

BlindShell Classic user guide

BlindShell Classic is a button phone for blind and visually impaired people. The phone is operated via the physical keypad or by voice commands. Feedback is provided by the built-in synthetic voice, vibrations and additional acoustic signals.

Important notice: If you let your phone's battery discharge completely, it may appear that the phone is not able to charge at all. In such case leave the phone on the charger for several hours. Afterwards the phone should start charging again. Leaving a discharged battery in the phone for longer period of time might lead to damaging the battery. Such case is not covered by the phone's warranty. We recommend you to remove the battery from the device when you are not using it for more than a week.

Getting started

Package contents

- BlindShell Classic phone
- Battery - is the flat rectangular object. it has a notch on its bottom edge.
- Earphones - on one side of the earphones there is a jack connector, the other side has two earbuds.
- USB charger - Standard EU USB charger, input 110V~240V, 50Hz, output 5V.
- USB cable - a micro USB cable, with standard male USB A on one side.

Phone description

Front side of the phone

Upper part of the front side of the phone is occupied by the LCD screen, this is the Smooth area of the phone. The notch right above the LCD screen is an earpiece. Below the LCD screen is the alphanumeric keypad with the control buttons.

- LCD screen - displays information.
- Keypad - controls the phone, also used for inputting text.
- Earpiece - used as a speaker during a phonecall.

Rear side of the phone

All the features on the rear side of the phone are located in the upper part. Going from the left to right there is a camera and an LED flashlight. Next to it, in the middle is the SOS emergency button. On the right-most side is the phone's speaker.

- Camera - used in the colour recognition and object tagging applications
- LED flashlight - assists the camera in low light settings.
- SOS emergency button - used in emergency situations to call a previously assigned emergency contact.
- Speaker - used for voice and audio output.

Edgess of the phone

On the top edge there is a USB port and audio jack connector. On the bottom edge there is a microphone. In the right bottom corner there is an opening slit.

- Audio jack - earphones connector.
- USB connector - used for charging the phone and connecting the phone to a computer.
- Microphone - used as voice input during a phonecall, voice control, voice dictation, and taking voice memos.
- Opening slit - used for taking the back cover off the phone.

Full description of the phone's buttons with their functions can be found in the section **operating the phone**.

Taking off the back cover

There is a paper insole, which protrudes from the phone. This piece of paper will help you with taking the back cover off the phone for the first time; you can dispose of it afterwards. If you need to remove the back cover later when it is fully attached to the phone, hook your fingernail into the opening slit located on the bottom right edge of the phone and pull the back cover away from the device until you hear a clicking. Move your finger around the phone through the little gap that has now appeared and remove the back cover completely. The back cover fits the phone quite tightly, so it may take some force to take it off.

Inserting SIM card, SD card, and battery

Position the phone in front of you in a way, that the screen and keypad of the phone is facing downwards and the top of the phone (camera and SOS emergency button) is pointing away from you. The rectangular hollow space which is meant for housing a battery should now be in front of you.

Inserting SIM cards

The phone has two micro SIM card slots which are located in the lowest part of the battery space. One on the right-hand side and one on the left-hand side. The right-hand side SIM slot supports 4G.

The right-hand side SIM slot

In between of the two SIM card slots there is an indented space. Put the SIM card in this space such, that the SIM card contacts are facing downwards, and its bevelled edge is its upper right corner. Push on the SIM card lightly with a tip of your finger and carefully slide it all the way to the right.

The left-hand side SIM slot

In between of the two SIM card slots there is an indented space. Put the SIM card in this space such, that the SIM card contacts are facing downwards, and its bevelled edge is its lower left corner. Push on the SIM card lightly with a tip of your finger and carefully slide it all the way to the left.

Removing a SIM card

To remove a SIM card from a SIM card slot place a tip of your finger on the edge of the SIM card, push down on it and slide your finger with the SIM card towards the space in between of the SIM card slots.

Inserting an SD card

SD card slot is located above the right-hand side SIM card slot. To insert an SD card,

you need to open the cover of the slot first. Push the metal cover of the SD card slot to the right, until you hear a click. Carefully lift the cover upwards, no force is needed to do so, if you feel resistance while lifting the slot, then the slot is not opened properly. Insert the SD card to the opened slot, contacts facing downwards and to the right. Close the metal cover and push it downwards. While pushing on the cover, slide it to the left to lock it in place. You should hear a click once the cover is locked.

Inserting a battery

Locate a notch on the edge of the battery. This notch should point towards you and be on the side of the battery which is facing upwards. Slide the battery from top to the bottom into its housing, it should fit snugly. To remove the battery use your fingernail to hook it from the top and pull upwards.

Switching on the phone

To switch on the phone, press the **back button** for at least three seconds. The phone will play a start-up melody. After the first item in the main menu - **call** - is announced, the phone will be ready for operation. Registration to the mobile network may take up to a minute after the phone is switched on.

Interactive tutorial

An interactive tutorial automatically starts, when the device is powered on for the first time. This tutorial has to be completed before you can use the phone. The tutorial is later available in the menu item called **Manual**. The interactive tutorial will teach you how to operate the phone. Pressing any button during the tutorial will tell you what the button is used for. Some of the buttons have two functions, depending on whether you performed a short press of the button or a long press. Once you are done with the training, you can end the tutorial by pressing the **back button** and a **confirm button** afterwards.

Operating the phone

This section of the user guide describes how the device can be controlled, either by making use of the phone's buttons or using your voice.

Volume buttons

The two topmost buttons on the sides of the keypad are the **volume buttons**.

- Short press of either of the volume buttons changes the current volume. The **volume button on the left side** decreases the current volume and the **volume button on the right side** increases the current volume.
- Long press of either of the **volume buttons** anywhere, except when inputting text, will start voice control.
- Long press of either of the **volume buttons**, while inputting text, will start voice dictation.

Function buttons

Two **function buttons** are located below the volume buttons.

Left function button - confirm button

- The left function button, called a **confirm button**, is used for confirming actions, selecting menu items, and accepting calls. You can think of this button as OK/Send/Confirm.
- During a call this button switches between the ear-piece (small speaker used during a phone call) and the loudspeaker.
- Long press of this button within the main menu will bring up a screen for dialing numbers.

Right function button - back button

- The right function button, called a **back button**, is used for going back in a menu, canceling events, and rejecting calls. You can think of this button as NO/Back/Cancel/Erase/Reject.
- Long press of this button anywhere will always bring you to the Main menu of the phone.
- Long press of this button while the phone is switched off will switch the phone on.
- While inputting a text, short press of the **back button** will delete a character, long press of the button will delete everything.

Directional pad

Upper part of the keypad in the middle is occupied by a directional pad. This pad has a button in each cardinal direction (up, right, down, and left) and an extra button in the middle.

Left and right buttons

Left and right buttons are used for navigation in a menu. The **right button** will get you to the next item in a menu, and the **left button** will get you to the previous item in a menu. Those buttons are also used for moving in a text by characters, when writing a message or any other text.

Up button

Press of the **up button** will produce information about state of the phone, such as time and date, battery level, or information about networks.

Down button

Press of the **down button** will repeat the last utterance. Long press of this button will spell the last utterance by letters.

Middle button

The **middle button** serves as a confirmation, this button can be interchanged with the **confirm button**. When the phone is locked, pressing the **middle button** will tell you the current time.

Numeric keypad

Layout of the numeric keypad is identical to layouts which were used in older button phones. There are four rows of three buttons each. First row contains buttons one, two, and three. Second row contains buttons four, five, and six. Third row contains buttons seven, eight, and nine. Last, fourth row, contains buttons **asterisk** (star),

zero, and **hash** (number sign).

0 - 9 buttons

In a menu, pressing a **number button** (except zero) will move you to the corresponding item in the menu. For example: While being in the main menu, pressing the number 3 will move you to the third menu item called **Contacts**. To select the item press the **confirm button** afterwards. In the main menu, long pressing a **number button** will produce a corresponding quick dial contact. Pressing the **confirm button** afterwards will initiate a call to that contact. If no contact is assigned to the pressed number, you will be able to do so now. You can have up to 10 contacts stored for the quick dial.

Asterisk button

Long pressing the **asterisk button** (bottom left button) anywhere in the menu will lock the phone. To unlock the the phone long press the asterisk again. This feature can be switched off in the **Settings**.

Hash button

Long pressing the **hash button** (bottom right button) anywhere in the menu will bring up a menu with sound profile options (silent, vibration, loud)

Using the numeric keypad to input text

In an input mode the numeric keypad buttons are used to input text, numbers, and special characters. Each button, except the hash button, which changes capitalization of the letters, contains a group of characters. You can cycle through the group of characters by pressing the respective button multiple times. For example: **button two** contains characters A,B,C, and number 2. To enter the letter B – press the button twice. To enter the number 2 – press the button four times or hold the button little longer.

- **Button one** contains punctuation special characters.
- The **asterisk button** contains the rest of the special characters.
- **Button zero** contains number 0 and a space.
- The **hash button** changes the capitalization of the letters, and switches between numeric and alphanumeric keyboard.
- Long press of the **hash button** will bring up a menu with emojis. To input an emoji, select it with the **confirm button**.

Voice dictation

Important notice: In order to make use of the voice dictation function, you have to be connected to the Internet via WiFi or a mobile network.

As an alternative to inputting text by typing it on the keypad, voice dictation function can be used. While in an input mode (typing a message, a note, and so on) long press one of the **volume buttons**. Voice dictation will be activated and after a beep you will be able to dictate text.

Dictate the text in short sentences or in a few words. After each dictated segment the phone will slightly vibrate. At this moment you can either continue with the text dictation or finish the voice dictation by long pressing either of the volume buttons, or by pressing the **confirm button**. If you don't finish the voice dictation function

manually, it will be finished automatically after a few seconds when no text is being dictated.

Voice control

Important note: In order to make use of the voice control function, you have to be connected to the Internet via WiFi or a mobile network.

The phone can be alternatively controlled by voice commands instead of using the phone's keypad. While in a menu long press one of the **volume buttons**. Voice control will be activated and after a beep you will be able to dictate the commands. The voice control has following functionality:

- You can open any application by simply saying its name. For example to open the application **messages**, start the voice control and say "messages".
- You can dial a contact from you contact list by voice. To do so, start the voice control and say "call NAME", for example: "call Michael" or "call mom".
- You can create a new message with a recipient from your contact list by voice. To do so, start the voice control and say "send message to NAME", for example: "send message to Michael" or "send message to mom". Afterwards you can either type the text or use the **voice dictation** to input the text.
- You can get quick information about the state of the phone, time and date, or current battery level. To start the voice control and say "information about state", "time", "date", or "battery level".

SOS emergency button

SOS emergency button is located on the reverse side of the phone. Pressing the button for at least 3 seconds will initiate an emergency call to a previously assigned contact. This outgoing call has to be confirmed by the **confirm button**. Emergency call can be initiated even when the phone is locked.

If no contact is assigned to the **SOS emergency button**, then long pressing the button will bring up a menu for assigning a contact to it.

BlindShell Functions

This section of the user guide describes each item in the menu and its function.

Call

The **call** menu item allows you to make calls to contacts from your contact list or to phone numbers. In the **call** menu you can also check your call history - incoming, outgoing, rejected and missed calls.

Dial contact

Selecting the **dial contact** menu item will produce a list of contacts. Move in the list of contacts until you find the contact you want to call. Alternatively you can use the **find** function to locate the contact faster (this is especially useful for contact lists containing a lot of entries). The **find** menu item is the last item in the list and you can get to it quickly by pressing the **left button** when being on the first contact in the list. Another alternative to speed up going through the contact list is typing a letter on the keypad. This will move you to the first contact, whose surname is starting with that letter. Afterwards you can move in the list by the **left**

and right buttons. After finding the contact you want to dial press the **confirm button** to initiate a call.

Dial number

Selecting the **dial number** menu item will produce a dialing screen. You can now type the phone number you want to call. After typing the number press the **confirm button** to initiate the call.

Call history

Menu item **call history** contains all incoming and outgoing calls and their details. Selecting an entry by pressing the **confirm button** will bring up a menu with following options:

- call the contact/number
- send a message
- check the length of the call
- delete the call from the call history.
- Selecting the **delete all history** option will erase every single call in the call history list.

Blocked numbers

Menu **blocked numbers** contains a list of contacts and phone numbers which are prevented from making phone calls to your device. New blocked numbers or contacts are added via the **add blocked number**. To unblock a contact or number from the list, select it and confirm the action with the **confirm button**.

Blocking or unblocking numbers can be also performed from the menu **call history**.

Messages

The **messages** menu item allows you to write messages to contacts from your contact list or directly to a phone number. You can write messages to multiple recipients at once and you can also check your past conversations - your incoming and outgoing messages.

Note: To find out how many characters are remaining till you fill the character limit for one SMS, press the **down button** which will read the whole message back to you and announce the remaining characters count.

Write SMS to contact

Selecting the **write SMS to contact** will bring up a list of your contacts. You can move in the list the same way you move in your **contact list**. After finding the contact you want to send message to, select it by the **confirm button**. Write the text of the message and send it by pressing the **confirm button**.

Write SMS to number

Selecting the **write SMS to number** will open a menu with three items. The first one being **number**, the second one **text**, and the last one **send message**.

- **Number** - enter a number, to which you want to send the message to and confirm it with the **confirm button**.

- **Text** - enter the text of the message and confirm it with the **confirm button**.
- **Send** - after entering the number and text select this menu item to send the message.

The written number and text are not final, you can edit them before sending the message by selecting the corresponding menu item.

Write SMS to multiple recipients

Selecting the **write SMS to multiple recipients** will open a menu with three items. The first one being **recipients**, the second one **text**, and the last one **send message**.

- **Recipients** - select either contact from your contact list or a number to which you want to send the message. The entry will be added to the list. You can continue adding additional contacts and phone numbers until you have entered all recipients. Afterwards go back to the previous menu with the **back button**. To delete an entry, select it and choose **delete item**.
- **Text** - enter the text of the message and confirm it with the **confirm button**.
- **Send** - after entering the number and text select this menu item to send the message.

The selected recipients and text are not final, you can edit them before sending the message by selecting the corresponding menu item.

Conversations

The **conversations** menu item contains all incoming and outgoing messages, which are grouped under a corresponding contact or phone number. Selecting a specific contact or a phone number will bring up a list of all messages belonging to that contact or phone number. If you then select a single message, following options will be presented:

- **Reply** - instantaneously write a message and send it to the contact by pressing the **confirm button**.
- **Forward** - forward the message to another contact or a phone number.
- **Call** - dial the contact or the phone number.
- **Save as a new contact** - in case the phone number is not saved in your contact list already, you can save it to it by selecting this option.
- **Add to a contact** - in case the phone number is not saved in your contact list already, you can add it to an existing contact.
- **Delete** - deletes the message.
- **Delete conversation** - delete all incoming and outgoing messages corresponding to the contact or the phone number.

Drafts

When you quit writing a message before you send it, you will be asked if you want to save it as a draft. This item contains a list of all drafts stored on the device. You can select a draft, finish composing the message and send it or save the draft again.

Messaging settings

Here you can enable or disable **Message delivery notification**.

Contacts

The **contacts** menu item allows you to access, edit, and add contacts. You can back-up contacts to, and import contacts from a .VCF file. You can also assign a quick dial contacts.

Contacts list

Contact list contains all your contacts from the phone's memory and your SIM card. You can move in the list of contacts using the **left and right buttons**, use the **find** menu item, or jump to contacts by using the keypad and typing letters.

- The **find** menu item is the last item in the list and you can get to it quickly by pressing the **left button** when being on the first contact in the list. After selecting the **find** menu item, type whole name or part of the name of the contact that you want to find. All contacts matching the input criterion will be displayed after confirming the input text.
- Using the keypad as a alphanumerical keyboard will move you in the contact list to a first contact, whose surname is starting with the input letter. For example: pressing the **button two** three times (letter C) will move you in the contact list to the first contact with surname starting with the letter C. You can move in the list of contacts afterwards with the **left and right buttons**.

When you select a contact following options will be presented:

- **Dial** - dials the contact.
- **Send message** - opens a text input field which content, after being confirmed, will be sent to the contact.
- **Send an e-mail** - opens **New email**, the field **Recipients** will be filled automatically.
- **Edit contact** - edit name, surname, phone numbers, or e-mail of the contact.
- **Assign ringtone** - opens a list of possible assignable melodies. Selecting one will assign it to the contact. This melody will be played during an incoming call from that contact.
- **Send contact as a business card** - opens a menu to select either a contact or a phone number, to which you want to send the original contact. After selecting either of those the original contact will be sent as a business card.
- **Delete contact** - deletes the contact. This action requires a confirmation.

SIM card contacts

Contacts stored on your SIM cards are displayed in the contact list. If you delete such contact, it will be also deleted from your SIM card. When you edit a SIM card contact it will be saved as a new contact to the phone and the original one will be removed from the SIM cards.

Add new contact

New contact can be added to the contact list through the **add new contact** menu item. You can store following information about the contact - name, surname, mobile number, home number, work number, and e-mail. When all the desired fields are filled, you can save the contact by selecting the **save contact** menu item.

Single button dialing

Single button dialing, or quick dialing, is used for easy and quick dialing of up to 10

selected contacts. You can dial them from the main menu by long pressing a number, to which a contact or number is assigned, and confirming the choice by the **confirm button**.

List of the currently in use numbers and contacts assigned to them can be found in the **single button dialing** menu item. Each item in the menu will announce the currently assigned contact or phone number, or whether there is anything assigned at all.

- **Unassigned** - the number does not have a quick dial assigned. By selecting this item you can assign a phone number or a contact to it.
- **Assigned** - there is a contact or phone number assigned to the quick dial number. You can either remove it, or change it to another contact or phone number.

Backing up and importing contacts

BlindShell allows you to backup contacts into and import contacts from a .VCF file.

Importing contacts

- The filename of the file, from which the contacts will be imported has to be Contacts.vcf. Copy this file either to the root folder of the memory card, if you use one, or to the root folder of the internal storage of the phone.
- If Contacts.vcf is present in both storages, the file which is located on the memory card will be used.
- Select the option **import contacts** to copy the contacts from the Contacts.vcf file into the phone's contact list.
- Contacts in the Contacts.vcf file, which are identical with contacts already stored in your contact list, will be skipped during the import.
- After the contact import is finished the Contacts.vcf file will be renamed to Contacts-imported.vcf.
- The phone will announce an error if the Contacts.vcf file is not found either on the memory card or in the internal phone storage.

Backing up contacts

- Select the **backup contacts** menu item to create a Contacts.vcf file; this will copy contacts that are in the phone's contact list to the Contacts.vcf file.
- If a memory card is in the phone, the file will be created in the root folder of the memory card.
- If no memory card is present in the phone, the file will be created in the root folder of the internal storage of the phone.

Contact settings

If you prefer different sort or display order of your contacts, you can set your preferences here.

- Sort contacts - changes contact sorting, the contact list can be ordered alphabetically by given name or by surname
- Display order - changes order of reading of contact items. Either a given name or a surname can be announced first.

More applications

The **more applications** menu item contains various applications, which expand the

functionality of the phone. These applications are grouped under following menu items.

- **Tools** - contains tools like alarm, calendar, calculator, unit converter, weather forecast for your area, or others.
- **Communication** - contains a basic e-mail client and Telegram messenger client
- **Web Browser** - simple web browser
- **Media** - contains music player, FM and Internet radios or YouTube.
- **Games** - contains couple interactive games
- **Books** - contains library and book reader.
- **Vision aids** - contains tools that are designed to aid with a vision handicap.

Tools

The **tools** menu item follows these applications:

- **Alarm**
- **Minute timer**
- **Stopwatch**
- **Calendar**
- **Notes**
- **Voice recorder**
- **Calculator**
- **Unit converter**
- **Weather**
- **Dictionary**

Alarm

The **alarm** feature, allows you to utilize multiple alarms at once. For each of those alarms you can set time, and days of a week on which the alarm should go off. To dismiss an active alarm press either the **confirm button** or the **back button**.

Creating an alarm

To create a new alarm select the menu item **new alarm**.

- **Set time** - accepts 4 digits as a time. The first pair of digits represents hours and the second pair of digits represents minutes.
- **Set repeating** - governs the days of the week on which the alarm will go off. If you do not select any day the alarm will go off daily. Otherwise the alarm will ring only on the selected days.
- **Save alarm** - saves the alarm and activates it.

Editing the alarm

After selecting a previously created alarm you can activate/deactivate the alarm and change the alarm settings. Inactive alarm will be still stored in the phone, but it will not go off on its set time. Selection of the **change alarm** menu item will provide following options:

- **Set time** - changes the time of the alarm.
- **Set repeating** - sets the days on which the alarm should go off.
- **Save alarm** - saves the changes to the alarm (to discard the changes press the **back button**).

Minute timer

The minute timer is a basic countdown which plays a notification melody after a specified amount of time. It runs on a background, so you do not need to have the screen with the countdown timer active. To dismiss the alarm press either the **confirm button** or the **back button**.

Setting the countdown time and activating the countdown

You can only set the countdown time when the timer is not active (neither running or paused).

- Selecting the timer will show **activate** and **set time**.
- **Activate** will start the countdown with currently set time.
- Selecting **set time** will produce menu to set minutes and seconds of the countdown.
- After minutes and seconds are input, the **save** menu item will store the information to the timer.

Activating, pausing, and canceling the countdown

- To activate the timer select the timer and **activate** menu item afterwards. Timer will start counting down.
- While the timer is counting down, you can either **pause** it (the timer will freeze on its current time) or **cancel** it (the timer will reset to its initial time).
- While the timer is paused, you can either **resume** it (the timer will continue counting down from its current time) or **cancel** it (the timer will reset to its initial time).

Stopwatch

Stopwatch enables you measuring the time periods. After the start the time is measured from zero until the timing is stopped. During the time measuring it is possible to stop it and resume it again. Time measuring works in the background, so meanwhile you can use other functions of the phone as well.

Start, resume and zero the stopwatch

- **Start stopwatch** - starts measuring the time from 0. You can stop the timing by pressing **confirmation button**. Afterwards, by pressing **confirmation button** one more time you will access a menu with the following options:
- **Resume stopwatch** - starts the counter from the time that was stopped earlier
- **Restart stopwatch** - starts measuring from zero right after you pick this option
- **Zero stopwatch** resets the counter and sets the time to zero. Pressing the **confirmation button** opens the menu where you can **start stopwatch** again.

Calendar

The **Calendar** application allows you to create and track your agenda. You can create events lasting whole day, events lasting from specific time to specific time, or event stretched over several days. You can be notified about an upcoming event in advance and each event can be repeated with a specified interval.

Adding an event

Selecting the **add event** menu item will open a menu where details of the event can be specified. The only mandatory fields are **title** and **start date**. Following fields can be filled during the event creation:

- **Title** - title of the event.
- **Location** - location of the event. You can use this field to add more information as well.
- **Start date** - First day of the event. You can either enter the date manually via **enter a date** option or use the **pick a date** option, which will show you 7 days of the upcoming week.
- **Start time** - If the event is meant to last whole day, leave this empty. Otherwise enter the starting time of the event.
- **End date** - in case of one day event the end date should be same as the start date. Otherwise enter the last day of the event.
- **End time** - enter the end time of the event. If you enter earlier time than the start time, the start time will be set to one hour before the end time.
- **Repetitions** - If you want the event to be a periodical one, select the period of the repetition here and number of repetitions.
- **Reminder** - If you want to be notified before the event starts, select the amount of time in this option.
- **Save event** - Saves the event.

Browsing the agenda

All the future events are listed under the menu item **agenda**. Name of the event and its timeframe are displayed. If you want to either edit or delete the event, press the **confirm button** to access those options.

Browsing the calendar

To browse calendar by weeks or by days select the **browse calendar** option. Choose a year, month, and a week of the month for which you want to display your events. You can then display all the events for the chosen week by selecting **All week**, or further filter the selection to display **by days**.

Namedays

Namedays allow you to browse date of namedays (this function is only available in some countries). If you want to view namedays for the following week, select **Next week namedays**. To find what nameday is on a specific date, select **Find by date**. Another option is **Find by name** to find the date for a specific name. To use this function, you need an internet connection to download the list of namedays.

Settings

Calendar settings contains options to choose public holiday visibility. If you choose public holiday visible, public holiday will be shown in the agenda and the calendar browser. To use this function, you need an internet connection to download the list of public holidays.

Notes

The **notes** application allows you to take written notes.

- To create a new note select the **add note** menu item, write the content of the note, and save it by pressing the **confirm button**.
- To access the created notes select the **notes list** menu item.

If you select a note in the list of the created notes, you will be able to perform following actions:

- **Edit** - opens the note for editing.
- **Send via SMS** - opens a dialog to select a contact or enter a phone number, to which the note will be sent.

- **Send via e-mail** - this option opens a **New e-mail** and the field **Text** will be automatically filled by the note.
- **Delete** - deletes the note.
- **Delete all** - deletes every single note in the list.

Voice recorder

The **voice recorder** application allows you to take voice memos, record conversations or sound.

- To create a new recording select the **start recording** menu item and a recording will start immediately. To finish the recording press either the **confirm button** or the **back button**.
- To access the recordings select the **records list** menu item.

If you select a recording in the records list, you will be able to perform following actions:

- **Play** - plays back the recording. For seeking forward or back in the recording use the **left and right buttons**.
- **Rename** - renames the recording to a chosen name.
- **Share the record via e-mail** - This option opens a new e-mail and the record will be automatically saved as an attachment to this e-mail.
- **Delete** - deletes the recording.

Calculator

Calculator allows you to perform basic arithmetic operations - addition, subtraction, multiplication and division. You can enter an arbitrary long expression with as many numbers and operators as you want. Once the **confirm button** is pressed the result of the expression is presented. The result of the previous expression can be used in the next expression as the first number, if after pressing the **confirm button** you continue with a mathematical operator. The mathematical operators are stored under the **asterisk button** and the decimal point is stored under the **hash button**.

Unit converter

The **unit converter** allows you to convert physical units of area, angle, fuel consumption, digital memory, energy, length, mass, power, pressure, speed, time, temperature and volume. The application supports both metric and imperial units. After you choose, which type of units you wish to convert, you can select input and output unit from list of supported units and fill numerical value of the input unit. Note that units can be swapped by choosing the output unit same as input unit and vice versa. Confirmation of "Convert" item by pressing **confirm button** will show the result.

Weather

The **weather** application shows the current temperature in your area and a forecast for upcoming three days. You can also access a detailed forecast for each of those days by selecting a day with the **confirm button**. This detailed forecast shows temperature, wind speed, cloudiness, humidity, and atmospheric pressure for every three hours of the day, from two in the morning until eleven in the evening. You can move in the detailed forecast by using the **left and right buttons**.

The **Unit settings** item in the menu allows for changing used units. Temperature can be shown in Celsius or Fahrenheits, wind speed can be shown in meters per

second, kilometers per hour or knots.

Dictionary

The **dictionary** application can be used to look up translations of words or phrases in different languages on-line. You select the source and target languages, enter the word to be translated and then use the **Translate** item to retrieve translation. The format of the result may differ depending on selected language combination. Some combinations only support returning single result while others will return a list of multiple definitions with synonyms and possible translations, including information about parts of speech and grammatical gender.

Appropriate text to speech voices are used for readback of words in foreign languages. To get spelling of the word, you can use the spelling function (long press the **down button**).

This function is powered by Yandex.Translate (<http://translate.yandex.com>) and Yandex.Dictionary (<https://tech.yandex.com/dictionary>) on-line services.

Communication

Email

You need to have an e-mail account created prior to using the BlindShell e-mail client. The BlindShell e-mail account is capable of managing one e-mail account at a time.

Logging in to an e-mail account.

During the first start of the **email** application you need to log into your e-mail account. To do so, select the **new account** menu item. Enter your email address, SMTP server address, IMAP server address, and your password. You can find information about the SMTP and IMAP server addresses on the website of your e-mail provider. After selecting the **save** menu item, an attempt will be made to log into your email. If successful, menu item **new email** will be shown. Logging into your email account might take some time, depending on your Internet connection. You can change your e-mail account information or delete the account from the device via the **edit account** menu item.

Important notice: In some cases you need to explicitly allow third party applications to remotely access your e-mail, or you have to enable the IMAP access for your e-mail account.

Writing a new e-mail

To write a new e-mail select the **new email** menu item. In the **recipients** menu item you can either enter an e-mail address from your contact list (selected contact has to have an e-mail address assigned) or type in the e-mail address manually. You can also add multiple recipients. Fill in the **subject** and **text** of the e-mail, and send it afterwards by selecting the **send** menu item. The menu with the written e-mail will stay opened until the e-mail is successfully sent. Once the e-mail is sent, you will be moved back to the main menu of the e-mail account. If the sending of the e-mail fails, you can try to send the e-mail again, or leave the writing of the e-mail, saving the e-mail to drafts.

You can send pictures or voice records from your phone as **Attachments**.

When you receive an email, after pressing the **Confirmation button** the list of attachments will appear. You can also access the **Add attachment** item where you

can attach either voice records or pictures from your phone. Previously added attachments can be removed by pressing the ****Confirmation button**** and confirming that you want to remove it.

If you are not able to, or do not want to send the e-mail right away, you can press the **back button**, which will bring up these two options:

- **Save to drafts** - finish writing the e-mail and save the progress as a draft.
- **Don't save to drafts** - finish writing the e-mail, discard it. You can return to the drafted e-mail later by opening it from the **drafts** folder.

Browsing e-mails

To browse e-mails in your inbox, or other folders, select the respective folder and then move within the folder using the **left and right buttons**. To read the contents of a specific e-mail, select it with the **confirm button**. When reading the contents of an e-mail, pressing the **confirm button** again will bring following menu items:

- **Reply** - reply to the original sender. Opens a new e-mail with prefilled recipient and subject.
- **Reply all** - reply to the original sender and everyone on copy. Opens a new e-mail with prefilled recipient and subject.
- **Forward** - forward the e-mail to someone else. Recipients are empty, subject and text of the e-mail is prefilled.
- **Attachments** - the list of attachments will be displayed. When the attachment's format is supported, you can proceed pressing the **Confirmation button**. If the attachment is a text file (PDF, Word, PowerPoint) you can read it by picking **Read document**. If the attachment is a picture, you can see the picture by picking **Show the picture**. The option **Save the picture** downloads the picture and saves it to the phone. You can access the picture later in the gallery. Similarly work the voice records - you can **play the record** and **save the record**.
- **Add sender to contacts** - Create a new contact with the e-mail address of the sender, or update a current contact with the senders e-mail address.
- **Delete** - delete the e-mail.

Email Settings

After the successful login you can access the email settings. Go to **Settings** in the main menu of e-mail and open the available settings

- You can change the login credentials in the item ****Edit account**
- The item **Background checking for new e-mails** enables adjusting the frequency of the new mail. If you enable this option, the delivered mail is checked in the pre-set interval. If a new e-mail is found, the phone will announce it as a notification in the missed events item in the main menu.

Telegram

Telegram is a chat application that allows you to communicate with other people using an Internet connection.

Registration

To use Telegram, you have to register your phone number. The first time you open the application, the user registration process starts. Enter a phone number first. If the account is already registered for the entered phone number, a verification code will come in the message and you will then be logged in.

If this is the first login, you will then be prompted to enter your first and last name which will be visible to other users on Telegram and then you will be logged in.

Menu

Main Telegram menu contains these items:

- **Chats** - list of conversations.
- **Contacts** - list of contacts with Telegram account.
- **Groups** - item to manage group chats.
- **Settings** - item to change Telegram settings.

Chats

Chats contain conversations with other users. In Telegram are two types of chat. Chat with only one contact or group chat with a group of people. If you do not have an active chat, "No items" are shown. You can create new chat in Contacts or Groups.

Each chat in the list can be opened. Then you can use the arrow keys to scroll through the conversation from newest to oldest message.

With each message you can perform some action:

- **New message** - it opens the text keyboard to write a new message.
- **Reply message** - open the text keyboard to reply on the message.
- **New voice message** - open recorder to create voice message
- **Send file** - it is possible to send a picture or recording stored in your phone.
- **Delete message** - in some cases, it is possible to delete the sent message.
- **Info** - contains information about message state and time of sending.
- **Play voice message** - if an audio message is received, the message can be played.
- **View image** - if an image file is received, the image can be displayed.
- **Save image** - if an image file is received, the image can be downloaded to the phone storage.
- **Play audio file** - if an audio file is received, the audio file can be played in the audio player.
- **Download audio file** - audio file could be downloaded to music, alarms or ringtones.

Contacts

This item is used to manage contact and work with them.

- **Contacts list** - contains all contacts from the phone which are registered in Telegram (these contacts cannot be deleted) and the contacts that were added in the Telegram. After opening the contact menu, you can **edit contact, delete contact** or **open chat** with contact.
- **Add new contact** - it is possible to add new contacts which are not saved in the phone contact list. You have to enter phone number and optionally first and last name. Then press save contact. If the phone number is registered in the Telegram, the contact is saved successfully and is visible in the contacts list.

Groups

Groups is an item to manage group chats. Group chat behaves like a classic chat with other contact, but contains more people in one chat.

- **Groups list** - contains group chats that you are part of. You can **open chat**, **edit name** (if you have permission). In item Change chat members it is possible to add or remove people from group chat which you have in Telegram contact list. If you choose Leave chat item, you will be removed from the group chat and you will not see the previous conversation.
- **Create new group** - To create new group chat you have to write name in **Group name** item. Then it is necessary to select the contacts to be added to the chat in **Select contacts** item.

Once opened, it gets to the list of messages, where the specific user who sent the message is visible. You can interact with individual messages in the same way as in a normal conversation.

Settings

This item contains settings for some Telegram functions:

- **Stay connected in background** - there are two possibilities. **Background connection on** means that you will be notify from Telegram in background. For example, when a new message arrives, a notification is displayed in Blindshell notifications. If **background connection off** is selected then when you leave Telegram you will be disconnected from Telegram and you will not receive notifications on Blindshell.
- **Other members last seen visibility** - you can see when a contact in chat was last active on the Telegram. If the **last seen shown** is selected then you will see in chat list information about contact last seen visibility (for example 2 hours ago).
- **Log out** - logging out the user. The next time you open it, you will have to go through the login to the Telegram.

Internet Browser

The **Internet Browser** application allows you to browse internet. After opening **Internet Browser** you will enter the **Internet Browser menu**. By pressing **back button** you will leave the **Internet Browser**. **Internet Browser menu** has following options.

Browse page

This option takes you back to the page and is only available if some page has already been opened.

Insert URL or search

This option allows you to enter a URL or search text using a search engine. If the inserted text is interpreted as a URL, it will be opened in the browser, otherwise text will be searched by a search engine. Note: You do not have to enter the full URL, e.g.: google.com will be recognized as https://www.google.com.

Bookmarks

This option allows you to manage your bookmarks.

List bookmarks

Opens a list of all previously saved bookmarks. Press the **confirm button** to select whether to open or delete the current bookmark.

Save bookmark

Bookmarks the currently opened page. This option is only available if the current page has not been bookmarked yet.

Navigation

This menu option allows you to manage browser history or navigate in it.

History

History allows you to **List history** or **Clear history**.

List history

History visits are organized in following categories:

- **Today** - pages visited today
- **Yesterday** - pages visited yesterday
- **Last week** - pages visited in last 7 days
- **Last month** - pages visited in last month
- **All** - all visited pages

Press **confirm button** to open the list of history visits corresponding to the current category. Press **confirm button** to choose whether to open or delete the history visit.

Clear history

Pressing **confirm button** will delete entire history. This option is only available if the history is not empty.

Reload

Press **confirm button** to reload the current page. This option is only available if some page has been already loaded.

Back

Press **confirm button** to go back in browser history.

Forward

Press **confirm button** to go forward in browser history.

Find in page

This option allows you to enter the text you want to find in the current page. This option is only available in the menu only if some page has already been loaded. After entering a search term, you will return to browser and you can navigate between occurrences of searched term in page by pressing **left and right buttons**. You can cancel search by pressing **button 1**.

Settings

This option allows you to change browser settings.

Earcon settings

This setting allows to choose which events should be announced by earcon (sound) instead of spoken words. By default, all events except of the link are announced using spoken words.

Search engine

This setting allows you to choose which search engine should be used for searching by **Insert URL or search** option.

Other settings

This setting includes the following options:

- **Text overlay** - transparent text overlay is displayed over the page and shows current text with bigger text size.
- **Private mode** - in Private mode visited pages will not be saved to the history.

Downloaded files

This option opens a list of downloaded files. Pressing **confirm button** will allow you to delete file. Downloaded files can be accessed using computer and are available in Download directory.

Help

This option opens a list of shortcuts assigned to the **number buttons**, which are available while browsing the page. These shortcuts are discussed in more detail in the following section.

Browsing

Entering a URL or searching, opening a bookmark, or opening a history visit opens a browser with the corresponding page. Page loading is announced by "Loading page" or by the corresponding earcon. After the page is loaded, it will be announce by "Page loaded successfully" or by the corresponding earcon, or by "Page loaded unsuccessfully" in case if there is a problem with the internet connection, in this case Error page with detailed information about the problem will be displayed. After the page is loaded, first element on page will be announced, after that you can browse the current page.

You can move over the page elements using the **left and right buttons**. **Right button** will go to the next page element and **left button** to the previous element. If there is neither previous nor next element, it will be announced. **Down button** will repeat text of the focused element. **Center button** and **menu button** will click on the focused element, in case of input element it will open keyboard. **Up button** will open phone states. Pressing **Back button** will go back to the **Browser menu**. **Volume down** and **volume up** buttons changes volume and can be used to input text using dictation on long-press.

To make navigation in page content more effective you can use following navigation options:

- Default - Explore every element on the page in logical order.
- Headings - Navigate by headings (level 1-6).
- Controls - Navigate by control elements, such as form fields or buttons.
- Links - Navigate by links.
- Words - Explore one word at a time.
- Landmarks - Navigate by ARIA landmarks.

You can control browser by **number buttons** shortcuts, which have following functions:

- 1 - Default navigation.
- 2 - Navigation by Headings.
- 3 - Navigation by Controls.
- 4 - Navigation by Links.
- 5 - Navigation by Words.
- 6 - Navigation by Landmarks.
- 7 - Jump to the top of the page.
- 8 - Toggle automatic reading from the next element.
- 9 - Jump to the bottom of the page.
 - Go back in history
- 0 - Speak title of current page and navigation mode.
- # - Opens Help with description of shortcuts.

Media

Applications in the **Media** section allow you to listen to radios, or your own audio files. This section also contains **Camera** and **Image viewer**. The **media** menu item contains following applications:

- **Music player**
- **Internet radio**
- **YouTube**
- **FM radio**
- **Camera**
- **Images**

Music player

To make use of the **music player** you first need to copy audio files to a Music folder of the phone, either to the internal memory of the phone or onto an SD card. To do so, connect your phone via USB cable to a computer, on which your music files are stored.

Windows machines

The phone should be recognized as an external device. Afterwards you can copy files via any file explorer application from your computer to the device. If the device is not recognized by the computer, please install the latest updates and check if there is MTP driver present.

Apple machines

You need to install **Android File Transfer** software to copy files from your Mac device to the phone. You can download the program here:
<https://www.android.com/filetransfer/>

Linux machines

The phone should be automatically recognized by the computer. Copy the files to the phone with a file explorer application.

Music folders

To play music, first pick an audio file which you want to play. There are four folders from which you can choose: **All songs** - shows every audio file in the phone, ordered by name. **Artists** - shows artists of all the audio files present in the phone. After selecting an artist you can either browse the artist's songs or albums. **Albums** - shows all albums present in the phone. After selecting an album, songs from the album are shown. **Favorites** - shows audio files you have labeled as favorites. Each of the above mentioned folders has a **search** option, which is always the last item

in the menu. You can access it quickly by pressing the **left button**, which will bring you to the last item in the menu.

Music playback

Menu item **resume playback** will continue playing an audio file which was played the last time the **music player** application was opened. If you select a specific file from a folder, it will start playing right away. The playback mode is always set to repeat all songs within the selected directory. During the playback you can perform following actions:

- Pressing the **left or right button** will move you to the previous or the next audio file in the list.
- Pressing the **back button** while the audio is playing will pause it.
- Pressing the **back button** while the playback is paused will get you to the list of the songs in the selected folder.
- Pressing the **confirm button** while the playback is paused will resume it.
- Pressing the **confirm button** while the audio is playing will temporarily pause the playback and bring up a menu with **move in song** and **save to favorites/delete from favorites** options. After selecting one of those options, or going back, the playback will resume.
- Selecting the **move in song** option will change the function of the **left and right buttons**. Pressing them will move you forward or backward in the song by 10 seconds. If you do not press either of the buttons for 10 second, the function of the **left and right buttons** will revert back to its original state.

Internet radio

Internet radio allows you to listen to radio stations via Internet. You can choose country of origin for the radio station, or search radio stations by genre. Pressing the **confirm button** while a radio station is being played will allow you to label it as a favorite radio stations.

Resume playback - plays the last played radio station. **Popular stations** - contains list of radio stations which are most listened to in your country. There are up to 90 stations. **Categories** - contains radio stations sorted by genre. Select the genre to see the corresponding stations. **Country** - contains a list of continents and countries, respectively. After selecting a country **popular stations, categories, and search** menu items are available for the selected country. **Favorites** - contains list of radio stations which have been labeled as favorites. **Search** - searches for a radio station by its name. Its is possible to type whole name or part of the name of the radio station's name you want to find. All radio stations matching the input criterion will be displayed.

Important notice: In order to make use of the **Internet radio** application, you have to be connected to the Internet via WiFi or a mobile network.

YouTube

The **YouTube app** allows you to play freely available audiovisual content posted on the YouTube site.

The main menu of the YouTube application has the following options:

- **Search** - allows you to search a video or channel
- **History** - a list of videos played on the device in the past
- **Favorites** - a list of your favorite videos and channels
- **Categories** - allows to browse newest videos by different categories

A **List of videos** is a search result, category selection result or user list (favorites, history...). It contains the respective list of videos, pressing the **confirm button** will open a menu of options that can be done with the video.

- **Play from the beginning** will start the playback from the beginning
- **Resume playback** will resume the video where you left the player the last time
- **Search related videos** will take you to a list of related videos
- **Go to channel** will take you to the author's channel where you can find more videos by them
- **Save to favorites** will allow you to add this video to your favorites list
- **Delete from history/favorites** will erase the video from the respective list
- **Video Info** will show more information about the video, like the publish date or description

Video playback screen is responsible for actual playback of the video. Use the **confirm button** to toggle between paused and playing state. Use the **left button** to rewind the video and the **right button** to fast-forward. When you rewind or fast-forward the video while playing, it will skip back or forth by ten seconds with every key press. When paused, it will skip by a whole minute.

Settings: Video mode has three options **portrait mode**, **landscape mode** and **sound only**.

- The portrait mode is the default, the video appears centered on your screen.
- In the landscape mode, you need to hold your phone rotated by 90 degrees clockwise, but the picture will be bigger.
- The sound-only option avoids downloading and displaying video data altogether. This can help you save mobile data in case you're only interested in the audio track.

Notice:

- All YouTube videos are work of independent authors. BlindShell is not affiliated with the YouTube platform or the content creators in any way and can't be held responsible for anything published on YouTube.
- We access YouTube in anonymous mode. BlindShell does not require or support user login. YouTube Premium content or age-restricted content is not available.
- The lists of your favorite videos, history or channels stored in your BlindShell are not synchronized to other devices or your YouTube account.
- Some videos or live streams may use incompatible video formats that can't be played back on your phone.

FM radio

The phone has an integrated FM receiver. For correct operation of this applications earphones need to be plugged in. The earphones serve as an antenna, without which the radio signal would be noisy.

Tuning into a radio station

- Selecting the **play radio** menu item will start playing the radio station which was played the last time the **FM radio** application was opened.
- Pressing the **left and right buttons** will automatically tune the previous/next radio station, without the need of adjusting the frequency manually.
- Pressing the **down button** will announce the frequency and name of the

currently playing radio station, if available.

Other FM radio options

If you press the **confirm button** while a radio station is playing following options will be available:

- **Save to favorites** - labels the radio station as favorited. Afterwards, you can access it quickly via the **favorites** menu.
- **Play from speaker** - the phone will use the built-in speaker instead of the plugged earphones to output the sound. Once playing from the speaker, you can switch back to the earphones by selecting the **play from headphones** option.
- **Manual tuning** - switches the mode from auto tuning to a manual one. In this mode the **left and right buttons** will move you by 0.1MHz instead of jumping to next available radio station. Once in the **manual tuning** mode, you can switch back to automatic tuning by selecting the **automatic tuning** option.
- **Enter frequency** - Allows you to enter a radio frequency manually.

Camera

The phone has a simple camera function that can be used to capture images using the integrated camera of the phone. The camera is located on the top rear side of the phone, left of the SOS button. Every image taken can be accompanied by a short voice description which will be later utilized in the image viewer.

How to operate the camera:

- Open the Camera application. As long as the camera is operating, you will hear periodic clicking.
- Point the camera towards the object or scene you want to capture.
- Press the confirmation button to capture the image. A characteristic "shutter sound" can be heard when the capture is finished. Hold the phone still during the whole process.
- After the image capture is done, you will be presented with a menu where you can view or save the image. The view option will just show the image on the screen, as captured. If you don't like the image, you can get back to the camera capturing mode using the back button.
- When you select the "save" option, you will be prompted to record a short voice description of the image (up to 5 seconds). This description will later help you identify images in your image gallery.
- After the image has been saved, the phone will return to the capture mode and you can capture more images. Use the back button to leave the camera function.

Images

A simple image viewer can be used to view images captured by the camera application.

There are two folders for images: **Camera images** (containing images captured by the phone) and **Other images** (containing any images you may have copied to your phone from your computer)

- When you open the image viewer, the most recently captured image will be presented to you. The image will be shown on the screen and the voice description will be played back to you.

- You can browse the list of images using previous and next buttons. Every time a new image is shown, its respective voice description will be played.
- A confirmation button will open a context menu where you can select one of the following actions: Zoom, Share image, Image information, Change recorded note, Delete image
- You can browse the pictures by months or altogether

Zoom

If you need to magnify the image, you can do so using the **Zoom in** item in the context menu. Once the image is zoomed, the zoom level will be announced (available zoom levels are 2, 4, 8 and 16). You can scroll the zoomed image using the left, right, top and bottom keys. If you want to decrease the zoom level, open the context menu again use the **Zoom out** option. You need to zoom out before navigating to the next image because the D-pad is used for scrolling the image in the zoom mode.

Share image

Sharing pictures is possible in two ways - via SMS or via e-mail.

- **Share picture via e-mail** - This option opens a new e-mail and the picture will be automatically saved as an attachment to this e-mail. The recipient of this e-mail can open and save the picture.
- **Share the picture via text message** - This option allows you to share an image you have taken with another person who will be able to view it.

This can be useful when you want to ask a sighted person for help or when you just want to send a photo for any reason.

For this function, you will need functional mobile data or Wi-Fi connection. The image will be encrypted and uploaded to BlindShell servers. The recipient will then receive a text message containing a link that can be used to view this image.

The image will be viewable on most smartphones and feature phones that have a web browsing functionality. The link can also be forwarded to someone else or manually copied to a web browser on a computer if needed.

We do not use MMS to facilitate this function. You will be charged a standard SMS fee by your mobile provider (and for the data transfer if you use mobile data).

Privacy note: All images sent through this function are end-to-end encrypted using a secure cipher (AES). The decryption key is contained in the text message and only sent to the recipient of your choice and never transferred anywhere else. Although the encrypted image data is stored on our servers, nobody (including the BlindShell company) can view the content of shared images without the key.

We will store encrypted image data for at least 14 days after upload.

Image information

Here you can view the basic information about the image: date, time, image dimensions and file size.

Change recorded note

This option will allow you to change the originally recorded note. You will be prompted to record a new description and the original description will be overwritten.

Delete image

This option will let you delete an image. A confirmation will be required.

Games

This section contains following games:

- **Hangman**
- **Memory game**
- **Mau-mau**
- **Dice roller**

Hangman

Hangman is a simple word game. The goal of the game is to guess a hidden word, letter by letter. You have a limited number of attempts.

The Hangman menu offers following choices:

- **New game** - to start a new game
- **Difficulty** - to set a game difficulty (different number of attempts to guess the word)
- **Statistics** - how many victories and defeats there were

Gameplay

A word to guess is represented by a sequence of letters. On the beginning, each of the letters is hidden and replaced with a beep. On the screen, dashes are displayed instead of missing letters. This way you can tell how many letters there are. Use the keyboard to type a letter you want to guess. The game will inform you whether your guess was successful or not. A guess is successful if the word contains your letter (the order is not important). After each guess, the sequence will be updated and you will be able to identify correctly guessed letters and their position within the word. If you need to repeat the sequence, use the arrow down, like in the keyboard mode.

To win the game you need to correctly guess the word using the limited amount of guesses.

Memory game

BlindShell contains a sound version of the classical memory game (also known as Pexeso).

The main menu contains following options:

- **New game** - opens a selection of sound theme, once the selection is made a new game starts
- **Statistics** - information about how many games have been played and how many attempts were needed

Gameplay

There is a grid of 12 cards and each of the cards is assigned to one of the keys 1-9, asterisk, zero or hash. Your goal is to find all matching pairs of cards that have the same sound. To play, first flip some card by pressing the corresponding number. Listen to the sound and try to memorize it. Then flip another card that you suspect might contain the same sound. You will hear the sound of the second card. If the sounds match, the pair of cards will be removed, if not, the cards will stay in place.

Continue until there are no cards left. The goal is to memorize the sounds and use as few guesses as possible.

Mau-mau

Mau-mau is a simple card game you can play against the phone.

The main menu contains following options:

- **New game** - starts a new game
- **Settings** - you can choose your preferred card style and opponent difficulty

Gameplay

This game uses a deck of 32 cards, either German suit (values seven to ten, Unter, Ober, King and Ace) or French suit with only values seven to ten, Jack, Queen, King and Ace.

Each player initially gets four cards. The point of this game is to get rid of all your cards.

1. The first card of the game can be arbitrary.
2. Players take turns
3. It is allowed to play a card that has the same suit or the same value as the previous one
4. If you don't have the same suit, you must take a card from the deck.
Exception: If you have Ober (or Queen) you can play it anytime and change the suit to whatever you want
5. If you play Ace, the opponent must also play Ace or pass their turn.
6. If you play Seven, the opponent must also play seven or take two cards. The penalty doubles each time seven is played.

Control

The default view is the "table". It shows and reads back the last card, number of cards you and the opponent have. You can repeat this information using the down button. The confirmation button opens a menu with cards that you can play. Depending on the state of the game, there may also be other actions available, namely Take a card, Pass or Take penalty.

Dice Roller

This is not a game as such but can be useful when playing board games like Ludo. A virtual die can't be lost and the outcome will be known instantly.

- **Roll a die** - The phone will randomly pick a number from 1 to 6 (or alternatively your preferred number of sides). You can start a new roll by pressing the confirmation button.
- **Number of sides** - You can change the number of sides the virtual die has. Starting from two (a coin), through six (a normal Ludo die) all the way up to 99 sides.

Books

Books contains **book reader** and **library** applications. **Book reader** allows you listen to your favorite books. Compared to that **library** allows you download your favourite books from online libraries.

- **Book reader**

- **Library**

Book reader

To make use of the **book reader** you first need to download books using **library** or copy the book files to a BlindShell/Books folder of the phone, either to the internal memory of the phone or onto an SD card. Book reader can play audio files and read text (.txt) files. Every file in the first level of Book folder is recognized as a single book. Structured books with multiple files could be stored in such folder, in which any number of subfolders are allowed.

Main menu

- **Last book** - shows the last read book.
- **Books list** - contains a list of all your books.
- **Bookmarks** - shows a list of bookmarks you have created.

Book selection menu

- **Continue reading** - starts reading the book from the position from which you have left the reader the last time you were reading the book.
- **Read from the beginning** - starts reading the book from the beginning. Previous progress will be lost (except created bookmarks).
- **Browse content** - allows browsing content of the book by its chapters, parts, or sections.
- **Bookmarks** - shows a list of bookmarks you have created for the book.

While listening to a book

- Pressing the **left or right button** will move you to the previous or the next section of the book.
- Pressing the **back button** during the playback will pause it.
- Pressing the **back button** while the playback is paused will get you to the current played part of the book in the book content.
- Pressing the **confirm button** while the playback is paused will resume the playback.
- Pressing the **confirm button** during the playback will temporarily pause the playback and bring up a playback context menu with options. After selecting one of those options, or going back, the playback will resume.

Playback context menu

- **Jump to a percent of the book** - allows you to enter percent of the book (0-99) that reader will jump to.
- **Add a bookmark** - creates a bookmark of the current position in the book. You will be prompted to enter a name of the bookmark upon its creation. If nothing is entered, timestamp will used as the bookmark's name.

Playback context menu - audio file specific

- **Move in book** - changes the function of the left and right buttons. Pressing them will move you forward or backward in the book by 10 seconds. If you do not press either of the buttons for 10 second, the function of the left and right buttons will revert back to its original state.

Playback context menu - text file specific

Speech rate - changes the book readers rate of the speech. **Speech language** - changes the language in which the book is read.

Library

Library allows you to search books in supported online libraries (e.g. Librivox) and download them for usage in **book reader**. Some libraries may require login with existing account.

Main menu

- **Search book** - opens book search options (i.e. title, author, key word).
- **Log out** - log out from library (if library requires login).

Search book

- **Title** - shows list of books found based on provided title.
- **Author** - shows list of books found based on provided author.
- **Key Word** - shows list of books found based on provided key word.

Book menu

- **Download book** - downloads book. Wait until the book is downloaded, or cancel download using **back button**. Once the book is downloaded, it will be available in the **book reader**.
- **Book info** - shows more detailed information about the book (e.g. length, language, description, origin year).

Vision aids

Vision aids applications offers tools, which are designed specifically for blind and low vision users. BlindShell Classic offers following applications:

- **Colour indicator**
- **Localization**
- **Object tagging**
- **Flashlight**

Colour indicator

Colour indicator application is used to detect colours of objects around you. It uses the camera of the phone which is located on the rear side of the phone, next to the **SOS emergency button**. Hold the phone a few centimeters from the scanned object and start the recognition by pressing the **confirm button**. The detected colour will be announced afterwards. To increase the accuracy repeat the process several times and pick the colour which was announced in the majority of the detection.

Important note: Colour indicator application is highly dependent on the ambient lighting and does not perform well in low-light conditions. In these conditions the result of the colour indications may not correspond to reality.

Localization

Localization application aggregate data from GPS, WiFi networks, and mobile network to estimate the nearest physical address in your vicinity, your GPS location, and its accuracy. The whole process of estimating your location may take up to 30 seconds. The result menu contains following information:

- Estimated address.
- Location estimation accuracy.
- Option to send the estimated location via SMS.

- GPS coordinates.

Important notice: The accuracy of the location estimation may vary. You should not rely on the result absolutely, but take the accuracy in account.

Important notice: In order to make use of the **localization** application, you have to be connected to the Internet via WiFi or a mobile network.

Object tagging

The object tagging function can help you tag and later identify objects that are otherwise hard to tell apart by touch - like bags or boxes with spices, cosmetic and household cleaning products, bottles, cans and so on. For this function you will need coded tags that can be purchased separately from your BlindShell distributor.

The tags are squares stickers about one and half centimeter by one one and half centimeter. They have to be peeled of the sheet and stuck on the object you want to tag. The tags are to be read by the phone's back camera lense. Each tag is unique and when you tag an object, your phone will associate that tag with your spoken or written description. Later on, when you read the tag again, the description will be played back to you.

Tagging a new object

- Pick an object you want to tag.
- Peel one square tag off the sheet with tags and stick it to the object. If possible, avoid sticking the tag on rough or curved parts of objects.
- Open the tagging application and select the "add tag" option. Periodic tapping starts, informing you that the detection is running.
- Point the camera of your phone towards the tag on your object. The recommended distance is around 20 to 30 centimeters or inches. It may take some practice to get it right.
- After the tag is read, you will be asked if you want to record or write a description. If you choose to record, the recording will start after a beep and will automatically finish after five seconds. If you choose to type, a standard keyboard will appear and you will be able to input the description this way.

Identifying an object

- Select the "read tags" option from the menu, the phone will start tapping periodically once the camera is ready for tag reading.
- Point your phone camera towards the tag like when tagging a new object
- Once the tag is read, the camera mode will be paused and the description will be read back to you
- Pressing the **back button** will return you to the camera mode for another tag. The description can be repeated with the **down button**.

Editing and deleting tags

The "list tags" option in the menu brings you to the list of your tagged objects. Here you can edit descriptions or delete a tag that is no longer in use.

Flashlight

A simple app that will turn the camera's LED light on. The LED is located on the back side of your phone, next to the camera lens.

Settings

This section of the main menu allows you to customize behavior of the phone. It

also contains settings of the networks, SIM cards and a possibility to update the phone to a newer version, when an update is available.

Sounds

This section contains various settings of the sounds and voice output of the phone.

Profiles

Allows you to set the sound profile used for incoming calls and messages. Alternatively you can access this setting by long pressing the **hash button**.

- **Normal** - Sounds and vibrations will be used for the incoming calls and messages.
- **Vibration** - Only vibrations will be used for the incoming calls and messages.
- **Silent** - No sound or vibration will be used for the incoming calls and messages.

Volume

This menu item allows you to set the volume level for incoming calls, notifications, and alarm.

Melodies

This menu item allows you to set a melody for incoming calls, notifications, and alarms. If you want to use your own melody, copy the melody file to the phone's storage. For ringtones use the **Ringtones** folder, for notifications use the **Notifications** folder, and for alarm use the **Alarms** folder.

Voice output

This menu item allows you to set the speech rate of the phone's voice and the level of intonation. You can try various speech rates to find out which fits you the best. You can also turn the information about time and date, which is announced after unlocking your phone, on or off.

Feedback

Allows you to set methods which the phone uses to provide you with feedback (other than the speech output). You can select to be provided only with sounds. Those are beeps and sound, which are played when moving through a menu, writing a text, or locking the phone. Other possible provided feedback are vibrations, which are used in the same circumstances as the beeps and sounds. You can also choose to be provided with both types of feedback at once.

Menu position indication

Allows you to enable or disable announcement of position in the menu (for example one of nine).

Notification reminder

When you receive a message or miss a call, which produces a missed event notification, a notification sound is played. If you enable the **notification reminder** option, a less intrusive beep is played every five minutes, to alert you about the missed notifications. This periodic beeping will be dismissed, once you check your missed events.

Keyboard

This section contains settings regarding inputting text and using the keypad lock.

Keypad lock

Selecting this menu item enables or disables the possibility to lock the phone using the **asterisk key**. The **keypad lock** is mainly intended for prevention of unwanted presses of the phone's keys.

- When the keypad lock is enabled, the phone can be locked and switched to a sleep mode by long pressing the **asterisk key**. The phone will be also automatically locked after the screen timeout time. To unlock the phone long press the **asterisk key**.
- When the keypad lock is disabled, the phone will also automatically switch to the sleep mode after the screen timeout time, but the keyboard won't automatically lock. To wake the phone up, press **any key**. This key will only wake the phone and will not be interpreted by the phone in other way. You can still lock your phone by long pressing the asterisk key and unlock it the same way, but it won't happen automatically.

Reading during deleting characters

This option affects the deletion of characters when writing a text.

- **Read last remaining character after deletion** - when deleting characters using the **back button** the last remaining character, after the deletion, will be read.
- **Read deleted character** - when deleting characters using the **back button** the just deleted character will be read.
- After deletion, you can press the **down button** which will read the remaining text to you.

Repeating during writing characters

During writing a text you can choose following options of repetition of the input text.

- **Repeat word after you write a space** - Repeats the last written word after you input a space or a punctuation mark.
- **Repeat whole text after you write a space** - Repeats the whole written text after you input a space or a punctuation mark.
- **Do not repeat** - Does not repeat anything after you input a space or a punctuation mark.. You should use the **down button** to repeat the input text manually.

You can also scroll the text by character or by word. While in keyboard, long press of the **up button** changes the setting.

Capital letters signaling

This options affects how should capital letters should be signaled in the keyboard mode.

- **Signal verbally** - prefixes "capital" when typing capital letters
- **Signal with higher pitched voice** - changes pitch of voice when typing capital letters
- **Don't signal** - no signaling of capital letters

Display

This section contains settings regarding displaying information on the device screen and the screen timeout.

Brightness setting

This option allows you to change the display brightness - higher level means brighter screen, but shorter battery life.

Screen timeout

This options allows you to set a period of inactivity, after which the phone will go to the sleep mode, to save battery power. When the keypad lock is enabled, the phone keypad will be locked after the timeout as well.

Colour scheme

This option allows you to select from four different colour schemes, first colour denotes the colour of the text and the second colour denotes the background colour. There are following options:

- **White on black**
- **Black on white**
- **White on blue**
- **Black on yellow**

Main menu style

This option allows you to choose the appearance of the main menu. You can either use plain text, icons, or combination of text with icons.

Set huge text size

This option allows you to enlarge the font used in the menus. Be aware that this will break the word wrapping and thus a single word might be stretched over multiple lines.

Networks

This section allows you to set various connectivity settings such as WiFi, Bluetooth, mobile networks, or PIN code.

Wifi

To make use of the Wifi networks, you first need to enable the Wifi. When you do not intend to use the WiFi, you can turn it off by selecting the **disable wifi** menu item. This will save some battery.

Network list

This menu item will show you all available networks in your vicinity as well as past saved networks.

- To connect to a network, select it with the **confirm button** and select the **connect to network** option afterwards. If the Wifi network is protected by a password, you will be prompted to enter the password.
- Alternatively you can make use of the WPS button. Select the **Connect with WPS push button** option and afterwards press the WPS button on your router. The two devices should be paired after some time.

- **Information about network** will provide you with additional information about the Wifi network such as signal strength or network availability.
- To remove a saved network from the list, go to the network list, select the respective Wifi network and choose **forget network** option.

If the network you want to connect to has a hidden SSID, you can connect to it via the **Connect to hidden network** option. In this case first enter the SSID and afterwards its password .

Wifi connection via text file

You can connect your phone to PC via a cable and create a plaintext file in the root folder of the storage.

- The name of this file should be wifi.txt (case-insensitive) and it should contain two lines.
- The first line of this file is the name of the wifi network (case insensitive) and the second line is the network password (case-sensitive).
- Every time an attempt to connect to an encrypted network is made from the BlindShell menu, BlindShell will check for presence and correct format of this file.
- If the file is found and is valid, the phone will check, whether the first line, with the network name, matches the selected network name.
- If so, the password keyboard won't even be shown and the password from the file will be used instead.

Bluetooth

The phone supports audio Bluetooth devices - speakers, headphones, handsfree. A device has to be paired before it can be used for the first time.

Important notice: If you connect an audio device, your audio output (including the synthetic voice) will be played through that audio device. If the device fails to function properly, you might end up without any useful feedback. In that case you can always disconnect a faulty audio device by raising the volume beyond the maximum level, i.e. pressing the volume button few times in a rapid succession.

Turning the Bluetooth on and off

The Bluetooth function is off by default. This helps to save energy of your battery. We recommend that you turn Bluetooth off if you don't use it. You can turn Bluetooth on and off using the first option in the menu.

How to pair a new device

- Enable the pairing mode on your device. Some devices are in the pairing mode by default when turned on and out of signal. Other devices have a special key or combination of keys that will trigger the pairing mode. This is device-specific and can be found in the manual of the device.
- Once your external device is in the pairing mode, select the **scan for devices** option in the menu. The scan will take up to half a minute after which a list of nearby devices will be presented to you.
- Selecting a device from the list by pressing the **confirm button** will trigger the pairing process. This will generally take few seconds.
- Some devices may require entering a verification code. If this happens, you need to type a code given by BlindShell on your external device.

Connecting and disconnecting a device

A newly paired device should be generally connected automatically. However, this

is not the case with all devices. Sometimes it's also useful to be able to connect and disconnect devices at will, without pairing and unpairing them.

To connect or disconnect a device:

- Select the **paired devices** menu item, all paired devices will appear in this menu
- Selecting a device from the list by pressing the **confirm button** will open a menu where you can select an operation to do with your device (connect, disconnect, unpair)
- If you choose connect or disconnect, an attempt to connect or disconnect a device will be made. Once it succeeds, the sound output of the phone will be played through the device.
- If you choose to unpair a device, this device will become unavailable until you pair it again. Some devices may require this action before they can be connected to another phone.

Notes about Bluetooth

- Before you can connect a paired device, you usually need to turn it on by a switch on the device. Some devices may turn themselves off after a period of inactivity.
- There is a vast number of Bluetooth devices on the market. BlindShell cannot guarantee compatibility with every device available. Your BlindShell vendor might be able to give you an advice or offer you a tested model.
- Due to possible radio interference and due to nature of the Bluetooth protocol itself, there is no guarantee that a device will be found during the scan procedure. If you can't see or pair your device, make sure it's still in the pairing mode and then try the procedure again. If the problem prevails, make sure there is no strong source of interference in your area, like another Bluetooth device, a WiFi router or some other radio device in a close proximity.

Mobile data

Mobile data can be turned on and off by selecting this menu item. This can be alternatively accessed from the **information about state** menu.

Pin code

- You can activate or deactivate the request for PIN code at the phone startup in the PIN code menu. To change the PIN code you need to activate it first.
- If you enter the PIN code incorrectly three times in a row, your SIM card will be temporarily blocked and PUK code will be requested. If you enter the PUK code incorrectly ten times in a row, your SIM card will be blocked permanently.
- If you use two SIM cards, select the respective SIM card prior to changing, enabling, or disabling the PIN code.

SIM cards

This option will be visible only when there are two SIM cards used in the phone. You can select preferred SIM card for outgoing calls, outgoing messages, or data transfers.

Phone menu mode

Here you can pick one of two modes:

- **Full mode** - all the functions of the phone are available
- **Simplified mode** - all the advanced functions of the phone will be hidden. Only a set of basic functions can be used. These are **Call, Messages, Contacts, Missed Events** and **Turn Off the Phone**. After the activation of the simplified mode the Settings item will be hidden as well. To access the **Settings** dial **###**. After that you will be able to change the settings or activate the **Full mode** again.

BlindShell update

Important notice: In order to update your phone, you have to be connected to the Internet via WiFi.

Updates for the BlindShell phone are released for two reasons:

- Enhancing current features and fixing bugs
- Bringing new features

When a new update is available for download you will receive a notification message. This message will appear in the missed events and in your received messages.

To perform the update first select the **check for update** menu item. When new update is available you will be able to download it. There will be also a short description of the contents of the updates.

After the update file is downloaded, you need to install it by selecting the **install update** menu item. This process will take several minutes. During the update the phone will speak in robotized voice. You will be also informed about the progress of the update.

Important notice: Do not switch your phone or do other actions with your phone during the update process. Doing so might result in damaging the phones software and subsequent necessity to send the phone for repair.

Time and date settings

Time and date are usually automatically set from the network, when SIM card is inserted in the phone. However you can change the settings here.

- To enter a custom time and date first disable the automatic time and date setting. This option might not be displayed, when date and time were not able to be obtained from the network.
- **Set time** menu item accepts 4 digits as a time. The first pair of digits represents hours and the second pair of digits represents minutes.
- To set date first select the **set date** menu item, afterwards enter day, month, year, and select the **save date** menu item.
- You can always revert back to the time and date from the network by selecting the **enable automatic time and date** menu item.

About phone

In this section, you can check out some technical information about your phone, like software version and free internal and SD card storage. There is also a shortcut to open a Service menu, which can be used to perform some advanced actions, like backup or factory reset.

Service menu

The service menu is a feature that simplifies certain service operations. For the service menu, the phone has to reboot in a special mode, outside of the ordinary operating system. The service menu is not a part of the BlindShell system and you will not be able to receive calls or operate your phone in a standard way in this mode.

For the backup and restore functions of the service menu, you will need to insert an SD card first. The card is used as a storage for the backup files.

The service menu has the following items:

Backup data

The backup function will create an file containing internal user data. This exported file does not contain internal storage data normally accessible as files by user when connected to a computer. For example, music or book files, voice recordings and others are excluded from this backup.

This is the content of the backup:

- BlindShell preferences
- contacts
- messages
- calendar
- call history
- notes
- alarms
- object tagging database
- e-mail configuration

The backup is stored in a file called `blindshell_backup.bin`

Restore data

The restore function will restore user data from a backup previously created using the **Backup data** function. Warning: **Your data will be overwritten by the restore operation.**

If there is no `blindshell_backup.bin` present on the SD card, an error will be announced.

Factory reset

This item will perform a so called factory reset of your phone. During this operation, all user data will be wiped and the phone will return to its original state. This also applies to any updates performed by user. After the factory reset, the BlindShell will be reverted to its original version.

Restart phone

This item will exit the service menu and restart the phone back to the normal mode of operation.

Information about state

The **information about state** can alternatively be brought up from anywhere, except when inputting text, by pressing the **up button**. It contains following items:

- **Time and date** - displays current time and date information. Pressing the **confirm button** will take you to the **calendar** application.
- **Signal strength** - displays the information about network signal
- **Battery state** - displays the remaining percentage of the battery
- **Wifi state** - displays information about the Wifi network, to which the phone is connected. Pressing the **confirm button** will take you to the Wifi settings.
- **Bluetooth state** - displays an information about connected Bluetooth devices

Manual

The **manual** menu item contains this document divided to sections to allow for better readability. It also contains a **start tutorial** option to start the interactive tutorial which was started when the device was powered on for the first time.

Missed events

This menu item contains notifications about new messages or missed calls. Once you check the corresponding message or call, by selecting it, the notification will be removed from the missed events list.

Switch off the phone

Selecting this option and its subsequent confirmation will switch off the phone.

Technical specification

- Mobile networks frequency bands:
 - GSM: 900/1800/1900MHz
 - WCDMA: 2100MHz
 - LTE-FDD: B1/B3/B7/B20
- CPU: Dual core 1.2GHz
- Memory:
 - RAM: 512MB
 - Internal storage: 4GB
 - Expandable by SD card
- Screen: 2.8 inch QVGA TFT colour screen
- SIM cards: dual micro SIM card slots
- Camera: 2.0MPx
- Battery: 1800mAh
- Wifi
- Bluetooth
- GPS
- FM receiver
- LED flashlight
- SOS emergency button



This product is CE marked and fully complies with all applicable EU legislation.



At the end of the product's life you can return it to the supplier or manufacturer for free of charge disposal. This is to comply with 'The Waste Electrical and Electronic Equipment Directive' (WEEE).

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