode by resting your gaze on the Task Button until the color changes according to the image below.

The Functions Overlay Task will not perform any zooming. When selecting Functions Overlay with Secondary Selection, the Functions will be active and the areas of each Function will be visible to the user.

The Functions Overlay will not perform any zoom, some other tasks won't either in some situations (scroll, settings, keyboard).

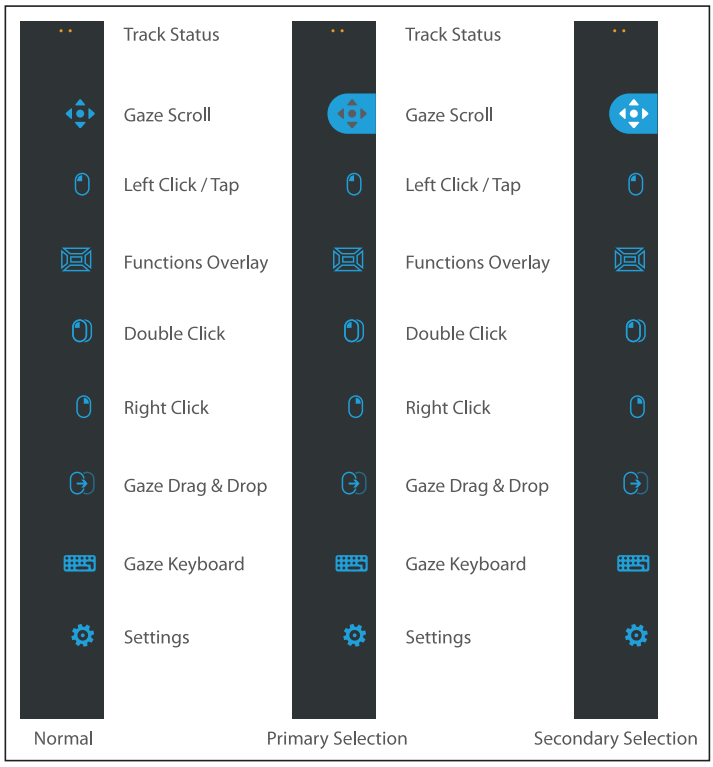


Figure 5.3 The Modes for the Gaze Selection Taskbar

5.4.3.2 Task Buttons

Task Button	Action	Description
	Gaze Drag & Drop	Task that performs two "clicks", where the first one represents the starting position for the drag and the second the drop position (to move objects or select areas). • Select the Task • Look at the object you want to move or the starting point for the area selection • Execute the Gaze Selection (first "click") by Switch or Gaze • Look immediately at the drop position for the object or end point for the area selection. • Execute the second "click" by Switch or Gaze
	Gaze Scroll	Task that, if performed on a scrollable window, enables a gaze-controlled way to scroll the page • Select the Task • Look at any scrollable area and hold your gaze, the Gaze Scroll icon will appear where you looked • Look above the icon to scroll up • Look below the icon to scroll down • Look to the left of the icon to scroll left • Look to the right of the icon to scroll right • While scrolling, look back at the icon (on the screen, not the Taskbar icon) to toggle between up/down or left/right • Look back at the Gaze Selection Taskbar (or outside of the screen) to end scrolling Use the Gaze Scroll Task to scroll vertically and horizontally in Modern UI apps and the Modern UI Windows Start Screen.
	Left Click / Tap	Task that performs a single left-click, or for touch based devices, the equivalent of a single finger Tap. When in Switch mode Left CLick / Tap is Default on and Sticky" (see *5.4.3.4.1 Sticky Tasks & Default Left Click / Tap for Switch, page 37*)
	Functions Overlay	Task that activates the Functions Overlay. Primary Selection activates the Functions Overlay. Secondary Selection activates the Functions Overlay and makes it (and its individual Functions and areas) visible over the top of anything else on the screen to assist in selecting them. The individual Functions available on the Functions Overlay are different for Windows 7 (see).
	Right Click	Task that performs a single right-click
	Double Click	Task that performs a double left-click. When in Switch mode Double Click is a "sticky Task" (see *5.4.3.4.1 Sticky Tasks & Default Left Click / Tap for Switch, page 37*)
	Gaze Keyboard	Task that opens an on-screen Gaze enabled keyboard for Gaze typing
	Settings	Task that opens the Gaze Selection Settings Dialog For more information, see *8 Gaze Selection Settings, page 73*

5.4.3.3 Functions Overlay in Windows 8

Windows 8 Gaze Selection is a revolutionary new method of Gaze Interaction. It is expressly created for the modern and intuitive touch enabled environment of tablets, as well for maximizing and enhancing the complete Gaze Interaction experience of ultrabooks, laptops, and desktop PCs.

It is created as a wholistic, full OS control, Gaze Interaction solution; enabling fully hands-free control of your Windows 8 OS. From emulated touch gestures, click types, taps and side swipes, to Charms and split screen Snapping. From real "Gaze-on/ Hands-off" multitasking to true access and control of all available legacy or current Desktop applications and settings.

Windows 8 Gaze Selection opens the tens of thousands of the current, social, professional, entertaining and educational Windows 8 Modern Apps to Eye Controlled use.

Built around making use of the intuitive power of Microsoft's new touch-centric interface for Windows 8 touch screen devices, the new Gaze Selection brings hands free use into the modern consumer computer environment.

While it is centrally built around fully hands-free use cases, Gaze Selection is also made for even faster access with Switches, as well as being completely touch (and mouse) enabled for multimodal input and third party assistance.

When selecting the Functions Overlay with **Primary Selection**, the Functions Areas/Commands will be active but not visible.

When selecting the Functions Overlay with **Secondary Selection**, the Functions will be active and the areas of each Function will be visible to the user.

The Functions Overlay will not perform any zoom.

Functions	Action	Description
	App Switcher	Function that opens the App Switcher bar where all running Modern User Interface (UI) Apps are visible including the Desktop. All software running in the Desktop, will not be visible here. They are only visible from the Desktop. The App Switcher will not show if there is only one or less Apps open. The App Switcher will not be accessible if the App Switcher is turned Off in the PC Settings.
	Show App Bar	Function that makes the App Bar for active App visible. The App Bar is context based for the active App and therefore will consist of different actions for each App.
	Charms Menu	Function that opens the Charms Menu.
	Move Taskbar	Function that moves the Taskbar from right/left.

Functions	Action	Description
	Snap Window/Close App	Function that performs three (3) different actions. • Select the to move and dock the active App to the selected Target area. • Select the to move the active App to the bottom of the screen and to Close the active App. • Select the to move and dock the active App into Full-screen view. For more information, see *5.4.3.3.1 Snap Window/Close App, page 33*.
	Windows Button	Function that toggles between the Modern Windows UI and the previous Modern UI App or Desktop. All software running in the Desktop, will not be visible here. They are only visible from the Desktop.
	Hide Taskbar	Function that hides the Taskbar for Full Screen view. To Bring back the Taskbar, select depending on which side the Taskbar is located.
	Flip Previous App	Function that swipes through all running Modern UI Apps and the Desktop. All software running in the Desktop, will not be visible here. They are only visible from the Desktop.

5.4.3.3.1 Snap Window/Close App

The Snap Window feature in Window 8 makes it possible to split and divide the screen to be able to run two to four Modern Apps at the same time. This feature is limited to the resolution of screen of the device, see *Table 5.1 Number of Apps on Screen Windows 8.1, page 33* for information on how many Apps are possible to run on which screen resolution in Windows 8.1. The lowest resolution needed to be able to Snap Windows is 1024×768 (Windows 8.1) and 1366×768 (Windows 8.0).

Table 5.1 Number of Apps on Screen Windows 8.1

Number of Apps	Screen Resolution (Pixels)
2	<1499
3	1500 — 1999
4	>=2000

Windows 8.0 can only run two Apps at the same time.

The Snap Window/Close App can only control visible Apps on the screen.

This will look different depending on how many Apps are Snapped at the same time.

To Snap the Apps:

1. Select the (Functions Overlay) Task from the Taskbar.

2. Select one of the following actions:

   - Select the to move and dock the active App to the selected Target area.
   - Select the to move the active App to the bottom of the screen and to Close the active App.
   - Select the to move and dock the active App in Full-screen view.

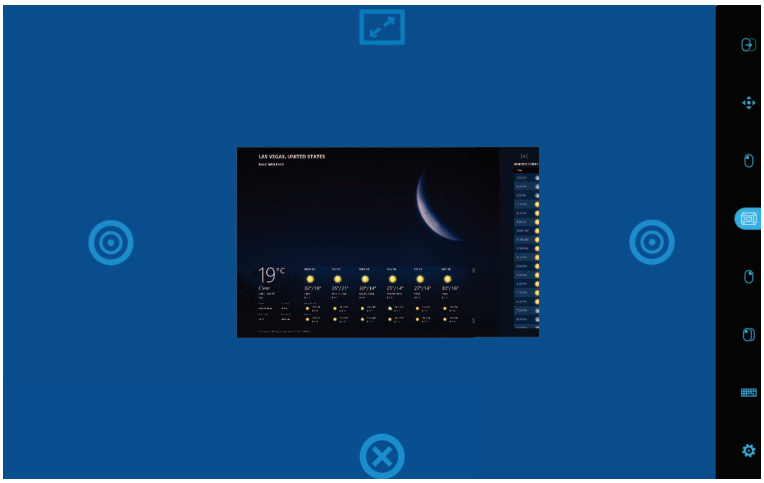
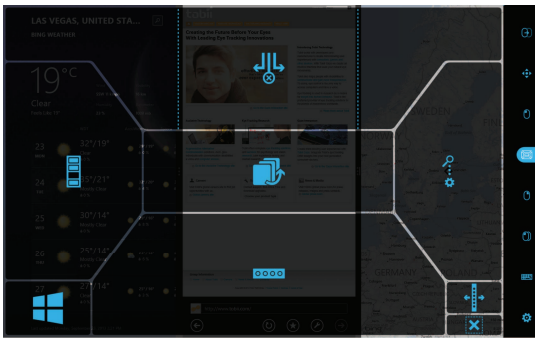


Figure 5.4 Overview

To Move and Close the Apps:

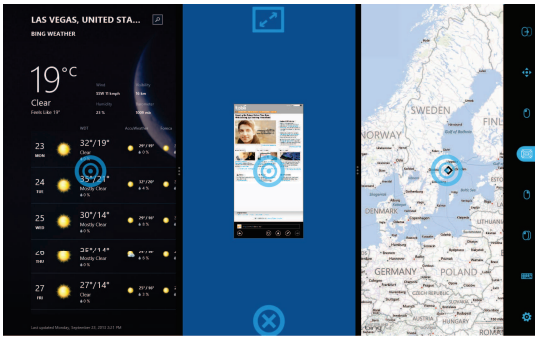
For example: If an App is Snapped in the middle, Select:

1. The function



2. Select the middle area.

3. Select:



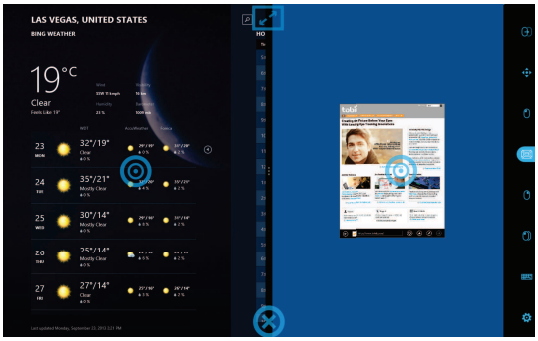
- Select to move the App into (Full-screen) view
- Select one of the (Target) to move the App to the new Target area.
- Drag the App to the (Close) icon in the bottom middle of the screen to close the App.

For example: If an App is Snapped to the left or right, select:

1. The function

2. Select the left or right area.

3. Select:



- Select to move the App into (Full-screen) view
- Select one of the (Target) to move the App to the new Target area.
- Drag the App to the (Close) icon in the bottom middle of the screen to close the App.

5.4.3.3.2 To Snap More Apps

To be able to Snap more than two Apps on the screen, the (Drag and Drop) Task from the Taskbar must be used, see *Table 5.1 Number of Apps on Screen Windows 8.1, page 33* for more information about how many Apps can be visible at the same time on the screen. With the (Drag & Drop) it is possible to customize the width of each Snap area also.

1. Start an App from the Modern UI Start Screen or from Recent Apps/App Switcher. It will place itself in the center, see *Figure 5.5 Selected Third App, page 36*.

You can always Right Click an App in the App Swittcher and choose the Target area from the Drop Down list.

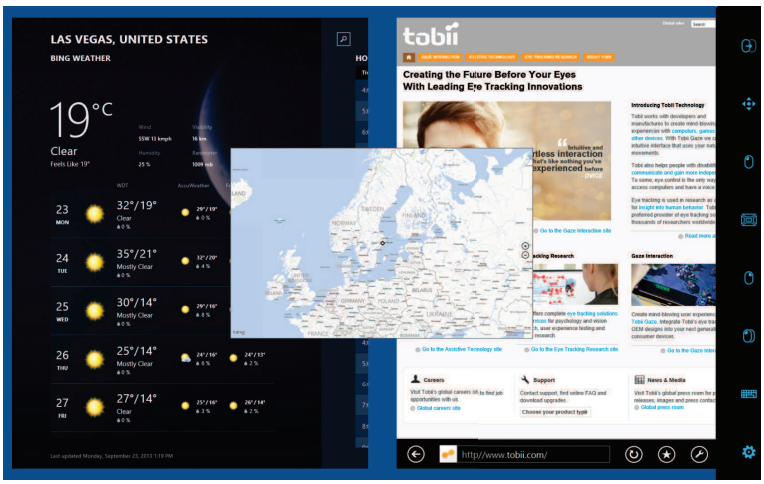


Figure 5.5 Selected Third App

2. Select the (Drag & Drop) Task from the Taskbar.
3. Drag and then Drop the App where you want it to be

- Right — Select the App with the (Drag 6 Drop) Task from the Taskbar. Drop it to the right side of the screen to place it in the right-hand target, see *Figure 5.6 Snap Right, page 36*
- Left — Select the App with the (Drag 6 Drop) Task from the Taskbar. Drop it to the left side of the screen to place it in the left-hand target, see *Figure 5.7 Snap Left, page 37*

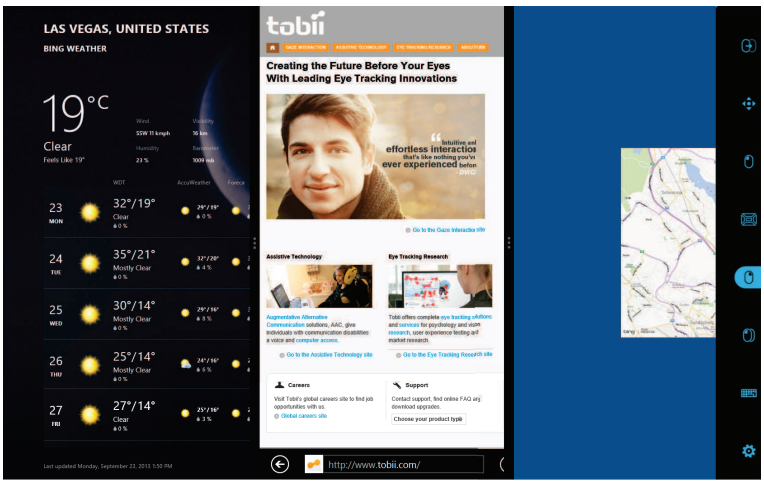


Figure 5.6 Snap Right

Figure 5.7 Snap Left

5.4.3.4 Selection Methods — Gaze and Switch

There are two methods to execute the chosen Task. The method of choice is set from within the Gaze Selection Settings Dialog, see *8 Gaze Selection Settings, page 73*.

Before executing a selection you select a Task from the Taskbar to execute. Gaze at your chosen task until it is highlighted as "Primary" or "Secondary Selection".

- **Gaze** - To execute the chosen Task, rest your gaze at the desired portion of the screen (or icon on the screen) where you want to execute the Task. An automatic zoom function is enabled, ending in the selection of the icon or execution of the task.
- **Switch** - Two different execution modes.
  - **Single activation of the Switch** - the zoom function will execute in the same way as with the Gaze method and according to the settings made in the Gaze Selection Settings Dialog, see *8 Gaze Selection Settings, page 73*.
  - **Activate and hold the Switch** - the zoom function will zoom continuously and end only upon the release / deactivation of the switch.

The Functions Overlay will not perform any zoom.

When using the Gaze method, you have to look back to the Taskbar to select a new Task after the execution of the Task, even if it is the same as you have just used.

When precision is set to zero in Gaze Selection Settings - no zoom is performed. For more information, see *8 Gaze Selection Settings, page 73*.

5.4.3.4.1 Sticky Tasks & Default Left Click / Tap for Switch

When using the Switch method, a feature is made use of called "sticky tasks". If a Task becomes "sticky" it means that you do not have to look back at the Taskbar if you want to repeat the execution of the selected Task, only if you want to change the Task to another.

When using the Switch method, the Left Click / Tap Task is "sticky" by default. This means that Left Click / Tap is always on and will always be activated by the activation of the switch, if nothing else is selected. If another Task is selected it will be active only once (for one selection) and then Gaze Selection will automatically default back to Left Click / Tap for the subsequent selections.

The exception to this is the Double Click Task; when it is selected when using Switch mode it will also become sticky, meaning that it will stay selected until another Task is selected (after which it will again default back to Left Click / Tap).

This allows for excellent use cases such as quick/continual surfing of the internet by activating the Switch and thus the Left Click / Tap Task once and then repeatedly selecting anything desired, without having to choose the Left Click /Tap Task again multiple times.

5.4.3.4.2 Activating a Task with a Keyboard button instead of a Switch

Selecting the “F12 Keyboard Button”,

, on an attached keyboard will activate a Task selection. It can be used in exactly the same way as a connected switch. For more information on Switches, see *5.4.3.4 Selection Methods — Gaze and Switch, page 37*.

5.4.3.5 Gaze Keyboard

By selecting the Gaze Keyboard button on the Taskbar, the Gaze Keyboard will launch as an on-screen keyboard. The Gaze Keyboard will be positioned either at the top or at the bottom of the screen depending on where the user has placed the last mouse click (or last cursor position) before launching the Gaze Keyboard. The keyboard will place itself on the opposite side from where the mouse/cursor is.

The Gaze Keyboard consists of four keyboard pages in a rotating loop. The user can easily switch between the different keyboard pages by selecting the next page buttons located to the far left and right on all pages of the Gaze Keyboard.

The key on the keyboard where the user is looking will be indicated by a light frame around the character/function on the key.

While the user is typing, the last 5-10 characters will be displayed in blue on the indicated/highlighted key. This feature assists the user in easily spotting misspellings and reduces the need for looking at the actual spot where the text is inserted, thus increasing typing speed.

The four keyboard pages are:

Figure 5.8 Default Startup Page

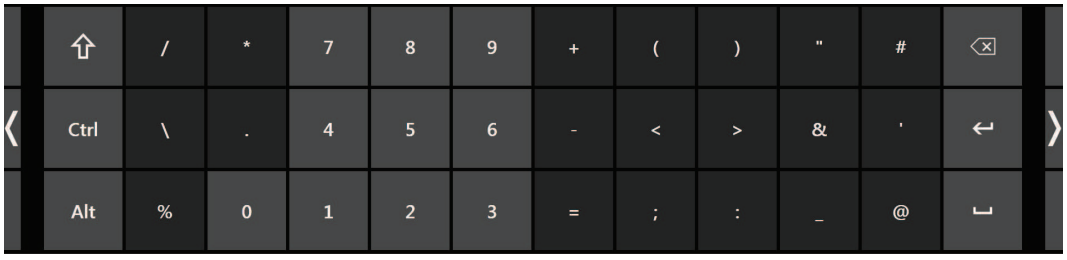


Figure 5.9 First Page to the Right

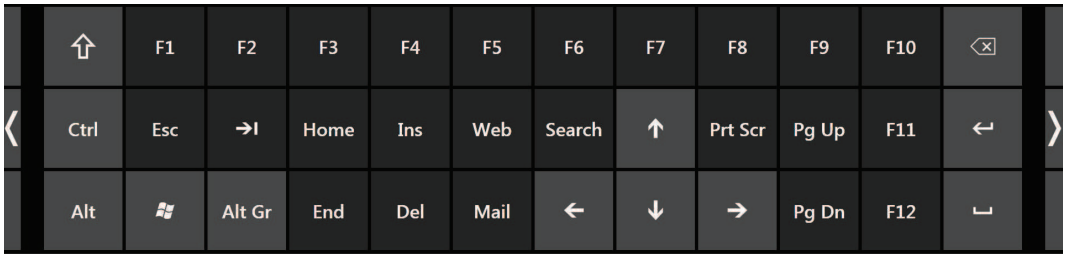


Figure 5.10 Second Page to the Right or Left

Figure 5.11 First Page to the Left

The Shift, Ctrl, Alt, Win and Alt Gr keys will become "sticky" once selected. This means that they will stay selected until the user selects a new key from the keyboard. They will stay sticky if the next selected key is another sticky key.

To write a letter with an accent:

1. Select the accent
2. Select the character
3. The character will appear with the chosen accent.

To delete a full word at a time instead of one character at a time:

1. Select the Ctrl key
2. Select the Backspace key

5.4.3.6 Gaze Selection in Combination with Region Based Keyboards

Gaze Selection can be used in combination with other eye controlled applications. "Gaze Enabled" regions in other applications are active as long as there is no active Task in the Gaze Selection Toolbar. If you are using Gaze Selection with switch the Task Buttons will be "sticky", if you need to deselect a Task just look back at the selected Task for a short moment.

5.4.4 Using Mouse Emulation

The Mouse Emulation mode makes it possible for the user to emulate and control a standard PC mouse pointer on the screen.

To configure the Mouse Emulation, go to Tobii Dynavox Gaze Interaction Settings. For more information, see *7.5.2.2 Mouse Emulation, page 69*

5.4.4.1 Placing the Mouse Emulation Menu

The menu can be placed anywhere on the desktop or docked along the edge of the screen. You dock the Mouse Emulation

Menu by dragging it to the edge of the screen. You can also do this by pressing and dragging the Move icon . When the menu is docked you have to look outside the screen to bring up the Mouse Emulation Menu items.

If the Mouse Emulation Menu is docked at the same side as the System Off-Screen Menu (For more information, see *5.6 Pause/Resume Gaze Interaction and Put the Tobii Dynavox I-Series+ to Sleep with Gaze Interaction, page 42*), the Mouse Emulation Menu might not function at all.

5.4.4.2 Clicking with Windows Control in Mouse Emulation Mode

Select what type of mouse click you want to perform from the **Button** drop down list in the Mouse Emulation Menu.

Right-click simulates a right mouse click.

Left-click simulates a left mouse click.

5.4.4.3 Magnifying with Windows Control in Mouse Emulation Mode

To use the magnifier, select the magnifier icon, , in the Mouse Emulation Menu.

If you want to perform a click with the magnifier:

1. Select the magnifier.
2. Select the other options as usual. The options will now have changed to reflect the magnification state.

Right Click Zoom

Left Click Zoom

5.4.4.4 Selecting Mouse Emulation Functions

You can set different functions for clicking:

Mouse cursor

No cursor movement on screen

Single-click

Double-click

Drag and drop

5.4.4.5 Pausing Windows Control in Mouse Emulation Mode

To pause Windows Control select the Pause icon in the Windows Control Menu.

Pause

Pausing Gaze Interaction can also be accomplished by looking at (about) the Tobii logo at the bottom of the Tobii Dynavox I-Series+, then selecting, using Gaze Interaction, the pause icon that pops up.

For more information, see *7.6.1 System Off-Screen Menu, page 71*

5.4.4.6 Scrolling with Windows Control in Mouse Emulation Mode

The scroll buttons appear automatically in the upper right corner in any object which can be scrolled. The buttons will only appear on the window which has focus. To activate the scroll select the or icon. If the icons show up when they are not desired you can use the icon to hide them.

When scroll mode is activated you will see a shaded gradient over the window which will be scrolled.

To scroll, look in the direction you want to scroll.

To toggle between left/right or up/down scroll, select the or icon for the desired direction.

Scroll functionality can be turned off in
Tobii Dynavox Gaze Interaction Settings > Windows Control > Turn off scroll functionality.

5.5 Wake the Tobii Dynavox I-Series+ from Sleep with Gaze Interaction

It is possible to wake the Tobii Dynavox I-Series+ from sleep with Gaze Interaction. This makes it possible for the user to be more independent and secure while alone or without a caregiver; during the night for example. If the user wants attention from the caregiver when the user wakes at night, the user could wake the Tobii Dynavox I-Series+ with Gaze Interaction and use the

Tobii Dynavox I-Series+ to communicate quickly to alert the caregiver. Waking the device from sleep in this way is called: **Wake-on-Gaze®**

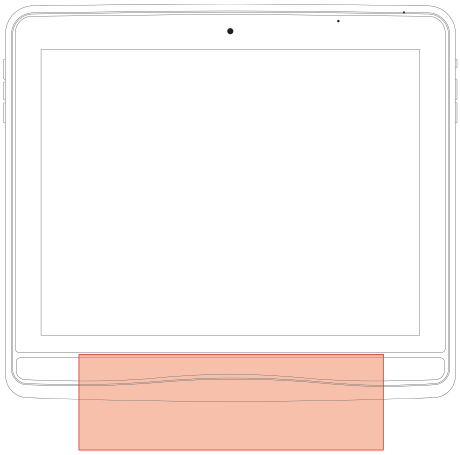


Figure 5.12 Wake-on-Gaze® Area

To Wake-on-Gaze®:

1. Make sure the Wake-on-Gaze® is activated, see *6.4 Wake-on-Gaze®, page 50*.
2. Look at the area in between the two illuminators of the Eye Tracker at the bottom of the Tobii Dynavox I-Series+, see *Figure 5.12 Wake-on-Gaze® Area, page 42*.

The Eye Tracker will search for the users eyes every 3 seconds.

The Tobii Dynavox I-Series+ will wake up from Sleep and will be ready to use.

5.6 Pause/Resume Gaze Interaction and Put the Tobii Dynavox I-Series+ to Sleep with Gaze Interaction

While using Gaze Interaction it is possible to both Pause/Resume Gaze Interaction (if the user wants to rest their eyes for a while) and to put the Tobii Dynavox I-Series+ to Sleep (to reduce battery consumption, or in situations where the device is not needed). Putting the device to sleep in this way is called **Sleep-on-Gaze**.

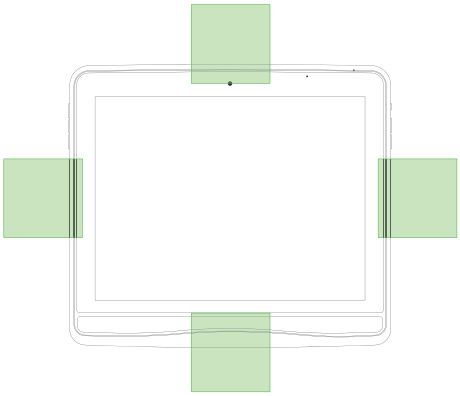


Figure 5.13 System Off-Screen Area

To Pause Gaze Interaction:

1. Make sure the **Pause/Resume** System Off-Screen menu is activated, see *7.6.1 System Off-Screen Menu, page 71*

2. Look at the area where the System Off-Screen menu has been configured for your Tobii Dynavox I-Series+, see *Figure 5.13 System Off-Screen Area, page 42*
   For more information and for how to configure the System Off-Screen menu, see *7.6.1 System Off-Screen Menu, page 71*.
3. Selecting, using Gaze Interaction, the (Pause) icon that pops up.

To Sleep-on-Gaze:

1. Make sure the **Sleep-on-Gaze** function is activated, see *6.4 Wake-on-Gaze®, page 50*
2. Look at the area where the System Off-Screen menu has been configured for your Tobii Dynavox I-Series+, see *Figure 5.13 System Off-Screen Area, page 42*
   For more information and for how to configure the System Off-Screen menu, see *7.6.1 System Off-Screen Menu, page 71*.
3. Selecting, using Gaze Interaction, the (Sleep-on-Gaze) icon that pops up.
4. Select **Yes** for Sleep or **No** for Cancel

5.7 Using the Cameras

The two built-in cameras allows you to take snapshots of items in front of the Tobii Dynavox I-Series+ device and also from the display side.

Use **Tobii Dynavox Communicator /Tobii DynaVox Compass** or other relevant software to operate the cameras.

5.8 Using the GEWA Programmable IR Remote Control

The Tobii Dynavox I-Series+ device includes a GEWA Programmable IR Remote Control — Environmental Control Unit (ECU) with two (2) filter windows:

- 1 Transmitter filter window — Position 6 in *Figure 3.1 Front and Back, page 16*
- 1 Transmitter and Receiver filter window — Position 27 in *Figure 3.2 Bottom, Left and Right Side, page 17*

Use the Transmitter and Receiver filter window (position 27 in *Figure 3.2 Bottom, Left and Right Side, page 17*) when programming the GEWA Programmable IR Remote Control in **Tobii Dynavox Communicator /Tobii DynaVox Compass**.

The GEWA Programmable IR Remote Control is a programmable Infrared device that can be used to control equipment with an IR Remote Control such as TV-sets or DVDs.

For more information about how to use and program the GEWA Programmable IR Remote Control, see the **Tobii Dynavox Communicator 5 Getting Started** or the **Compass User Guide**.

If the device you are trying to control is not responding, try tilting the Tobii Dynavox I-Series+ device up or down slightly to change the angle at which the IR signal is being sent.

The ECU is not to be relied on as the only method of interaction with IR controlled devices.

5.8.1 Handling I-Series Product Key

To use the GEWA Programmable IR Remote Control, a I-Series Product Key is required. To view or enter a I-Series Product Key, go to the I-Series Product Key section in the **I-Series Control Center**. See *6.7 I-Series Product Key, page 54*

When the I-Series Product Key is in place, the GEWA IR Programmable Remote Control is ready to use.

5.9 Adjusting the Volume

To adjust the volume use the Volume Up button (Position 11) and volume down button (Position 12) on right hand side of the Tobii Dynavox I-Series+ device. For position references, see *Figure 3.2 Bottom, Left and Right Side, page 17*

Volume adjustments can also be done in **Tobii Dynavox Communicator /Tobii DynaVox Compass**.

5.10 Adjusting the Sound

You can configure the built-in speakers using the **Windows 8.1Control Panel > Sound**.

We refer to Microsoft's information on how to configure the sound in the Windows 8.1Control Panel.

Sound adjustments can also be done in **Tobii Dynavox Communicator /Tobii DynaVox Compass**.

5.11 Performing a Factory Recovery

Every Tobii Dynavox I-Series+ device has a factory image stored on the disk. If you need to restore the device back to its original state, this can be done by using our OEM Factory Recovery Application.

This will delete any personal data or software installed after the device was delivered.

Factory Recovery means that the device will be reset to the factory mode, without anything installed. In this mode you have to re-enter your Tobii Dynavox Product Key and licenses to perform the SW installation you have ordered.

Make sure you've connected the Power Supply before you start the process - do not run the device on batteries, as it might run out of power during the Factory Recovery. In such a scenario, you might have to send the unit back to Tobii Dynavox for repair.

To perform a Factory Recovery for your Tobii Dynavox I-Series+ device, follow this procedure:

1. Backup your personal data such as documents and Tobii Dynavox Communicator /Tobii DynaVox Compass settings etc.
2. Make sure you have the Tobii Dynavox I-Series+ Product Key available
3. Shut down the device
4. Connect a keyboard
5. Start up device again
6. Hold down the (Arrow Down) keyboard button continually during startup until you get into "Windows Boot Manager"
7. Select "Factory Reset" and press the (Enter) keyboard button.
8. The Tobii Dynavox I-Series+ Software Installation dialogue will be loaded
9. Follow the instructions on the screen. These steps are identical to the initial setup you did when you first received the device.

or

To perform a Factory Recovery for your Tobii Dynavox I-Series+ device, follow this procedure:

1. Backup your personal data such as documents and Tobii Dynavox Communicator /Tobii DynaVox Compass settings etc.

2. Make sure you have the Tobii Dynavox I-Series+ Product Key available
3. Shut down the device
4. Connect a keyboard
5. Start up device again
6. Hold down the

(F8) keyboard button continually during startup until you get into “Advanced Boot Options”
7. Press the

(Esc) keyboard button to get to the “Windows Boot Manager”
8. Select "Factory Reset” and press the (Enter) keyboard button.
9. The Tobii Dynavox I-Series+ Software Installation dialogue will be loaded
10. Follow the instructions on the screen. These steps are identical to the initial setup you did when you first received the device.

The Factory Recovery process will now start. This will take about 40 minutes. After the restore process is finished, the device will be reset to its original image as it was when you first received it from Tobii Dynavox. If you have installed any additional Software or Tobii Dynavox Product Keys after you ordered the device, these will have to be manually installed again

5.12 Calibrating the Touch Screen

There are two ways of calibrating the Touch Screen depending on if the Windows Control Panel is in Category view or Classic view with Small/Large icon.

To calibrate the Touch screen from Category View in Windows Control Panel, follow this procedure:

1. Select **Start > Control Panel**
2. Select **Hardware and Sound**
3. Select **Tablet PC Settings**
4. Select the **Calibrate...** button under Display options
5. Follow the on-screen instructions

To calibrate the Touch screen from Classic View with small/Large icons in Windows Control Panel, follow this procedure:

1. Select **Start > Control Panel**
2. Select **Tablet PC Settings**
3. Select the **Calibrate...** button under Display options
4. Follow the on-screen instructions