

LyriQ[®] Ai Reader



User Manual

Rev. 1.6.2

Lyriq Vision Technologies, Inc.

I. Introduction

LyriQ® is an electronic text-to-speech device for people experiencing blindness or other visual impairments. Enjoy reading any printed material, such as letters, newspapers, and books, and hear them read aloud in a natural-sounding voice.

II. What's In the Box

- LyriQ® device
- Power supply / charger
- Carrying case
- Keypad (optional) and keypad USB charging cable

III. Unpacking and Powering Up the LyriQ®

1. Place the LyriQ® onto a flat surface. Open the camera arm by lifting it up.
2. Plug the power adapter into an outlet, and plug the other end into the LyriQ® power port located on the left side of the base.
3. Press and hold the power button located on the left side of the base for 3 seconds. You will hear some beeps; soon after, you will hear the phrase "Place your document".

In order to power the LyriQ® off, press and hold the power button for 3 seconds.

IV. Reading with LyriQ®

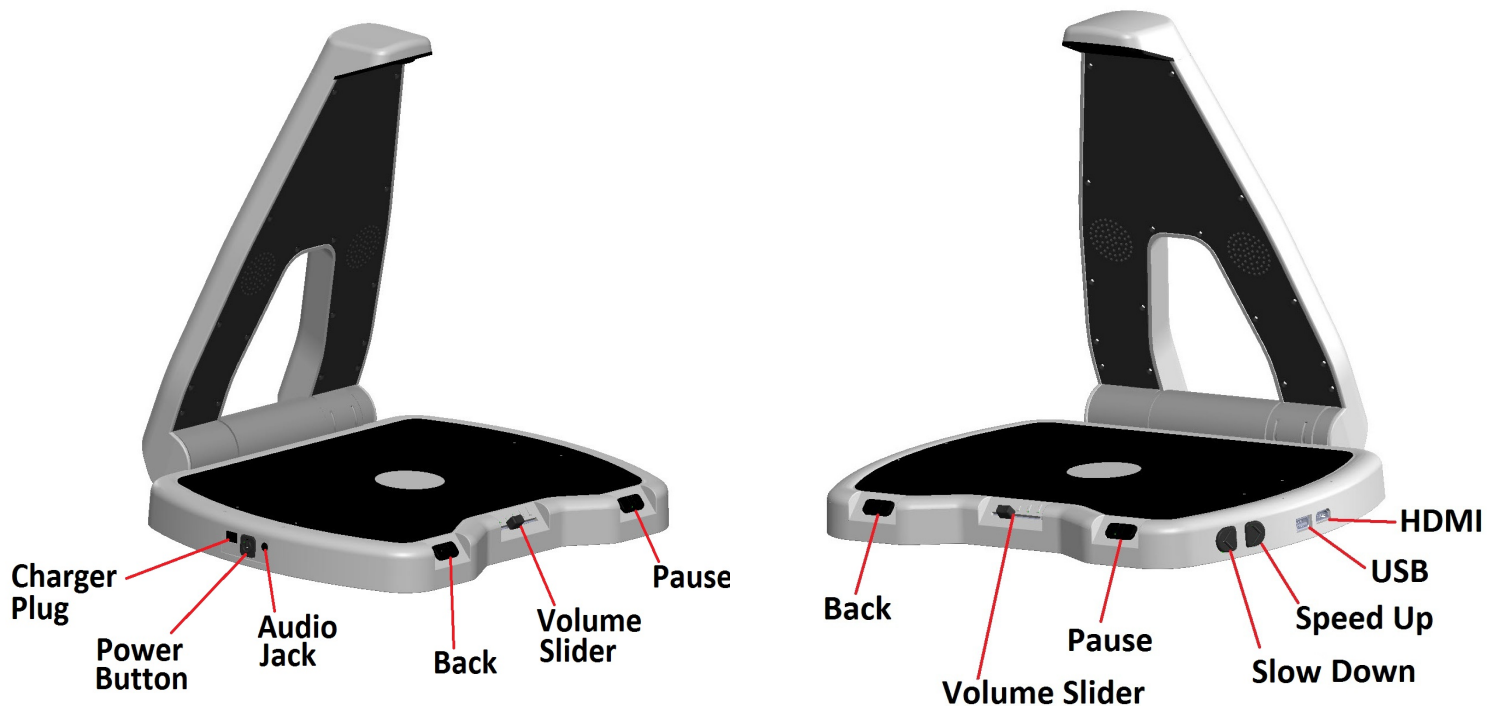
Place your document with the text facing up on the base and make sure it is not moving. If needed, place the document towards the edge to ensure that the text is not being blocked by your hands. Once the document has been placed, you will hear a camera shutter sound; in a few seconds, LyriQ® will be reading your document aloud.

V. LyriQ® Controls

On the LyriQ® device, there are three types of controls:

1. Base Buttons
2. Hand Gesture Controls
3. Keypad (if optional keypad is included)

V.1. Base Buttons



LyriQ® has four control buttons on the base:

- **Pause/resume button** *located on the front right side of the LyriQ® base.* Press this button while the LyriQ® is reading to pause reading. Press it again to resume reading.
- **Back button** *located on the front left side of the LyriQ® base.* Press this button to repeat the previous sentence. Each press takes the reader back one sentence. Press it once to repeat the previous sentence, twice to go back two sentences and so on.
- **Reading speed buttons** *shaped as two semi-circles located on the right side of the base.* The slow-down button is located closer to the front of the device. Press the slow-down button to read slower. The speed-up button, directly next to the slow-down button, is closer to the back of the device. Press the speed-up button to read faster.
- **Volume control slider** *located front and center of the device base.* Move the slider to the left to decrease the volume, and to the right to increase the volume.

V.2. Hand Gesture Controls

Hand gestures offer a helpful way to control the LyriQ®. Hand gesture controls are disabled by default.

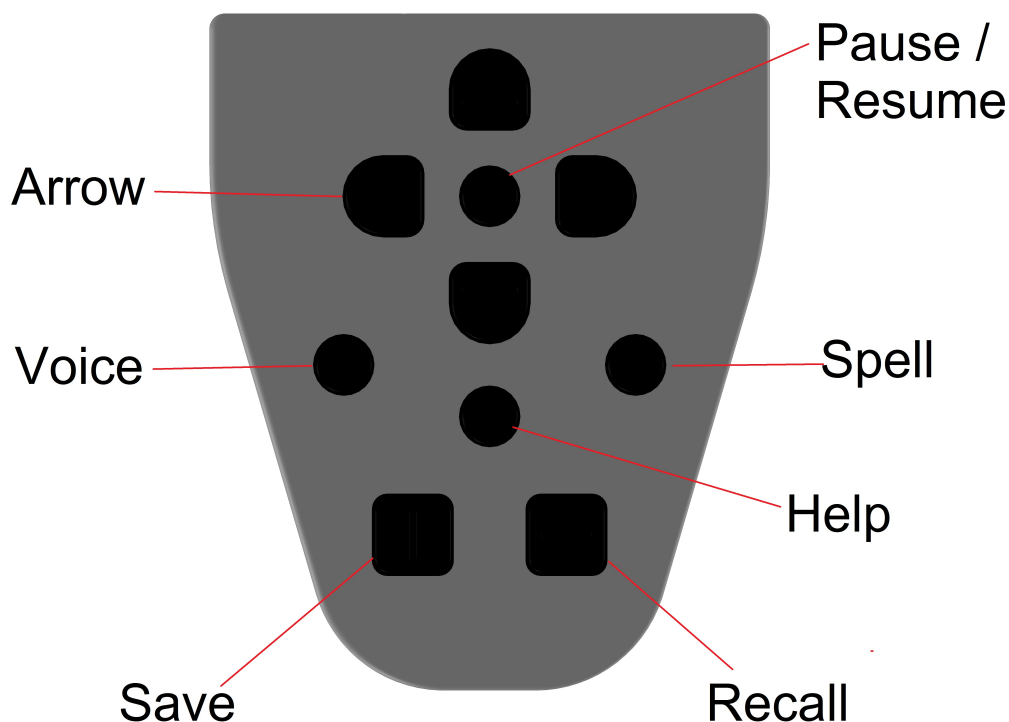
In order to enable hand gesture controls on a LyriQ® equipped with AI, enter the main menu and navigate to Options. See Menu Navigation section for details. On LyriQ® without AI, hand gestures are enabled by a long press of the Pause button.

To pause or resume reading: move your hand slowly just above the document from left to right.

To go back to a previous sentence: move your hand slowly just above the document from the right to the left. Repeat multiple times to reach desired sentence.

Please note that the above hand gestures work only when document is positioned on the LyriQ® base.

V.3. Keypad Controls



If optional keypad is included, LyriQ® can be controlled by the keypad.

Help Button: This is the round button located in the center of the keypad. Press the help button together with any other button to hear a description of the button and its function. Press the button on its own to hear general help information.

Pause / Resume Button: This is the round button located closer to the top of the keypad in the center of the arrow keys. This button will pause and resume reading.

Arrow Buttons: These are the four moon-shaped buttons located around Pause/Resume button.

Spell Button: This is the round button located to the right of the help button. Press the spell button to hear the spelling of the current word.

Voice Button: This is the round button located to the left of the help button. Press the voice button to change voice or language.

Save Button: This is the square button located on the lower left side of the keypad. Hold down the save button and one of the arrow buttons at the same time and the device will save the image and say "image saved." Up to four pages can be saved with one page designated to each arrow button.

Recall Button: This is the square button located on the lower right side of the keypad. Hold down the recall button and press one of the arrow buttons to read a previously saved page. The device will say “reading image” and then read the saved image.

Note: Keypad automatically turns off when it is attached behind LyriQ® camera arm. Keep keypad attached in place when not in use. Remove keypad before using.

VI. Using Keypad Navigation Buttons

Optional keypad can be used for advanced navigation. Use arrow up and arrow down keys to select whether you want to navigate by character, word, sentence or paragraph. Use the left and right arrow buttons to go backward and forward respectively.

VII. Summary of Commands

Command	Keys on device	Keys on keypad
Pause or resume reading	Pause/resume button	Pause/resume button
Go back one sentence	Back button	See using keypad navigation buttons section above
Increase reading speed	Speed up button	
Decrease reading speed	Slow down button	
Switch voice/language (alternate through all languages installed). See Note1.	Press pause/resume button and slow down button together for 3 seconds	Press voice button
Hear general help		Press and hold help button
Hear help info for any button on the keypad		Press and hold help button, then press the button to hear help info
Enable/disable read through columns. See Note2.	Press speed up and slow down buttons together prior to placing a document	Press arrow left and arrow right buttons together
Spell current word		Press and hold spell button
Save current page into one of four memory slots		Press save button and one of arrow buttons.
Read page saved in one of four memory slots		Press recall button and one of arrow buttons.

Command	Keys on device	Keys on keypad
Enter menu	Press back button and speed up button together for 3 seconds	
Hear battery level (if battery is installed)	Press back button for 3 seconds	

Note 1: When switching language you will hear the beep, then announcement of a new language. If page OCR is not complete, language cannot be switched until OCR finished. In that case you will hear beep and not the announcement.

Note 2: Reading through columns is enabled for the next scanned page only unless "Keep Column Mode" option is selected in Menu->Options

VIII. Menu Navigation

Command	Key on device
Next menu item	Slow down button
Previous menu item	Speed up button
Select item	Pause/resume button
Go back to previous level/exit	Back button

IX. Menu

Press and hold the Back and Speed Up buttons together for 3 seconds to enter menu. The menu items are:

- **Bluetooth** (This item is available only for LyriQ® equipped with Bluetooth)
Menu items to pair and unpair a Bluetooth headset
- **WiFi** (This item is available on LyriQ® equipped with AI)
Menu items to connect LyriQ® to WiFi network.
- **Languages**
List of available voices and languages. Each language/voice can be individually enabled and disabled.
- **Options**
Various customization options
- **About**
Information about serial number and software version
- **Exit**

X. Bluetooth

If equipped with the optional Bluetooth module, LyriQ® can output audio to Bluetooth wireless headsets. In order to use a wireless headset, it has to be paired with LyriQ®. In order to pair:

1. Enter the main menu
2. Select Bluetooth
3. Enable pairing mode on your headset
4. Select Scan for Devices. LyriQ® will start searching for devices, and after 10-20 seconds will list found devices
5. Use speed up/down keys to select the device you want to pair with. Press pause/resume to pair

XI. Saving Books with LyriQ®

LyriQ® allows you to save books or multi-page documents on a USB flash drive. In order to scan a book:

1. Plug in USB flash drive to LyriQ® USB port located on the right side of the base
2. Wait until "USB storage detected" announcement
3. Place first page of the book on LyriQ® base. Wait until the "Page saved" announcement
4. Repeat the previous step for all pages

After all desired pages are scanned, press Pause/Resume button. LyriQ® will convert all scanned pages to text and MP3.

XII. Reading Saved Books with LyriQ®

LyriQ® allows you to read books previously saved to the USB flash drive.

In order to read a saved book:

1. Plug the USB flash drive into the LyriQ® USB port located on the right side of the base. Wait until "USB storage detected" announcement.
2. Press Back and Speed up buttons together for 3 seconds to enter the menu.

Note: If USB flash drive is inserted, LyriQ® will enter Book Reading Menu instead of Main Menu.

- Press the Speed Down button to scroll to desired book
- Press Pause to enter the book. Press Speed Down to scroll to desired page
- Press Pause to start reading the page

Note: Although LyriQ® has an option to convert the saved books to text and MP3 formats (see section XI), that is not necessary to do in order to use LyriQ® to read saved books.

XIII. Advanced Visual Features of LyriQ®

LyriQ® can display scanned text on the external monitor. The external monitor can be connected to the right side of the base. The optional keypad is required to change fonts and colors. All visual adjustments are controlled by the keypad.

- Hold the Spell button and press arrow up and arrow down keys to change the font
- Hold the Spell button and press arrow left and arrow right keys to change the colors

XIV. Artificial Intelligence Features

Features described in this section are available on LyriQ® Ai only.

XIV.1. Connecting to the Internet: Preparing to Connect to the Wi-Fi Router

In order to use LyriQ® Ai features, the LyriQ® Ai device should be connected to the internet through a WiFi router.

There are two ways to connect LyriQ® Ai to the home WiFi internet router – using QR code or WPS:

1. Prepare to use the QR Code on a Smartphone

In order to connect using the QR code on a smartphone method you need to know the WiFi network name (SSID) and the password.

- Open the internet browser on your smartphone and go to <https://lyriqvision.com/qr/gen/>
- Fill out the form with the network name (SSID), the password (key) and choose the type of encryption (most routers utilize WPA encryption)
- Press the *Generate QR Code* button

OR

2. Prepare to Use WPS

WPS is a feature on many routers that allows to connect a device without explicitly entering a password.

Locate a WPS button on the router. Refer to your router manual to locate the WPS button.

XIV.2. Connecting to the Internet: Connecting the LyriQ®

Press and hold the *Pause* button located on the front right side of the device. Pause button is marked with two vertical lines.

LyriQ® Ai will prompt to either place the phone with QR code screen up on the base under the camera arm or press WPS button. When placing the phone make sure the QR code is displayed on the phone, and the screen's brightness is high.

In about 30 seconds LyriQ® Ai will announce if it connected successfully. After the initial connection, LyriQ® Ai device will download an update and reboot itself.

In order to disconnect LyriQ® Ai from WiFi or connect to a new WiFi, enter the main menu and navigate to "WiFi", then to "Forget Network" and remove current WiFi connection by selecting the current network and choosing the *remove connection* option.

XIV.3. Using Ai

Place any document you wish to read on the reading surface: the device use under the camera arm. LyriQ® Ai will start reading the document. Press and hold the Pause button. You will hear a beep, and after few seconds LyriQ® Ai will:

- Read a general description of the document
- Summarize and read the important parts if it is a bill or a receipt
- Provide a description if the document is a picture
- If the document is handwritten, LyriQ® Ai will read the handwritten text
- Translate the document if it is in a foreign language

XV. Safety

Please see LyriQ® Ai User Manual Addendum for important safety and compliance information.