Tobii C8 User Manual

Tobii Technology

Important Safety information about C-Series devices

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/TV technician for help.
Modifications not expressly approved by the manufacturer could void the user's authority to operated the equipment under FCC rules.

To ensure safe operation of your C-Series device, please note the following:
Caution: C-Series devices contains Lithium Ion batteries. Do not expose batteries to fire or temperatures above 45°C (113°F). These conditions may cause battery to generate heat, ignite or explode.
Caution: Do not disassemble or harm the battery. Follow local law when disposal of battery is needed.
Caution: For safe operation of C-Series devices, use only charger, batteries and accessories approved by Tobii Technology.
Caution: Do not open the metal casing of C-Series devices, as it is a hazard risk. The unit contains no serviceable parts.

Avoiding hearing damage
Permanent hearing loss may occur if ear buds or headphones are used at high volume. Set the volume to a safe level. You can adapt over time to a higher volume of sound that may sound normal but can be damaging to your hearing. If you experience ringing in your ears, please lower the volume or stop using the earphones. The louder the volume, the less time is required before your hearing could be affected. Hearing experts suggest that to protect your hearing:

- Limit the amount of time you use ear buds or headphones at high volume.
- Avoid turning up the volume to block out noisy surroundings.
- Turn the volume down if you can't 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.

Introduction

The Tobii C8 is a portable communication device with an 8.4" color TFT display with a resistive touch panel. It is one of the products in the C-series which also consist of the C12.

C-Series devices are designed to be portable, easy to use, and efficient for communication. The C-Series devices are adaptable and able to meet the needs of a wide variety of users, by supporting multiple access methods and a variety of screen sizes , to mention just a few of the many flexible features!

This User manual covers:
- Hardware functions of the C-Series devices
- C-Series Hardware options application

About C-Series devices

The C-Series speech generating devices are easy to use, easy to carry, and efficient for communication. They are intended to be used as Augmentative/Alternative Communication (AAC) devices for daily communication needs. They provide highly intelligible speech output for independent communication in a variety of environments.

Support

For support please contact your local representative. In order to receive support as quickly as possible, please make sure you have both your C-Series device and an internet connection with you when you contact support.

Warranty

Please read the user manual carefully before using the unit. The warranty is only valid if the unit is used according to the user manual and the warranty seal is not broken.

Package contents

The items below are included with your C-Series package.
- A Tobii C8
- Two rechargeable LiIon battery packs
- A DC power adapter/charger including 4 different plugs for different regions.
- A carrying strap
- A user manual with CD
- A quick start guide
- 3 pairs of side covers

Cleaning the C-Series device

To clean the C-Series device, unplug all cables and turn it off. Use a soft, slightly damp, lint-free cloth. Avoid getting moisture in openings. Don't use window cleaners, household cleaners, aerosol sprays, olvents, alcohol, ammonia, or abrasives to clean the device.
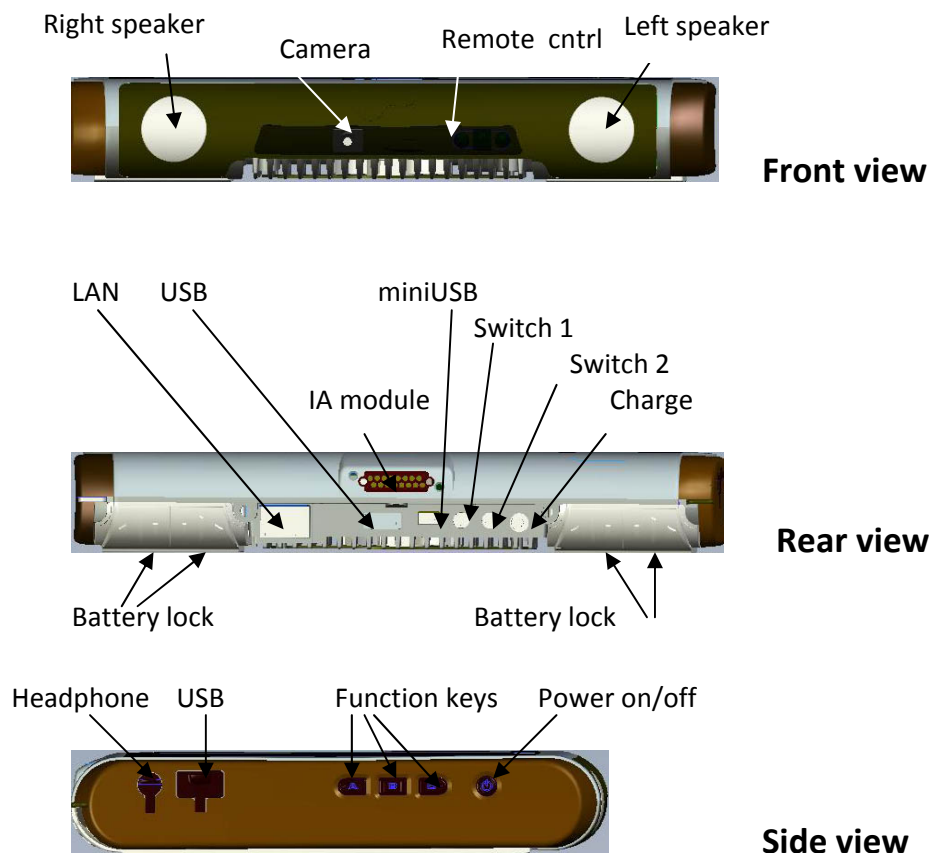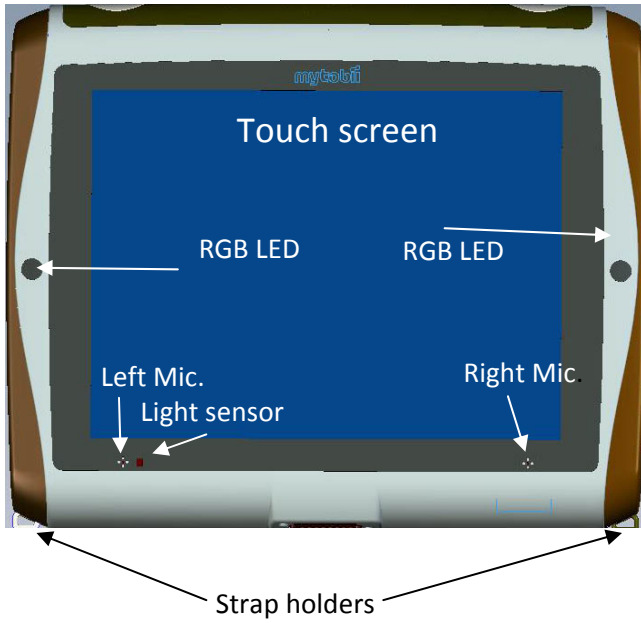
Tobii C-Series

C-Series overview

A variety of communication methods allow Tobii C8 users the ability to achieve their full potential. A user can communicate via text or symbols to generate synthesized or digitized speech for face-to-face interaction or connect through email, text messages or chat. With the Tobii C8, users also have the freedom and flexibility to write and edit documents, surf the Internet, play music and games, control a TV, DVD and other household appliances (additional equipment required) and even plan and manage their time – making independence easy.

Hardware overview

The C-Series device has a color TFT display with a touch screen. Other features are pointed out on next page. A more detailed description of the features can be found on the following pages.

Right speaker   Camera   Remote cntrl   Left speaker

Front view

LAN   USB   miniUSB   Switch 1   Switch 2   Charge   IA module

Rear view

Battery lock   Battery lock

Headphone   USB   Function keys   Power on/off

Side view

6

Top view

Touch screen

RGB LED   RGB LED

Left Mic.   Right Mic.

Light sensor

Strap holders

Bottom view

Left battery

Right Battery

Battery **lock**   SIMcard cover   Fan   Battery lock
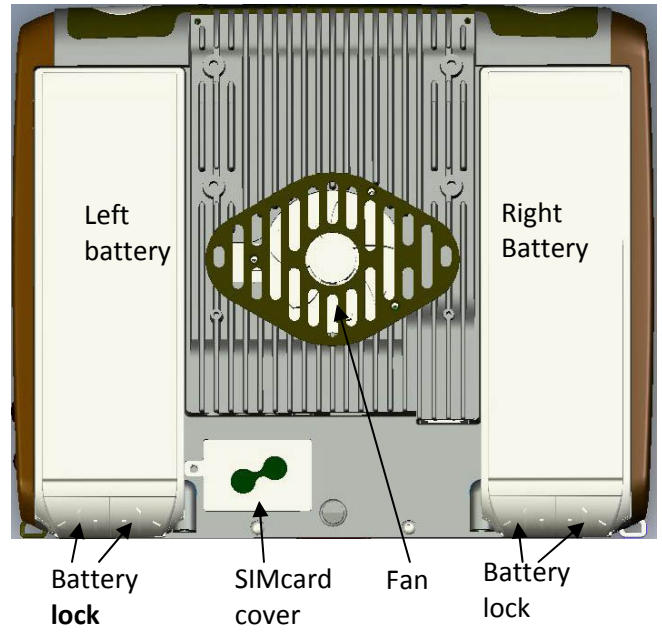
Batteries and charging

A C-Series device has two fully interchangeable batteries. One battery can be replaced without switching off the unit, AS LONG AS the (existing) battery is sufficiently charged. To check the status of a battery not currently in the C-Series device, press the Indicator button on the side of the battery. 5 LEDs (light-emitting diodes) will indicate the remaining charge, i.e. 2 lit LEDs indicate 40% charge.

The batteries should only be charged using the supplied adapter. Charging of fully discharged batteries takes up to 12 hours. The device can be used while charging.

Install batteries

When a C-Series device is delivered the batteries are not installed. Batteries are delivered half charged (2 or 3 of the 5 LEDs are lit when the indicator button on the side of the battery is pushed).

To install batteries:
Place the C-Series device face down, insert a battery in its position and push it down until it locks in place. Make sure that the locking function clicks in closed position.

You can use the C-Series device right away, but it is recommended that the batteries are charged for at least 2 hours by connecting the power delivered with the C-Series device.

How to start and shut down

The C-Series device is started by pressing the power button on the right side of the unit.

When Power On is pushed, the LEDs on both sides of the display turns green until the display starts.

Shutting down the C-Series device should always be done from the start menu in Windows when possible. If this is not accessible, the power button at the right of the device can be held down for five seconds to shut it down.

Display and touch screen

The C-Series is available in two sizes, the Tobii C8 and the Tobii C12. Both devices have a color display with a touch screen.

C8 has a resolution of 800 by 600 pixels and an 8.4" screen.
C12 has a resolution of 1024 by768 pixels and a 12.1" screen.

The backlight intensity can be adjusted manually or automatically using the light sensor below the screen. For setup of this feature see chapter *Backlight*.

The touch screen interprets the user's touch and moves the cursor wherever the user moves his or her finger. The touch screen can be "calibrated" for the user's individual touch in the separate touch screen software or in C-Series Hardware option, see chapter Touch Screen

Use your finger or a stylus on the touch screen; do not use sharp objects that can scratch or puncture it.

8

Ports

The right side of the unit has two ports, one USB port and one port for connecting headphones.
The back of the device has the following ports:

- A standard RJ 45 connector to connect to a 100/10 Mbps LAN
- A USB port
- A mini USB port
- Two ports for switches
- A DC power connector

Built in functionality

The C-Series has several built in functions, some of which come as standard and others that can be ordered as additional functions.

Standard functions: WLAN, Bluetooth, camera, ECU (environmental control unit), microphones, speakers and headphones

Additional functions: Mobile phone

Each function is described below.

WLAN

The built in WLAN enables connection to a wireless network following the standard 802.11b/g. To check that the built in WLAN is activated, check the Wireless section of the C-Series Hardware Options.

Bluetooth

The built in Bluetooth enables connection to wireless devices following the Bluetooth standard. To check that the built in Bluetooth is activated, check the Wireless section of the C-Series Hardware Options.

Camera

The built in camera allows you to take snapshots of items in front of the C-Series device

Infrared environmental control unit

The C-Series device contains a built in infrared environmental control unit (Infrared ECU). This can be used to control TIRA/GEWA units, X10 units or other equipment with IR remote controls like TV-sets or DVDs etc.

Microphones

The C-Series units have two built in microphones placed below the screen.

Speakers and headphones

The speakers and the headphone can be configured in C-Series Hardware Options and/or Vista Control Panel.

Mobile phone

To use the built in Mobile phone (optional accessory) a valid SIM card from a network operator is needed. The SIM card should be installed beneath the SIM card cover on the back of the C-Series device. The Mobile phone can be used to:
- Send and receive SMS and MMS messages
- Make telephone calls
- Answer telephone calls

Device buttons

On the side of the C-Series device there are four buttons. One is the power on/off button. The functions of the other three buttons are customizable. For more information please read under Button in chapter C-Series program.

User profile card

The C-Series device comes with a 1GB user profile card installed. The purpose of this card is to store personal settings and data. . In case of damage to the C-Series device, the profile card can be inserted into a new device for quick and easy retrieval and restoration of personal data and settings.

Tobii C-Series program

Software Overview

This Software chapter describes the software made by Tobii Technology that comes with the C-Series devices. This software is referred to as the C-Series Hardware Options and interfaces with the C-Series device features described previously in this manual.

Installation

The C-Series devices are delivered with all ordered software installed and ready to use. If a reinstallation becomes necessary at any stage, a setup file and a compact disc is also included.

C-Series Hardware Options program

To view C-Series Hardware Options; on the **Start** menu, click **Control Panel**, and then click **C-Series Hardware Options,** if the Control Panel is in Classic View. If it is in Control Panel Home it will be found by clicking **Additional Options**.

Select in the list to the left which option you want to change and the different option to be set will be shown to the right.

Click **OK,** down in the right corner, and your changes will be saved and C-Series Hardware Options program will be closed.

Changing the settings here will affect the C-Series programs and hardware. However, some individual settings for other software programs (such as your communication software) need to be changed within that program's settings menu.

Audio settings

The speakers can be configured to output either one of the left or right channel or both channels (stereo) or none (mute). This is done by clicking one of the options below **Speaker output**.

For enabling usage of headphones, select the **Enable headphones** check box. To disable, click to clear the **Enable headphones** check box.

Backlight

The screen brightness level can be adjusted manually by moving the slider, to the right to increase the brightness and to the left to decrease it. The backlight needs a short moment to adjust when changing the brightness.

Note that using a darker setting can make your battery last longer.

Buttons

On the side of the device there are three buttons: *A, B and C*. The functionality of these buttons can be customized.

Click **Set action** to view the dialog box where you can select the action you would like the button to perform. By clicking one of the actions the options for this action will be shown below.

Description of the different actions:

Send Input – choose either to send a keyboard input, a mouse click or a specified text by clicking the option you want the button to perform.

> **Send keyboard input** – In the **Send keyboard input** list click the keyboard stroke you want to be executed.
> **Send mouse click** – In the **Send mouse click** list click the wanted mouse click; left middle or right.
> **Send text** – In the **Send text** box type the text you want to send.

Start Application – select the application you want to start, either from the list of application or browse it by clicking the browse button. More information here…

Volume – choose to increase, decrease or mute the volume by clicking the preferred option.

Backlight – choose to either increase or decrease the screen backlight by clicking the preferred option.

Eye Tracking – to enable this option you have to install Tobii eye tracking program, see chapter Eye tracking for installation instructions.

The eye tracking options available to set are:

> Use for eye tracking activation
> Show track status
> Calibrate eye tracking
> Pause eye tracking on/off

Wireless – you can either set all radio connections on/off or each wireless unit on/off one by one.

Switches

The C-Series devices has two ports for external switches, see picture X in C-Series chapter.

The actions of these switches can be customized by clicking **Set action**, and then choosing from the list of available actions. These actions are the same as for the hardware buttons.

Touch Screen

Press the calibrate button to start a calibration of the touch screen. More info on how to calibrate… Use your finger or a stylus on the touch screen; do not use sharp objects that can scratch or puncture it.

System Information

System information shows the version and model of the device and the licenses activated. Please have this information available if you have problems with the device and need to contact support.

Under *Licenses* the different license number are displayed.
By clicking **Copy all information** you can paste the information into a document (such as Notepad or WordPad) or into an email.

Technical specifications

Microphones	2 x Integrated
Processor	Intel Core Duo U2500
Operating System	Microsoft Vista
Hard disk drive	60 GB
SD Card	1 GB
USB Connection	3 connections
LAN connection	Yes
WLAN	Yes
Headphone connections	Yes
Switch connection	2 connectors
Power charge connection	Yes
Bluetooth	Yes
GSM	Yes, optional
Battery time - batteries are hot swappable	Approximately 4 hours
Integrated camera	Yes
Deskstand	Integrated

Mounting	VESA as standard. REHAdapt and DEassy optional

Technical safety

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) The device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment .FCC Radio Frequency Exposure statement, This product has been evaluated under FCC Bulletin OET 65C and found compliant to the requirement asset as set forth in CFR 47 section 2.1093 and 15.247(i) addressing RF Exposure from radio frequency device, The redialed output power of this product is far below the FCC radio frequency exposure limits.

WARNING：
 Modifications not authorized by the manufacturer may void users authority operate this device.

SAR Information

The SAR limit of USA (FCC) is 1.6W/kg and in Europe (CE) is 2.0 W/kg averaged over one (FCC)、ten (CE) gram of tissue. Device types Tobii C8 (FCC ID: W5MTOBIIC8) has also been tested against this SAR limit. The Highest SAR Values reported under these standard during product certification for use when properly put on the lap is 1.025W/kg(FCC) and 0.239 W/kg(CE). To maintain compliance with FCC RF exposure requirements.

Specific Absorption Rate Data

This laptop PC meets the government's requirements for exposure to radio waves.
Your laptop PC is a radio transmitter and receiver. It is designed and manufactured to exceed limits for exposure to radio frequency (RF) energy set by the Federal Communication Commission (FCC) of the U.S Government and Commission(CE) of European Union. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

The exposure standard for laptop PC employs a unit of measurement known as the Specific Absorption Rate, or SAR, The SAR limit set by the FCC is 1.6 W/Kg and (CE) is 2.0 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC and CE with the laptop PC transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the laptop PC while operating can be well below the maximum value. This is because the laptop PC is designed to operate at multiple power levels so as to use only the power required to reach

the network. In general, the closer you are to a wireless base station, the lower the power output.

Before a laptop PC model is available for sale to the public in the U.S and EU, it must be tested and certified to the FCC and CE that it does not exceed the limit establish for safe exposure. The tests are performed in positions and locations reported to the FCC and CE.

While there may be differences between the SAR levels of various laptop PC s and at various positions, they all meet the governmental requirements for safe exposure. Please note that improvements to this product model could cause differences in the SAR value for later products, in all cases, products are designed to be within the guidelines.

In the United States and Canada, the SAR limit for laptop PC used by the public is 1.6 W/Kg averaged over one gram of tissue. In the EU, the SAR limit for laptop PC used by the public is 2.0 W/Kg averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

Software Copyright Notice

The software products described in this manual may include copyrighted and third-party software stored in semiconductor memories or other media. Laws in the United States and other countries preserve for manufacturer and third party software providers certain exclusive rights for copyrighted software, such as the exclusive rights to distribute or reproduce the copyrighted software. Accordingly, any copyrighted software contained in the product may not be modified, reverse engineered, distributed, or reproduced in any manner to the extent allowed by law. Furthermore, the purchase of the product shall not be deemed to grant either directly or by implication estoppels, or otherwise, any license under the copyrights, patents or patent applications or any third-party software provider, except for the normal, non-exclusive royalty-free license to use that arises by operation of law in the sale of a product.

Safety and General information

This section contains important information on safe and efficient operation of your laptop PC. Read this information before using your laptop PC.

Exposure To Radio Frequency (RF) Energy

Your laptop PC contains a transmitter as receiver. When it is ON, it receives and transmits RF energy. When you communicate with your laptop PC, the system handling your call controls the power level at which your laptop PC transmits.
Your laptop PC is designed to comply with local regulatory requirements in your country concerning exposure of human beings to RF energy.

Operational Precautions

For optimal laptop PC performance and to be sure that human exposure to RF energy does not exceed the guidelines set forth in the relevant standard, always follow these instructions and precautions.

RF Energy Interference/Compatibility

Nearly every electronic device is subject to RF energy interference from external sources if inadequately shielded, designed, or otherwise configured for RF energy compatibility. In some circumstances your laptop PC may cause interference with other devices.

Contact information

Tobii Technology AB
Karlsrovägen 2D
182 56 Danderyd
Sweden
support@tobii.com
+46-8-663 6990