

# User Manual

# MagniLink ZIP

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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.

## 1. General Information

**MagniLink Zip** are magnifying electronic autofocusing vision aids that are available in two versions:

- a version with picture mode in natural colours (MLZIP)
- one that uses a High Definition colour camera (MLZIP-HD)

Height adjustment (Optional): articlenumber and "-AD" (*MLZIP-HD-AD*).

It is possible to fold MagniLink Zip when the system is not in use or being transported.

The screen is a 17" TFT wide-screen, integrated with the camera and the reading table.



**CE** The equipment complies with requirements for CE-approval of medical devices according to 93/42/EEG directives.

## 2. Safety Information

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

- Before connecting, check the system, the power supply and the mains cord to make sure nothing is damaged. The enclosed power supply is only intended for use with the MagniLink Zip. Never operate the MagniLink Zip if the unit has been exposed to water, rain or other liquids. Damaged mains cord or plugs may result in a shock or a fire hazard.
- Do not allow anything to rest or roll over the mains cord. The power supply emits heat and must therefore not be covered.
- If cleaning is required, unplug the MagniLink Zip, use a slightly damp (not wet) cloth. Only use water or some detergent specially made for cleaning monitors and computers. Do not use aerosol cleaners directly on the MagniLink Zip since it may overspray and cause an electrical shock.
- When operating the reading table, do not place hands under or behind the reading table. It could get one's finger caught between the reading table and the stand or the slides. The MagniLink Zip has to be placed at least 10 cm from the edge of the table.  
**Warning!** MagniLink Zip has a low total weight, which means that it is important to place the system correctly so 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 which could lead to personal injuries.
- If the MagniLink Zip is to be transported, do not lift the unit by the screen or the reading table, as they are movable parts. When folding or unfolding the product make sure that both push-pull buttons at the joint are in their inner position. Be careful not to squeeze your fingers when folding the product.
- If you are unable to restore normal operation by following the operation instructions, do not attempt any further adjustments. Unplug the set and call 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 at least 30 minutes before use. Do not exposure 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 rain or 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 power supply
- the carrying case
- the user manual



Inspect the package for exterior damages. Note that severe damages should be directed to the transport company.

Open the box and take out the carrying case that contains MagniLink Zip. Remove the packaging and place the carrying case on the table with the LVI logotype facing up. Open the zipper and release straps. Lift the unit from the carrying case by holding the round bar closest to the screen. Place the system on a table and remove packaging between the screen and the reading table. Power supply and mains cord are placed in the side pockets of the carrying case. See the section "Installation" for unfolding and installation of MagniLink Zip.

#### Packaging

The packaging of the unit contains the following:

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

(LVI recommends the user to keep all packaging material, to be reused in case of future shipping).



## 4. Packing

See pictures on pages 10-12, but in reverse order.

Lock the table in transport position (see page 17) then pull out the net cable. Hold the camera and pull out the pull-push button at the joint closest to the screen. Fold the camera backwards until it locks. Make sure the pull-push button is in its inner position.

Grab the screen and fold it backwards as far as it goes.

Grab the screen under the front panel and hold the weight of the screen in your hand. Pull out the back pull-push button. Fold the screen and let go of the pull-push button. Keep folding the screen until it locks. Make sure the pull-push button is in its inner position.

If the unit has to be moved or sent back, note the following:  
Put cellular plastic parts or some soft material between the reading table and the screen. Put the product and power supply into your carrying case, then, put some more cellular plastic parts on the carrying case and place it in the cardboard carton.



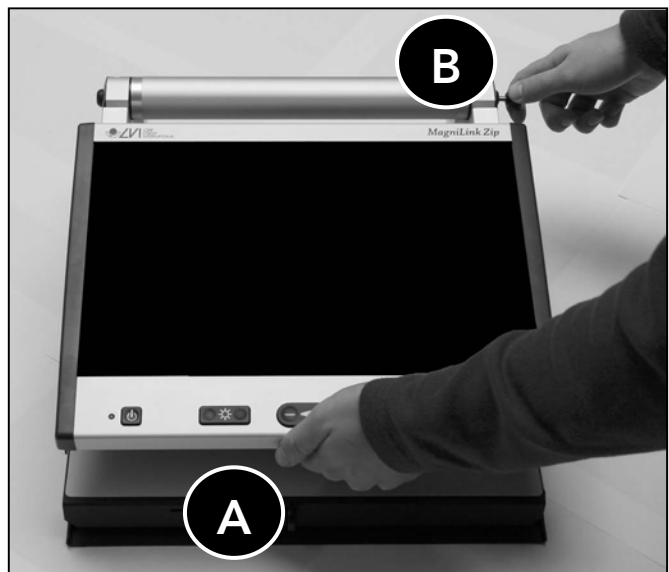
Be careful not squeeze your fingers when you fold the unit.

## 5. Installation

Place the unit on a table. The MagniLink Zip has to be placed at least 10 cm from the edge of the table. Notice that the system's reading table can be moved up to 30 cm in three directions. MagniLink Zip has a low total weight, which means that it is important to place the system correctly so 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.

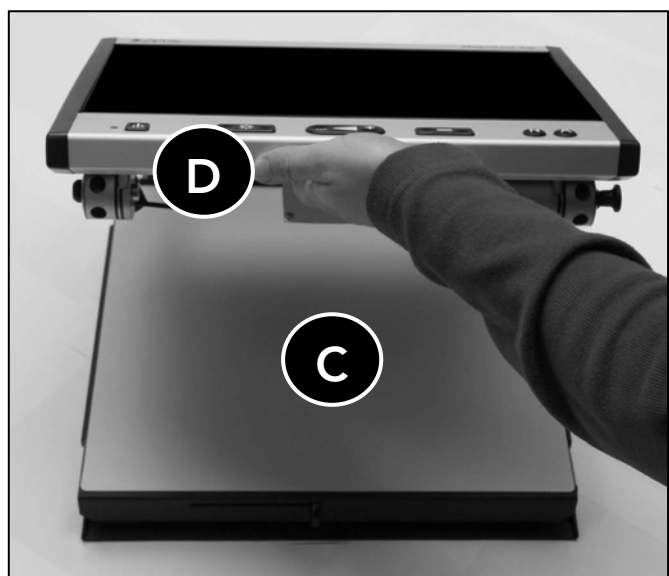
Grab the screen under the front panel (A) and lift it so you can feel the weight of the screen in your hand (the screen should not move).

Pull out the pull-push button (B) in the back of the unit and start lifting the screen, approximately 5 cm.

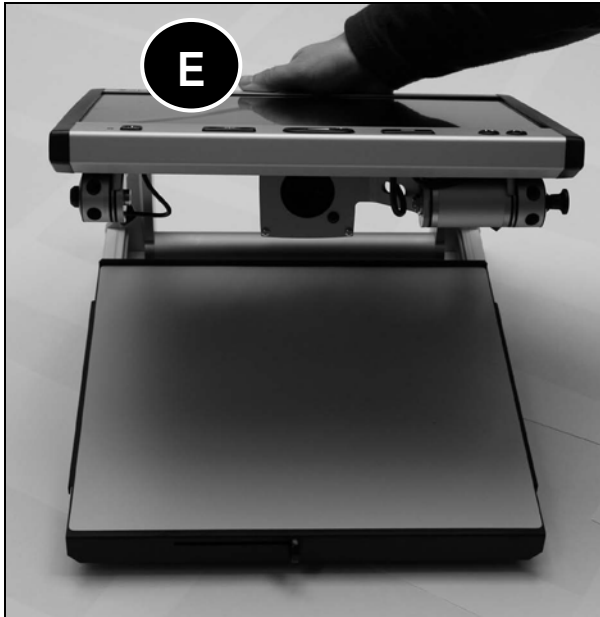


Let go of the pull-push button and continue lifting the screen (C) until it flicks on both sides. The pull-push button should be in its inner position.

If necessary, jiggle the screen up and down (D) until it comes to the right position. The arms are now in their upfolded position.

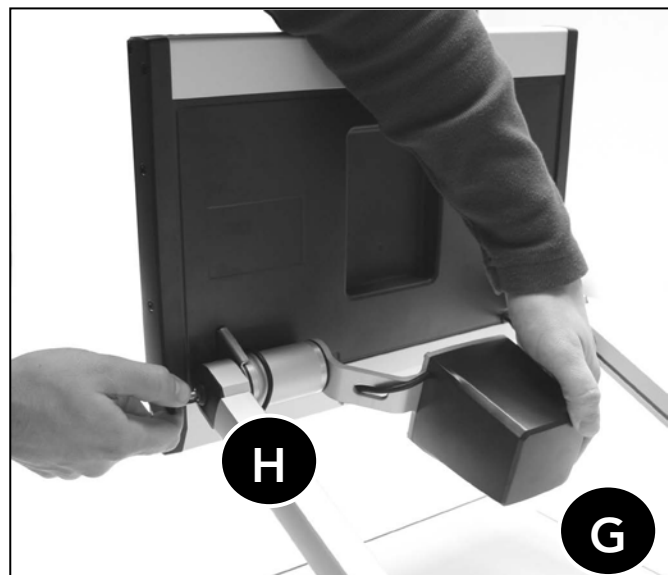


Take the screen (E) and tilt it towards you until it stands in a vertical position (F). The screen is now in its upfolded position.

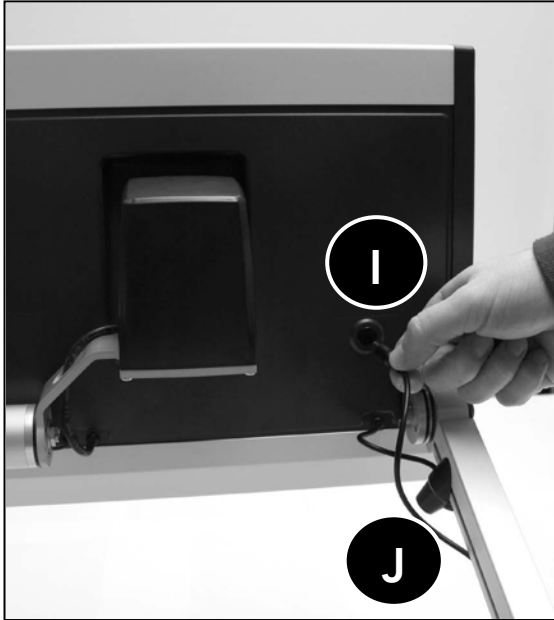


The camera is placed at the back of the screen. Lift the camera (G) so you can feel its weight in your hand (the camera should not move).

Pull out the pull-push button (H) on the side of the unit, which is placed just slightly behind the screen. Fold the camera up, approximately 5 cm, and then let go of the pull-push button. Keep on folding the camera until it flicks.



The camera is now in its top position.



Connect the power supply to the connector at the back of the screen (I). Press the cable into the slit at the bottom of the arm (J). To keep the cable from pulling out when the screen is tilted, give it some length so it can stretch out sufficiently.

The power supply emits heat and must therefore not be covered.

The unit is now ready to be used. The screen can be tilted 5 degrees forward and 10 degrees backwards, counting from a vertical position. Take both sides of the screen and tilt it forward/backward to obtain the desired position.

#### Height adjustment (Optional)

Height adjustment of the screen is available as an option. This upgrade makes it possible to lower the screen 5 cm from the original height. To lower the screen, press down on top of the screen with one hand (F) to preferred height. To raise it, use both hands and press it upwards using the screen support as a counterstay, or fold the unit and press the bottom of the screen.

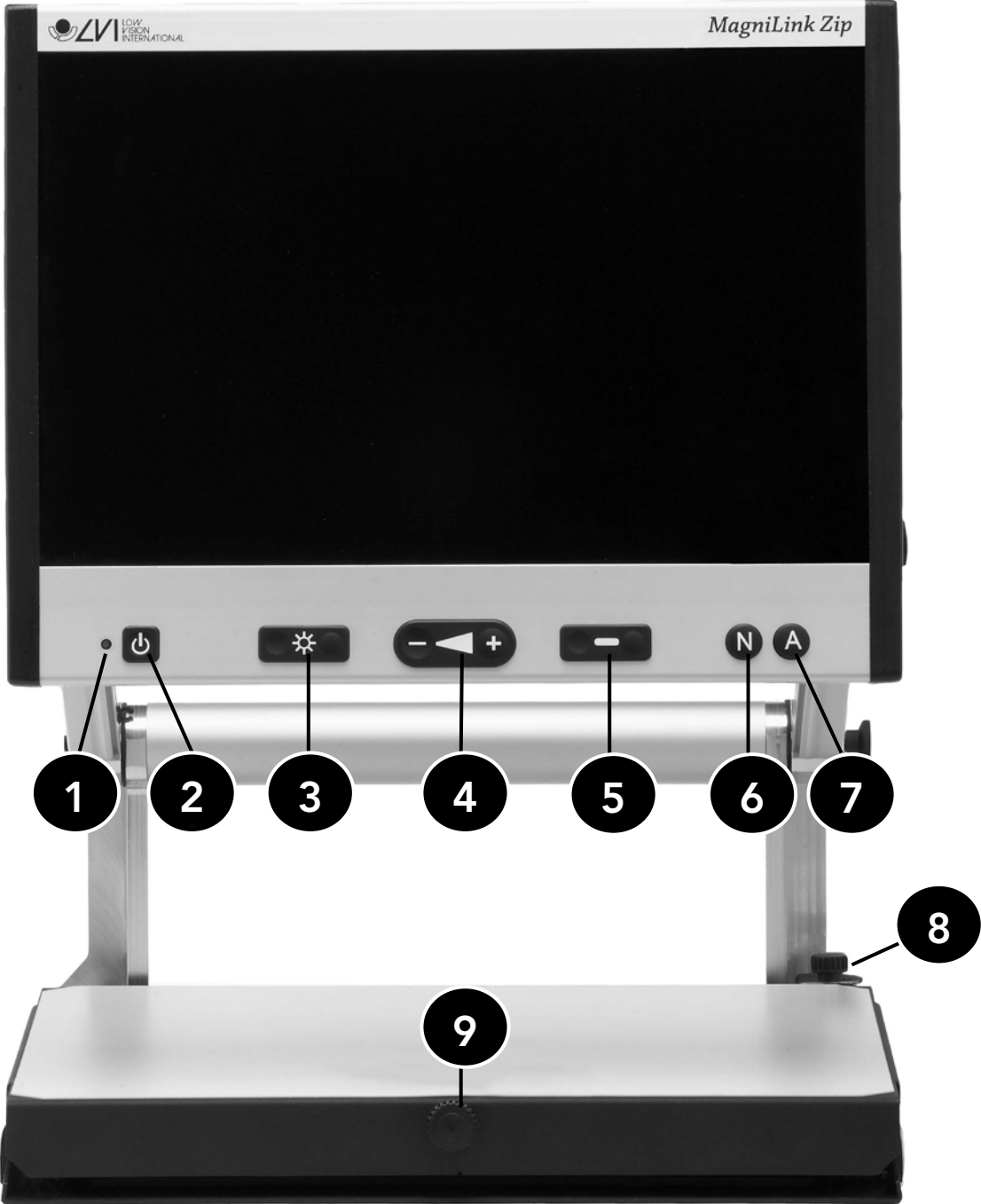
**NB!** To fold and transport the unit, place the screen in the highest position.

## Work place

A comfortable work place 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 of 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 that allows your forearm to rest horizontally on the table.
- Shield off daylight. Lights from ceiling lamps, table lamps and windows can be reflected on the monitor.

# 6. Instruction



## Features, camera unit

- 1) LED
- 2) Main switch on/off
- 3) Brightness control
- 4) Magnification lever
- 5) Control for reference line
- 6) Button for color picture mode
- 7) Option 1. Button for high contrast mode with artificial colors  
Option 2. Autofocus on/off
- 8) Depth direction friction adjustment
- 9) Sideway direction friction adjustment

### 1) LED

Green light indicates that the unit is on. Red light indicates that something in the system is wrong, see section "Troubleshooting".

### 2) Main switch on/off

Press the button to switch on or off the unit.

### 3) Brightness control

By turning the control it is possible to adjust brightness. This way best readability in different situations can be achieved.

### 4) Magnification lever

Lever for adjustment of the magnification. To decrease the magnification, push the left side of the button and to increase the magnification, push right side of the button.

### 5) Control for reference line

Controls the position of the guiding line. Press the right side of the button to move the guiding line horizontally upwards. Continue to press and the guiding line switches from horizontal to vertical position and the guiding line will be moved from right to left. The left side of the button makes the guiding line go in opposite direction.

### 6) Button for color picture mode with natural colors

## 7) Option 1. Button for high contrast mode with artificial colours

Press the button to switch between different combination of colours.

### **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

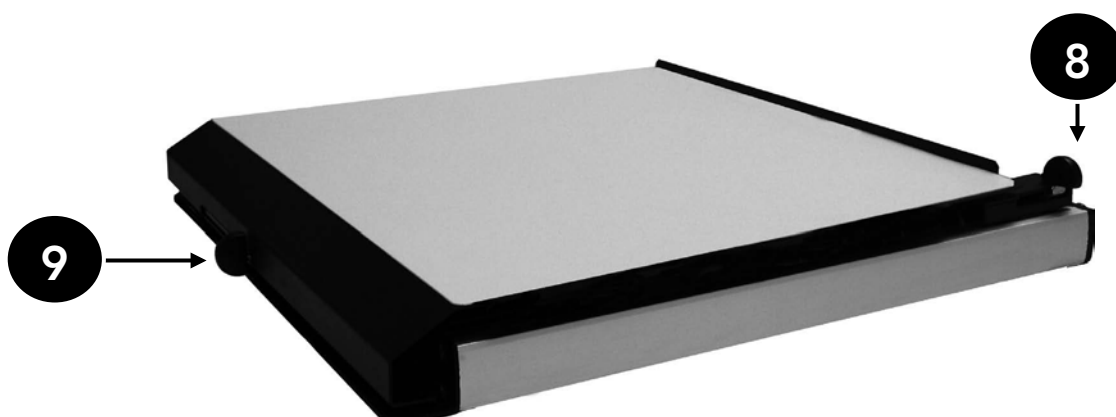
Blue /White

## **Option 2. Autofocus on/off**

Pressing the button for 3 seconds locks the autofocus in present position. This could be used for example when writing by hand without disturbing the focusing system with the hand or the pen. A new push of 3 seconds at the button reactivates the autofocus system again.



## Features, reading table



### 8) Depthway brake

It is used to set the depthway friction.

With the brake in near end position, the reading table is unlocked.

To increase friction, push the depthway brake towards the back.

### 9) Sideway brake

Is used to set the sideway friction.

With the brake in the left end position, the reading table is unlocked.

To increase friction, push the sideway brake to the right.

### Writing position

Place the reading table in desired position. Lock the table by pushing the sideway brake to the right end position and the depthway 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 sideway brake to the right end position and the depth way brake towards the back.

## 7. Troubleshooting

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

If the led to the left of the main switch is solid red, something is wrong with the equipment and it can not be used. Press once on the main switch and MagniLink Zip 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 wrong voltage from the power supply is being used. Make sure to use the power supply that belongs to MagniLink Zip. If the problem remains, pull out the net cable and contact an authorised service technician.

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

## 8. Accessories

There are two accessories for MagniLink Zip:

1. Battery
2. Trolley

Battery

Order.nr: MLZIPBAT

The battery can provide up to 2,5 hours of operating time.

### Safety information

- Do not remove cover on any part. No user serviceable parts inside.
- Do not incinerate, disassemble, short circuit or heat the battery above 176 °F (80 °C).
- Only use designated charger.

### Maintenance

Charge the battery at least every six months. The battery has no memory effect. That means that the battery can be charged at any time, regardless of the amount of discharge.

### Operation

During operation the system will be configured as:

BATT.PACK -----> DC/DC CONVERTER -----> MLZIP

- 1) Connect the green marked DC-cord from the DC/DC-converter to the connector at the back of the screen.
- 2) Connect the yellow marked DC-cord from the DC/DC-converter to connector at the battery, also marked yellow.

### Power Meter

The battery status can be checked by pressing the TEST button on the battery. The power meter consists of five LED`s. A red LED will flash to indicate when the battery is low. You can stop the alarm by pressing TEST once. If you press TEST again, the alarm will operate again.

### Charging

During charging the batterypack will be configured as:

BATTERY PACK -----> BATTERY CHARGER ----->WALL CONNECTOR

- 1) Connect the power cord of the battery charger to the wall connector.
- 2) Connect the yellow marked DC-cord of the charger to the connector of the battery pack, also marked yellow. (It is not possible to operate MagniLink Zip with the battery during charging)

The charger will indicate red light during charging. When the light turns to green the charging is completed. The charging time (empty to full battery) is approximately three hours.

Trolley

Order .nr: MLZIPBAG

With every MagniLink Zip comes a bag for transportation. A trolleybag is available as an accessory and can be ordered separately.

## 9. Technical specification

Order number:	MLZIP
Magnification:	2,8 - 40 x or 1,6 - 60 x (MLZIP-HD)
Monitor:	17" TFT widescreen
Focusing distance:	0-55 mm (at max. magnification)
Luminance:	400 cd/m <sup>2</sup>
Contrast:	600:1
Lamp type:	LED
Free space distance:	175 mm (screen lowered: 125 mm)
Refresh rate:	60 Hz
Mains Voltage:	100-240 V, 50-60 Hz
Power consumption:	25 W or 33 W (MLZIP-HD)
Power consumption, standby:	1,3 W
Weight:	8 kg (8,3 kg incl. Netpower supply)
Size of reading table:	390 x 350 mm (W x D)
Dimensions in use:	400 x 430 x 530 mm (W x D x H)
Dimensions of packaging:	260 x 460 x 560 mm (W x D x H)
Temperature limit:	Transportation and storing -20°C till +60°C Operation +5°C till +35°C
Rel air humidity:	<80%
Accessories:	Battery and Trolley



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

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.

## 10. An 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 that 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 cause 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 into 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 shall only be used with the enclosed LVI power supply.

# DECLARATION OF CONFORMITY

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

Type of equipment: *Reading Aid*  
Brand name or trade mark: *MagniLink*  
Type designation: *MLZIP, MLZIPHD, MLZIPB/W*  
Product class: *Class 1.*  
Manufacturer: *LVI Low Vision International AB*  
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Sweden*  
Web: <http://www.lvi.se>  
Phone: *+46 470 - 72 77 00*  
Fax: *+46 470 - 72 77 25*

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

- the product follows 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, taken 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

2010-04-21



Managing Director

Clarification

Erik Bondemark