

User Manual

MagniLink S PREMIUM 2

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1 About LVI

LVI Low Vision International AB was founded in 1978 and is one of the world's leading manufacturers of magnifying TV- and computer systems for visually impaired. New products are developed in close cooperation with users and professional personnel of vision rehabilitation. LVI is a Quality System Certified ISO 9001 and Environmental System Certified ISO 14001 company.

The information in this manual has been carefully checked and is believed to be accurate. However, LVI assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will LVI be liable for direct, indirect, special, exemplary, incidental, or consequential damages resulting from any defect or omission in this manual. In the interest of continued product development, LVI reserves the right to make improvements in this manual and the products it describes at any time, without notice or obligation.

2 Introduction to the MagniLink S

Thank you for choosing this video magnifier. We aim to ensure that you are completely satisfied with your choice of supplier and reading aid.

The MagniLink S is a portable camera system with autofocus, which can be connected to a computer or directly to an external monitor. The system is controlled via a keyboard and/or control box. MagniLink S is available in a number of different models. Choose model in the following steps:



Choose reading camera HD or FHD.

Model	Camera
MLS-HD-2	HD (720p)
MLS-FHD-2	FHD (1080p)

Choose among the following accessories.

Product code	Accessory
A	Text To Speech for PC
B	Text To Speech for Mac

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

3.1 Reuse, installation and maintenance

The device may only be technically overhauled and prepared by an authorized company. Re-use may only be carried out after appropriate inspection and cleaning / disinfection.

3.2 Cleaning

Before equipment cleaning and maintenance note:

- Disconnect the device from the power supply before cleaning.
- Use a slightly damp (not wet) cloth and a cleaning / disinfectant agent intended for monitors and computers.
- Do not allow any liquids to enter the device.

3.3 Safety information

The reading aid is only intended for indoor use and must be used in accordance with the following safety instructions.

- Use only the power adaptor supplied with MagniLink S. If the wrong type of adaptor is used for operation of MagniLink S, this can cause damage to the system.
- Units such as HDMI monitors and/or computers that are to be connected to the system must comply with the appropriate safety regulations for their country of use.
- Never turn on or use the product if it has been exposed to water, rain or other liquids. Pull out the USB cable and allow trained service personnel to carry out an inspection of the product before it is used again.
- The product contains a neodymium magnet. This is a potential risk for a user with a pacemaker. If the magnet gets too close, its magnetic field can interfere with the operation of the pacemaker.
- Place the power cord in such a way that you can neither trip over it or that crush damages can occur.
- If the product is moved from the cold into a warm room, condensation (moisture) can form inside the unit or on the camera lens. To prevent problems with condensation, the apparatus should be installed in the room at least 30 minutes prior to usage.

- If the system requires cleaning, pull out all cables and use a slightly damp (not wet) cloth. Use only water or a cleaning agent that is intended for monitors and computers.
- Do not rely 100 per cent on the results of an OCR conversion; the OCR engine can misinterpret the text. This is particularly important to bear in mind when processing sensitive information such as a medical prescription.
- 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.
- Make no further adjustments, even if the product does not function normally after following the functional descriptions. Pull out the USB cable and contact service personnel or the product distributor. Only use spare parts that are specified by LVI

If in doubt, contact your supplier.



Warning

MagniLink S is supplied packed in a plastic bag. To avoid risk of suffocation, keep the bag out of the reach of children and infants.

4 Unpacking

The system is supplied in a box with the following contents:

- Reading camera
- Removable USB/HDMI module
- USB cables
- Case
- USB memory stick with software
- Polishing cloth
- User Guide
- Power adaptor
- HDMI to HDMI cable
- HDMI to DVI cable

Check first that the box has no damage to its exterior. In the event of damage, contact the delivery company and file a notification of damage.

Open the box and take out the MagniLink S; remove the white packaging. For further information see Installation.

4.1 Packaging

The packaging consists of the following packaging material (LVI recommends that the packaging be kept in case you have to return the system or you need to move it):

- Packing material (EPE)
- Box (corrugated cardboard)
- Polyethylene (LDPE4)

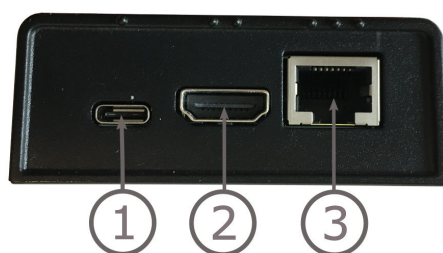
For sorting and collection of packaging material, please call the packaging collection customer service department for information on the rules that apply in your municipality.

5 Hardware

5.1 Installation of hardware



Open the camera's arm and pull out the camera's supporting legs. It is not possible to manipulate the camera's arm until the supporting legs have been extended.



The USB/HDMI module has several connection options.

1. **USB connection**

In addition to transferring images to a computer, the USB connection is used to provide power to the system.

2. **HDMI connection**

Here the camera can be connected to a monitor that supports HDMI or DVI.

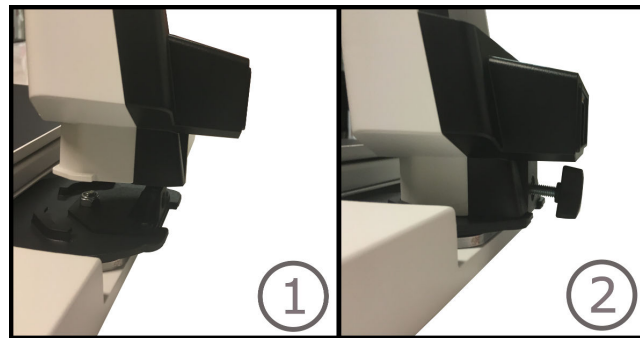
3. **External control panel**

An external control panel can be connected via this input. If the camera is linked to a docking station, the control panel must be connected before you attach the USB connection.

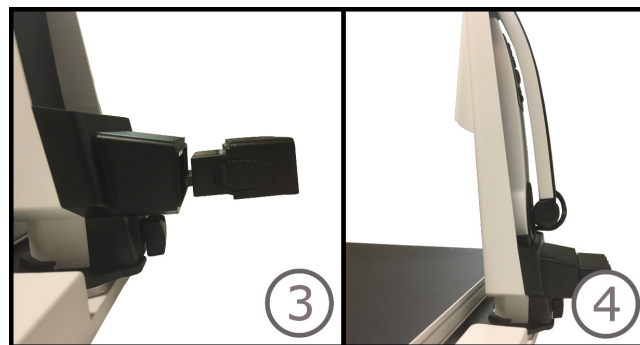
5.2 Installation of docking station

If you bought a MagniLink Docking Station, follow the instructions below to install it.

A MagniLink Docking Station consists of a camera holder and a reading table, plate or table clamp. If it is the variant with a table clamp, fasten it to the table.



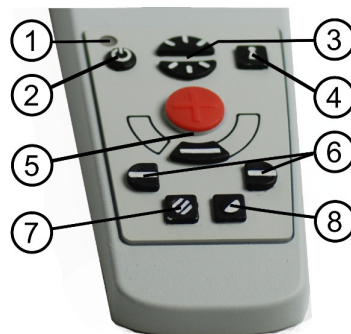
- 1 Place the holder in the reading table, plate or table clamp.
- 2 Fasten the holder with the screw.



3. Remove the USB / HDMI module from the camera and insert it into the holder.
4. Place the camera in the holder.

5.3 Using the hardware

5.3.1 Control box



1. **LED**

A green light indicates that the system is on. A flashing green light means that the system is starting up. A slowly flashing yellow light indicates standby. A red light indicates that something is wrong in the system. See the chapter on *6.1 Troubleshooting, page 10*.

2. **Power on/off**

Press to start or shut down the system.

3. **Lighting configuration**

Used to configure the light intensity in order to optimize reading conditions. Press the upper half to increase the light intensity and the lower half to decrease it. For systems that have LED lighting, the intensity is adjusted by holding down the button (7).

4. **Autofocus on/off**

Press the button once to lock the focus. This can be used when you wish to write by hand. Autofocus is not affected by the pen or your hand. Press the button a second time, to reactivate autofocus.

5. **Zoom control**

Used to set the zoom. To reduce the zoom, press the lower key (minus) and to increase the zoom, pressure the upper key (plus).

6. **Reference line/Bar**

Adjust the position of the reference line. Press the right-hand button to move the horizontal line down. Hold the button in to change the reference line to vertical and move it to the left. The reference line then becomes a horizontal bar which diminishes the viewing area. To make the bar vertical, press the button again. The left button gives the opposite result.

7. **Picture mode**

Press the button to switch the picture mode between natural colours and grey scale.

Lighting adjustment

Hold the button down to temporarily enable adjustment of the lighting via the lighting configuration (3). When the lighting configuration (3) is used to adjust the lighting, there is no switching between colour and grey scale (only possible if the system has LED lighting).

Mirroring

A mirror image can be obtained by holding the button down for three seconds.

8. **High contrast modes with artificial colours**

Press the key to switch between the various colour combinations.

Rotation

By holding the button down for three seconds, the image can be rotated 180 degrees.

5.3.2 Position sensor



MagniLink S is equipped with a position sensor that is used to switch between reading mode (the user points the camera down and flips the lens into place) and distance mode (the user opens the lens). The settings for both modes are automatically saved when you switch from one to the other.

Settings that are automatically saved for these modes are:

- Artificial colours
- Negative/Positive/Natural colours
- Light
- Magnification level
- Reference line/Bar
- Rotation of camera image
- Mirroring of camera image

6 Working with the reading camera

Your reading camera is now ready to use. It is important that the workplace around your MagniLink is comfortable, and that you sit correctly. This is so that you can use the camera for as long as possible without putting undue strain and stress on your neck and back.

You should bear the following in mind:

- Your chair should be positioned close to the table on which the equipment is located, and you should not sit in the chair for too long. We recommend a good office chair with adjustable height.
- The seat of the chair should be at a height that does not cause your legs to become numb; legs should be at an angle of 90 degrees and you should rest your feet on the floor.
- The reading table should be at a height at which you can rest your lower arm horizontally on it. It is important that the table is neither too high nor too low for you. The ideal solution is if the screen is slightly below eye level and in as straight a line in front of you as possible.
- Shut out daylight. Lights in the ceiling, table lamps and light from windows can cause reflections on the monitor. For this reason, avoid placing lights where they shine directly at the screen or at yourself.

6.1 Troubleshooting

If the indicator light is flashing:

A red light or a flashing red light indicates a system error. Restart the system by disconnecting and reconnecting all cables and rebooting the system. If a red light is still displayed, contact your service technician.

7 Technical information

Magnifying area HD camera	1,4 - 75 x (15,4" 16:9 screen)
Magnifying area FHD camera	1,1 - 75 x (15,4" 16:9 screen)
Power output	5 W
Power output, standby	1.7 W
Weight	1.9 kg
Refresh rate	60 Hz
Dimensions BxDxH	350x305x390 mm
Operational temperature	0 to 30°C
Storage and transportation temperature	-20 to 60°C



Disposal of old electrical and electronic equipment (applies for EU countries and all other European countries that have specific collection systems)

If the product or its packaging has this symbol on it, it is not to be handled as regular domestic waste. It should instead be deposited at a suitable collection centre for the recycling of electrical and electronic equipment. By ensuring that this product is properly taken care of, you are helping to prevent the negative impact on health and the environment that might otherwise result from inappropriate disposal of this product. Recycling helps in the management of our natural resources. For more detailed information regarding the recycling of this product, you can contact your municipality, your waste management company or the store where you purchased the product.

8 Declaration of Conformity

DECLARATION OF CONFORMITY

Manufacturers name: *LVI Low Vision International AB*

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

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

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

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

Brand name or trademark: *MagniLink*

Product code: ***MLS-HD-2, MLS-FHD-2***

Classification: *Class 1*

Type of equipment: *Reading Aid*

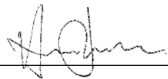
Conformity assessment route: *LVI Low Vision International AB uses the following
procedures for the CE-labeling of their products
according to the Regulation MDR 2017/745:

Class [1]: EC conformity declaration according to
Annex I + Annex II + Annex VII*

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. 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


Position
Managing Director

Clarification
Henrik Blomdahl

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