Rehan K1638 i-Reader 2 8MP Camera User Manual

**i-Reader 2
User Manual**

Contents

K1638 i-Reader 2 8MP Camera

Read this manual carefully before using the i-Reader 2.
Keep the user manual for future reference.

Foreword

This user manual is intended for end users as support for the use and maintenance of the i-Reader 2. Read this manual carefully before use and observe all safety instructions to prevent damage to your health, the device or the environment.
The i-Reader 2 is a text-to-speech device incorporating many languages with selectable male and female voices. The i-Reader 2 comes with a built-in battery as standard, so you can use it on the go as easily as you use it at home.
If you have any questions after reading this manual, please contact your supplier. You will find this information on the back of the manual.

Important instructions and warnings are placed in black-outlined areas such as this one.

Intended Purpose and patient population

The i-Reader 2 is an assistive product for persons with any kind of reading disability, for example low vision, dyslexia, motor impairment or other reading impairment such as aphasia. It is developed for indoor use only, in professional and home-healthcare environments.
The device is easy to use and it could be used by any person over 6 years old.
Children under 6 years or people with intellectual disabilities may only use the i-Reader 2 if they are supervised by a person designated for their safety.

Package Contents

- i-Reader 2 device
- Power adapter with power cord
- Headphone
- Carrying case
- User manual

Safety

Important! Please note the following instructions for safety and quality reasons:

- Always adjust the volume of the i-Reader 2 to an acceptable level that isn't distorting the sound. High sound levels can cause permanent damage to your hearing.
- During use your hearing gets used to the volume of the device. If you raise the sound in these cases it can still be harmful to your hearing. To protect yourself against this, set the volume to a safe level before your ears get used to the sound and do not raise it further.
- Do not look directly into the LED-light from a short distance. This may cause serious injury to the eyes.
- Avoid touching the lens as doing so can reduce the scanning quality.
- Do not use this device if it has a damaged plug or power cord, if it is not working properly or if it has been damaged by falling.
- Always use the i-Reader 2 at a reasonably constant temperature between 5 °C and 40 °C / 41°F and 104°F.
- The i-Reader 2 requires little to no maintenance. If you want to clean the outside of the device, only use a soft dry cloth. Never use water, alcohol, acetone or other cleaning agents. Cleaning can only be done when the adapter is unplugged.
- Always switch off the i-Reader 2 if you are not using it.
- Only use the manufacturers supplied adapter or equivalent type described in this manual to charge the device.
- Do not expose the i-Reader 2 to direct sunlight and extreme or rapidly changing temperatures or humidity.
- Only use the i-Reader 2 in dry rooms, not in a bathroom or outside.
- Do not place your i-Reader 2 next to or on a heat source.
- Place the device on a stable, horizontal surface so that the device cannot fall.
- Pay attention to the connected cables of the adapter and headphones. These cables can pose a risk to your safety.
- Use precautions for implanted devices, like a pacemaker. Maintain at least 15cm / 6 inches between the speaker or headphone and the implanted device. See magnetic strength details in the technical information. If in doubt, contact your specialist.
- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation.
- Use of accessories, transducers and cables other than those specifi ed or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the i-Reader, including cables specifi ed by the manufacturer. Otherwise, degradation of the performance of this equipment could result.
- Active mobile phones in the area can cause malfunctions due to interference.

- The floor should be made of wood, concrete, or ceramic tile. If fl oors are covered with synthetic material, the relative humidity should be at least 30% to prevent electrostatic discharges.

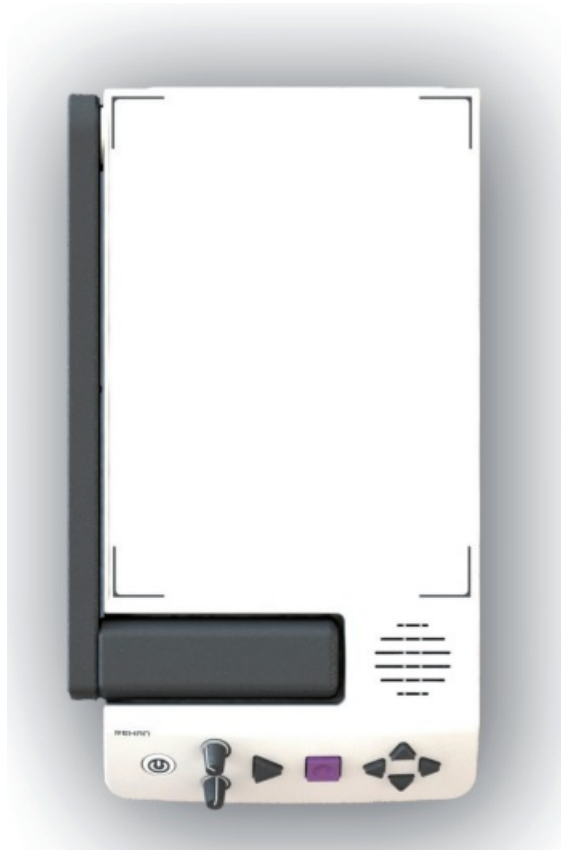## Overview and description

Device overview

Figure 1: Top view

The scanning camera with integrated LED lights is positioned into the device when it is not in use or in transport position. The camera arm is located at the left side of the device and must be lifted to bring it into reading position. The speaker is located at the bottom right side. There are tactile document placement markers at the top left side and on the bottom side of the camera area to align your document.

Control panel

Figure 2: Front view

All user controls are positioned at the front of the device. The functions of these buttons vary as a result of the mode the device is in. Read this manual for the functionality of the user controls.

Side connections

At the front right side there is a rectangular slotted hole with a USB2 connection. The headphone connection is located at the lower right side and is detected as a round hole.
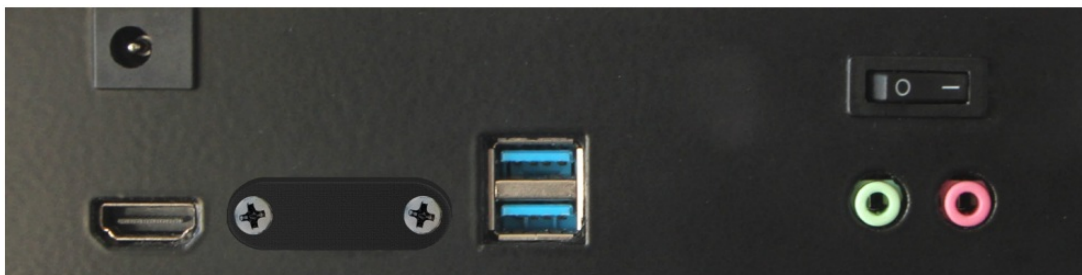
Rear connections

Figure 4: Rear view

The power adapter input is located at the upper left side and is detected as a rectangular box with a small hole to connect the power adapter output plug.
A digital HDMI monitor connection is located below the power plug. To the right of that are 2 additional USB connections. These could be used for a USB mouse to control the font size when using an external monitor.
At the lower right side there are 2 round connections. At the left is the green audio lineoutput. Use this line-output for external audio equipment only, do not use the headphone with this connector. The pink connection has no function, it is part of the integrated PC board and is reserved for possible future upgrades.
At the upper right side, above the two audio outputs, there is a switch to turn the LED lights next to the camera on or off. This way, the lights can be turned off to reduce reflections for better text recognition quality when reading glossy paper.

Rechargeable battery

The i-Reader 2 has an integrated Li-ion battery. Enjoy the use of the device even when the direct power is unavailable.
Charging the battery
Charging the battery is managed by the internal system and might take up to 6 hours depending on the charge state. The light indicator inside the ON/OFF button shows the

charging status of the device when the power adapter is connected:

Light	State
Green	The device is switched on, charging is managed by the internal system
Blue	The device is switched off and charging
Off	The device is switched off, battery is full of charge
Red	The battery is empty. Connect the adapter to charge the battery
Red (blinking)	The device is not able to run on battery power, only with the adapter

Battery empty
If the battery runs out, the device will indicate this with the message "Low battery.
Connect adapter".
When the battery runs empty, the device will turn itself off. The switch-off tone is audible, and the green light indication of the ON/OFF button will switch off.
Battery saver
The i-Reader 2 has a smart battery power control and will automatically turn off the device if it hasn't been used for 30 minutes. An indication tone will be heard and the device will turn off.
Storage conditions
To prolong your battery's lifespan when the device is stored for longer periods, it is advisable to charge the battery to approximately 50% charge. Recharge the battery to this level every half year. Keep the storage temperature to room temperature or below.
High temperatures will negatively affect the self-discharge of the battery.

First time use

Unpack the device and place it on a stable surface. Connect the power adapter and switch on the unit by pressing the ON/OFF button until a 4-tone sound is audible. The integrated battery will be automatically charged.
The i-Reader 2 will start, and a ticking clock signal is audible. When the device is ready it will read aloud the first-use instructions and safety notice.
This message is only read aloud once and could be interrupted by pressing the STOP button. Read the menu chapter to turn the first time use message on for the next time you turn the i-Reader 2 on.

General controls

Turning the i-Reader 2 on and off
At the left of the control panel is the ON/OFF button. Press the button until an audible tone is heard. This will switch the device on or off.
Change the volume
To the right of the on/off button you will find 2 turn knobs. The top knob is the volume control. Turn clockwise to increase the volume and counterclockwise to decrease.
Change reading speed
To the right of the on/off you will find 2 turn knobs. The bottom knob is the reading speed control. Turn clockwise to increase the reading speed and counterclockwise to decrease.
Note that the reading speed control has an indication notch that indicates the normal reading speed.
Play/pause control
To the right side of the turn knobs there is a triangular PLAY button to start or pause the read aloud mode.
Stop reading
To the right of the PLAY button you will find the STOP button to stop the current action.
Navigation keys
On the right side of the control panel you will find 4 navigation keys: UP, DOWN, LEFT and RIGHT.
Spoken instructions

It's important to understand the operating modes which are described in the next chapters. The device contains a spoken manual to explain all available features for each mode. If you need any help, press the PLAY and DOWN key at the same time to get access to the spoken instructions.

Retrieve battery status

Short press the ON/OFF button to hear the current battery charge status.

Retrieve date and time

Press the PLAY and RIGHT buttons simultaneously to hear the current date and time.

If the date and time are incorrect they can be set in the menu. See Chapter 12 for more information.

Start mode

The Start mode is the mode the i-Reader 2 starts in when you turn the device on. In this mode you can have the following controls:

Scan document

Switch on the device and put the camera in reading position. Align your document with the document placement markers. Press the PLAY button to scan the document. The

device will sound a capture sound and starts ticking to indicate it is processing the document. Press the STOP button to cancel processing. Once scanned, the read aloud mode will start automatically. See Chapter 10 Read aloud mode for more information.

Save document

Press the PLAY and STOP buttons simultaneously to scan and save a document on the internal storage. Follow the device instructions to scan multiple pages if you so desire.

Open document browser

Press the LEFT and RIGHT buttons simultaneously to open the document browser. See Chapter 11 Document browser for more information.

Change system language

Press the STOP and UP buttons or STOP and DOWN buttons simultaneously to change the system language.

Change system voice

Press the STOP and LEFT buttons or STOP and RIGHT buttons simultaneously to change the system voice.

Turn automatic language detection on or off

Press the UP and DOWN buttons simultaneously to turn automatic language detection on or off. If this is turned on, the device will process the text and read it in the observed language of the document. If this is turned off, the device will process the text according to the selected system language and system voice. If automatic language detection fails, turn automatic language detection off.

Scan document in column mode

Press the PLAY and LEFT buttons simultaneously to scan the document in column mode.

Use this if the device doesn't read documents such as invoices or bank receipts as expected.

Open menu

Press the UP and LEFT buttons simultaneously to open the menu. The menu allows you to check the software version, set the date and time and reset the device to factory defaults. See Chapter 12 Menu for more information.

Read aloud mode

When a document is scanned, the i-Reader 2 will process the text, text zones and language of the document. Once ready, it will start reading the text aloud.

Pause/Play reading

Press the PLAY button to pause/play reading the current document aloud.

Stop reading

Press the STOP button to stop reading and return to Start mode.

Navigating in the document

The navigation keys allow you to navigate through the document in the following ways: Press the LEFT or RIGHT button to select the previous or next word. The device will be paused to allow you to navigate through the document.

Press the UP or DOWN button to select the previous or next sentence.

Long press the UP or DOWN button to move to the previous or next page if available.

Long press the LEFT or RIGHT button to select the previous or next detected text zone.

Spell words

If you want to spell a word, pause the reading. Use the navigation keys to find the word again and press and hold the play button for 2 seconds.

Change reading voice

Press the STOP and LEFT button or STOP and RIGHT buttons simultaneously to change the reading voice. Only voices of the selected or detected language are available.

The manufacturer is not responsible for any scanning errors of digitized and read-aloud documents.

Document browser

The i-Reader 2 has the capability to capture documents and store them on the internal memory. It is possible to store up to 999 or 1Gb of documents. Each document gets a unique name with number assigned when they are saved to the internal storage.

The document browser allows you to open, delete, backup and restore documents. The system voice will read aloud the document name, the number of pages and which page is selected in case you open it to read aloud. The device remembers the last page read for previously opened documents so you can continue where you left off last time.

Open Document browser

Ensure you are in Start mode by pressing the STOP button. Now press the LEFT and RIGHT buttons simultaneously to open Document Browser.

Navigate between documents

The navigation keys allow you to navigate through the documents in the following ways: Press the UP or DOWN button to select the previous or next document.

Press the LEFT or RIGHT button to select the previous or next page in a document.

Open document

Press the PLAY button to open the currently selected document in Read aloud mode.

Close document

Press the STOP button to close the current document and return to Document browser.

Delete document

Press the STOP and LEFT buttons simultaneously to delete the currently selected document. Follow the device instructions to confirm or cancel.

Deleting a document is a permanent action and can not be undone.

Adjust filename

Connecting an external keyboard allows you to adjust the filename:

Press the "R" key to change the filename of the currently selected document.

Press "Ctrl + A" and type the new name of the document.

Press "enter" to confirm or "ESC" to cancel.

Once a display is connected, a dialogue is visible to change the filename.

The number of pages is placed after the filename as an indication of the length of the document.

Close Document browser

Press the STOP button to close Document browser and return to Start mode.

External media

The i-Reader 2 can read documents from external media, like USB-flash drives. A 4-tone sound should be audible when inserting a USB device in the front right USB port.

Press the DOWN and RIGHT buttons simultaneously to switch between documents on internal memory and external media.

See Chapter 18 Technical information for more information on supported file types.

Importing document from external media

To import a document from external media, switch to external media and select the document you wish to import. With the document selected, press the UP and LEFT buttons simultaneously to start the import of the file to internal memory. Press the STOP button to cancel or the PLAY button to confirm.

Exporting document to external media

Documents that are scanned by the i-Reader 2 are saved as .vdf files. This file type is proprietary and can't be opened on a device other than an i-Reader 2. The i-Reader 2 can

export documents as this .vdf file type or as a .txt file.

To export a document from the internal memory to external media, open the browser and select a document. With the document selected, press the UP and LEFT buttons simultaneously to start the export. Select the export file type with the UP or DOWN button. Press the STOP button to cancel or the PLAY button to confirm.

If the document is exported as a .txt file, a new folder is created at the of the external media device. This folder will

be named with the document-name and date. This folder contains the .txt file and an image of the scanned document.

Never connect more than 1 USB key to backup, import or export documents.
Backup all documents to external media
Insert a USB device in the front right USB port. A 4-tone sound should be audible. Open the document browser and press the UP and RIGHT buttons simultaneously, to backup all documents to the USB device. Press the PLAY or STOP button to start or cancel backing up all documents.
The i-Reader 2 will mention it if there is no USB device detected or the inserted USB device is not readable.
Restore backup
To restore a backup, make sure the device is in the Document browser. Insert he USB device that contains the backup file and press the DOWN and LEFT buttons
simultaneously to restore a backups from the inserted USB device.
Select a backup with the UP or DOWN buttons and press the PLAY or STOP button to confirm or cancel restoring from the selected backup.

Restoring a backup overwrites all current documents on the i-Reader 2.

Menu

The i-Reader 2 has a menu with clear audio feedback. Menu and submenu items are placed in a loop to select the first or last item fast and easy.
Open menu
Press the UP and LEFT buttons simultaneously to open the menu.
Navigating in the menu
The navigation keys allow you to navigate in the menu in the following ways:
Press the UP or DOWN button to select the next or previous (sub)menu item.
Press the LEFT or RIGHT button to activate or change the (sub)menu item.
Press the PLAY or STOP button to set or cancel the date, time and factory defaults settings.
The menu has the following items:

Firmware
Selecting this item reads aloud the Firmware Version.
Date
Selecting this item allows the user to change the internal date.
Time
Selecting this item allows the user to change the internal clock.
Factory defaults
Selecting this item allows the user to set the device back to factory defaults.
First time use message
Press the RIGHT and ON/OFF buttons simultaneously to turn on the first time use message for the next time the device is switched on.
Battery saver
In order to save energy, the i-Reader 2 switches off after 30 minutes of inactivity. To turn the Battery saver off and make sure the device stays on indefinitely, press the ON/OFF and PLAY buttons simultaneously.
This setting will only be set for the current use. Battery saver will be switched on automatically the next time the device is powered on.

Transport

Use the supplied carrying case to store or transport the i-Reader 2 over long distances.
The device is best protected against bumps and shocks in the carrying case. Avoid direct sunlight and large humidity and temperature fluctuations.

Troubleshooting

The i-Reader 2 is an advanced device and can detect different kind of issues. Issues or error messages will be spoken by the system voice in most cases. In some cases, the ON/OFF button might blink red or the device will restart automatically.

If the i-Reader 2 doesn't respond to any user control, please disconnect the power adapter and keep the ON/OFF button pressed for 10 seconds to turn the device off.

If you try to turn the i-Reader 2 on and the ON/OFF button lights up RED for 2 seconds or does not light up at all, the battery is empty. Connect the adapter and let the device charge for a few minutes before turning the i-Reader 2 on again.

If you try to turn the i-Reader 2 on and the ON/OFF button starts blinking RED the device cannot run on battery power. Connect the adapter to use the i-Reader 2. Contact your dealer if the problem persists.

The i-Reader 2 has an integrated computer with the i-Reader 2 software application.

It is possible that troubleshooting does not help and in some cases your dealer or the manufacturer can perform a software update to solve the issue.

Please contact your dealer if problems persist and inform your dealer about the error message.

Recycling

The i-Reader 2 contains electrical and electronic equipment (WEEE) and should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product to designated collection points where it will usually be accepted free of charge. Alternatively, in some countries, you may be able to return your products to your local retailer upon purchase of an equivalent new product. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling. If you are unsure, contact your local authority for further details of your nearest designated collection point. Penalties may be applicable for incorrect disposal of this waste, in accordance with your national legislation.

Be aware of internal stored data/documents on the i-Reader 2. Please delete these to protect your privacy.

Warranty

This product is covered by the warranty provisions of your supplier. For more information about these provisions, contact your supplier.

Regulations

The i-Reader 2 complies with CE according to the following guidelines:

- Class 1 medical device (MDR2017/745), no essential performance **MD**
- ROHS 3 (2015/863)

FCC NOTICE (Class B)
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

    Federal Communications Commission Statement

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer for help.

Technical information

Specifications

Product name:	i-Reader 2
Dimensions (l × w × h):	42.5 × 24.5 × 7 cm 16.73 × 9.65 × 2.76 inch
Weight:	2950 grams 6.5 lbs
Battery:	Internal Li-ion battery 14.8V, min. 5100mAh Regulated 12V output
Adapter input:	Model: FJ-SW1903400D Input: 100-240V, 50/60Hz, 1.5A max. Output: 19V DC 3400mA
Speaker output power:	≤ 100 dB(A) <0.5mT at 10cm distance
Headphone:	3.5mm jack 25mW max. <0.5mT at 3cm distance
IP rating:	IP20; solid foreign objects >= 12.5mm Not protected against ingress of water
Camera resolution:	8 Megapixel
Maximum scanning size:	Letter / A4
Video output:	HDMI, up to 1080p
Sound controls:	Adjustable audio volume and reading speed
Supported languages:	Dutch, Belgian Dutch, US English, British English, Irish English, Scottish English, Australian English, Indian English, South African, English, German, French, Canadian French, Belgium French, Spanish, Chilean Spanish, Argentinian Spanish, Colombian Spanish, Mexican Spanish, Italian, Turkish, Norwegian, Swedish, Danish, Finnish, Polish, Portuguese, Brazilian Portuguese, Czech, Russian, Hungarian, Greek, Catalan, Bulgarian, Croatian, Romanian, Slovak
Documents formats:	vdf, PDF, Docx, TXT, ePub 2, ePub 3
Document navigation:	by words, sentences, paragraphs (zones), pages
Internal SSD:	1Gb or 999 documents

Conditions of use

Temperature:	+5°C to +40°C +41°F to 104°F
Air humidity:	15% to 93%, no condensation
Atmospheric pressure:	700 hPa to 1060 hPa

Storage and Transport conditions

Temperature:	-20°C to +60°C -4°F to +140°F
Air humidity:	<93%, no condensation

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This document concerns the original general user manual, has been prepared by and is commissioned by Rehan Electronics Ltd.
The i-Reader 2 product name is a trademark of Rehan Electronics Ltd.

Documents / Resources

Rehan K1638 i-Reader 2 8MP Camera [pdf] User Manual
K1638 i-Reader 2 8MP Camera, K1638, i-Reader 2 8MP Camera, 2 8MP Camera, Camera