

User Manual

MagniLink Vision PREMIUM



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LIST OF CONTENTS

- 1. GENERAL INFORMATION 5
 - 1.1 Product information.....7
- 2. SAFETY INFORMATION 8
- 3. UNPACKING..... 11
 - 3.1 Packaging..... 11
- 4. INSTALLATION 12
 - 4.1 Workplace 13
- 5. INSTRUCTIONS..... 14
 - 5.1 3 Push 14
 - 5.2 5 Push 14
 - 5.3 3 Turn..... 15
 - 5.4 External control box 15
 - 5.5 Reading table..... 16
 - 5.6 Description of features 16
- 14. TROUBLESHOOTING 20
- 15. TECHNICAL SPECIFICATION..... 21
- 16. FCC STATEMENT (USA AND CANADA ONLY) 24

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In the interest of continued product development, LVI reserves the right to make improvements to this manual, and the products it describes, at any time, without notice or obligation.

1. General Information

Thank you for choosing this video magnifier. Our aim is for you to be satisfied with your choice of supplier and reading aid.

MagniLink Vision (MLV) is a video magnifier which is available in several models. All models have the same structure and electronics. Thereafter, the model is chosen in the following steps:



Choose HD or FHD reading camera, with reading table or table clamp.

Product code	Camera	Reading table/Table clamp
MLV-HD	HD (720p)	Reading table
MLV-FHD	FHD (1280p)	Reading table
MLV-HD-1	HD (720p)	Table clamp
MLV-FHD-1	FHD (1280p)	Table clamp

Choose (if needed) monitor.

Product code	Monitor
A0	No monitor
A1	18,5" monitor
A2	23,0" monitor

Choose one of the following panels.

Product code	Panel
B0	No panel
B1	3 Knob
B2	3 Push
B3	5 Push
B4	External control box

Choose among the following accessories for computer connection.

Product code	Accessory
C1	DVI-switch
C2	PC/MAC Software
C3	Hardware split
C4	Hardware split (mounted)

Choose if you want a distance camera.

Product code	Distance camera
D1	MLV Distance camera SD
D2	MLV Distance camera SD (Split box mounted)
D3	MLV Distance camera HD
D4	MLV Distance camera HD (Split box mounted)



The systems complies with all CE certification requirements for medical devices in accordance with EU regulation 2017/745.



Medical Device

The MD symbol indicates that the product is a medical device in accordance with Regulation (EU) 2017/745 (MDR)..



The product complies with all applicable requirements of the FCC rules.

1.1 Product information

Clinical benefit

Magnifiers empower the user, helping to instil independence, increase productivity, and improve self-esteem. In short, those who struggle with daily tasks due to low vision find their quality of life enhanced by utilizing magnifiers.

Intended use

Portable/transportable low vision magnifier.

Intended use environment

Home, office or school.

Intended user

People with a visual impairment.

2. Safety Information

MagniLink Vision is only intended for use as a reading aid in home, school or office environments.

- Before connecting, check the system and the mains cord to ensure that nothing is damaged. The enclosed power supply is only intended for use with the MagniLink Vision.
- Never operate the MagniLink Vision if the unit has been exposed to water or other liquids.
- Damaged mains cord or plugs may result in electrical shock or a fire hazard. Do not allow anything to rest or roll over the mains cord.
- Serious incidents that have occurred in connection with the product shall be reported to the manufacturer and to the competent authority in the Member State where the user is established.
- If cleaning is required, unplug the MagniLink Vision, and then use a slightly damp (not wet) cloth. Only use water or a detergent specially made for cleaning monitors and computers. Do not use aerosol cleaners directly on the MagniLink Vision since it may overspray and cause an electrical shock.
- When operating the reading table, do not place hands under or behind the reading table as one's finger may get caught between the reading table and the stand or the slides. The MagniLink Vision should be placed at least 10 cm from the edge of the table.
Warning! Do not apply excessive weight to the reading table when it is in its most extended position, as this may cause the system to turn over, which could lead to personal injuries.

- If the MagniLink Vision is to be transported, do not lift the unit by the screen or the reading table, as these are movable parts.
- Serious incidents that have occurred in connection with the product shall be reported to the manufacturer and to the competent authority in the Member State where the user is established.
- If you are unable to restore normal operation by following the operating instructions, do not attempt any further adjustments. Unplug the set and contact your dealer or service technician. Only use replacement parts specified by LVI.

- Moving the system from a cold to a warm place may cause condensation (water droplets) on its internal surfaces or on the lens. To avoid condensation, install the system in the room where it is to be used at least 30 minutes before use. Do not expose the system to sudden or extreme changes in temperature.

If you are unsure, contact your dealer or service technician.



To prevent fire or shock hazard, do not expose the equipment to moisture. To reduce the risk of electric shock, do not remove the cover.

No user serviceable parts inside. Please refer service to qualified service personnel.

3. Unpacking

The equipment is delivered in one box containing:

- the unit
- the user manual

Inspect the package for exterior damage. Note that severe damages should be addressed with the transport company.

Open the box and take out the MagniLink Vision. Remove the packaging and place the unit on a table. The mains cord is placed on the back of the unit. Refer to the section "Installation", in the next chapter, for further information.

3.1 Packaging

The packaging of the unit contains the following:

- cellular plastic (EPP)
- corrugated cardboard
- polyethylene (LDPE4)

LVI recommends that all packaging material be kept, to be reused in case of future shipping.

4. Installation

Place the unit on a table. The MagniLink Vision should be placed at least 10 cm/3.9 inches from the edge of the table. Note that the system's reading table can be moved up to 30 cm/11.8 inches in three directions. MagniLink Vision is very light, which means that it is important to place the system correctly to ensure that it always remains stable, especially if the reading table is in its most extended position. An overload in this position may cause the system to turn over.

Connect the mains cord to the wall socket and press Power On. The unit is now ready to be used. The screen can be tilted 10 degrees and lowered 8,5 cm/3.4 inches from the highest position. Place your hands on the soft touch padding on both sides of the screen and adjust it to the desired position. Release the brakes on the reading table; you are now ready to start using the MagniLink Vision.

Writing position

Place the reading table in the desired position. Lock the table by pushing the side way brake to the right end position and the depth way brake to the far end position (towards the back).

Transport position

Place the table in the middle position and push it back as far as possible. Lock the table by pushing the side way brake to the right end position and the depth way brake towards the back.

End User Configuration (EUC)

A configuration program is available which can individually modify the settings as per the user's requirements. The settings are: magnification (max + min), guiding line (colour + thickness), lighting settings and high contrast mode (colours + number of colours).

4.1 Workplace

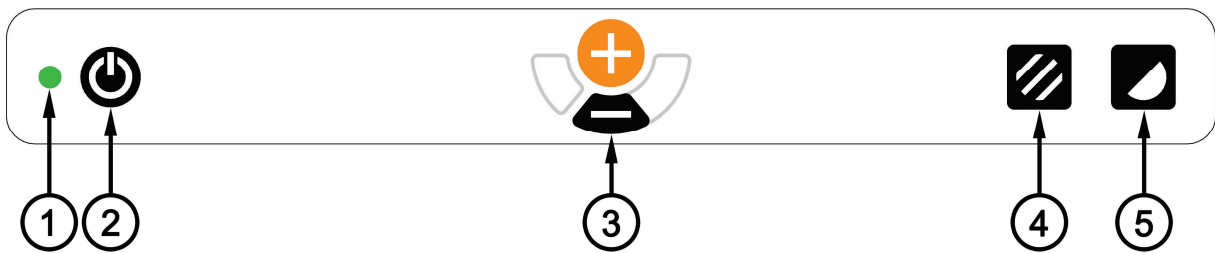
A comfortable workplace around your MagniLink is important. It could be useful to keep the following in mind:

- The chair should have a back rest.
- The seat of the chair should be at a height which does not make your legs become numb.
- Let your feet rest on the floor.
- The reading table should be at a height which allows your forearm to rest horizontally on the table.
- Shield off daylight. Lights from ceiling lamps, table lamps and windows might be reflected on the monitor.

5. Instructions

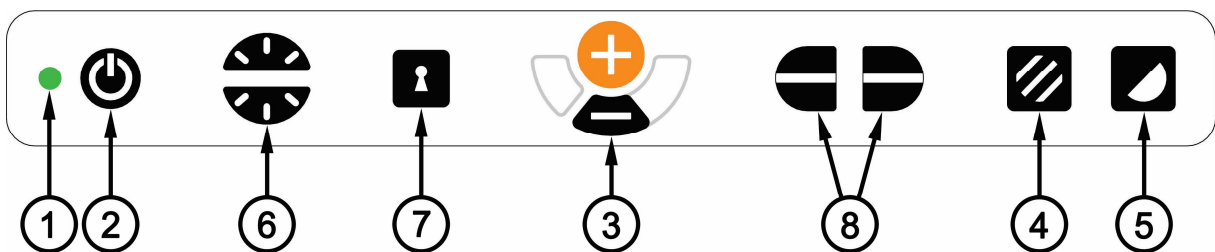
Four panels are available for MagniLink Vision. The functions on each panel are listed below, as well as the function of the reading table.

5.1 3 Push



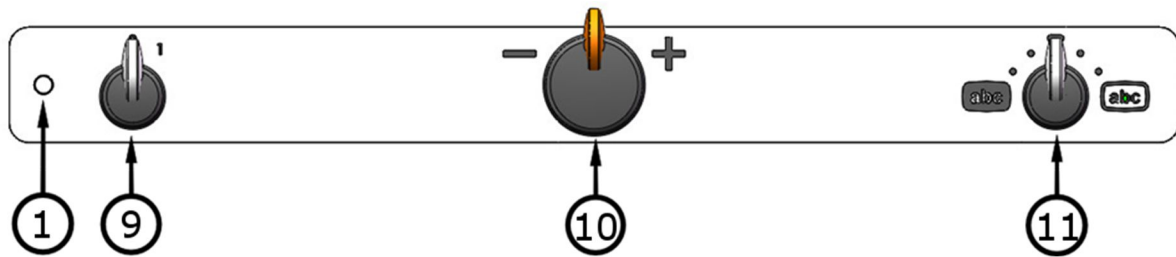
1. LED indicator
2. Power on/off
3. Magnification buttons
4. Colour/Grey scale picture mode
5. High contrast mode with artificial colours

5.2 5 Push



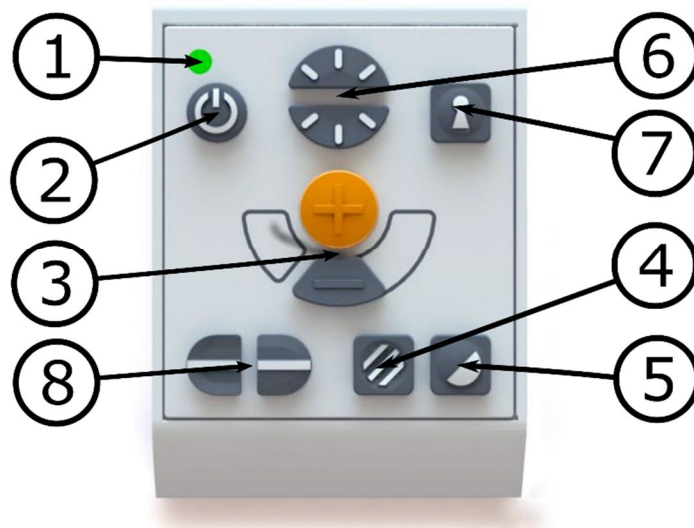
1. LED indicator
2. Power on/off
3. Magnification buttons
4. Colour/Grey scale picture mode (or Light adjustment)
5. High contrast mode with artificial colours
6. Brightness control
7. Autofocus on/off (or DVI switch)
8. Control for guiding line/curtain

5.3 3 Turn



1. LED indicator
9. Power on/off
10. Magnification control
11. Colour picture mode and high contrast mode

5.4 External control box



1. LED indicator
2. Power on/off
3. Magnification buttons
4. Colour/Grey scale picture mode (or Light adjustment)
5. High contrast mode with artificial colours
6. Brightness control
7. Autofocus on/off (or DVI switch)
8. Control for guiding line/curtain

5.5 Reading table



- 12. Side way direction friction adjustment
- 13. Depth way direction friction adjustment

5.6 Description of features

1. LED indicator

Green light indicates that the unit is on. Flashing green light indicates start-up. Slowly flashing yellow light indicates that the unit is in standby mode. Red light indicates an error; refer to the section "Troubleshooting".

2. Power on/off

Press the button to switch the unit on or off.

3. Magnification buttons

To decrease the magnification, press the lower button (minus) and to increase the magnification, press the upper button (plus).

(The magnification settings can be adjusted with the EUC software; please contact your dealer for more information.)*

4. Colour/Gray scale picture mode

Press button for a picture mode with natural colours or gray scale picture.

Light Adjustment (5 Push panel only)

Press and hold the button to temporarily adjust the light by

pressing brightness control (6) up or down. This could be used, for example, by light sensitive persons or when reading on glossy paper. The system will automatically switch between ROPC (Reading Optimized Picture Control) and DPC (Dynamic Picture Control) when the light reaches a certain level. There is no switching between natural colours and gray scale when the light adjustments are used.

Light on/off

The light can be turned on and off by pressing the button for three seconds. The system will automatically switch between ROPC (Reading Optimized Picture Control) and DPC (Dynamic Picture Control).

(The light settings and grey scale settings can be adjusted with the EUC software; please contact your dealer for more information.)*

5. High contrast mode with artificial colours

Press the button to switch between different combinations of colours. Colour combinations available in the standard configuration:

Background/Text

White/Black
Black/White
Yellow/Black
Black/Yellow
Green/Black
Black/Green

Background/Text

Red/Black
Black/Red
Yellow/Blue
Blue/Yellow
White/Blue
Blue/White

(The colour settings in high contrast mode can be adjusted with the EUC software; please contact your dealer for more information.)*

6. Brightness control

By pressing the buttons it is possible to adjust brightness. Press up to increase and down to decrease the brightness. When button picture mode (4) is pressed, the lamps intensity is adjusted instead. In this way, the best conditions for reading in different situations can be achieved.

7. Autofocus on/off

Pressing the button locks the autofocus in the present position. This could be used, for example, when writing by hand without risk of disturbing the focusing system with the hand or the pen. A subsequent press of the button reactivates the autofocus system.

DVI switch (5 Push panel only)*

When the DVI switch is connected, press the button for three seconds to switch between the camera image and the computer image on the built-in screen.

8. Control for guiding line/curtain*

Controls either the position of the guiding line or the size of the curtain. Press the right button to move the guiding line downwards. Continue to press the button and the guiding line switches from horizontal to vertical position and the guiding line will be moved from left to right. Further pressing the button and the guiding line turns into a horizontal curtain that reduces the visual area. Continue to press the button and the curtain becomes vertical. The left button gives the opposite result.

(The colour and size of the guiding line can be adjusted with the EUC software. It is also possible to select if the guiding line, the curtain or both should be active; please contact your dealer for more information.)*

9. Power on/off

Turn this knob to switch the unit on or off.

10. Magnification control

Turn this knob to the left to decrease the magnification or turn it to the right to increase the magnification. With this knob the magnification can be set to 16 different levels.

(The magnification settings can be adjusted with the EUC software; please contact your dealer for more information.)*

11. Colour picture mode and high contrast mode

With the knob in the upright starting position the colour picture, with natural colours, is displayed on the screen. Turn the knob to the left for a negative high contrast mode and to the right for a positive high contrast mode. There are four combinations in the standard configuration:

Background/Text

White/Black

Black/White

Background/Text

Yellow/Black

Black/Yellow

(The colour settings in high contrast mode can be adjusted with the EUC software; please contact your dealer for more information.)*

12. Side way direction friction adjustment

Set the side way friction by moving this handle. With the brake in the left end position, the reading table is unlocked. To increase friction, push the side way brake to the right.

13. Depth way direction friction adjustment

Set the depth way friction by moving this handle. With the brake in the near end position, the reading table is unlocked. To increase friction, push the depth way brake towards the back.

14. Troubleshooting

If nothing happens when turning the system on, refer to the section "Installation" and check that all connections are correct.

If the LED to the left of the main switch is solid red, something is wrong with the equipment and it cannot be used. Press the main switch once and MagniLink Vision will make three attempts to restart. If the light still indicates a solid red, turn off the equipment and contact an authorised service technician.

If the light is flashing red, it means that the wrong voltage is being supplied from the power supply. If the problem continues, pull out the power outlet cable and contact an authorised service technician.

Never disassemble any covers to try to repair the system yourself.

15. Technical specification

MagniLink Vision with an 18.5" TFT widescreen

Magnification:	1.7 – 60x (HD) or 1.5 - 75x (FHD)
Resolution:	1366 x 768
Power consumption:	Max 40 W 1.3 W
Power consumption, standby:	11.8 kg
Weight:	26 lb

MagniLink Vision with a 23" TFT widescreen

Magnification:	2.0 – 60 (HD) or 1.9 - 90x (FHD)
Resolution:	1920 x 1080
Power consumption:	Max 50 W 1.3 W
Power consumption, standby:	13.5 kg
Weight:	29.7 lb

General properties

Refresh rate:	60 Hz
Luminance:	300 cd/m ²
Contrast:	1000:1
Focusing distance:	0-60 mm (at max. magnification)
Working space:	110 mm – 195 mm 4.3 – 7.7"
Lamp type:	8 LEDs
Power adapter, AC input:	100-240 V, 50-60 Hz
Power adapter, DC output:	12 V, 5.41 A
Power adapter, power:	65 W
Size of reading table:	420 x 300 mm (W x D) 16.5 x 11.8" (W x D)
Dimensions in use:	420 x 470 x 570 mm (W x D x H) 16.5 x 18.5 x 24.4" (W x D)
Dimensions of packaging:	620 x 590 x 610 mm (W x D x H) 24.4 x 23.2 x 24.0" (W x D)

Temperature limit:	Transportation and storage: -20°C – +60°C -4°F – +140°F Operation: +5°C – +35°C +41°F – +95°F
Relative air humidity:	<80%

Service Life and Safe Use

In compliance with the Medical Device Regulation (EU) 2017/745, the manufacturer specifies the period during which the device is expected to maintain safe and effective performance under normal conditions of use. For this device, the recommended service life is 3 years from the date of purchase.

Note:

The indicated service life does not represent the full technical lifetime of the product. It reflects the period during which the device's performance and safety have been verified by the manufacturer. After this period, the device may still function, but technological developments or wear-related factors may justify evaluation for potential replacement.



Disposal of old Electrical & Electronic Equipment (Applicable throughout the European Union and other European countries with separate collection programs).

This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, which could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product, please contact your local city office, household waste disposal service or the retail store where you purchased this product.

16. FCC statement (USA and Canada only)

NOTE: 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.
- (2) This device must accept interference received, including interference which may cause undesired operation.

This equipment has been tested and complies with the limits for a Class B digital device, according 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. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that no interference will occur in a particular installation.

If this equipment causes harmful interference to radio or television receivers, (which can be determined by turning the equipment on and off) the user is encouraged to try one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment to a different circuit from the one that the receiver is connected to.
- Consult LVI or an experienced radio/TV technician for help.

CAUTION: The Federal Communications Commission warns the user that changes or modifications of the unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with the FCC rules, the system should only be used with the enclosed LVI power supply.

DECLARATION OF CONFORMITY

Manufacturers name: *LVI Low Vision International AB*

Manufacturers Address: *Verkstadsgatan 5
S-352 46 Växjö
Sweden*

Web: *http://www.lviglobal.se*

SRN (Single Registration Number): *SE-MF-000004178*

Basic UDI-DI (GMN): *7330724MLVEJ*

Brand name or trademark: *MagniLink*

Product code: **MLV**

Classification: *Class 1*

Type of equipment: *Reading Aid*

Conformity assessment route: *LVI Low Vision International AB uses the procedures for the CE-labeling of their products according to Article 52(7) of Regulation MDR 2017/745.*

This declaration of conformity is issued under the sole responsibility of LVI Low Vision International AB. We hereby declare that the medical device(s) specified above meet the provision of the Regulation (EU) MDR 2017/745 for medical devices and Regulation (EU) 2023/1542 concerning batteries, where it is applicable. This declaration is supported by the Quality System approval to ISO 9001 issued by Intertek. All supporting documentation is retained at the premises of the manufacturer.

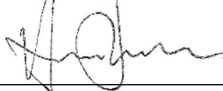
Manufacturer

Manufacturer's authorized representative

Date

20-05-2021

Signature



Clarification

Henrik Blomdahl

Position

Managing Director