Tellus 4

manual

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Tellus 4

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Jabbla

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1 - Introduction

The Tellus 4 is a dynamic display solution for augmentative and alternative communication. The Tellus 4 uses Mind Express but can be equipped with other software.

The Tellus 4 is also a powerful computer platform with additional features such as high quality stereo speakers, an alternative access interface for switches, two different touch screen technologies: active pen and finger touch, an integrated infrared remote control system (GewaLinked) and a mounting plate for the DaeSSy quick-release mounting system. Tellus 4 has 2 programmable buttons to allow system control such as for instance volume settings.

The heart of the Tellus 4 is Mind Express, a powerful software program for graphically based communication. For an optimal use of the system we advice you to become familiar with the software program Mind Express. In this manual some references will be made to the use of Mind Express.

The Tellus has a communication supporting function and is applicable for people (from the age of 3 years) with a communication disability, for general use in their daily life. The user should have the mental and motor ability the use the device. The Tellus should not be used for clinical, therapeutic or diagnostic applications.

1.1 Safety precautions

The Tellus will in most cased be mounted on a wheelchair. When mounted on a wheelchair, make sure that the fixation is done correctly and that the mounting of the Tellus is also locked on the mounting system. This is to avoid that theTellus drops from its mounting system due to shocks and bumps while driving.

The Tellus has internal Li-ion batteries. Do not trow away the battery after replacement. Follow the proper waste regulations of your state or region. You can contact your local dealer or sent the used battery back to your local dealer.

In case the Tellus would be stored for a longer period, make sure that the Tellus is completely powered off and that the battery is fully charged.

Keep the Tellus away from high temperatures or do not leave the device in spaces where it can be or become very hot (for instance a car during the summer). High temperatures can have a negative effect on the battery life.

The Tellus is splash proof on top, but be aware that it has loudspeaker holes at the back. Avoid dirt and moisture intruding the Tellus via the loudspeaker holes, the microphone hole or the connectors. This can effect the quality of the sound and the recording or it can effect proper operation of theTellus. Follow the cleaning instructions when cleaning the Tellus.

 The Tellus has a touch screen to make selections on the screen. You can only use your finger. You do not need to press hard to make a selection. Do not use a stylus with sharp edges because that could make scratches on the screen.

The Tellus has a desk stand to allow you to put and use the device upright on a table. A little magnet in the housing of the Tellus will keep the desk stand closed when not used. You should not use the desk stand as a handle to carry the Tellus. It is not designed for that purpose and it could come loose so that the Tellus would drop on the floor.

The Tellus has an internal high performance microphone to make recordings. Depending on the adjustable output volume and the original volume of the recorded message, the reproduced message can have a high volume. Be aware of this when making recordings, speak at a normal sound level.

1.1.1 Additional safety notes concerning the radio components of the Tellus

The Tellus is equipped with radio components (Wireless LAN, Bluetooth, UMTS). You must be sure to observe the following safety notes when using the Tellus:

• Switch off the Tellus when you are in an aircraft.

• Switch off the radio components when you are in a hospital, an operating room or near a medical electronic system. The transmitted radio waves can impair the operation of medical devices.

• Switch off the radio components when you let the device get near flammable gases or into hazardous environments (e.g. petrol station, paintshops).

1.2 General characteristics

- Intel® CoreTM i5 2.4 Ghz

  Windows 7 Pro 64 bit

  4 GByte DDR3

  500 GByte SATA HD

- Integrated WLAN (IEEE 802.11 b/g)

  Integrated Bluetooth

  Integrated 3G/UMTS

- 3x USB 2.0 ports

  1 SD Card slot

  1 Firewire (IEEE-1384) port

- Wide vieuw 13,3" WXGA high-bright LED screen (1280 x 800)

  Dual Touch screen technology: active digitizer and capacitive finger touch

  2 programmable switches on the back + direct connection of switches for scanning

  Dual microphone

  WebCam

- 1st battery: 6 cell Li-Ion 62 Wh, 2nd hot swappable battery: 6 cell Li-Ion 41 Wh or DVD
- Mounting plate for DaeSSy quick release mount
- W x H x D: 33,5 x 26 x 6-4,5 cm
  13,2 x 10,2 x 2,4-1,8 inch

  Weight: 2,8 kg (2nd battery adds 0,285 kg)
  6,2 lbs (2nd battery adds 10 oz)

2 - Parts, Connectors and System Indicators

2.1 Parts and connectors
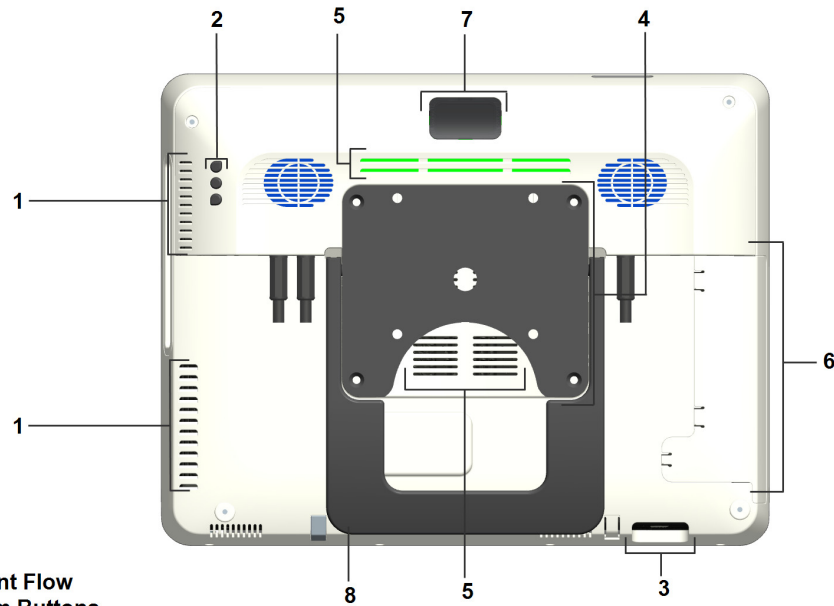
1. Air Vent Flow
2. System Buttons
3. Socket SIM card
4. Mounting Plate
5. Air Vent Flow
6. 2nd Battery / DVD cover
7. Remote IR Port
8. Desk stand

2.1.1 Air Vent Flow

Provides secondary cooling for the processor. Do not obstruct the ventilation slots.

2.1.2 System Buttons

Buttons1 and 3 are programmable buttons. The default factory settings are volume up (button 1) and volume down (button 3).


Pressing Button 2 for longer then 1,5 sec executes the same function as the ESCape key on a keyboard. It allows to stop switch scanning algorithms. This will also display again the title bar in case it was hidden (See also Mind Express Manual).

Press button 2 shortly to generate a right mouse click on the next screen touch.

2.1.3 Socket SIM card

The Tellus has an internal UMTS module to allow to join a broadband network (internet, GSM datatransfer). To enable access to such a mobile radio network you need to place a SIM card in the Tellus that support this feature.
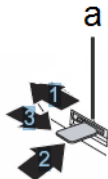
Open the protective rubber cover of the SIM card slot. Do not pull on the SIM card lock! The lock could break off otherwise. But always slide the lock in the direction of the arrow as shown.

Slide the SIM card lock (a) in the direction of the arrow (1). The clip (a) controls the power supply for the UMTS module. The UMTS module is switched off while the clip is open.

Slide the SIM card with its contact points upwards as shown into slot (2) until it engages.

Slide the SIM card lock (a) in the direction of the arrow (3).

Close the protective rubber cover of the SIM card slot.

2.1.4 Mounting Plate

Compatible DaeSSy Mounting plate for easy and save mounting via the quick release Daessy Mounting System.

2.1.5 Air Vent Flow

Provides secondary cooling for the processor. Do not obstruct the ventilation slots.

2.1.6 Second Battery / DVD cover

Tellus can be equipped with a second hot swappable battery. This means that you do not need to switch of the Tellus to replace the 2nd battery. The 2nd internal battery is located behind the battery cover. Only open the battery cover unless it is necessary.

2.1.7 Remote IR Port

Window for the integrated GEWA remote control unit (option) allowing recording and transmitting IR codes for environmental control.

2.1.8 Desk stand

The desk stand allows to put the Tellus 4 on a table and use it standing up. A little magnet holds the desk stand in its closed position when carried.
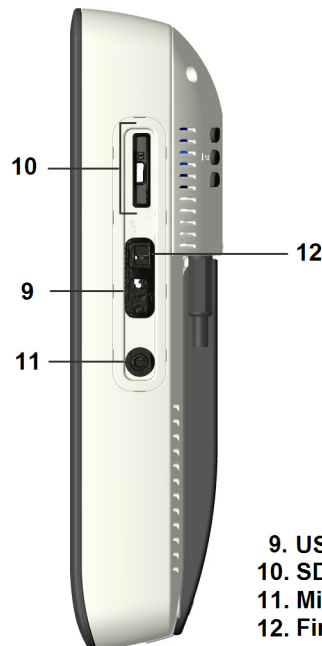
9. USB Port 1
10. SD Card Slot
11. Microphone Jack
12. Firewire port (4 pins)

2.1.9 USB Port 1

The Universal Serial Bus Port 1 allows to connect Universal Serial Bus compliant devices such as a mouse, a keyboard, a printer, a floppy drive, a CD-Rom etc. USB 2.

2.1.10 SD card slot

The SD card slot is used to insert and use SD memory cards on the Tellus. Inserting a SD card should not require any force. If you feel any resistance when inserting the card you should check if the poralisation of the SD card is correct.

To avoid data loss when removing the card it is better to left click on the icon to safely remove hardware, located in the taskbar. Select the card you want to stop, before removing it

2.1.11 Microphone Jack

Allows you to connect an external microphone. The Tellus 4 also has an integrated microphone array of 2 microphones.

2.1.12 Firewire port (4 pins)

Allows you to connect Firewire compatible peripherals to the Tellus.

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3. Socket SIM card
13. USB Port 2
14. USB Port 3
15. Headphone
16. Switch 1
17. Switch 2
18. Power / Adapter DC

2.1.13 USB Port 2

The Universal Serial Bus Port 2 allows to connect Universal Serial Bus compliant devices such as a mouse, a keyboard, a printer, a floppy drive, a CD-Rom etc.USB 2.

2.1.14 USB Port 3

The Universal Serial Bus Port 2 allows to connect Universal Serial Bus compliant devices) such as a mouse, a keyboard, a printer, a floppy drive, a CD-Rom etc. USB 2.

2.1.15 Headphone

The headphone output will not automatically switch off the speakers. Both speakers and headphone are controlled by software.

2.1.16 Switch 1

This is the first switch input for operating the Tellus with 1 switch scanning.

2.1.17 Switch 2

This is the second switch input for operating the Tellus with a 2nd switch.

2.1.18 Power / Adapter DC input

Use this input to connect the Tellus with the adapter/charger that is delivered with the device. Do not use another adapter. Using another adapter might damage the unit.

19. Light sensor
20. Microphone array
21. Power ON/OFF switch
22. Power indicator
23. Web cam

2.1.19 Ambient Light sensor

The light sensor measures the environmental light and allows the Tellus to automatically adapt the backlight of the display. This will optimise power consumption and increase battery life.

Select the Light Sensor on_off symbol on the desktop to switch on or off this utility.

2.1.20 Microphone array

The Tellus has an integrated microphone array of 2 microphones. The internal microphones will be switched off as soon as an external microphone is connected.

2.1.21 Power ON/OFF switch

Press the Power ON switch shortly to power up the Tellus. The power indicator will turn on.

When turned on, the Tellus can be put into stand by mode by pressing the on/off switch shortly.

In stand by mode all system functions are turned off. Power to memory is still on, maintaining data in programs that were running before entering the Stand by mode. Power consumption is now very low in favour of a long battery run time.

Resuming from stand by mode can be done by pressing the Power Button shortly. After approximately 3 seconds the Tellus will be ready to be used again. Switch users can use switch 1 or switch 2 to resume from Stand by mode.

Reset the Tellus

In case the Tellus does not react properly and you are unable to switch off the unit, press the power button for more than 5 seconds to reset the Tellus. The Tellus will shut down automatically.

2.1.22 Power indicator

The Power indicator turns on when power is switched on. In stand-by mode the Power indicator blinks shortly every 2 seconds.

2.1.23 Web cam

Depending on the software used, you can use the integrated webcam to take pictures, record video clips or take part in web chats. The picture quality depends on the lighting conditions and the software being used.

2.1.24 Battery indicator

The Tellus has two internal batteries. The main battery 1 and a hot swappable battery 2. Battery 2 can be replaced by a DVD player. The battery indicator shows the state of charge of the installed battery. Following description applies to both batteries.

The indicator is lit in	blue	battery is between 50 % and 100 % charged
	orange	battery is between 13 % and 49 % charged
	red	battery is between 0 % and 12 % charged

The indicator flashes orange	The battery state of charge is being checked (for four seconds after battery installation).
The indicator flashes red	The battery is faulty.
The indicator is not lit	There is no battery installed.

3 - Tellus 4 Options

3.1 Programmable User Buttons
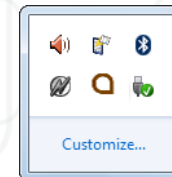

Programmable
User buttons
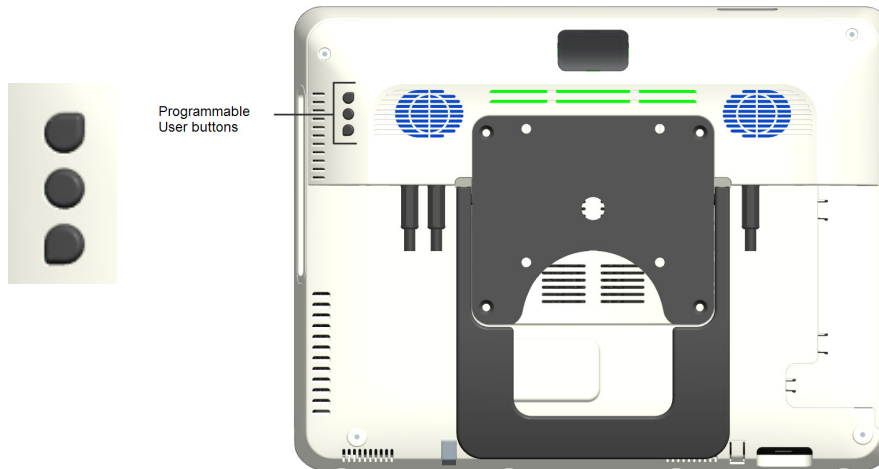
The Tellus has 2 programmable buttons, button 1 and 3, on the back of the device. The buttons can be used to control system functions such as volume settings. The default settings are volume up and volume down.
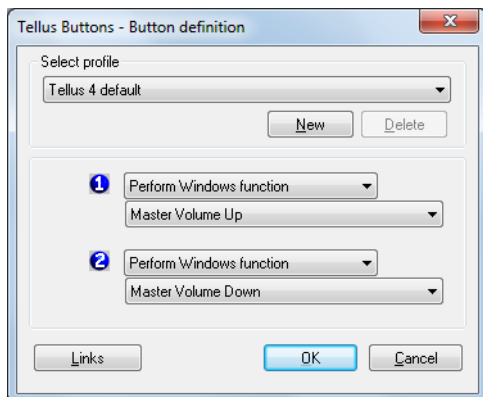
To program the buttons select the following icon   in the system tray:


Customize...

The Button definition window will appear:

Each of the two buttons can be programmed to **Send a macro** or to **Send a key** to an active application, to **Play a Wave file**, to **Start a program**, to **Perform a Windows function**, to **Send a command to DocReader**, to **Send a command to Skippy** or no actions (DocReader and Skippy are modules from the program Eurovocs Suite).

To define a macro, select Send a macro and press the [...] button. The macro definition window will appear:
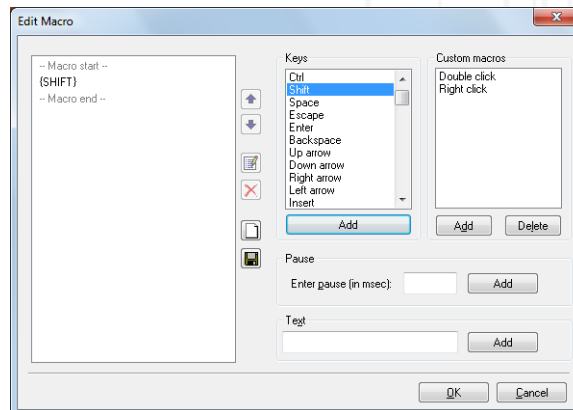
Make a choice of the items in the Keys list and/or Other list to create a macro.

3.2 Options

Tellus 4 Options allows you to set and control specific system parameters like the configuration of back buttons, master volume, …

If you are not familiar with the consequences of changing these parameters, please do not change them.

To have access to the Tellus 4 Options right click on the A icon or the battery or power indicator in the system tray at the bottom right corner of the screen. (You can perform a right click by pressing the ESC button on the back of the Tellus first. Your next press on the screen will then be a right click.)

To have access to the Tellus 2 Options right click on the A icon in the system tray at the bottom right corner of the screen. (You can perform a right click by

pressing the ESC button on the back of the Tellus first. Your next press on the screen will then be a right click.)
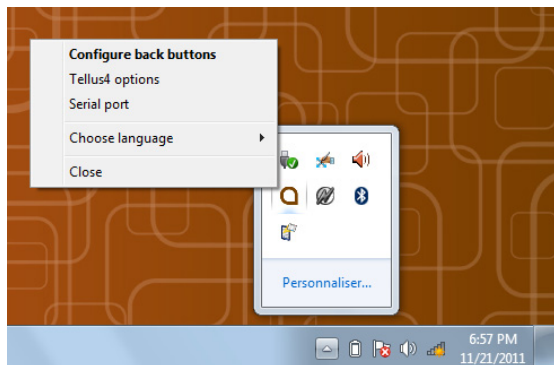
For more information on how to configure the back buttons, see "Programmable User Buttons" on page 9.

Select **Tellus 4 Options** to control Tellus specific hardware settings.
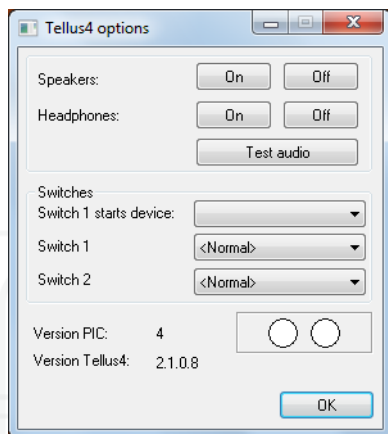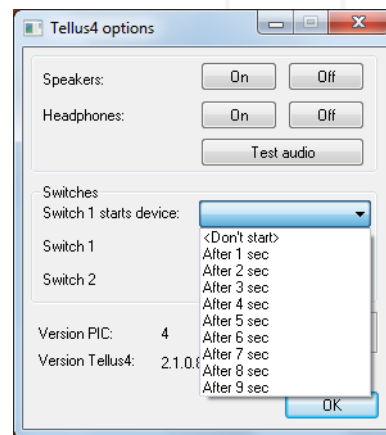

3.2.1 Speakers

Speakers buttons turn the speakers **On** or **Off**.

3.2.2 Headphones

The headphones buttons turn the headphone output of the tellus *On* or *Off* .

3.2.3 Switches

The Tellus can be switched on with an external switch (switch 1). You can adjust how long the switch needs to be pressed before the action is executed.

Switch 1: select the action that switch one has to execute: left click, right click, letter, number,...

Switch 2: select the action that switch one has to execute: left click, right click, letter, number,...

3.2.4 Version PIC

You may need to provide this information when you contact the manufacterer.

3.2.5 Version Tellus 4

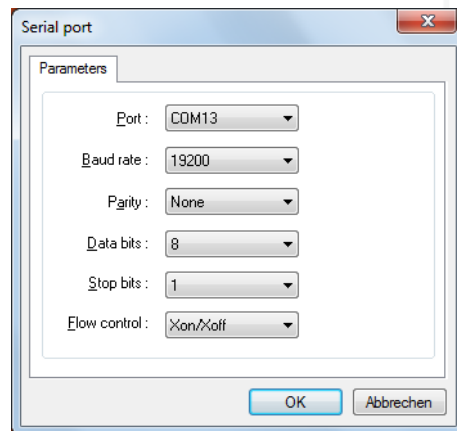You may need to provide this information when you contact the manufacterer.

3.2.6 Test switches

To test the switches. When selecting switch 1, the first circle will turn green, when selecting switch 2, the second circle will turn green.

3.3 Serial Port

To select the serial port for the user buttons on the back and the buttons for the switches.

3.4 Choose language

To select language of the menu.

4 - The User Interface
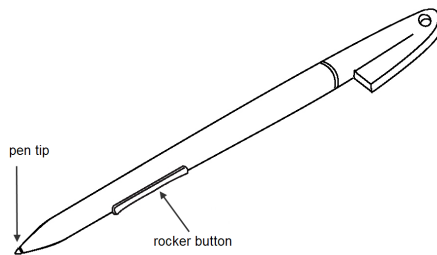
4.1 Direct Selection

To activate direct selection choose option 'Mouse' in the menu 'Mode'.

Tellus offers two different ways of making direct selections on the screen:

- Active pen
- finger touch

4.1.1 Active pen touch

With this option you need to use the active pen to make a selection on the screen.

pen tip

rocker button

With the pen you can run all functions for which you otherwise use a mouse.

To select an object on the screen touch it with the pen tip (simulation of the left mouse button).

To double click an object briefly touch it twice consecutively with the pen tip.

To move an object place the pen tip directly on the object, hold the pen tip pressed against the screen and move the desired object.

To simulate a right mouse click first press the front part of the rocker button and then touch the object with the pen tip.

4.1.2 Finger touch

Allows to make a selection with a simple finger touch (not the nail), based on capacitive touch screen technology. To select an object on the screen touch it with your finger.

To double click an object briefly touch it twice consecutively.

To move an object place your finger directly on the object, hold it and move the desired object.

To activate the right click function shortly press the System Switch (button 2) on the back of the Tellus. Touching an object on the screen will now simulate a right click on the object. The Tellus automatically returns to the left click function after a right click action. An alternative to generate a right click is by holding your finger on the screen until a circle around your finger appears. Then release your finger.

4.2 Mouse

The Tellus can be operated with a mouse or with an alternative mouse. Use one of the USB input ports to connect a mouse or an alternative mouse.

To activate mouse input choose option 'Mouse' in the menu 'Mode' in Mind Express.

4.3 Scanning

The Tellus supports different scanning algorithms. When using a 1 switch-scanning algorithm you need to connect a switch to the Switch 1 input. When using a 2 switch scanning algorithm the second switch can be connected to the Switch 2 input.

To activate scanning choose option 'Scanning' in the menu 'Mode'. The settings and the definition of the different scanning algorithms are described in the user manual of Mind Express: 'scanner preferences'.

To stop the scanning mode you can press the ESC key on a keyboard if there is one attached. You can also use the System Switch 2 on the back of the Tellus. Press the System Switch during 1,5 seconds to simulate the ESC function, stopping the scanning algorithm.

4.4 Keyboard

Tellus is delivered with a USB keyboard, but you can also use the Tablet PC Input Panel software keyboard. When activated it is displayed on screen.

To activate this keyboard click on the keyboard icon on the desktop or in the task bar next to the Start button.

The following keyboard will appear on the screen:

5 - Infra Red Remote control

The Tellus can be (optionally) equipped with a programmable infrared remote control unit (GewaLinked). This unit can learn and transmit Infrared codes of for instance your television, CD player…

5.1 Programming IR codes

Mind Express has a specific user interface to easily program the Infrared module. Select the item *GEWA > Record...* in the Mind Express menu *Tools* . The following window will appear on your screen:
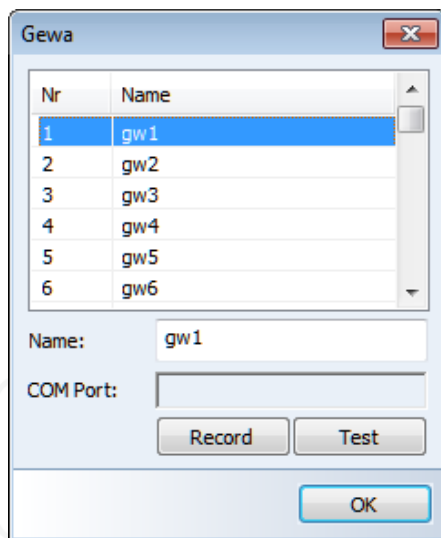

The following procedure will guide you to program infrared codes into the GEWA infrared module.

Choose one of the codes gw1 … gw150 to link with a specific IR code. You can change the name to a more logical name. Like for instance "television volume up".

Put your remote control (in this example it will be the remote control of your television) in front of the IR window of the Tellus. The distance between your remote control and the IR windows should be about 2 inches.
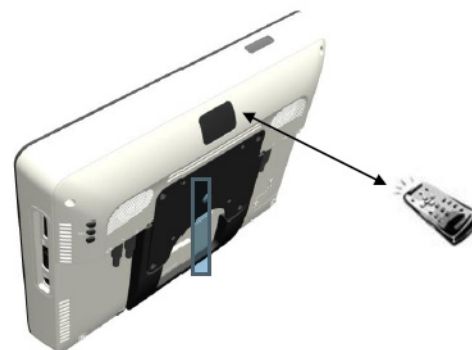
On the Tellus screen: Press the Learn button to start the IR record procedure.
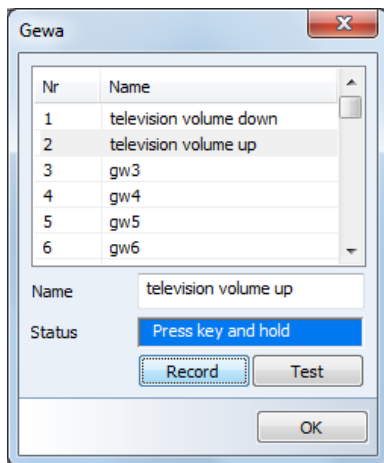
The status line in the Gewa window on the Tellus will display in red: *Press key and hold*. At the same time a red light in the IR window will turn on. The IR module now waits for the IR code that has to be learned.

Press on your remote control the button of the code you want the Tellus to learn (in this case the IR code for television volume up).

Keep the button pressed until the red light in the IR window of the Tellus goes out or the status line in the Gewa window displays in green *Release key*. The IR module now has recorded the code.
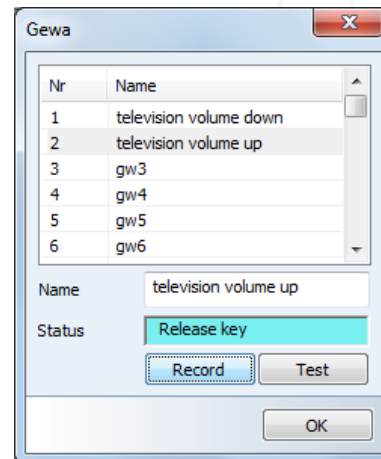
This procedure will be repeated in order to learn the code for a second time: The red light in the IR window will turn on again and the status line will ask to press the (same) remote control button again. The unit is now waiting for you to send the IR code for a second time: Press the same button on your remote control again.

Keep the button pressed until the red light in the IR window of the Tellus goes out again and the status line displays in green Release. The IR module now has recorded the code a second time.

The red light will blink shortly to confirm that the record procedure has been finished successfully. In the status line an OK will appear.
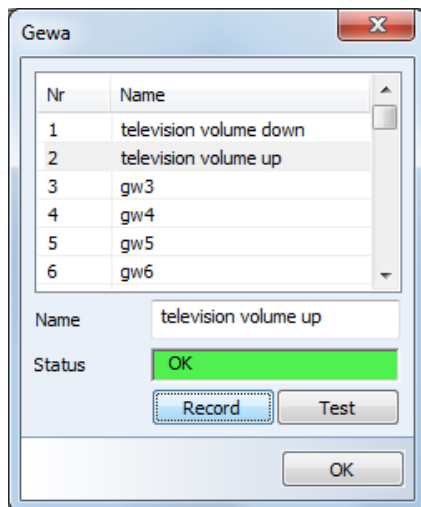

Repeat this procedure for all IR codes you want the Tellus to learn.

5.2 Transmitting IR codes

To link a recorded IR code to a specific cell in the Mind Express grid go to *edit* mode and select a cell. Look for a corresponding symbol for, in this example, volume up and choose the action *GEWA* in the list of *Actions*.
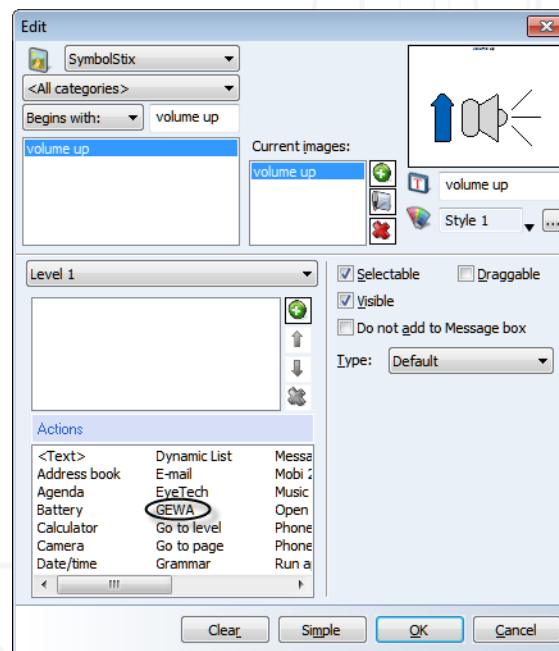
Press the down arrow to get the list of available IR codes and choose *Television volume up*.
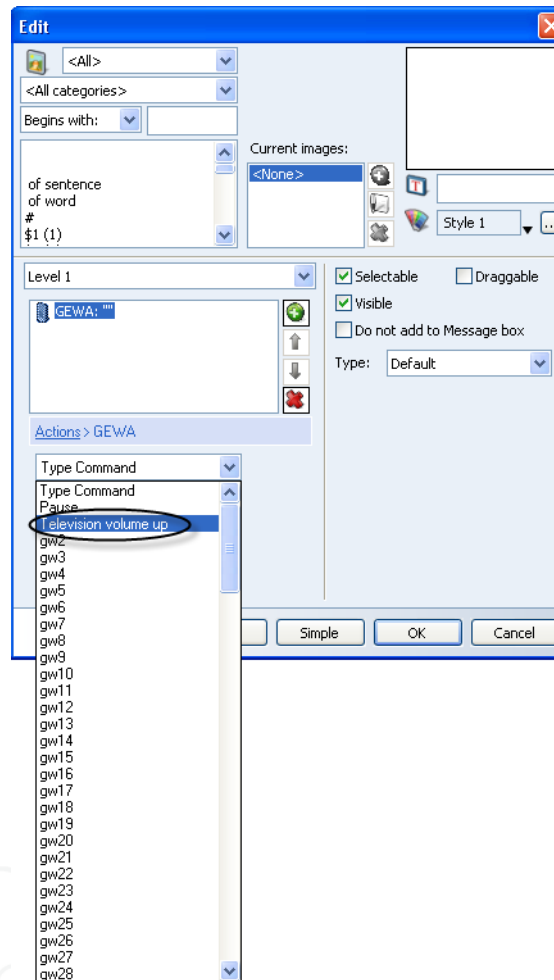
Make a choice and fill in the *Repeat* frequency for the specific code. This is useful for volume control for instance. The chosen command will now appear in the list.

You can press *OK* or add another command (press ⊕ in the command list) to build a macro. This can be useful to make TV channel selections like for instance TV channel 39. The *Pause* command in the list of GEWA codes allows you to add a pause after sending the corresponding IR code. This will avoid that IR codes are sent to fast one after the other.

If you are familiar with the original Gewa command codes you can also use the Gewa commands in the *Type command* window.
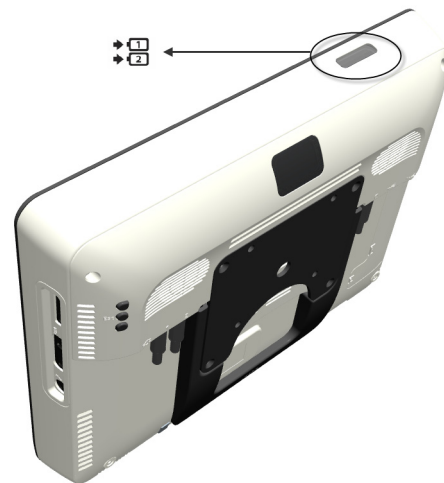
6 - Tellus batteries and charging

When not plugged into a mains socket, the Telllus runs on its built-in battery. The average battery life is around 500 charge/discharge cycles. You can increase the life of your battery by allowing it to fully discharge before recharging it again.

The Tellus battery can only be charged, when the ambient temperature is between 5°C and max. 35°C. You can charge the battery by connecting the Tellus to the mains adapter. Do not use another adapter than the one that is delivered with the Tellus. Using another adapter could damage the internal circuits or the battery.

Windows has a "Battery status meter" in the taskbar for monitoring the battery capacity. When you place the mouse pointer on the battery symbol, the system displays the battery status.

At the top side of the Tellus you will also find the battery indicators.

The battery indicator shows the state of charge of the installed battery. Following description applies to both batteries.

The indicator is lit in	blue	battery is between 50 % and 100 % charged
	orange	battery is between 13 % and 49 % charged
	red	battery is between 0 % and 12 % charged

| The indicator flashes orange	The battery state of charge is being checked (for four seconds after battery installation).
The indicator flashes red	The battery is faulty.
The indicator is not lit	There is no battery installed.

6.1 Replacing battery 2

Tellus can be equipped with a second battery. This is a hot swappable battery. This means that you do not need to switch off the Tellus to replace the 2nd battery. The 2nd internal battery is located behind the **battery cover**. Only open the battery cover when necessary.
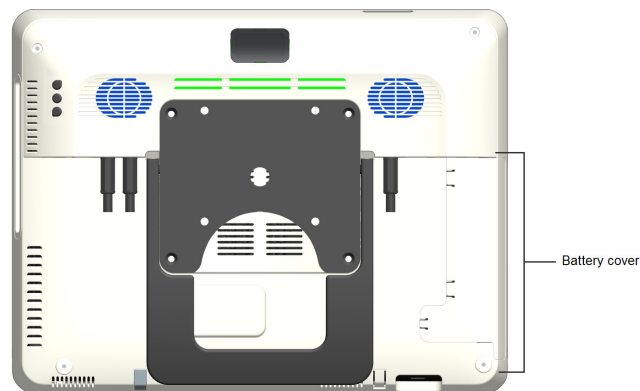
Battery cover

Press the two lids (1) of the battery cover downwards and slide the battery cover away from the Tellus (2).
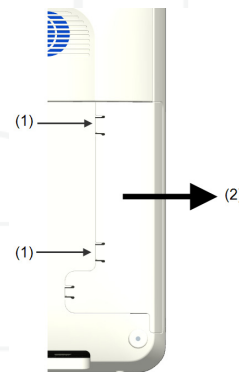
The battery and a release switch are visible now.

Slide the release mechanism in the direction of the arrow and hold. Now pull the battery out of the battery compartment.

Take the battery out of its compartment and replace it with the new battery. Control the position of the battery and slide the battery in the battery compartment towards the battery connector. You should feel a little resistance when the battery slides into the battery connector. But you should not use much force to make the connection. If that would be the case, double check if the position of the battery is correct.

Place the battery cover back on the Tellus housing.

Do not throw away batteries that no longer can be used or recharged but use the proper waste regulations of your state or region. You can always send the used battery back to your local Jabbla representative.

7 - Power Management

The Tellus has two internal batteries. Battery 2 is hot swappable and can be replaced while the Tellus is powered on.

The autonomy of the Tellus depends on the backlight intensity of the screen and the communication activity of the user. Good power management can increase the autonomy.

7.1 Idle mode

To conserve power the Tellus automatically turns off the display (after 2 minutes of no activity) and the hard disk (after 3 minutes of no activity). The turn off times can be changed in the Control Panel – Power Options – Power Schemes. Touching the screen, mouse movement, joystick or switch action will wake up the Tellus from idle mode immediately.

7.2 Stand by mode

All system functions are turned off in Stand by mode. Power to memory is still on, maintaining data in programs that were running before entering the Stand by mode. Entering Stand by mode can be programmed to be executed automatically or by means of the Power Button in the Control Panel – Power Option – Power Schemes. Resuming from Stand by mode can only be done by pressing the Power Button shortly. After approximately 3 seconds the Tellus will be ready for use again.

Switch users can resume from Stand by mode by pressing switch 1 or switch 2.

8 - DVD player/recorder

The Tellus has an internal module bay that can be equipped with a 2nd battery or with a DVD player/recorder. 2nd battery or DVD player/recorder can be installed or removed while the Tellus is powered.

Do not use force when installing or removing a module (2nd battery or DVD player/recorder). Make sure that no foreign objects enter the module bay.

The internal module bay is located behind the battery cover (part 6). Only open the battery cover when necessary.

Press the two lids of the battery cover downwards and slide the **battery cover** away from the Tellus. The battery or DVD player/recorder and a release switch are visible now.

Slide the release mechanism in the direction of the arrow and hold. Now pull the module out of the module bay.

Take the battery out of its compartment and replace it with the DVD player/ recorder. You should feel a little resistance when the DVD player slides into the battery connector. But you should not use much force to make the connection. If that would be the case, double check if the position of the DVD player/recorder is correct.

Place the battery cover back on the Tellus housing.

9 - Cleaning instructions

We advise to clean the Tellus regularly to give germs no chance to spread. Switch off the Tellus and unplug the power adapter before cleaning.

If possible use dry cleaning with a soft cloth. Local spots on the housing can be cleaned with a slightly moistened cloth. Do not use aggressive cleansing agents. Take care that no moisture soaks into the housing via the loudspeaker holes, ventilation holes, the microphone holes or the connectors. Use a little swab to clean the connectors.

Avoid cleaning the touch screen with paper towels, they can produce little scratches. Use a dry and soft lint-free or microfiber cloth with, if necessary, some distilled water. Make sure the cloth is damp but not wet. Another option is to use a screen cleaner kit that is specially designed for cleaning computer screens. You can find these kits in computer stores. Do not press too hard on the screen but wipe softly in circles.

For cleaning the carry case you should again try dry cleaning with a cloth or brush. If spots are persistent use a slightly moistened cloth. Avoid using aggressive cleansing agents.

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