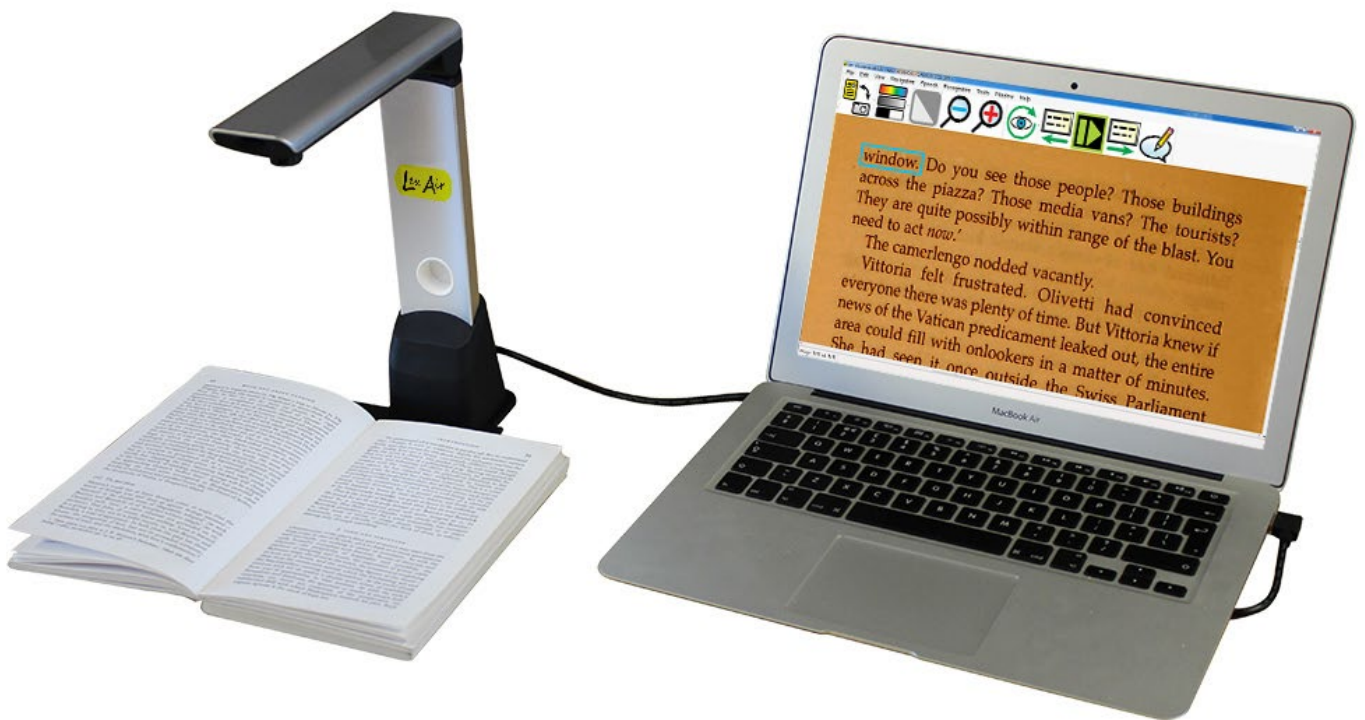


Lex Air

Hardware Guide Rev B English



VisionAid International

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Introduction

Congratulations on choosing the Lex Air digital capture reading system.

The Lex Air combines high speed OCR, speech and reformatted text output with ease of use and portability. It can capture and read any printed material such as letters, bank statements, newspapers, food packaging etc. and weighs just 500 grams (1.1 lbs).

Lex Improvement program

Users are the best people to help us improve and develop our products so if you have any ideas or suggestions, no matter how small, please do contact us.

Suggestions contact information

Please use the following methods to contact us regarding your suggestions:

Email:

suggestions@visionaid.com

Post:



VisionAid International Ltd.
Bridge Lodge, Spalding, Lincolnshire
PE11 3AU
United Kingdom

Phone:

+44 (0) 1775 711 977

Thank you and we wish you many hours of enjoyment with your new portable dyslexia reading assistant!

Ownership and intellectual property

The software makes use of third party software libraries that are redistributed under their own respective licenses.

LAME is distributed under the terms of the GNU Lesser General Public License (LGPL), a copy of which can be found at <http://www.gnu.org/licenses/lgpl.html> and is included in the software's program directory.

OpenCV is distributed under the terms of the Berkeley Software Distribution (BSD) license, a copy of which is included in the software's program directory.

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Box contents

Your Lex Air box should contain the following items:

1. Lex Air portable reading system.
2. Drawstring bag for Lex Air.
3. USB cable.
4. USB extension cable.
5. Over ear headphones with in line volume control.
6. White contrast/positioning mat.
7. Laminated quick reference guide.
8. This hardware guide.
9. Paper software instruction manual.
10. Lex software CD (if purchased at the same time as Lex Air)
11. Lex software instruction manual (if purchased with Lex Air)

If any of these items are missing, please contact your local distributor.

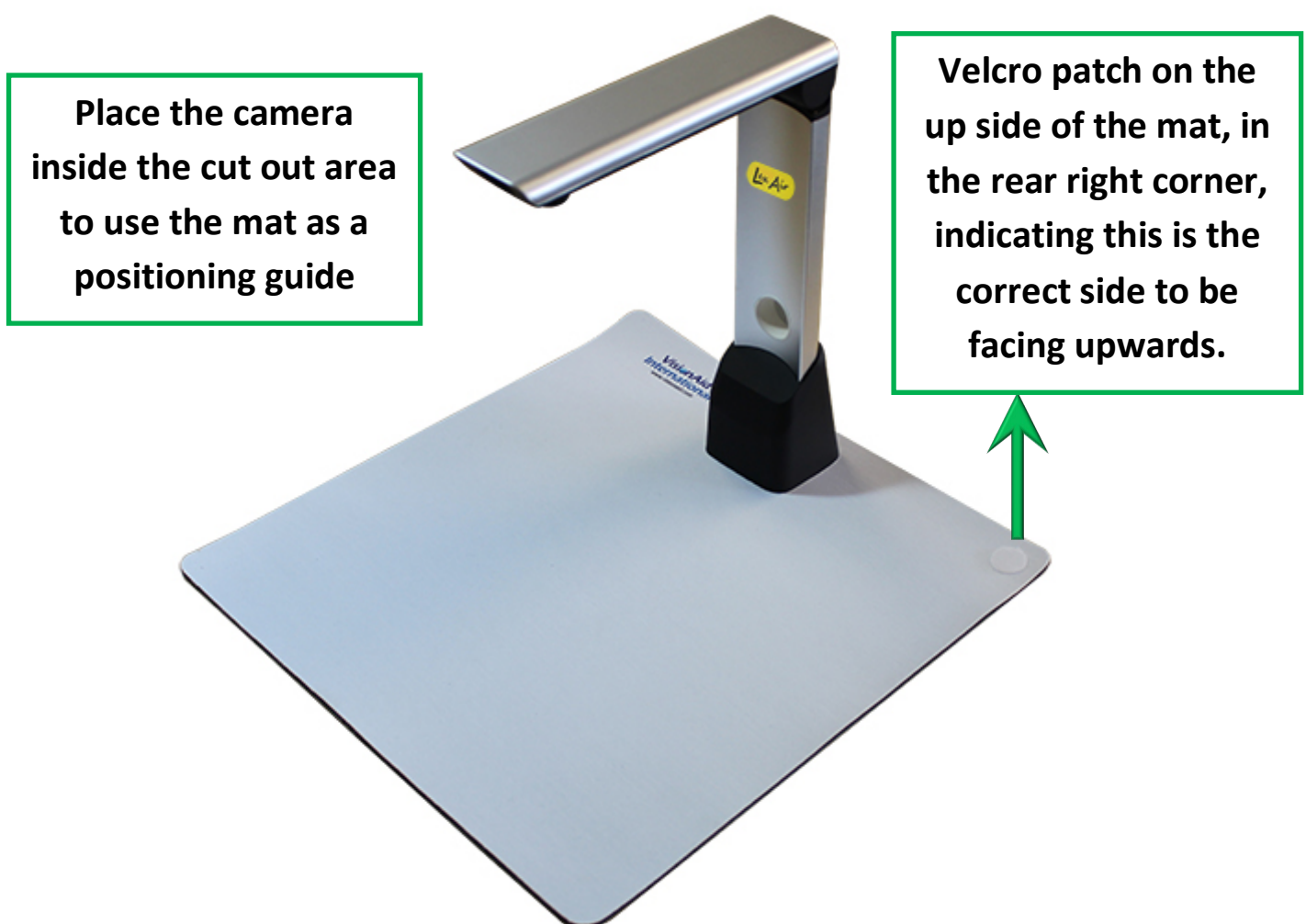
Positioning Lex Air for use

Remove Lex Air from its protective drawstring bag and place it on a flat surface. When doing so, try and ensure that it's not directly underneath any bright lighting, as this can affect its accuracy, especially when reading glossy documents.

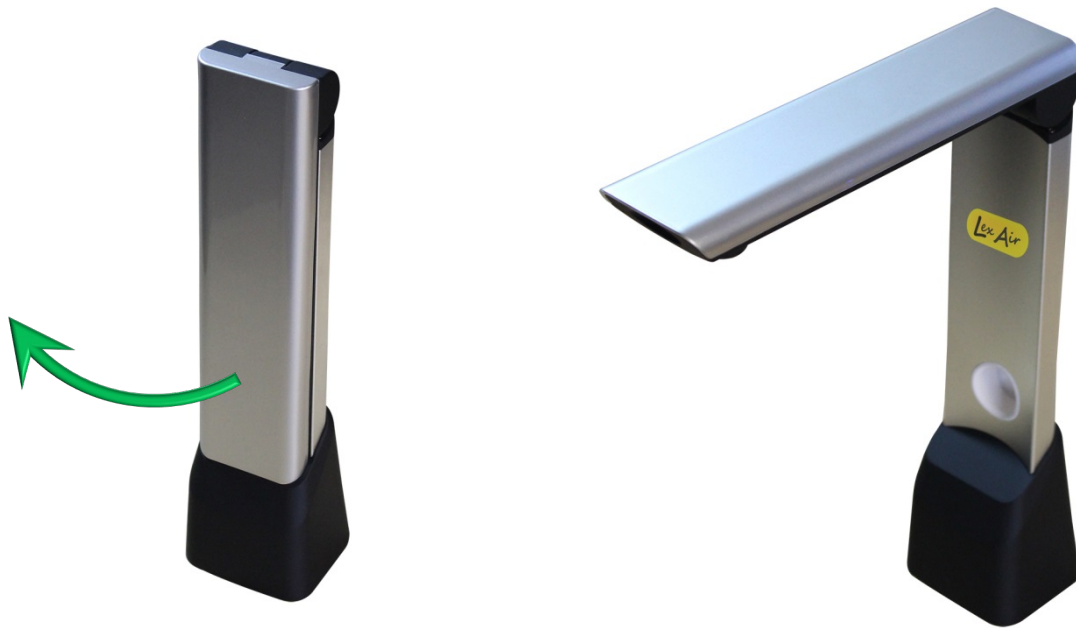
Lex Air contrast/positioning mat

Lex Air also includes a contrast/positioning mat. This can be used if the surface where you wish to place the Lex Air is very dark and the item wishing to be read is small (e.g. a postage receipt, business card etc.).

If you wish to use the contrast mat during capture, simply place the Lex Air within the precise cut out area of the mat. Please see "Positioning your documents for capture" on page 8.



Unfolding Lex Air camera



Unfold the camera head of the Lex Air camera by grasping the bottom of the camera head between your thumb and your index finger and lift it upwards until it stops.

Folding Lex Air's camera head for transport

To fold Lex Air for transport, simply do the exact opposite of the unfolding procedure before placing the Lex Air into its drawstring bag with the included right-angled USB cable.

IMPORTANT:

Always ensure that Lex Air's camera head is folded into its transport position before placing it into its protective drawstring carry bag. This will help prevent any damage being done to the Lex Air during transport.

Plugging In

Lex Air has a relatively short attachable USB cable included. This is designed to be used in conjunction with laptops.

A USB extension lead is also provided for desktop PC use.

At the end of the USB cable is the USB connector that needs inserting into one of your computer's USB ports. The connector has a bump-on stuck onto it. This is to enable you to feel which way round the connector is when inserting it into a USB socket.



Bump-on attached to top side of USB connector (for most computers)



USB Socket

IMPORTANT:

Some computers have their USB ports fitted the other way up!

USB connectors will only plug into USB sockets one way round. They do not require much force, so take great care when inserting them into a socket. Forcing a USB connector into its socket the wrong way round will break the socket and or the connector. This is not covered by warranty.

Positioning your documents for capture

Lex Air captures an area slightly larger than an A4 or Letter page.

Documents must be in a landscape orientation with the long edge of the document going left to right when the Lex Air camera head is facing towards you.

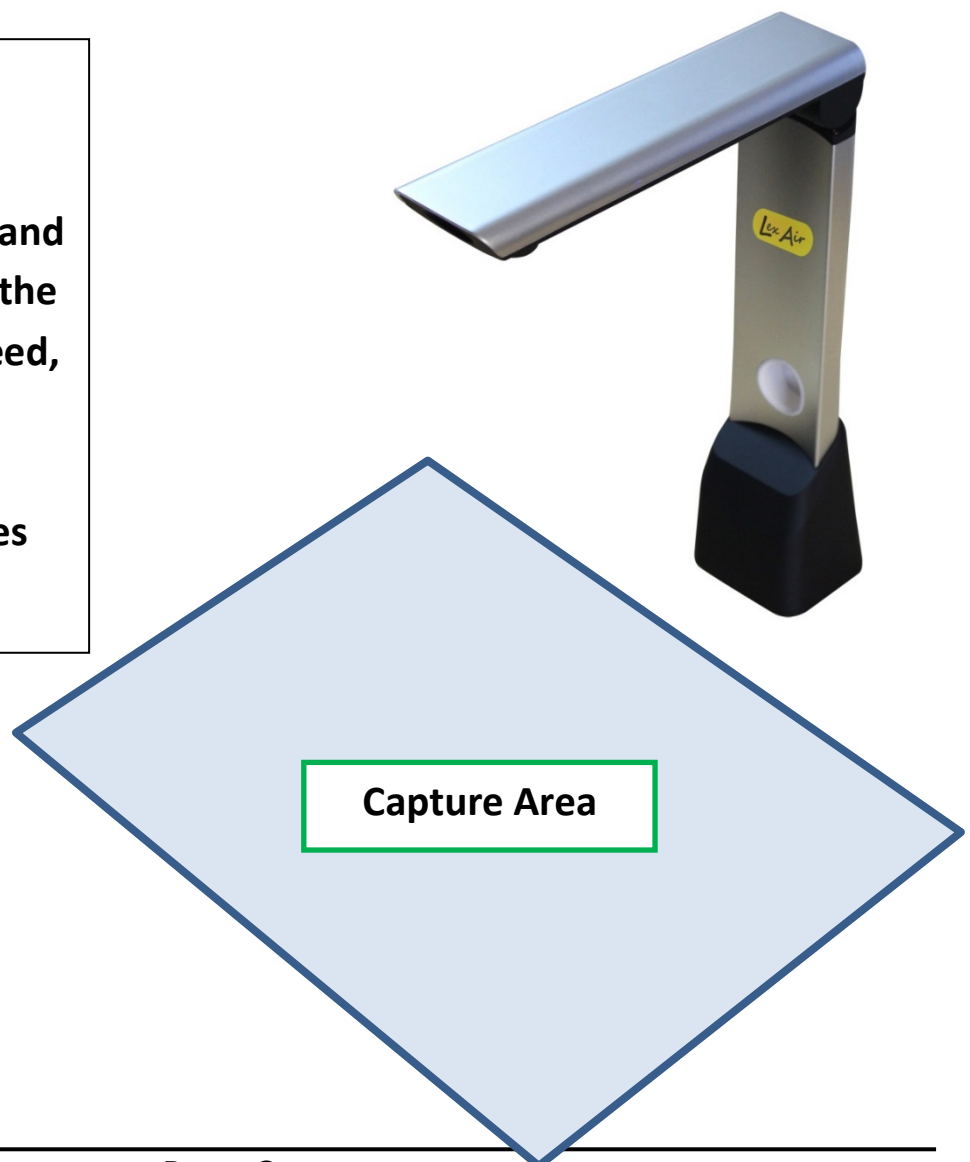
There are two ways to align your documents. The first is to ensure the Lex Air camera is correctly positioned into the cut out of the contrast / positioning mat. Then, simply place your document onto the mat, at least 1 cm from the base of the camera. Providing your document is fully within the area of the mat, it should be captured by the Lex. Please note that the mat is only a rough guide to the capture area and is not 100 % precise.

The second method is to align the document visually on screen within the Lex software once capture has been initialised.

The orientation of the document will not influence the recognition of the text but remember that to capture an entire A4 or letter page, the document must be in landscape orientation, otherwise the bottom of the document will be missed.

POSITIONING TIP:

Lex Air has powerful document straightening and rotation abilities but for the highest accuracy and speed, try to position your document as squarely as possible and ensure pages are relatively flat.



Headphones

Lex Air includes a pair of over ear headphones with an in-line volume control. They have a standard 3.5mm jack connector.

To use the headphones, (or any other headphones you already own), simply plug them into the audio socket on your PC or laptop.

To alter the headphone volume, we recommend using the in-line volume wheel, located on the headphone wire. It is also possible to adjust the volume of the headphones using the volume control on your computer.



FAQ and troubleshooting

- Q. I'm connecting the Lex Air to my PC via USB but the Lex software is not recognising it.**
- A.** Please try using a different USB port. Ensure as you connect the Air to your computer that you hear the Windows "Duh-dum" noise. Also ensure you have tried turning your computer off, (shutting it down completely), removing the camera, waiting 1 minute, then reconnecting it and turning your computer back on.

Maintenance

The Air camera is designed so that it requires no maintenance.

Cleaning

The Lex Air requires no special cleaning treatment. It can be dusted when required.

The camera's lens is recessed within the camera head so it is very unlikely that it would ever become dirty. If it does, a lint free cotton bud can be used gently to remove any dust or smears from it.

Appendix A: Safety

- Handle the Lex Air with care. Rough handling may damage internal components and will void your warranty.
- Contact your VisionAid International distributor to service this equipment if necessary.
- Do not open or remove any parts of the Lex Air as it will void the warranty.
- Do not expose the Lex Air to excessive heat or direct sunlight.
- Do not use the Lex Air near inadequately shielded medical devices.
- To avoid risk of electrical damage, keep your Lex Air away from fluids and chemicals.

Use of the Lex Air other than described in this manual will exclude it from warranty.

Appendix B: Technical information

General information	
Dimensions folded: (WxDxH)	6.3 x 5.6 x 8.1 x 25 cm 2.5 x 2.2 x 9.8 inches
Dimensions unfolded with positioning guide: (WxDxH)	19.3 x 21.2 x 25.5 cm 7.6 x 8.3 x 10 inches
Footprint - no positioning guide (WxD)	6.3 x 5.6 cm 2.5 x 2.2 inches
Weight:	500 grams (1.1 lbs)
Camera resolution:	High resolution 5 MP

Operating conditions	
Relative Humidity:	<70%, no condensation
Temperature:	0 to 35 °C

Storage and transport conditions	
Relative humidity:	<95%, no condensation
Temperature:	5 to 45 °C