

User Manual

MagniLink Zip

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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 equipment for persons with visual impairments. Development of new products takes place in close cooperation with users and professional staff within the low vision rehabilitation industry. LVI is quality-certified in accordance with ISO 9001 and environmentally-certified in accordance with ISO 14001.

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 MagniLink Zip

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


MagniLink Zip is a video magnifier designed for people with visual impairment. The video magnifier offers features including autofocus, several artificial colours, the option of switching the magnifier between reading mode and distance mode and the option of adjusting the brightness. MagniLink Zip has a height adjustable screen and it is also possible to collapse your MagniLink Zip when the system is not being used or for transportation.

MagniLink Zip is available in several different models. Choose a model in four steps.

- Screen size (choose between a 13.3 or 17.3-inch screen in widescreen format).
- Camera (the camera is available in two models, HD (720p) and FULL-HD (1080p)).
- Reading table (choose a model with or without a reading table).
- Battery (choose a model with or without a battery).



| Model | Screen size | Camera | Reading table | Battery |
|--------------|-------------|--------|---------------|---------|
| MLZIP-HD-13 | 13.3" | HD | No | Yes |
| MLZIP-13-01 | 13.3" | HD | No | No |
| MLZIP-13-02 | 13.3" | HD | Yes | Yes |
| MLZIP-13-03 | 13.3" | HD | Yes | No |
| MLZIP-FHD-13 | 13.3" | FHD | No | Yes |
| MLZIP-13-04 | 13.3" | FHD | No | No |
| MLZIP-13-05 | 13.3" | FHD | Yes | Yes |
| MLZIP-13-06 | 13.3" | FHD | Yes | No |
| MLZIP-HD-17 | 17.3" | HD | Yes | No |
| MLZIP-17-01 | 17.3" | HD | Yes | Yes |
| MLZIP-17-02 | 17.3" | HD | No | No |
| MLZIP-17-03 | 17.3" | HD | No | Yes |
| MLZIP-FHD-17 | 17.3" | FHD | Yes | No |
| MLZIP-17-04 | 17.3" | FHD | Yes | Yes |
| MLZIP-17-05 | 17.3" | FHD | No | No |
| MLZIP-17-06 | 17.3" | FHD | No | Yes |

| | |
|---|---|
|  | <p>MagniLink Zip meets all the requirements for CE marking of medical devices in accordance with Directive 93/94/EEC. Our products comply with MDD 93/94/EEC with additions from Directive 2007/47/EC</p> |
|---|---|

3 Safety information

- Only use the power adaptor supplied with the product. Using an incorrect type of power adapter may cause damage to the system.
- 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 condensation forming, the units should be installed in the room at least 30 minutes prior to usage.
- Never operate the product if it has been exposed to water or other liquids. Damaged or wet product can cause electric shocks or fire.
- Only use the battery supplied with the product. If the battery needs to be changed, please contact LVI.
- 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.
- Be careful not to catch your fingers when collapsing your MagniLink Zip or when adjusting the position of the screen. Do not place any objects on the reading table when the product is collapsed as they can damage the screen.
- Collapse your MagniLink Zip when it needs to be moved. Always lock the reading table and do not lift the screen or reading table as these are moving parts.
- Make no further adjustments, even if the product does not function normally after following the functional descriptions. Pull out the power cable and contact service staff or the product distributor. Only use spare parts that are specified by LVI.
- Always switch off the power when the system is not being used.

If in doubt, contact your supplier.

Warning



The product 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
- Power adaptor
- Carrying case
- User Guide
- Battery (only for models with a battery)

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

Open the box, take out the MagniLink Zip and remove the white packaging. For further information on installation, please see the chapter on Installation page 10.

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 (EPP)
- 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.

Note that the product and its accessories must be recycled as electronic waste. A worn-out battery is recycled as electronic waste.

5 Installation

Open your MagniLink Zip



1. Place your MagniLink Zip far enough in on the table in front of your seat, but at least 10 cm from the edge of the table. Remember that the reading table can be pulled out approximately 30 cm in three directions. MagniLink Zip has a low total weight. Therefore, it is very important to place the system in the right place on your table, particularly when you are using the reading table in its most extended position. Excessive load in this position can cause the system to tip over.
2. Take hold of the unit's arm and turn it upwards until you hear it click into place.
3. Turn the screen up to the desired position. When you do this, the camera will automatically move into the right position.

Install the battery (if your MagniLink Zip was supplied with a battery)



4. Turn the unit's arm so that it is easy to access the battery compartment. Place the battery in the contact on the top of the battery compartment.
5. Press the battery cover in place in the unit.

Connect the power cable.



6. Connect the mains adapter to the rear of the unit and to the wall socket. The unit is now ready to be used.

6 Use

It is possible to switch between basic mode and a mode with full functionality. To switch, do the following.

1. Press and hold button 4.
2. Press and hold button 3.
3. Press button 5.

Basic mode is perfect for users who want the simplest possible reading camera. The functions available are on/off, magnification control, picture mode, high contrast mode and contrast adjustment. Full functionality mode offers a wide range of additional options. For more information, see Menu page 13.

6.1 Panel



1. **Power on/off with LED**
Press to start or shut down the system. A green light indicates that the unit is on. A flashing yellow light means that autofocus is switched off. The light flashes green when the system is starting. A red light for five seconds when the system is starting indicates that the battery needs to be charged. If the unit was on when the battery started to be charged, the LED flashes yellow every five seconds.
2. **Magnification control**
Used to set the magnification. To reduce the magnification, turn anticlockwise and to increase the magnification, turn clockwise. Press the button to reduce the magnification to overview mode. Press the button again to restore the magnification.
3. **Picture mode**
Press the button to switch the picture mode between natural colours and grey scale.

4. High contrast mode with artificial colours

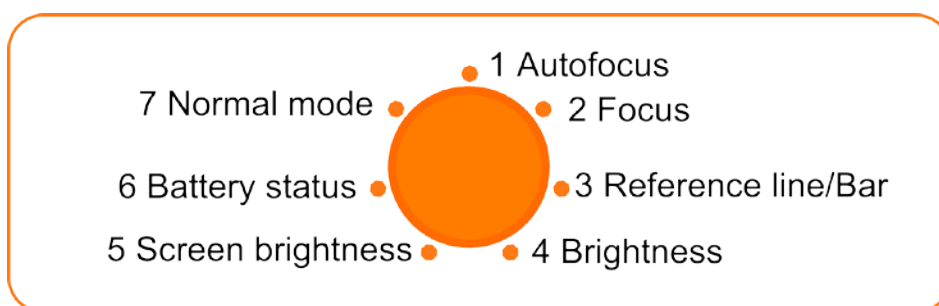
Press the button to switch between the various colour combinations.

5. Function control

In normal mode, this control is used to set the light level. When the controller is pressed down, you enter a menu in which further settings can be made.

6.2 Menu

The menu is opened by pressing the function control. Turn the control to display the current menu option on the screen.



There are seven different main modes in the menus. The current mode is displayed on the screen. The screen display in the current mode is shown within brackets. Unless "SET" is shown on the screen, the unit will go back to normal mode after 30 seconds of inactivity. If "SET" is shown, the user needs to press the control to save the setting.

1. Autofocus (AF)

In this mode, you can press the control to switch between automatic and manual focus. "AF-ON" is displayed on the screen if automatic focus is on and "AF-OFF" is displayed if it is off.

2. Focus (FOCUS)

In this mode, you can press the control. When you do so, "SET" is displayed on the screen and it is then possible to set the focus mode manually by turning the control. Manual focus may, for example, be useful for inspection. When this has been done, press the control again to return to the menu.

3. Reference line/Bar (REFLINE)

Press the control in this mode and "SELECT" is displayed on the screen. Then turn it to choose between vertical reference line, horizontal reference line, vertical bar or horizontal bar. Then press the control. "SET" is then displayed on the screen and it is possible to set the mode for the reference line or bar by turning the control. When this has been done, press the control again to return to the menu.

4. Brightness (LAMP)

Press the control in this mode to access the settings for the lamp's brightness. "SET" is displayed on the screen and it is possible to turn the control to change the brightness. When you are satisfied with the brightness, press the control again to return to the menu.

5. Screen brightness (SCREEN)

In this mode, you can press the control to adjust the screen's brightness. "SET" is displayed on the screen and it is possible to reduce or increase the brightness by turning the control. When you are satisfied with the brightness, press the control again to return to the menu.

6. Battery status (Battery symbol)

When you turn the control to this mode, the current battery status is displayed on the screen. This mode is only available in models with a battery.

7. Normal mode (EXIT)

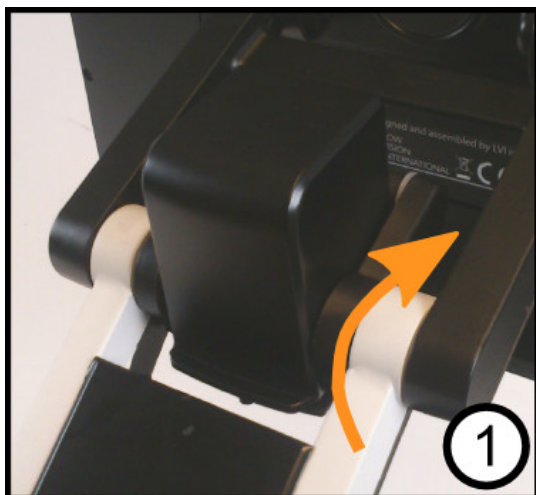
If you press the control in this mode, you exit the menu and return to normal mode.

6.3 Reading table



- 1. 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 (at the far right, the brake clicks into locked mode).
- 2. 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. Push the brake in as far as possible to lock the reading table.

6.4 Camera



The camera has two modes. Reading mode and distance mode. Turn the camera to switch it from reading mode (1) to distance mode (2). The screen may need to be lowered slightly when the camera is to be turned to distance mode. When the camera is in distance mode, it can be angled laterally, depending on what you want to look at.

6.5 Battery

The following applies to the MagniLink Zip models that are equipped with a battery. If the battery charge level falls below 10 or 5%, a red battery symbol is displayed to indicate that it is time to connect the mains adapter and charge the battery. To remove the symbol, press the function control.

Maintenance charging

The MagniLink Zip models with a battery are also equipped with a smart battery charger that uses maintenance charging to keep the battery in good condition. To further extend battery life, we recommend that you use your MagniLink Zip twice a year with just the battery (disconnect the mains adapter) until the battery is completely discharged.

7 Ergonomics

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.
- Shield off 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.
- If you use the device for long periods of time, there is a risk of repeated movements causing you pain in your neck, shoulders and back. Your eyes can also get tired from looking at a screen for too long.

8 Troubleshooting

No image is displayed on your MagniLink Zip after you start the system:

- Check that the power is on.
- Check that all connectors are properly connected as explained in the 'Installation' section.

The LED to the left of the start button shines red for five seconds.

- The battery needs to be charged. Connect the mains adapter to the units to charge the battery.

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

9 Technical information

MagniLink Zip with a 13" screen, without reading table and with battery.

| | |
|----------------------------|--|
| Dimensions collapsed | 330 x 450 x 90 mm (W x D x H) 13 x 17.5 x 3.5" (W x D x H) |
| Dimensions in use | 330 x 450 x 510 mm (W x D x H) 13 x 17.5 x 20.1" (W x D x H) |
| Dimensions of packaging | 460 x 605 x 240 mm (W x D x H) 18.1 x 23.8 x 9.4" (W x D x H) |
| Weight (with battery) | 4.2 kg 9.4 lbs |
| Monitor resolution | 1600 x 900 |
| Camera resolution | 720p/1080p |
| Magnification | 1,3x – 35x (HD), 1,1x – 35x (FHD) |
| Luminance | 300 cd/m ² |
| Contrast | 500:1 |
| Power consumption | 14-20 W (40 W during charging) |
| Power consumption, standby | 0,1 W |

MagniLink Zip with a 17" screen and reading table.

| | |
|----------------------------|--|
| Dimensions collapsed | 440 x 470 x 120 mm (W x D x H) 17.3.x 18.5 x 4.7" (W x D x H) |
| Dimensions in use | 440 x 470 x 560 mm (W x D x H) 17.3.x 18.5 x 22" (W x D x H) |
| Dimensions of packaging | 575 x 660 x 265 mm (W x D x H) 22.6 x 26 x 10.4" (W x D x H) |
| Weight (without battery) | 6,9 kg 15.3 lbs |
| Monitor resolution | 1920 x 1080 |
| Camera resolution | 720p/1080p |
| Magnification | 1,7x – 45x (HD), 1,4x – 45x (FHD) |
| Luminance | 300 cd/m ² |
| Contrast | 650:1 |
| Power output | 14-20 W (40 W during charging) |
| Power consumption, standby | 0,1 W |

General properties

| | |
|--|--|
| Refresh rate | 60 Hz |
| Mains voltage | 100-240 V, 50-60 Hz |
| Focal range | 0-60 mm |
| Lighting | LED |
| Battery capacity | 65 Wh |
| Charging time | 2,5 hours |
| Battery life (use) | Up to 5 hours (13.3") or 4.5 hours (17.3") |
| Battery life (standby) | Up to 45 hours |
| Battery weight | 322 g 0.7 lbs |
| Battery warranty period | 1 year |
| Free working height beneath the camera | 280 mm 11" |
| Relative humidity | <80% |
| Acceptable temperature ranges | Transport and storage -20°C - +60°C 68°F - 140°F Operation +5°C – +35°C 41°F - 95°F |



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.

10 Declaration of Conformity

DECLARATION OF CONFORMITY

according to the Medical Devices Directive, 93/42/EEC with amendments from directive 2007/47/EC

| | |
|--------------------------|--|
| Type of equipment: | <i>Reading Aid</i> |
| Brand name or trademark: | <i>MagniLink</i> |
| Type designation: | <i>MLZIPHD-13, MLZIPFHD-13, MLZIPHD-17, MLZIPFHD-17</i> |
| Product class: | <i>Class 1.</i> |
| Manufacturer: | <i>LVI Low Vision International AB</i> |
| Address: | <i>Verkstadsgatan 5 S-352 46 Växjö Sweden</i> |
| Web: | http://www.lvi.se |
| Phone: | <i>+46 470 - 72 77 00</i> |
| Fax: | <i>+46 470 - 72 77 25</i> |

As the manufacturer, we declare under our sole responsibility that:

- the product complies with the provisions of the Council Directive 93/42/EEC with amendments from directive 2007/47/EC.
- we will keep the technical documentation described in section 3 of Annex VII available to the national authorities for a period ending at least five years after the last product has been manufactured.
- the device meets the Essential Requirements of Annex 1 which applies to it, taking into account the intended purpose of the device.
- to follow the requirements regarding products placed on the market as described in section 4 of Annex VII.

Manufacturer

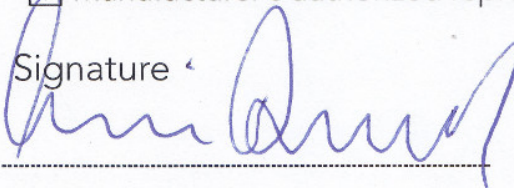
Manufacturer's authorized representative

Date

Signature

Position

2014-11-25



Managing Director

Clarification

Erik Bondemark

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