# Tellus i5







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# **A** Introduction

## 1 Introduction

The Tellus i5 is a versatile, symbol supported communication tool based on the Mind Express graphic communication program. The Tellus i5 runs on the Windows 10 operating system.



#### TIP

If you are not familiar with Windows, we advise that you only perform the actions described in this user guide and in the user guide of the Mind Express program.

The Tellus i5 has a bright 13.3 inch display with high resolution and a capacitive touch screen. Switches can be connected directly, and the JabblaIR IR remote control is an option. During the development of the Tellus i5, a lot of attention was paid to the casing. Not only is the screen area waterproof, but the design guarantees optimum acoustics and robust protection of the internal computer platform. Additional USB ports can be found at the rear and bottom of the device.

To make optimal use of the Tellus i5, we recommend that you read this user guide carefully before using the device. A basic knowledge of the Mind Express program is recommended. The Tellus i5 user guide regularly refers to the use of Mind Express.

## 2 Intended use

The device has a communication supporting function. This device is intended for general use in everyday life for people (from the age of 3) with a communication disorder (who are not able to speak or cannot speak clearly). Users must have adequate motor and mental abilities to use the device.

## 3 Prohibited use

The device must not be used for clinical, therapeutic or diagnostic purposes.

## 4 Service life

The expected service life of the device is 5 years.

# 5 The type plate

You will find the type plate with the serial number of the device on the rear panel.



## 6 Technical data

Specification	Explanation
Processor	Intel® Core™ i5-4300U
Operating system	Microsoft Windows® 10
Hard drive	240 GB SSD
Internal memory	4 GB DDR3
Screen	Bright 13.3 inch WXGA LED touch screen display  • 1280 x 800 pixels
USB	2 x USB 2.0
Battery	Li-Ion battery
Weight	3,200 g (7.05 lbs)
Dimensions	<ul> <li>Width: 33.02 cm (13 inch)</li> <li>Height: 26.50 cm (10.4 inch)</li> <li>Depth: 2 cm - 3.81 cm (0.79 - 1.5 inch)</li> </ul>
Webcam	Integrated in the screen.
Mounting	Mounting plate for DAESSY mounting system, VESA 75 compatible.
Connectivity	WLAN, Bluetooth

Specification	Explanation
Audio	<ul><li>1 integrated microphone</li><li>2 integrated speakers</li></ul>
Switches	2 (programmable)

# **B** Description and operation

#### Introducing the Tellus i5 1

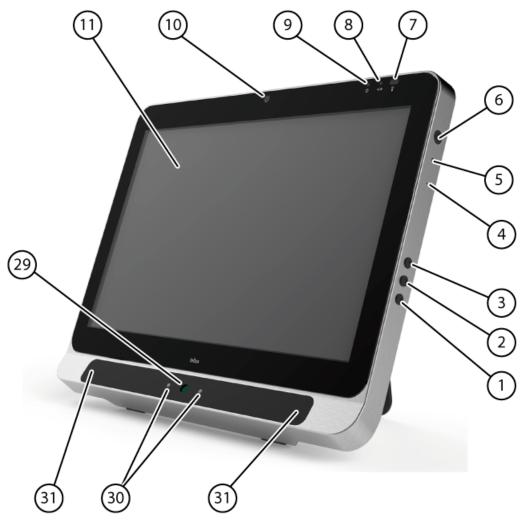


Figure 1: Tellus i5 front view

N°	Identification	Explanation
1	Bottom button	This button is programmable. As standard, the following functions are programmed:  • Short press and hold: the Windows function Master Volume Down  • Long press and hold: the Mind Express function Show Eyetracking. This is a toggle function: one long press and hold will undo the function.
2	Middle button	This button is NOT programmable, but can be disabled. Press this button briefly to simulate a rightclick at the next touch off the screen. Press and hold this button for 1.5 seconds to simulate an ESCAPE.
3	Top button	This button is programmable. As standard, the following functions are programmed:  • Short press and hold: the Windows function Master Volume Up  • Long press and hold: the Mind Express function Calibrate. This launches the eye control calibration.
4	Microphone opening	This is the microphone opening which is used for sound to reach the device's internal microphone when recording. The Tellus i5 has 1 integrated microphone.
5	Reset	This button is used to reset the device.
6	On/off button	This allows you to switch the device on/off or revert to sleep mode.

N°	Identification	Explanation
7	Infrared receiver	The infrared receiver is used to record the infrared codes.
8	Battery charge indicator	The battery charge indicator lights up as soon as the device is connected to the mains through the supplied power adapter. The indicator is amber while charging. The indicator changes to green as soon as the battery is charged.
9	On/off indicator	The on/off indicator shows the status of the device:  • no indicator light showing: device is switched off  • red: battery capacity below 20%  • amber: battery capacity is between 20% and 50%  • green: battery capacity is higher or equal to 50%
10	Webcam	The device has a camera for taking photos and videos.
11	Touch screen	The device has a 13.3 inch touch screen.
29	Eye control camera	Detects the movements of the eye pupils.
30	Indicator LEDs	<ul> <li>Displays the eye control status:</li> <li>The indicator LEDs light up in blue when the eye control is fed, but is not yet active.</li> <li>The LEDs switch off when the Mind Express eye control is launched.</li> <li>The LEDs light up in green when it finds the eyes. The left LED for the left eye. The right LED for the right eye.</li> </ul>
31	Infrared lamps	The infrared lamps light up during active eye control.

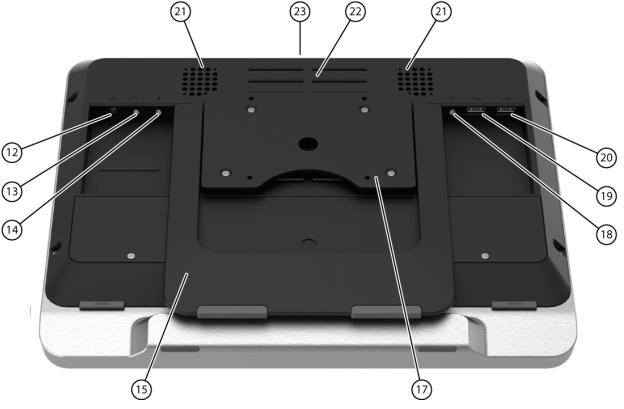


Figure 2: Tellus i5 rear view

N°	Identification	Explanation
12	Connection to power supply	This connection is to charge the device using the power adapter included.
13	Connection switch 1	This input is for connecting switch 1.
14	Connection switch 2	This input is for connecting switch 2.

N°	Identification	Explanation
15	Tray stand	The Tellus i5 has a folding stand. The stand is designed so that the device can be ergonomically supported on a tray.
17	Mounting plate	Mounting plate for DAESSY mounting system, VESA 75 compatible.
18	Jack for headphones	This output is for connecting headphones to the Tellus i5. The speakers are not automatically disabled when you connect the headphones. Headphones and speakers are controlled through the software.
19	USB 2.0	The USB port allows you to connect USB-compatible devices and peripherals such as a mouse, keyboard, printer,
20	USB 2.0	The USB port allows you to connect USB-compatible devices and peripherals such as a mouse, keyboard, printer,
21	Speakers	The device has a number of powerful loudspeakers.
22	Fan vent	This opening is for additional cooling to the Tellus i5. Be sure to keep this opening unobstructed!
23	Infrared transmitter	This transmits infrared signals to other devices.

# 2 Operation

The Tellus i5 is a versatile, symbol supported communication tool based on the Mind Express graphic communication program. Thanks to the Mind Express, voice messages can be created by selecting images and/or symbols. Selection is done by:

- touch screen
- mouse
- keyboard
- switches
- eye control
- head control

The Tellus i5 has a clear 13.3" high resolution touch screen.

The Tellus i5 runs on the Windows 10 operating system.



#### TIP

If you are not familiar with Windows 10, we advise that you only perform the actions described in this user guide and in the user guide of the Mind Express program.

The device is equipped with an infrared receiver and an infrared transmitter. This enables you to control devices such as televisions, radios, DVD players using infrared codes.

# 3 Accessories and options

- · Making calls via SIM card
- Infrared receiver and transmitter

# **C** Safety

## 1 Safety



#### CAUTION

When mounting the device to a wheelchair, ensure that the unit is securely fastened and additionally locked, so that it cannot accidentally fall at the slightest shock or impact.



#### NOTE

The device uses a Li-ion battery. Do not dispose of the battery in the usual way when replacing it. Keep to the waste regulations that apply in your region. You can always return the battery to your supplier.



#### NOTE

If you are not using the device for a longer period of time, always store it with the battery fully charged. Ensure that the unit is switched off.



#### **CAUTION**

Avoid heat sources in the vicinity of the device, or areas that may become particularly hot. For example, in summer it can become very hot in a car. Temperatures that are too high may adversely affect the performance of the battery life.



#### CALITION

The device is not watertight, but it has been designed in such a way that the screen area is splash-proof. At the rear there are openings for the loudspeakers that could allow moisture or dirt to enter. This may affect the quality of the loudspeakers. Always try and avoid situations that could cause moisture or dirt to enter the loudspeaker openings. Also take precautions when cleaning the device and always follow the cleaning instructions.



#### CAUTION

Do not use the tray stand as a handle for carrying the device! By using the tray stand as a carrying handle, it may detach from the device, causing the device to fall and possibly sustain damage.

The Tellus i5 is equipped with WLAN and Bluetooth. Please observe the following safety precautions:



#### CAUTION

Do not use the device on a plane. Switch off the device.



#### CAUTION

Do not use the device in the hospital in the vicinity of medical electronic devices. The transmitted radio waves may affect the equipment.



#### **CAUTION**

Do not use the device in an environment where flammable gases are present (such as gas stations).

# D Getting started

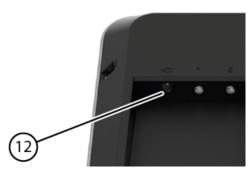
## 1 What's in the box?

The device is supplied with the following parts:

- carry case
- · power supply with plug and cable
- USB input panel
- USB mouse
- USB stick
- · operating instructions
- Mind Express (2 software licenses + Quick Start Guide)

## 2 First use

1. Connect the supplied power adapter between the device (12) and the power supply.



The battery charge indicator (8) will light up and remain amber while charging. As soon as the battery is fully charged, the indicator light changes to green.



Figure 3: The battery charge indicator

- 2. If the device is equipped with the functionality to make calls via the internal telephone (option), you must insert the SIM card. See Inserting a SIM card (optional) on page 35.
- 3. Start the device. Press the on/off button (6).



Figure 4: On/off button

During the device startup the on/off indicator will light briefly at one second intervals. Once the device has started up and is ready for use, the on/off indicator will stay on.

# 3 Storing the device for an extended period

1. Shut down the device.



#### NOTE

The device must not be in sleep mode! In sleep mode the on/off indicator lights briefly every 4 seconds.

# Tellus i5

- 2. Fully charge the device.
- **3.** Place the device in the carry case.
- 4. Store the device with carry case in a dry place at room temperature (20  $^{\circ}C$  / 68  $^{\circ}F).$
- **5.** Fully charge the battery every 6 months.

If you allow the battery to get empty, the device will no longer start.

# **E** Control

# 1 Starting up the device

Press the on/off button (6) of the device.



If the device was in sleep mode, it can be used immediately. If the device was switched off, then Windows must be started first.

#### See also

Shutting down the Tellus i5 on page 28 Resetting the Tellus i5 on page 27

# 2 Charging the device

The amount of time you can use your device without needing to charge it depends greatly on how you use it:

- · the audio volume
- the time set before the device reverts to sleep mode
- your Bluetooth and WLAN use

If the device is used a lot, it is recommended to recharge the device daily. To do this, use only the supplied power adapter. The device can still be used while charging.

- 1. Check the power status. See Viewing the power status on page 18.
- 2. Connect the supplied power adapter between the device (12) and the power supply.



The battery charge indicator (8) will light up and remain amber while charging. As soon as the battery is fully charged, the indicator light changes to green.



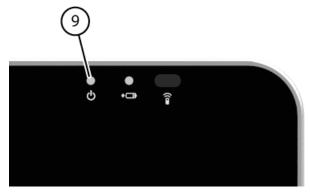
Figure 5: The battery charge indicator

#### See also

Viewing the power status on page 18 The battery alarm settings on page 34 Replacing the battery on page 39 Showing the battery info on page 41

# 3 Viewing the power status

1. View the on/off indicator (9) on the device.



2. The on/off indicator may show the following colors:

Color of indicator	Explanation
Green	Battery capacity is higher or equal to 50%
Amber	Battery capacity between 20% and 50%
Red	Battery capacity is below 20%



#### NOTE

To obtain a quick view of the remaining battery capacity, move the mouse pointer over the battery icon in the system tray. The remaining percentage is displayed.

#### See also

Charging the device on page 18

The battery alarm settings on page 34

Replacing the battery on page 39

Showing the battery info on page 41

# 4 Control options

## 4.1 Touch-screen control

The way to make a selection on the screen can be customized by the user. See Help in Mind Express.



#### NOTE

 ${\it Check that the protective film\ has\ been\ removed\ from\ the\ device.}$ 



## CAUTION

 $Do \ not \ use \ sharp \ tools, to \ prevent \ scratching \ the \ touch \ screen.$ 



## NOTE

Tap with your finger, not with your fingernail!



#### CAUTION

 ${\it Make sure the touch screen does not come into contact with water.}$ 

Use the following techniques to operate the touch screen:

Action	Technique
Left click	Tap once on the object with your finger.
Double-click	Give two short,quick taps on the object with your finger.
Dragging	To move a (draggable) object, touch the object and drag it to the desired location.
Right-click	Touch the object and continue to hold that position until a circle appears around the object. Then release the object to generate the rightclick.

Action	Technique
	<ul> <li>Press the center button on the side and then touch the object. After selecting, the left mouse button is active again. This does not work if the center button is disabled.</li> </ul>
	See Setting the side buttons on page 30.



#### NOTE

The option to drag in communication grids, can be set in Mind Express.

## See also

Mouse control on page 20

Scan control on page 20

Keyboard control on page 20

Using the on-screen keyboard on page 20

#### 4.2 Mouse control

The Tellus i5 can be operated with a mouse (or via head control, eye control). The device has several USB ports for connecting a USB-compatible mouse.

To activate the mouse control, select Mind Express **Edit** > **Mouse**.

To change the mouse control settings, select Mind Express Tools > Mouse selection....



#### TIP

For more information on activating and setting up the mouse control in Mind Express, see **Help** in Mind Express.

#### See also

Touch-screen control on page 19

#### 4.3 Scan control

The Tellus i5 can be operated in Mind Express by scanning. In Mind Express, you can specify how you want to scan. For scanning, 1 or 2 switches that are directly connected to the Tellus i5 (13) (14) can be used.

To activate scan control, select Mind Express Edit > Scanning.

To edit the scanning settings, select Mind Express Tools > Scanning selection....



#### TIP

For more information on activating and setting up the scanning control in Mind Express, see Help in Mind Express.



#### NOTE

To exit scan mode, you need to hold and press the middle button (2) for 1.5 sec. Or you can use the ESC key on a connected input panel.

### See also

Touch-screen control on page 19

Mouse control on page 20

Keyboard control on page 20

Using the on-screen keyboard on page 20

### 4.4 Keyboard control

The device has several USB ports for connecting a USB-compatible keyboard. The Tellus i5 also features an on-screen keyboard.

## See also

Touch-screen control on page 19

Mouse control on page 20

Scan control on page 20

Using the on-screen keyboard on page 20

### 4.5 Using the on-screen keyboard

In addition to a USB compatible keyboard, you can choose to use the on-screen keyboard.

- 1. Do one of the following:
  - Tap the screen. Along the left border of the screen, the edge of the on-screen keyboard will appear. Swipe the edge of the on-screen keyboard towards the center of the display.

- Tap on On-screen keyboard in the task bar.
- 2. From the title bar, drag the on-screen keyboard into the desired position.



#### TIP

For more information about the on-screen keyboard, refer to Windows Help.

#### See also

Touch-screen control on page 19 Mouse control on page 20 Scan control on page 20 Keyboard control on page 20

#### 4.6 Eye control

The device can be operated using eye control. This mode of operation is suitable for users with very limited movement capabilities.

To activate the eye control, select Mind Express Edit > Eye tracking.

To change the eye control settings, select Mind Express **Tools** > **Eye tracking** > **Selection**.



#### TIP

For more information on activating and setting up the eye control in Mind Express, see **Help** in Mind Express.

# 5 Making calls and sending and receiving text messages with the Tellus i5

## 5.1 Making a call with the Tellus i5

You can make calls with the Tellus i5 in two ways:

- Via an external telephone. For example, your cell phone. See Making calls / sending text messages with the Tellus i5 via an external telephone on page
- Via an internal telephone or via the Tellus i5 internal SIM card. This is an option! See Making calls with the Tellus i5 via the internal telephone on page 21.

#### See also

Setting the Tellus i5 phone options (external telephone) on page 24 Connecting the external phone to the Tellus i5 on page 25

## 5.2 Sending and receiving text messages with the Tellus i5

You can send text messages with the Tellus i5 in two ways:

- Via an external telephone. For example, your cell phone. See Making calls / sending text messages with the Tellus i5 via an external telephone on page 21.
- Via an internal telephone or via the Tellus i5 internal SIM card. This is an option! See Sending text messages with the Tellus i5 via the internal telephone on page 22.

## 5.3 Making calls / sending text messages with the Tellus i5 via an external telephone

The first time, you must complete the following steps. After that the Jabbla BT app will connect automatically provided that Bluetooth is enabled on your telephone.

- 1. Set the Tellus i5 telephone options. See Setting the Tellus i5 phone options (external telephone) on page 24.
- 2. Install the Jabbla BT app on your telephone. See Downloading and installing the Jabbla BT app on page 25.
- 3. Connect your telephone and the Tellus i5. See Connecting the external phone to the Tellus i5 on page 25.

#### See also

Using the sample file for phone on page 22 Using the sample file for SMS messages on page 23

#### 5.4 Making calls with the Tellus i5 via the internal telephone

As an option, the Tellus i5 can be equipped with an internal telephone. The minimum requirements are:

- Mind Express from version 4.3. See Checking the version and serial number of Mind Express on page 41.
- Tellus menu from version v3.0.0.69. See Finding the Tellus menu version on page 41
- The serial number of the Tellus i5 must be higher than T5 1285. See Finding the device serial number on page 40.



## NOTE

For serial numbers lower or equal to T5 1285, please contact your dealer for an upgrade of your Tellus i5.

- 1. Insert the SIM card. See Inserting a SIM card (optional) on page 35.
- 2. Set the Tellus i5 telephone options. See Setting the Tellus i5 phone options (internal telephone) on page 24.
- 3. Use the file App\_call to make calls. See Using the sample file for phone on page 22.

## 5.5 Sending text messages with the Tellus i5 via the internal telephone

As an option, the Tellus i5 can be equipped with an internal telephone.

- 1. Insert the SIM card. See Inserting a SIM card (optional) on page 35.
- 2. Set the Tellus i5 telephone options. See Setting the Tellus i5 phone options (internal telephone) on page 24.
- 3. Open Mind Express and choose the example file me4\_eng.
- 4. Choose Computer.
- 5. Choose one of the following apps:

Арр	Explanation
	This app allows you to fully manage your messages. You can create, send, receive, reply to, delete new messages. See Using the sample file for SMS messages on page 23.
	This app allows you to send simple text messages using selected symbols. See <b>Help</b> in Mind Express.

## 5.6 Using the sample file for phone

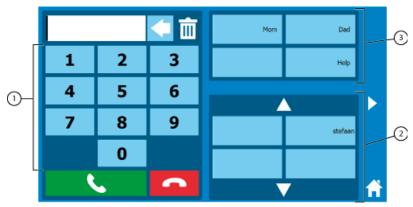
Mind Express contains a sample file that can be used to make calls. You can call a number you enter yourself, to stored numbers, or people in the address book. The conversation can be conducted through communication cards or using the microphone.



#### NOTE

Speech via communication cards is always sent. Speech via the microphone is only sent if the other side of the line does not speak!

- 1. Open the me4\_eng start document.
- Select the Computer > phone category.
   The App\_call sample file is opened.
- 3. Do one of the following:

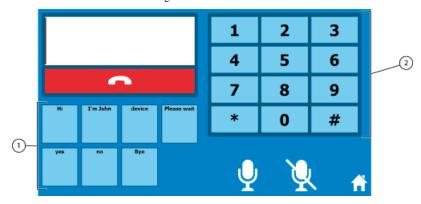


Number	Explanation
1	With this you can call a number you enter.  Compile the contact's number using the number buttons. Use the button to clear 1 character. Use the button to clear the input box completely. Choose the contact to call the number.
2	Using this you can call a contact from the address book.  Choose the name of a contact in your address book. That contact will be called immediately. Use the address book.
3	Using this you can call preset numbers without adding them to the address book.  Choose a field to call a specific number. The number will be called immediately.

Choose to end the call. Choose to go to the next page of the App\_call file. Choose to go to the Computer category of the me4\_eng file.

You can start a conversation as soon as the recipient has picked up. Use communication cards to conduct a conversation. By default, the microphone is off. If you (or the supervisor) want to speak, choose to enable the microphone. Choose to disable the microphone when you are not using it. This will prevent surrounding noises from disrupting the call.

4. You can also do one of the following:



Number	Explanation
	With this you can send messages quickly. The messages do not appear in the note area.
	Using this you can press the buttons during the call. For example, for calling your voicemail or when making a call to customer service.

Click the hutton to go to the previous page of the App\_call file. Click again to find the appropriate communication card for conducting the conversation. Click the button to end the call.

### See also

Making calls / sending text messages with the Tellus i5 via an external telephone on page 21

## 5.7 Using the sample file for SMS messages

- 1. Open the me4\_eng start document.
- Select the Computer > text message category.
   The App\_sms sample file is opened.
- Choose Inbox or Outbox and select a message.The details of the message are displayed on the right and the message is read automatically.
- **4.** Do one of the following:

Choose	Action
S	To check for new messages.
	To view previous messages.
	To view next messages.
<b>5</b>	To write a new message. See step 5.
<b>◄</b> ))	To read the selected message.
<b>◄</b> ×	To stop the reading of the message.
<b>Ø</b>	To reply to the selected message. See step 6.

Ε

Choose	Action
	To delete the selected message.

- 5. If you selected the field , the communication card appears for setting the text message. Choose and select the contact person.

  If you want to delete all the recipients, choose . If you want to delete one recipient, choose and select the contact person to be removed.
- 6. Type your message using the letter fields and the word prediction fields on the communication card.
- **7.** Do one of the following:

Choose	Action
<b>(</b> 1))	To read the message aloud.
X	To stop the reading of the message.
×	To clear the last character entered or predicted word.
	To delete the whole message.
=	To send the message.
	To go to the previous page of the App_sms file.

#### See also

Making calls / sending text messages with the Tellus i5 via an external telephone on page 21

#### 5.8 Setting the Tellus i5 phone options (external telephone)

You can change the Bluetooth name of the Tellus i5 and you can automatically enable Bluetooth when starting up the Tellus i5. You can also visualize events. For example, when to enable bluetooth, or when you are being called, ...

- Choose in Mind Express Tools > Phone > Settings.
- 2. Select **Tellus 5 external phone** from the drop-down list **Model**:.
- 3. As required, change the Bluetooth name of the device Tellus i5 in the field **Bluetooth name:**. This name appears on your mobile phone in the list of paired devices.
- 4. Select the Connect at startup option to enable Bluetooth when starting up Mind Express.
- Select the Show additional info option to explain certain events on the screen. Example: Enabling Bluetooth.
- As required, select the Notification on incoming call option.
   A message is displayed when you are called on the Tellus i5.
- 7. Tap on OK.
- 8. Choose in Mind Express Tools > Phone > (Re)connect.

If you checked the Connect at startup option and installed the JABBLA BT app on your smartphone, the connection will be made automatically next time.



#### NOTE

The phone settings are saved when you close Mind Express. If you close Windows without closing Mind Express, your phone settings will not be saved!

### See also

Making a call with the Tellus i5 on page 21 Connecting the external phone to the Tellus i5 on page 25

## 5.9 Setting the Tellus i5 phone options (internal telephone)

You can change the Bluetooth name of the Tellus i5 and you can automatically enable Bluetooth when starting up the Tellus i5. You can also visualize events. For example, when to enable bluetooth, or when you are being called, ...

1. Choose in Mind Express Tools > Phone > Settings.

2. Select **Tellus 5 internal phone** from the drop-down list **Model:**.

The correct COM port appears in the list automatically.

3. Enter the SIM card PIN code.

You must enter the PIN code. If you use a SIM card that does not have a PIN code, you must enter any number at random in this field.



#### NOTE

After 3 attempts, the SIM card will be locked. To unlock the SIM card it must be removed from the device and placed in a mobile phone. You can unlock the SIM card using the PUK code. Then you can re-insert the SIM card in the device.

- 4. Select the Connect at startup option to enable Bluetooth when starting up Mind Express.
- Select the Show additional info option to explain certain events on the screen. Example: Enabling Bluetooth.
- As required, select the Notification on incoming call option.
   A message is displayed when you are called on the Tellus i5.
- 7. Tap on OK.



#### NOTE

You cannot make calls or send text messages immediately. You have to wait another 30 seconds or so until there is a connection with the operator.

#### 5.10 Connecting the external phone to the Tellus i5

The connection between a mobile phone and the Tellus i5 depends on the brand and type of mobile phone. Below is a description of the general procedure.



#### NOTE

Refer to the operating instructions of your mobile phone.



#### NOTE

The telephone options must be set correctly, see Setting the Tellus i5 phone options (external telephone) on page 24.

- 1. Enable Bluetooth on the Tellus i5. See Enabling Bluetooth on page 32.
- 2. Enable Bluetooth on your mobile phone and allow the phone to find the available devices.
- 3. Search for the right Bluetooth name in the list of available devices.



## NOTE

The Tellus i5 has 2 Bluetooth functionalities. Select the Bluetooth name you entered when setting the phone options! You can use the other Bluetooth to connect to a wireless keyboard, mouse, headphones ...

4. Enter the pin code and connect. The standard code is 1111.

#### See also

Making a call with the Tellus i5 on page 21

Setting the Tellus i5 phone options (external telephone) on page 24

#### 5.11 Determining the Android version of your smartphone

- 1. Choose Settings.
- 2. Swipe everything upwards.
- 3. Tap on About device.

About device can be found at the bottom of the list. On some devices you will see About phone or an equivalent text.

4. Under Android version you will find the version that has been installed on your device.

## See also

Downloading and installing the Jabbla BT app on page 25

## 5.12 Downloading and installing the Jabbla BT app

The Jabbla BT app is available for Android version 4.2 or higher only. See Determining the Android version of your smartphone on page 25.

- Tap on Play Store on your smartphone.
- 2. Enter Jabbla in the search box and tap on on the on-screen keyboard in the bottom right.
- 3. Tap on the Jabbla BT app.

If you cannot find the app in Play Store, then the Android version 4.2 or higher is not installed on your smartphone.

4. Tap on INSTALL.

The JABBLA BT app is a free app. There is no need to set any payment options.

- 5. Tap on ACCEPT.
- Tap on OPEN.
- 7. Search for the bluetooth name of your device from the list of available devices and connect.



## NOTE

As required, click **Scan for devices** to see the available devices.

Your device is now ready for making calls and sending text messages via your smartphone.

#### See also

Determining the Android version of your smartphone on page 25

## 6 Linking the Eddy to the Tellus i5

The Eddy can be linked to the Tellus i5 using Bluetooth. See Enabling Bluetooth on page 32.

On how to use the Eddy settings, please refer to Help in Mind Express.

# 7 Using the environmental control of the Tellus i5 (optional)

The Tellus i5 can be equipped with an optional infrared receiver (7) and an infrared transmitter (23). This enables you to control devices such as televisions, radios, DVD players using infrared codes. The Tellus i5 can learn to recognize the infrared codes of the devices.



Figure 6: Infrared receiver



Figure 7: Infrared transmitter

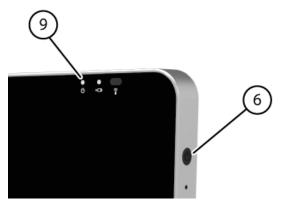
On how to use the infrared codes and their settings (JabblaIR), please refer to the Help in Mind Express.

# 8 Putting the Tellus i5 in sleep mode

Sleep mode is an energy-saving mode that allows you to quickly wake up your computer again. By default, after 3 minutes the Tellus i5 automatically switches to sleep mode. The Tellus i5 can also be put to sleep manually.

Do one of the following:

- Click Start and choose Sleep next to the Exit button.
- Briefly press the on/off button (6).



The screen switches off, but the on/off indicator (9) remains on. The indicator LEDs of the eye control switch off.

#### See also

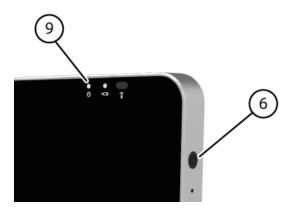
Waking the Tellus i5 from sleep mode on page 27

Disabling sleep mode

Automatically disabling the USB ports in sleep mode on page 33

# 9 Waking the Tellus i5 from sleep mode

If the display of the Tellus i5 is switched off, and the on/off indicator (9) is switched on, then the Tellus i5 is in sleep mode.



Carry out one of the following actions to wake the device from sleep mode:

- Press on the screen.
- Press the on/off button (6).
- Click a mouse button.
- Press a key on the keyboard.
- · Look into the eye control camera for a few seconds. The indicator LEDs will first light up in blue, and then turn green.

#### See also

Putting the Tellus i5 in sleep mode on page 26

Disabling sleep mode

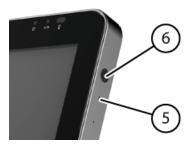
Automatically disabling the USB ports in sleep mode on page 33

# 10 Resetting the Tellus i5



#### CAUTION

Only reset the device when it has completely frozen.



- 1. Press the tip of a ball pen into the reset opening (5). The device shuts down.
- 2. Press the on/off button (6) of the device.

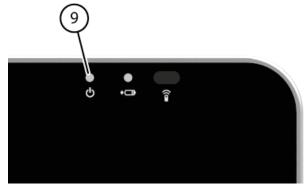
  The device will restart and can be used again.

#### See also

Starting up the device on page 18 Shutting down the Tellus i5 on page 28

# 11 Shutting down the Tellus i5

- 1. Click Start @.
- 2. Click Exit.



The on/off indicator (9) switches off.

## See also

Starting up the device on page 18 Resetting the Tellus i5 on page 27

# **F** Settings

# 1 Setting the side buttons

There is the option to assign certain functions to the top and bottom side buttons. With a short or long press and click on one of these buttons a program can be launched, a macro run, a key stroke transmitted, the Windows system volume increased or decreased, a Wave file played and commands can be sent to DocReader or to Skippy.

The middle button can be used for rightclicking and for Escape. The middle button can also be disabled.

- 1. Right-click Tellus5 in the system tray and select Options from the shortcut menu.
- 2. In the Side buttons options group. From the Top: (short), Top: (long), Bottom: (short) and Bottom: (long) drop-down list, select one of the following options:

Option	Explanation
Send macro	This allows you to run a macro in the active application. Or you can first create a new macro.
Send key	This allows you to send a key to the active application.
Play Wave File	This allows you to play a Wave file. Only WAV files.
Start program	This allows you to run applications. For example: select C:\Windows \System32\calc.exe to launch the calculator
Perform Windows function	From the drop-down list, select one of the Windows functions. For example: Master Volume Up
Send command to Mind Express	From the drop-down list, select one of the commands to operate eye control using the button on the side:  Calibrate Show Eyetracking Pause Eyetracking
Send command to DocReader	From the drop-down list, select one of the DocReader commands. For example: <b>Read whole text</b> .
Send command to Skippy	From the drop-down list, select one of the Skippy commands. For example: Select prediction 1.
Mind Express: do actions of cell with ID	In the ID text box, enter the ID of the box.



## NOTE

 $Commands\ can\ only\ be\ sent\ to\ Doc Reader\ and\ Skippy\ if\ these\ programs\ have\ been\ installed\ on\ the\ device.$ 

3. From the Middle: drop-down list, select one of the following options:

Option	Explanation
Short=rightclick, Long=Escape	<ul> <li>Briefly press this button and then select an item on the display. This allows you to simulate a right click.</li> <li>Press and hold (approximately 1.5 seconds) this button to simulate ESC. This will allow you to stop a scanning algorithm in Mind Express for example, or display the menu bar again.</li> </ul>
<disabled></disabled>	This button has been disabled, so will not respond.

# 2 Switching the speakers on or off

When the device is switched on, by default the speakers are on.

- 1. Right-click **Tellus5** on the system tray and select **Options** from the shortcut menu.
- 2. Click on one of the following buttons next to Speakers::
  - On, to switch on the speakers of the Tellus.
  - Off, to switch off the speakers of the Tellus.
- 3. Click OK.

## See also

Setting the speaker volume on page 30

#### 3 Setting the speaker volume

- Right-click **Tellus5** on the system tray and select **Options** from the shortcut menu.
- Move the **Speaker volume:** slider to change the volume on the device.



When the slider is halfway, it corresponds to the maximum Windows volume.



#### NOTE

The **Speaker volume:** slider of the Tellus is identical to the general volume slider in Mind Express.



#### CAUTION

Adjust the volume using **Options** instead of using the Windows volume.

3. Click OK.

#### See also

Switching the speakers on or off on page 30

# Switching the headphones on or off

When the device is switched on, by default the sound is sent to the headphones.

- 1. Right-click Tellus5 (a) in the system tray and select Options from the shortcut menu.
- Click on one of the following buttons next to **Headphones:**:
  - On, to send the sound to the headphones.
  - Off, to NOT send the sound to the headphones.
- Click OK.

#### Switching the microphone on or off 5

When the device is switched on, by default the microphone is off.



It is recommended to leave the microphone switched off. In Mind Express, the microphone is automatically switched on and off when you make a recording. Only switch on the microphone if you are using an application that is not a Mind Express application, and which requires a microphone (such as Skype). After using the application, switch off the microphone.

- Right-click Tellus5 in the system tray and select Options from the shortcut menu.
- Click on one of the following buttons next to Microphone::
  - On, to switch on the speakers of the Tellus.
  - Off, to switch off the speakers of the Tellus.
- Click OK.

#### Setting the microphone volume 6

You can use the microphone volume to turn up or turn down the sound recording via the microphone. This can be necessary when recording in Mind Express or when using an application such as Skype.

- 1. Right-click Tellus5 (a) in the system tray and select Options from the shortcut menu.
- Move the Microphone volume: slider.
- Click OK.

#### 7 Starting up the device using a switch

The Tellus i5 can be started up using switch 1. You can specify how long to hold and press switch 1 before Tellus i5 starts up.

- Right-click **Tellus5** on the system tray and select **Options** from the shortcut menu.
- Select one of the following options from the Switches options group, Switch 1 starts device: drop-down list:
  - **Don't start>**, the device cannot be started up using a switch.
  - **Immediately**, the device starts up immediately after pressing switch 1.
  - After 1 sec, the device starts up after holding and pressing switch 1 for 1 second.
  - After 2 sec, the device starts up after holding and pressing switch 1 for 2 seconds.
- After 9 sec, the device starts up after holding and pressing switch 1 for 9 seconds.
- 3. Click OK.

#### See also

Setting up the switches on page 32 Testing the switches on page 33

## 8 Setting up the switches

You can link an action to the switches. The action is then performed by pressing the switch. For example: left click, right click, send letter or number, ...

- 1. Right-click **Tellus5** on in the system tray and select **Options** from the shortcut menu.
- 2. Select one of the following options from the Switches options group, Switch 1: drop-down list:
  - Normal>, the switch performs the function that has been specified in Mind Express.
  - Leftclick, the switch performs a left click action.
  - Rightclick, the switch performs a right click action.
  - · A keyboard key (alphanumeric keys, navigation keys, numeric keys and function keys), the switch performs the action of pressing a key.
- 3. Repeat step 2 to set up Switch 2:.
- 4. Click OK.

#### See also

Starting up the device using a switch on page 31

Testing the switches on page 33

# 9 Putting the device into flight mode

Flight mode is a setting that allows you to simultaneously disable the wireless Internet connection (Wi-Fi), Bluetooth and the mobile phone function on your device. Typically you would be requested to disable these mobile connections on a flight. You can continue to use the applications on your device that do not require a mobile connection.

- 1. Right-click Tellus5 (a) in the system tray and select Options from the shortcut menu.
- 2. Select the Flight mode option.
- 3. Click OK.

#### See also

Enabling wireless Internet on page 32 Enabling Bluetooth on page 32

Enabling a mobile phone on page 32

# 10 Enabling wireless Internet

To be able to use a Wi-Fi connection, wireless Internet (WLAN) must be enabled on the device.

- 1. Right-click **Tellus5** on the system tray and select **Options** from the shortcut menu.
- 2. Select the Wlan option.
- 3. Click OK.

#### See also

Putting the device into flight mode on page 32

Enabling Bluetooth on page 32

Enabling a mobile phone on page 32

# 11 Enabling Bluetooth

To connect to the Eddy or to an external mobile phone, you will need to enable Bluetooth.

- 1. Right-click Tellus5 in the system tray and select Options from the shortcut menu.
- 2. Select the Bluetooth option.
- 3. Click OK.

#### See also

Putting the device into flight mode on page 32

Enabling wireless Internet on page 32

Enabling a mobile phone on page 32

# 12 Enabling a mobile phone

The Tellus i5 can be supplied with an optional data module with SIM card for sending text messages. To send text messages, the mobile phone function must be enabled.

- 1. Right-click Tellus5 (a) in the system tray and select Options from the shortcut menu.
- 2. Select the Mobile phone option.
- 3. Click OK.

#### See also

Putting the device into flight mode on page 32 Enabling wireless Internet on page 32 Enabling Bluetooth on page 32

# 13 Automatically disabling the USB ports in sleep mode

To prevent peripherals also using a lot of power in sleep mode, you can automatically disable the USB ports when the device goes, or is switched, to sleep mode. The USB ports at the back and the USB port at the bottom can be disabled separately.



#### NOTE

It is recommended not to automatically disable the USB ports in sleep mode! Only if you notice that the peripherals use up a lot of power in sleep mode, you might want to consider automatically disabling the USB ports in sleep mode.

- 1. Right-click Tellus5 (a) in the system tray and select Options from the shortcut menu.
- 2. As required, select the following options:
  - Disable USB ports (back) during Standby
  - Disable USB port (bottom) during Standby
- 3. Click OK.

#### See also

Putting the Tellus i5 in sleep mode on page 26 Waking the Tellus i5 from sleep mode on page 27 Disabling sleep mode

# 14 Testing the switches

You can carry out a test to check whether the switches have been connected correctly and are working properly.

- 1. Right-click Tellus5 (a) in the system tray and select Options from the shortcut menu.
- 2. Press switch 1.

If operating correctly, the light in the left circle will be green.



3. Press switch 2.

If operating correctly, the light in the right circle will be green.



4. Click OK

#### See also

Starting up the device using a switch on page 31 Setting up the switches on page 32

# 15 Setting the language of the Tellus menu

- 1. Right-click Tellus5 and choose Choose language from the shortcut menu.
- 2. Select the desired language.

#### See also

Shutting down the Tellus menu on page 33
Activating the Tellus menu on page 34
Show or hide Tellus icons in the system tray on page 34

## 16 Shutting down the Tellus menu

This is used to shut down the Tellus functions. You can continue using the Tellus as an ordinary computer.

- 1. Right-click **Tellus5** in the system tray and select **Close** from the shortcut menu.
- 2. Confirm in the Tellus5 dialog.

#### See also

Setting the language of the Tellus menu on page 33 Activating the Tellus menu on page 34 Show or hide Tellus icons in the system tray on page 34

# 17 Activating the Tellus menu

To be able to use the Tellus functions, the Tellus menu must be activated.

- 1. Open Explorer.
- 2. Go to C:\Program files\Tellus 5.
- 3. Double-click the file Tellus5.

The Power status dialog opens and the Tellus5 icon appears in the system tray.

4. In the Power status dialog, click OK.

#### See also

Setting the language of the Tellus menu on page 33 Shutting down the Tellus menu on page 33 Show or hide Tellus icons in the system tray on page 34

# 18 Show or hide Tellus icons in the system tray

The Tellus functions can be enabled without showing the (a), (a) or in the system tray. You can choose to permanently show or hide the icons in the system tray.

- 1. Do one of the following:
  - Right-click on the date and time in the system tray and select Customize Notification Icons
  - Click in the system tray and choose Customize.
- 2. From the Device tool for Tellus 5 drop-down list, select one of the following options:

Option	Explanation
Show icon and notifications	The icon is visible in the system tray.
Hide icon and notifications	The icon is hidden in the system tray.
Only show notifications	The icon is hidden in the system tray, only the notifications will appear.



#### NOTE

To display the icons in the system tray, click in the system tray.

#### See also

Setting the language of the Tellus menu on page 33 Shutting down the Tellus menu on page 33 Activating the Tellus menu on page 34

# 19 The battery alarm settings

Two alarms can be set to display a message when the remaining battery capacity falls below a preset value. The first alarm can be set to display a message for low battery capacity, and the second alarm can be used to display a message for very low battery capacity.

- 1. Do one of the following:
  - Double-click in the system tray.
  - Right-click in the system tray and select **Open power meter** from the shortcut menu.
- 2. As necessary, select Activate low battery alarm when power level reaches: and change the slider to the desired percentage for an alarm (between 3% and 60%).
- As necessary, select Activate critical battery alarm when power level reaches: and change the slider to the desired percentage for an alarm (between 3% and 30%).
- 4. Click OK.

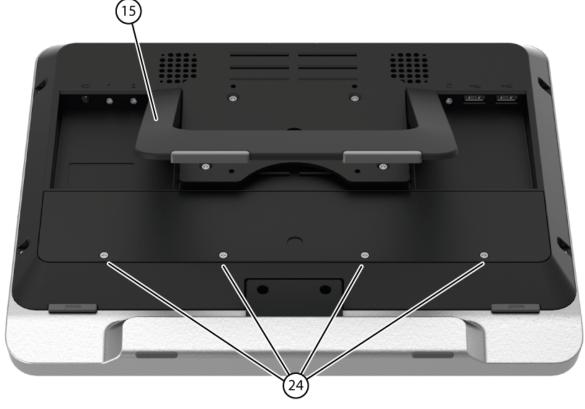
#### See also

Charging the device on page 18 Viewing the power status on page 18 Replacing the battery on page 39 Showing the battery info on page 41

## 20 Inserting a SIM card (optional)

With the Tellus i5 it is possible to make calls and send text messages via an external telephone. To use this function, you need to insert a SIM card into the device.

- 1. Shut down the device. See Shutting down the Tellus i5 on page 28
- 2. Remove the device from its mounting.
- 3. Use a cloth to place the device on, with the screen facing down on the cloth.



**4.** Fold open the tray stand (15).



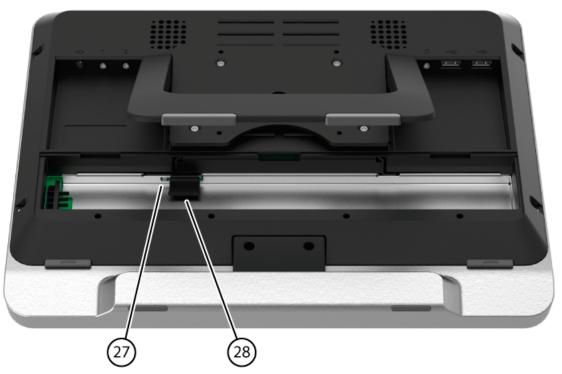
#### CAUTION

Never loosen the screws of the tray stand!

5. Loosen the 4 screws (24) and remove the cover (25).



- **6.** Remove the battery (26) from the device.
- 7. Place the SIM card (28) in the SIM card slot (27) of the device.



- **8.** Replace the battery (26).
- 9. Replace the cover (25) and tighten it firmly with the 4 screws (24).

- 10. As required, re-attach the device to the mounting.
- 11. Start the device.

## **G** Maintenance and troubleshooting

#### 1 Maintenance

#### 1.1 Repairs

In the event of damage to the device, please contact the distributor of the device.

Do not attempt to carry out any repairs yourself. This could damage the device and invalidate your warranty.

#### 1.2 Cleaning the device

Clean the device regularly so you do not give bacteria the chance to spread.

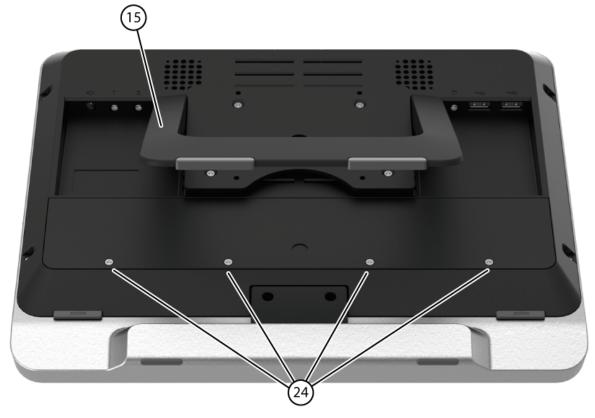
It is best to remove dust with a dry, soft cloth. For minor stains on the casing, use a damp cloth. Make sure no moisture can enter through the speaker openings, the microphone opening or the connectors. Any dirt near the connectors can be removed with a cotton bud.

To clean the touch screen, use a dry cloth; do not use kitchen paper as this may cause tiny scratches. To remove grease or stains from the screen, it is recommended that you use cleaning agents specifically designed for cleaning screens (aerosol or wipes). Do not press too hard on the screen when cleaning.

It is best to clean the carry case with a dry or slightly damp cloth. The carry case can also be cleaned with a soft brush.

#### 1.3 Replacing the battery

- 1. Shut down the device. See Shutting down the Tellus i5 on page 28
- 2. As required, remove the device from its mounting.
- 3. Use a cloth to place the device on, with the screen facing down on the cloth.



**4.** Fold open the tray stand (15).



#### CAUTION

Never loosen the screws of the tray stand!

**5.** Loosen the 4 screws (24) and remove the cover (25).

G



- **6.** Remove the battery (26) from the device.
- 7. Place the new battery in the device.
- **8.** Replace the cover (25) and tighten it firmly with the 4 screws (24).
- 9. As required, re-attach the device to the mounting.
- 10. Start the device.

#### See also

Charging the device on page 18 Viewing the power status on page 18 The battery alarm settings on page 34 Showing the battery info on page 41

## 2 Troubleshooting

#### 2.1 Finding the device serial number

In your dealings with the support department, you will be asked to supply the serial number of your device.

You will find the type plate with the serial number of the device on the rear panel.



#### See also

Finding the Tellus menu version on page 41

Finding the PIC version on page 41

#### 2.2 Finding the Tellus menu version

In your dealings with the support department, you will be asked to supply the Tellus menu version of your device.

- 1. Right-click **Tellus5** on in the system tray and select **Options** from the shortcut menu.
- At the bottom left, next to Version device: you can find the version number of the Tellus menu. Example: 2.5.0.45

#### See also

Finding the device serial number on page 40 Finding the PIC version on page 41

#### 2.3 Finding the PIC version

Your device is equipped with a PIC, which is a small electronic component. In your dealings with the support department, you will be asked to supply the PIC version of your device.

- 1. Right-click Tellus5 in the system tray and select Options from the shortcut menu.
- At the bottom left, next to Version PIC: you will find the PIC version number (or the electronic component). Example: 46

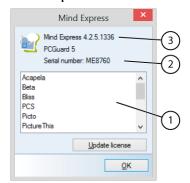
#### See also

Finding the device serial number on page 40 Finding the Tellus menu version on page 41

#### 2.4 Checking the version and serial number of Mind Express

In your dealings with the support department, you will be asked to supply the version and/or serial number of Mind Express on your device.

Choose Help > License Info....



The Mind Express dialog shows the version number (3) and the Mind Express serial number (2).

#### 2.5 Showing the battery info

In your dealings with the support department, you will be asked to supply the battery info on your device.

Right-click in the system tray and select Battery info from the shortcut menu.

The Tellus5 dialog is displayed with the battery information.

#### See also

Charging the device on page 18 Viewing the power status on page 18 The battery alarm settings on page 34 Replacing the battery on page 39

#### 2.6 Troubleshooting

Problem	Solution
The touch screen is slow or is not working properly.	<ul> <li>Restart the device to correct any software errors.</li> <li>Clean the screen. See Cleaning the device on page 39.</li> </ul>
The device is not responding.	Reset the device. See Resetting the Tellus i5 on page 27.

2

Problem	Solution
The device is becoming hot.	During long and intensive use of the device, it can become hot. This is normal and has no effect on the life or performance of the device.
No Bluetooth devices found.	<ul> <li>Make sure Bluetooth is enabled on the device you want to connect to.</li> <li>Make sure your device and the other device is within the maximum range of 10 meters.</li> <li>If necessary, remove any objects between the device and the other device.</li> <li>The device may not be compatible with your device.</li> </ul>
The device cannot be switched on.  The on/off indicator flashes 4 times in quick succession	The battery has insufficient charge for starting the device. Connect to the power supply and switch the device on.
The on/off indicator flashes 4 times	
The battery does not charge properly.	If the battery can no longer be fully charged, please contact the support department of the distributor where you purchased the device.

# **H** Decommissioning and disposal

## 1 Decommissioning

- 1. Shut down the device.
- 2. Remove the device from its mounting.
- 3. Remove the device from the carry case.
- **4.** If required according to the applicable local regulations, proceed as follows:
  - Remove the battery.
  - Remove the SIM card.
  - Remove the charger.

## 2 Disposal

At the end of its service life the device must be disassembled in an environmentally friendly manner and disposed of. Follow the applicable local regulations for this

# I Appendices

### 1 Set eye control

#### 1.1 Eye control

Using eye control, devices can be operated in a different way. This mode of operation is suitable for users with very limited movement capabilities. The user operates the application on the screen using his or her eyes.

Mind Express can be used with eye control. Mind Express offers a number of eye control types, which after calibrating the eye control program, you can adjust as well as possible to the needs and skills of the user.

- Alea
- Edge
- Eyetech.
- MyGaze
- Tobii



#### NOTE

Tellus i5 only use the Eyetech built-in eye control.

#### 1.2 Eye control calibration

During calibration, eye control is adjusted to the eyes of the user. The calibration can be carried out again, or calibration dots can be improved in order to adjust eye control to the eyes of the user as much as possible.

Calibration can be done in 3 different ways:

Calibration	Explanation
Through the <b>Eye tracking</b> > <b>Calibrate</b> action in a cell of the communication grid.	This way, the user can (re)calibrate the existing eye control. This method does NOT improve calibration dots!
Using the Tools > Eye tracking > Calibrate menu.	This way, the supervisor can (re)calibrate the existing eye control and the supervisor can also improve calibration dots. See (Re)calibrate eye control on page 52.
Using the Extra > Eye tracking > Selection menu.	This way, the supervisor can select the type of eye control, set the necessary configurations for the calibration and execute the calibration. The calibration dots can be improved. See Calibrating the eye control on page 46.

#### 1.3 Calibrating the eye control

After completing the calibration, the calibration data is stored on the device's hard disk and is then used by the eye control camera. The saved calibration is connected to the Mind Express user. So each Mind Express user can save their own calibration data.

1. Choose Extra > Eye tracking > Selection.



#### NOTE

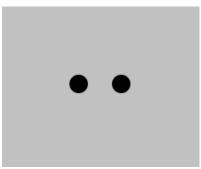
If **Eye tracking** does not appear, check that the plug-in has been activated.

- 2. From the **Type:** drop-down list, select the type of eye control.
  - If no type of eye control is included on the list, the eye control software is not installed or the eye control software is not up to date.
- Click Calibrate.
  - The Calibration settings dialog appears. Some calibration settings need to be specified by experimenting.
- **4.** Complete the fields below:

Field	Explanation
Eyes to track	Choose which eye is to be tracked. The default <b>Left and/or right eye</b> option is recommended. For users with an abnormality in 1 eye, an eye patch or any other issue, choose the best possible option from the list.
Number of points:	Choose the number of dots you want to use to calibrate. The position of the dots will appear in the adjacent image.
Calibration area:	Users who have difficulty with the size of the calibration area, can reduce the calibration area to 50%.
Point speed:	Choose the calibration speed. The speed needs to be determined by experimenting, and depends on the user.
Point size:	Choose the size of the calibration dots.
Point colors:	Click to choose a color for displaying the calibration dots.

Field	Explanation
Use image:	Select this option and select an image. The dots are replaced by the selected image. Tip: use an animation if the user has difficulty focusing.
Automatic calibration	Select this option for a fully automatic calibration. For a calibration that is not automatic, you will need to confirm to go to each next calibration dot. This can be done by pressing a button, clicking the left mouse button or touching the touch screen.
Random calibration points	Select this option if you want the calibration dots to appear randomly. With a fixed order, users are sometimes too quick to look at the next calibration dot, and as a result the calibration is not completed correctly.
Camera images	This option displays the camera images of the eyes, instead of the 2 full black circles. The image appears in the picture above this option.

5. Adjust the position of the eye control and/or the user, so that the eyes appear in the middle of the gray screen.



#### 6. Click Calibrate.

Calibration is started. The user looks at the first calibration dot and continues with the calibration procedure until completed.

**7.** After the calibration, one of the following results appears:

Background	Explanation
Green	The calibration was successful. Eye control will work accurately.
Amber	Calibration can be improved. Eye control can be used but will be less accurate in some areas on the screen. These areas can be improved. See the next step.
Red	Calibration was not successful. Improving or re-calibrating eye control is recommended.

**8.** Choose one of the following options:

Option	Explanation
Recalibrate or F3	Choose this option if there are too many poorly calibrated dots. This option restarts the calibration process and all dots must be re-calibrated.  Go back to step 3.
Improve or F4	Choose this option if you do not want to perform a full re-calibration.  This option allows you to calibrate one or more dots individually. When choosing this option, the background color dispersal and each dot receives an individual color (green, orange or red). Choose a dot that you want to recalibrate by clicking on the dot. The dot is readied for the user to focus on.  The re-calibration of the dot is started by pressing a button, a mouse click or by tapping on the screen. The re-calibration of the selected dot can affect the calibration of the other dots. The best calibration result is saved.  Go back to step 3.
Accept or F5	Choose this option if the calibration is good (preferably green background) or if the calibration is acceptable and any improvement is difficult. Eye control can be used immediately.  Go to the next step.



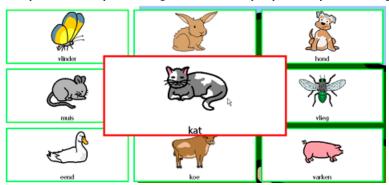
#### TIP

The calibration can be canceled at any time by pressing ESC. If there was a previous calibration, the previous calibration is used.

9. Use eye control.

#### 1.4 Displaying selected cell enlarged on eye control selection

When you select a cell, you can enlarge the cell. You can specify how many times to enlarge the cell.



- 1. Choose Tools > Eye tracking > Selection.
- 2. Select the Enlarge cell option.
- 3. Move the slider to set the enlargement.

  The enlargement settings can be between 1.1 and 10 times.
- Click OK.

#### 1.5 Showing the selection indicator and the mouse pointer on eye control

The selection indicator can be shown, specified cells can be enlarged, the mouse pointer can be made permanently visible.

- 1. Choose Tools > Eye tracking > Selection.
- 2. Select the Show indicator during mouse movement option.



#### NOTE

If you have also selected the Enlarge cell option, the selection indicator is shown when the mouse moves over a cell, and the cell is magnified.

3. As required, select the Also show mouse cursor option to continue to show the mouse during a mouse movement.



#### NOTE

In devices such as the Smart you will only be able to use this option if you connect an external mouse to the device.

#### 1.6 Play sound on eye control selection

A default sound can be played on selection of a cell.

- 1. Choose Tools > Eye tracking > Selection.
- 2. Select the Sound on selection option.
- 3. Click OK.

#### 1.7 The dwell selection on eye control selection

When using dwell selection, the indicated cell is automatically selected after a specified dwell time.

For example: if you point to the same cell for 2 seconds, then that cell is automatically selected after 2 seconds.

- 1. Choose Tools > Eye tracking > Selection.
- 2. Select the Dwell selection option.
- As required, select the **Repeat dwell** option.

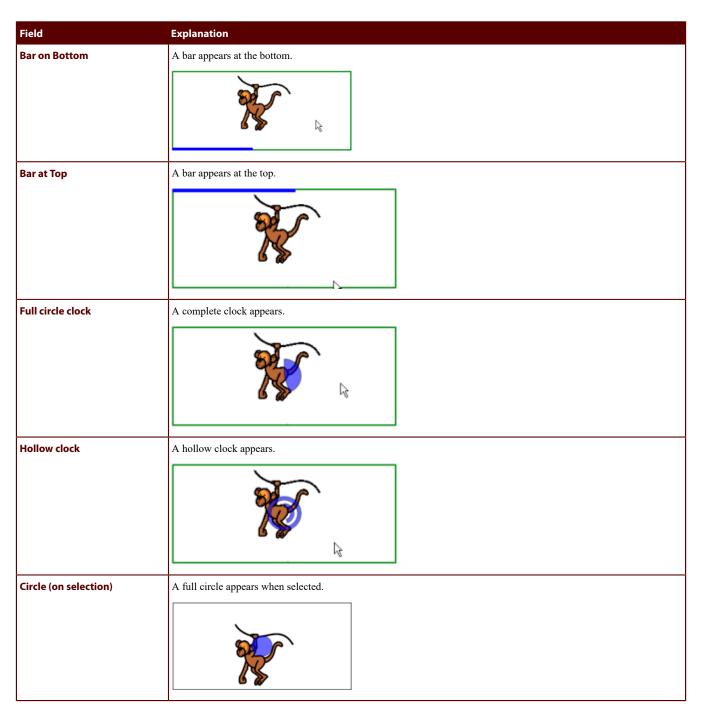
  The dwell selection is repeated each time the selected period passes. If a dwell selection time of 2 seconds has been configured, then the cell indicated by the pointer will be selected automatically every 2 seconds, until the pointer is moved to another cell. This can be useful when compiling words with a same letter sequence.
- 4. Click OK.

#### 1.8 The dwell indicator settings on eye control

You can configure how to visually display dwell time using the dwell indicator. You can choose whether to display dwell time progress using a bar or a clock. The color of the bar or clock can also be configured.

- 1. Choose Tools > Eye tracking > Selection.
- 2. From the **Dwell Indicator:** drop-down list, select one of the following options:

Field	Explanation
None	There is no visual indication of dwell time



- 3. As required, click on the colored cell next to the Dwell Indicator: drop-down list, and select a color and click OK.
- 4. Click OK.

#### 1.9 The external dwell jitter margin settings (on eye control)

If you want to use dwell outside of Mind Express, then you can specify the area within which to dwell.

- 1. Choose Tools > Eye tracking > Selection.
- 2. Select the **Dwell selection** option.
- 3. In the External dwelling jitter margin: field, enter the size (in pixels) of the dwell area. If the mouse pointer leaves this area, a new dwelling starts.
- 4. Click OK.

#### 1.10 The selection indicator settings on eye control selection

You can configure how to visually display the selected cell using the selection indicator.

- 1. Choose Tools > Eye tracking > Selection.
- 2. From the **Selection indicator:** drop-down list, select one of the following options:

Field	Explanation
None	There is no visual indication that the cell has been selected.
Border	A thin border appears around the cell.
Border (large)	A wide border appears around the cell.
Border (large x2)	An extra wide border appears around the cell.
Inverse	The selected cell is inverted.
Circle (bottom)	In the bottom-right of the selected cell, a full circle appears.
Circle (top)	In the top-left of the selected cell, a full circle appears.
Circle (centre)	In the center of the selected cell, a full circle appears.

- $\textbf{3.} \quad \text{As required, click on the colored cell next to the } \textbf{Selection indicator:} \ \text{drop-down list, and select a color and click } \textbf{OK}.$
- 4. Click OK.

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#### The dwell time settings on eye control selection

When using dwell selection, the indicated cell is automatically selected after the specified dwell time. The dwell time can be set between 0.1 and 15 seconds. For example: if you point to the same cell for 2 seconds, then that cell is automatically selected after 2 seconds.

- 1. Choose Tools > Eye tracking > Selection.
- 2. From the **Timing** options group, click **Dwell time**.
- Do one of the following:
  - Click on . to decrease dwell time, click on . to increase dwell time.
  - Drag the slider to the left to decrease dwell time, drag it to the right to increase dwell time.
- Click OK.

#### 1.12 Setting the dwell memory time on eye control selection

Using dwell memory time, you can set the delay after which dwell time is saved in memory. This option can be set for users struggling to remain on a cell with their eyes for the entire dwell time.

For example, the dwell time needed to continue with selection is set to 2 seconds and the dwell time memory is set to 1 second. The user looks at cell A for 1.5 seconds. This time (1.5 seconds) is greater than the set dwell memory time (1 second), so the amount of time (1.5 seconds) is stored in memory. Then the user looks at cell B for 0.5 seconds. This time (0.5 seconds) is less than the dwell memory time (1 second) and is therefore not stored in memory. Then, the user looks at cell A for more than 0.5 seconds. Cell A is selected. So, the user has looked at cell A for more than 2 seconds in total, of which 1.5 seconds was stored in memory in the first action.

- Choose Tools > Eye tracking > Selection.
- From the Timing options group, click Dwell memory time.
- Do one of the following:
  - Click on \_ to decrease the dwell memory time, click on \_ to increase the dwell memory time.
  - Drag the slider to the left to decrease the dwell memory time, drag it to the right to increase the dwell memory time.
- 4. Click OK.

#### 1.13 Using a switch on eye control

You can use eye control in combination with a switch. For example, you can use eye control to point and the switch to select. The switch can be used in combination with dwell selection and selection by blinking.

Do one of the following:

- Choose Extra > Eye tracking > Switch.
- Choose Extra > Eye tracking > Selection, select the Switch option and click Ok.

#### Blinking on eye control settings

The user can make a selection by blinking. Because not every eye blink should be made a selection, the minimum and maximum blink time must be set by experimenting.

- 1. Choose Tools > Eye tracking > Selection.
- Select the Blink option.
- From the Timing options group, click Minimum blink time.
- Do one of the following:
  - Click on to decrease the time, click on + to increase the time.
  - Drag the slider to the left to decrease the time, drag it to the right to increase the time.
- From the Timing options group, click Maximum blink time.
- Do one of the following:
  - Click on to decrease the time, click on + to increase the time.
  - Drag the slider to the left to decrease the time, drag it to the right to increase the time.
- 7. Click OK.

#### 1.15 Enabling or disabling blinking on eye control

You can enable or disable select by blinking on eye control. For example: in the morning you can enable select by blinking and in the afternoon disable it and continue by using a switch to select.

Do one of the following:

- Choose Extra > Eye tracking > Blink
- Choose Extra > Eye tracking > Selection, select the Blink option and click OK.

**Appendices** 

Set eye control

#### 1.16 Accept tap when pressing or releasing settings on eye control

With eye control a switch can be used to make a selection. There is the option to define whether selection is to be performed at the moment of pressing or releasing the switch. The select option to release allows the user to further view the cells and only release the switch at the desired cell.

- 1. Choose Tools > Eye tracking > Selection.
- 2. From **Select:** select one of the following options:
  - on press
  - on release
- 3. Click OK.

#### 1.17 The post selection time settings on eye control selection

To prevent the user from indicating the same cell several times, you can set a post selection time. For example: a post selection time of 2 seconds will ensure that after selecting a cell, for a period of 2 seconds, no other cell can be selected. The post selection time can be set between 0 and 15 seconds.

- Choose Tools > Eye tracking > Selection.
- 2. From the Timing options group, click Post selection time.
- **3.** Do one of the following:
  - Click on \_ to decrease the post selection time, click on \_ to increase the post selection time.
  - Drag the slider to the left to decrease the post selection time, drag it to the right to increase the post selection time.
- 4. Click OK.

#### 1.18 (Re)calibrate eye control

If eye control does not work as expected, you can recalibrate the eye control.

- Choose Tools > Eye tracking > Calibrate.
   Calibration is started. The user looks at the first calibration dot and continues with the calibration procedure until completed.
- 2. After the calibration, one of the following results appears:

Background	Explanation
Green	The calibration was successful.
Amber	At least one calibration dot can be improved.
Red	At least one calibration dot is not calibrated correctly. The bad dots must be re-calibrated or the calibration must be performed again completely.

#### 3. Choose one of the following options:

Option	Explanation
Recalibrate or F3	Choose this option if there are too many poorly calibrated dots. This option restarts the calibration process and all dots must be re-calibrated.  Go back to step 3.
Improve or F4	Choose this option if there are only a few dots that need to be re-calibrated. Choose a dot that you want to recalibrate. The re-calibration of the selected dot can affect the calibration of the other dots. The best calibration result is saved.  Go back to step 3.
Accept or F5	Choose this option if the calibration is good (preferably green background) or if the calibration is acceptable and any improvement is difficult. Eye control can be used immediately.  Go to the next step.

#### 4. Use eye control.

#### 1.19 Starting the eye control camera

After you stop the eye control camera, you can restart the eye control camera through the menu.

Choose Extra > Eye tracking > Start camera.

The camera starts and the Eye Control mode is activated.

#### 1.20 Stop the eye control camera

You can stop using the camera during eye control. For example, if you want to use a different type of camera, or if you want to completely stop eye control and reactivate Mouse mode.

Choose Extra > Eye tracking > Stop camera.

Eye control is stopped an Mouse mode is activated.

#### 1.21 Show eyes in pause cell

Instead of a using a cell of the **Eye tracking: monitor** type, you can also show the eyes in the cell of the type **Eye tracking: pause field**. This is so you can verify whether the eyes are properly observed by eye control when eye control is paused. A full circle means that the eye is properly observed, a hollow circle means that the eye is not observed by eye control.

 $Choose \ Extra \ge Eye \ tracking \ge Eyes \ in \ pause.$ 

To reactivate eye control, you must re-select the cell. When selecting the cell, dwell works, but the dwell symbol is not displayed because the eyes are displayed in this cell.

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