



Special Needs Computers.ca

T: 1-877-724-4922

E: sales@specialneedscomputers.ca

50 Niagara St. | St. Catharines, ON L2R 4K9 |
Canada

User Manual

MagniLink S - PC

LVI Low Vision International

Verkstadsgatan 5

SE-352 46 Växjö

Tel: +46 470-727700

Faks: +46 470-727725

info@lvi.se

www.lvi.se

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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. The following choices are available:

- Camera (two options available; Standard Definition (SD) or High Definition (HD)).
- Connection (choose between connection to a computer (USB 3.0 or USB 2.0), an external monitor (HDMI) or to both a computer and an external monitor (USB and HDMI)).
- Software (for a system with a HD camera and a USB-3.0 connection, software with OCR functionality can be selected).



Model	Camera	Connection	Panel	LED	OCR
MLS-C01	SD	USB	No	No	No
MLS-M01	SD	HDMI	Yes	No	No
MLS-M02	HD	HDMI	Yes	Yes	No
MLS-CM01	SD	HDMI/USB	Yes	Yes	No
MLS-CM02	HD	HDMI/USB	Yes	Yes	No
MLS-CM03	HD	HDMI/USB	Yes	Yes	Yes
MLS-CM03-MAC	HD	HDMI/USB	Yes	Yes	Yes

	<p>MagniLink S meets all the requirements for CE marking of medical devices in accordance with Directive 93/42/EEG. Our products comply with MDD 93/42/EEC with additions from Directive 2007/47/EC.</p>
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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.
- 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.
- 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.
- 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
- USB cables
- Case
- USB memory stick with software
- Polishing cloth
- User Guide
- Power adaptor*
- HDMI to HDMI cable*
- HDMI to DVI cable*

*Not included with model MLS-C01 since its power is always provided by the computer and it cannot be connected to a monitor.

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 on installation, please see the chapter on Installation of hardware page 14.

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.

5 Accessories

The following accessories can be ordered with MagniLink S.



External control box (MLS-A100).



Larger external control box (MLV-A110A).



MagniLink Reading Table (MLRT), portable reading table.



MagniLink Docking Station (MLS-A101), stationary reading table.



LVI Monitor 19" (MLV-A103) and 23" (MLV-A104).



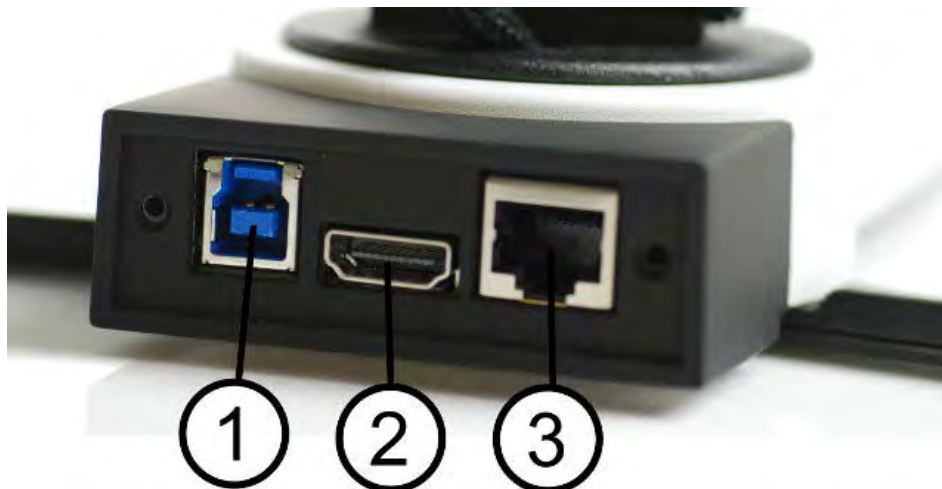
OCR functionality (MLS-A102, MLS-A102-MAC). It is possible to upgrade an MLS-CM02 to an MLS-CM03 and acquire OCR functionality for the software.

6 Hardware

6.1 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.



On the back of the camera there are several connection options. The connection options available depend on the camera model.

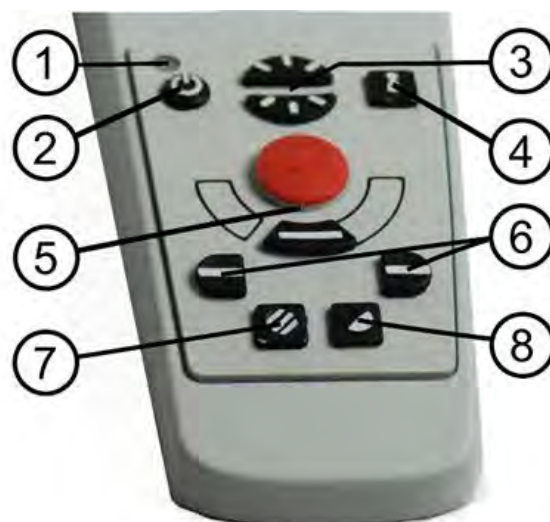
1. **USB connection**
In addition to transferring images to a computer, the USB connection is used to provide power to the system.
2. **HDMI connection**
Here the camera can be connected to a monitor that supports HDMI or DVI.

3. External control panel

An external control panel can be connected via this input.

6.2 Using the hardware

6.2.1 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 Troubleshooting page 41.

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.

6.2.2 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

7 PC software

The following pages describe the installation and use of the MagniLink S software for PC.

The MagniLink S software has been developed so that it does not affect or interfere with other software. It has been tested alongside other software to ensure there are no conflicts. However, LVI cannot guarantee compatibility with all other software as their methods are outside of LVI's control.

7.1 Minimum system requirements

- Microsoft Windows 7.
- 2 integrated USB 2.0 ports.
- i3 processor, 1 GB RAM (32 bit) 2 GB RAM (64 bit).

7.2 Recommended system requirements

- Microsoft Windows 7.
- 1 integrated USB 3.0 port.
- i5 or i7 processor, 4 GB RAM, external graphics card with at least 512 MB inbuilt memory.

LVI has tested MagniLink S on several computers without any problems, but there is no guarantee that the system will function on all computers that comply with the specifications. LVI recommends testing MagniLink S on the computer where the system is to be used, in order to ensure compatibility. Better performing computers will facilitate better camera performance.

7.3 Installation of software

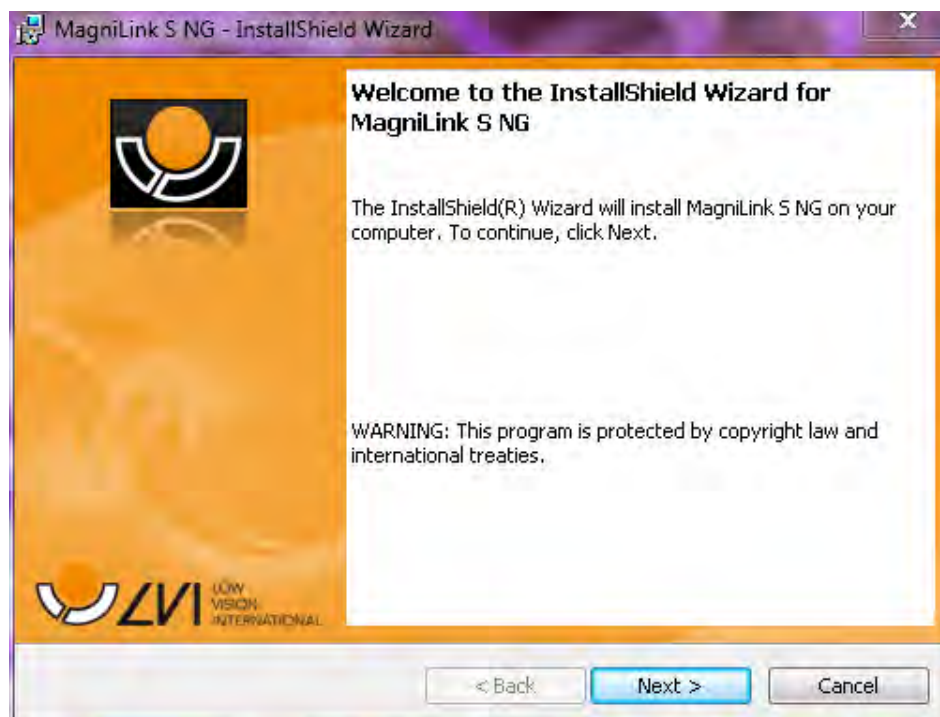
NOTE



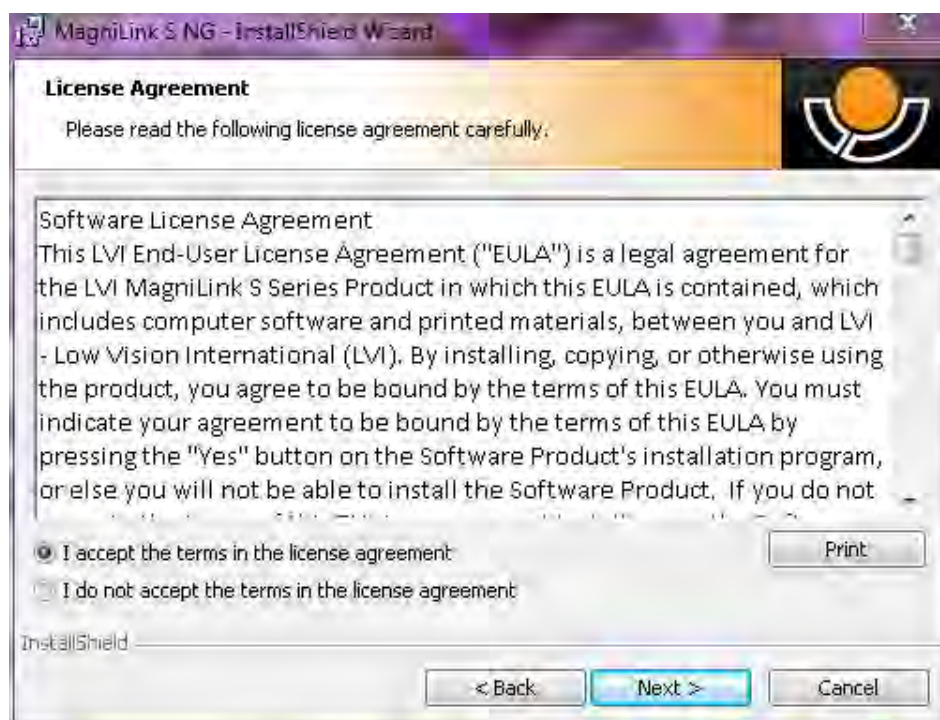
Installation requires administrator privileges on the computer in question and is performed on the user account currently in use.

Insert the USB stick containing the software into one of the computer's USB ports. Start the installation by clicking on the "**Setup**" file, which can be found in the **MagniLink S - PC** folder.

When the installation program starts, follow the instructions on the screen to complete installation of the software, or see below for a more detailed description.



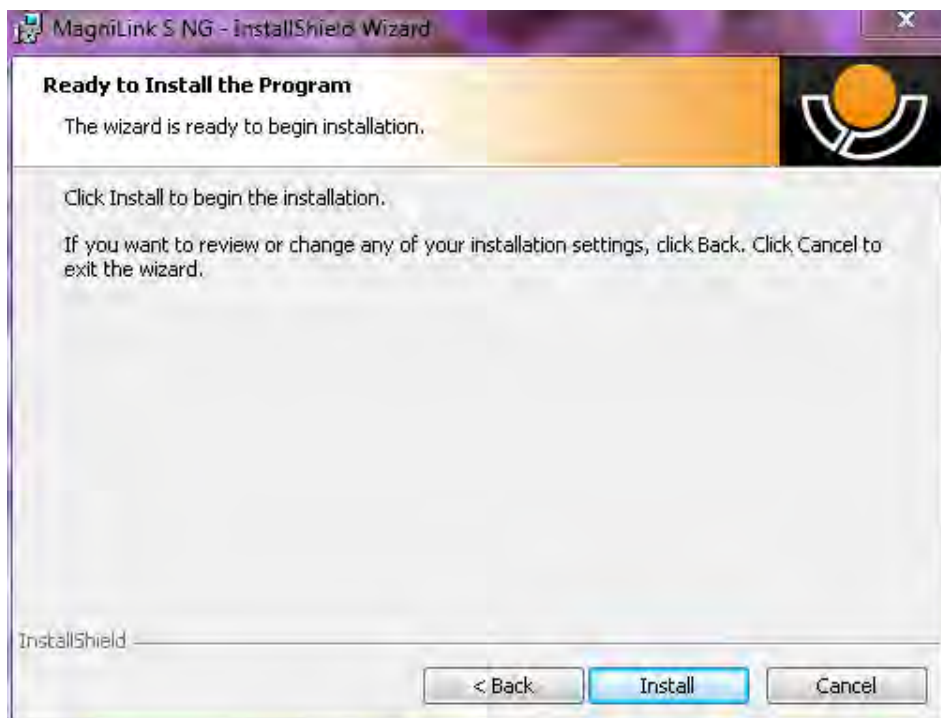
Select "Next" in the dialogue box "Welcome to the InstallShield Wizard for LVI MagniLink S".



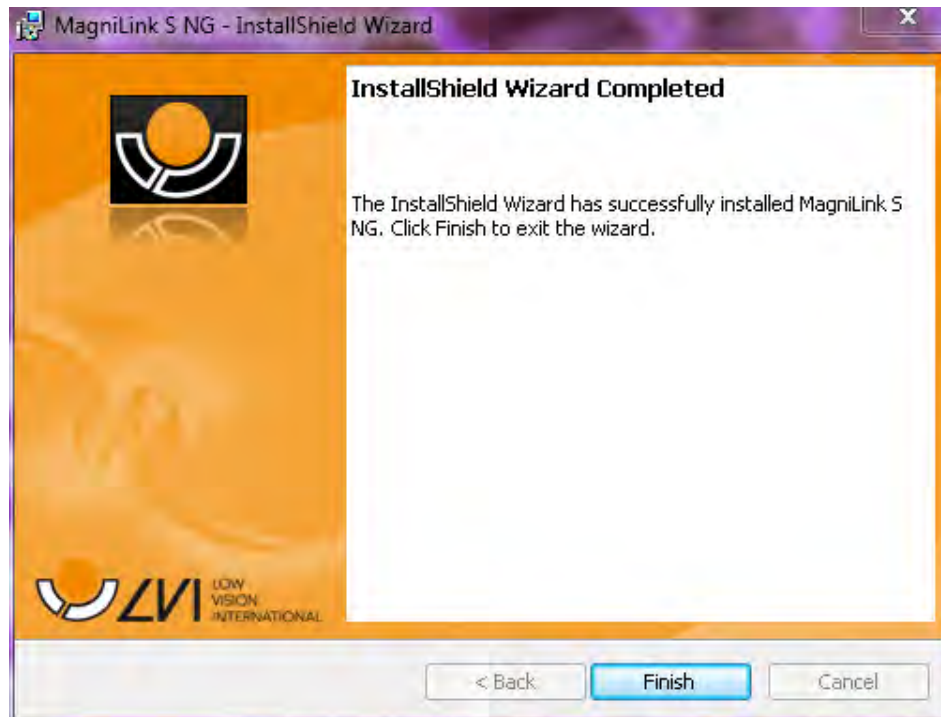
Read the text in "License Agreement", approve this by selecting "I accept the terms of the license agreement" and click on "Next" to start the installation.



If you have software with OCR functionality (**MLS-CM03**) then mark the language(s) for which you have a license. If you do not have OCR functionality, then do not select any languages. Then click "**Next**" to continue with the installation.



Select "**Install**" in the dialogue box "**Ready to Install the Program**".



Select "Finish" in the dialogue box "InstallShield Wizard Complete".

7.3.1 Updating/removing software

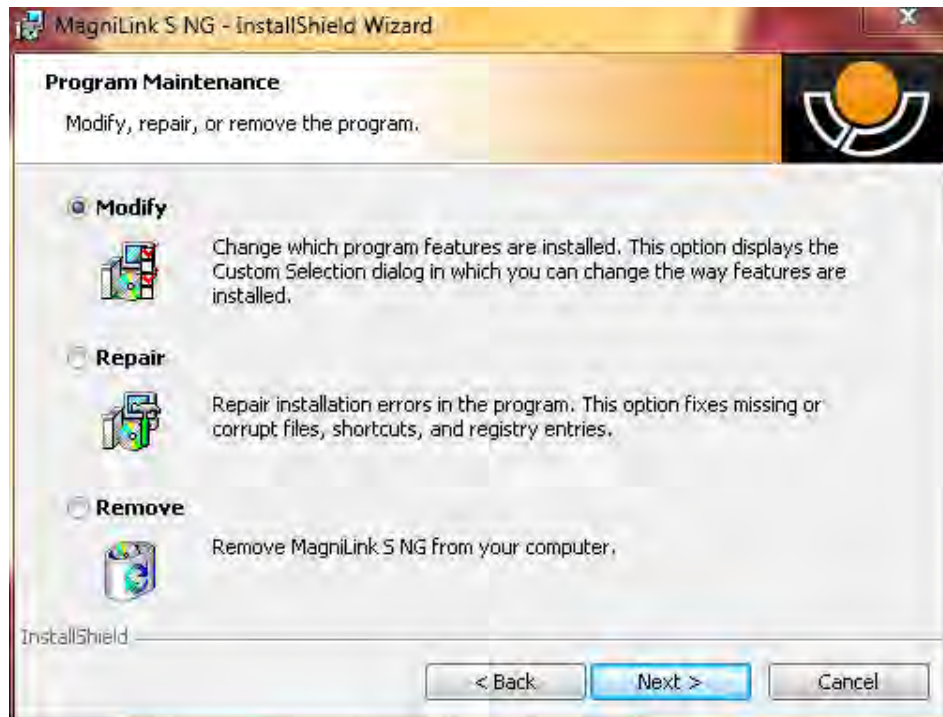
Insert the USB memory stick containing the MagniLink S software into one of the computer's USB ports. Start by clicking on the "Setup" file in the MagniLink S - PC folder.

Read the instructions on the screen in order to select the appropriate action.

Select "Modify" to change the software.

Select "Repair" if there is a problem with the software.

Select "Remove" to uninstall the software.



Select "**Next**" to start the required action.

Select "**Finish**" in the "**Maintenance complete**" dialogue box to complete the desired action.

Software can also be removed via Control Panel – add/remove programs, or from Uninstall MagniLink S in the MagniLink S folder in the Start menu.

7.4 Using the software

7.4.1 Functions via the keyboard

MagniLink S is shown as a MS Windows application and all functions can be managed via the keyboard. Various menus allow the short cut commands to be changed. Below are the standard settings for the short cut commands.

F1	Natural colours
F2	Positive image with heightened contrast Artificial colours; White/Black, Yellow/Black, Green/Black, Red/Black, Yellow/Blue, White/Blue. Press F2 repeatedly to switch between the various colours. (Shift + F2 to cycle backwards)
F3	Negative image with heightened contrast Artificial colours; White/Black, Black/Yellow, Black/Green, Black/Red, Blue/Yellow, Blue/White. Press F3 repeatedly to switch between the various colours. (Shift + F3 to cycle backwards)

F5	Take a "snapshot" Press F5 to open the "Save pictures" dialogue box. A file name (with the day's date and time) and a folder (My Pictures) are automatically suggested. Just press Enter to save the picture. If you wish to save the picture somewhere else, or with another name or in another format, (the standard is JPG), you can change this manually.
Shift + F5	Take a quick "snapshot" Press Shift + F5 to quickly take a picture and save it, without specifying a name or folder. This function saves the picture in My Pictures or in the folder most recently used for the F5 function.
Ctrl + F5	Start/stop video recording Press Ctrl + F5 to open the "Save video clip" dialogue box. A file name (with the day's date and time) and a folder (My video clips) are automatically suggested. Press Enter to save with the suggested name. If you wish to save the video in a different folder, or with another name, you can change this in the dialogue box. Stop the recording by pressing Ctrl + F5. See Recording Settings page 33 for more information.
Ctrl + Shift + F5	Quickly start/stop video recording. Press Ctrl + Shift + F5 to quickly start video recording, without specifying a name or folder. The video is saved under "My video clips" or in the folder most recently used for the function. See Recording Settings page 33 for more information.
F6	Display mode for "snapshots" Press F6 to view the saved pictures. Mark the picture you wish to view and press Enter or select Open. The picture is normally opened in Windows' standard picture-viewing program where, amongst other things, the picture can be enlarged.
Shift + F6	Immediately show the most recently taken "snapshot" Press Shift + F6 to immediately show the most recently taken picture. If no pictures have been taken previously whilst the program has been running, the button will have the same function as F6.
Ctrl + F6	Display mode for video Press Ctrl + F6 to view saved video files. Mark the video you wish to view and press Enter or select Open. The

video is normally opened in Windows' standard media player software. See Recording Settings page 33 for more information.

Shift + Ctrl + F6	<p>Immediate playback of the most recently recorded video.</p> <p>Press Shift + Ctrl + F6 to immediately play back the most recently recorded video. If no video has been recorded previously whilst the program has been running, the button will have the same function as Ctrl + F6.</p>
F8	<p>Preset split screen mode</p> <p>Press F8 repeatedly to switch between the preset split screen modes. If multiple screens are being used, the split screen modes will switch consecutively between all of the screens. The window can also be controlled via mouse or with Windows standard commands.</p>
F9	<p>Information and settings window</p> <p>Under this window, different settings for the application can be applied. See Information and settings window page 30 for more information.</p>
F11	<p>Return to default settings</p> <p>Press F11 to return to the default settings (normal window, natural colours and normal brightness).</p>
Up arrow	Zoom in
Down arrow	Zoom out
Ctrl + O	<p>Overview</p> <p>Switches to an overview mode. The camera zooms out and a sight is shown in the middle of the video window. To exit overview mode, press the key combination again.</p>
Left arrow	Reduce light intensity/contrast
Right arrow	Increase light intensity
Ctrl + Left arrow	Reference line left/up
Ctrl + Up arrow	Reference line left/up
Ctrl + Right arrow	Reference line right/down
Ctrl + Down arrow	Reference line right/down
Ctrl + A	<p>Deactivate/activate "always on top"</p> <p>Short cut command activates the "Always on top" function for the application window. If "Always on top" is activated, the camera image will be placed over other open applications. This means that another program can</p>

be in focus and that you can for example use Word whilst looking at the camera image.

Ctrl + M	Minimise the application window to the taskbar.
Ctrl + R	Rotate the camera image clockwise Every time this key combination is pressed, the camera image will rotate 90° clockwise (90°, 180°, 270° and 0°).
Shift + Ctrl + R	Rotate the camera image anticlockwise Every time this key combination is pressed, the camera image will rotate 90° anticlockwise (270°, 180°, 90° and 0°).
Ctrl + I	Reflect camera image Reflects the camera image. This is a handy function if, for example, you want to use the camera as a magnified cosmetic mirror.
F	Freeze camera image By pressing this key combination, the camera image freezes; to release the image, press the same key combination again. To save a frozen image, press F5.
Ctrl + J	Lock autofocus Locks the autofocus mode. This can be used when you wish to write by hand. In this way, autofocus is not affected by the pen or your hand. Press the button a second time, to reactivate autofocus.
Ctrl + Alt + S	Global short cut commands (quickly activate MLS) This command doesn't work immediately after the program has been installed. You need to log out and then log in again for it to work. If it still doesn't work it could be because of a conflict with another installed program. You can change this command by right-clicking on The MLS icon on the desktop, selecting Properties and then changing the last letter in the short cut commands field.

The following functions are only available for cameras that support OCR (MLS-CM03 or MLS-CM02 + accessories MLS-102).

F4	OCR-process This command takes a picture for OCR-processing. The program then switches to text view and the OCR-processed text is read aloud. If the text view already contains text, this is replaced by the text from the OCR
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conversion. See OCR Settings page 35 for more information.

Ctrl + F4	Process with OCR and add text Works like the previous command, but the text from the OCR conversion is added to the existing text. See OCR Settings page 35 for more information.
Ctrl + S	Toggle column selector Activates or deactivates the column selector. When the column selector is active, only those columns that are intersected by the column selector are OCR-processed.
Ctrl + C	Copy image or text Copy the camera image or all text in the text view to Windows Clipboard. If the text view is active the text is copied otherwise the camera image is copied. It is then possible to paste the content of the clipboard into another program, such as Word.
Ctrl + V	Paste text If the user has copied text from another program, this text can be pasted into the text view. This command replaces the existing text.
Ctrl + Shift + V	Paste and add text Works like the previous command, but the text is added to the existing text.
Alt + F6	Open text document A dialogue box opens. Select the .txt file in the dialogue box that is to be opened and press Enter or select Open.
V	Switch between camera view and text view If a text has been OCR-processed, this command switches between camera view and text view.
B	Display mode Switches to display mode for OCR-processed text. The available display modes are: Side view, line view, word view and a silent mode where the text moves sideways on the screen.
1	Start/Pause reading If no reading is currently in progress, reading starts, otherwise reading is paused.
2	Stop reading This command stops the reading. The next reading will begin from the start of the text.

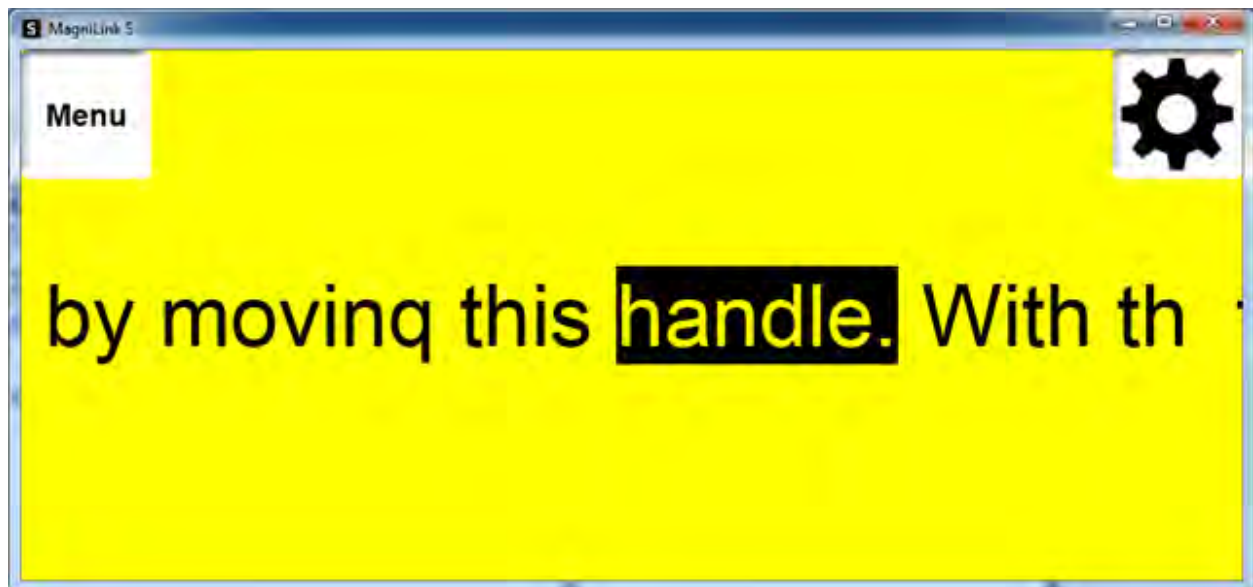
- 3** **Read previous**
With this command, the user can go backwards through the text. If the reading mode is set to character, one character is read for each keystroke. If the reading mode is word, you move backwards through the text word by word. If the reading mode is sentence, you move backwards through the text one line at a time.
- 4** **Read next**
With this command, the user can move forward in the text. If the reading mode is set as character, one character is read for each keystroke. If the reading mode is word, you move forward through the text word by word. If the reading mode is line, you move forward through the text one line at a time.
- 5** **Switch reading mode**
This command selects the reading mode that is to be employed when the "Read previous/next" command is entered. There are three modes: character, word and line.
- 6** **Slower**
Reduces the reading speed.
- 7** **Faster**
Increases the reading speed.
- 8** **Reduce volume**
- 9** **Increase volume**
- 0** **Next voice**
Switches to the next installed voice. This command also changes the OCR engine's language to the new voice's language.

The following functions are available when MagniLink S is used together with ZoomText or SuperNova/Lunar/LunarPlus:

- Shift + Left/Right arrow** Adjusts the width of the video window when video is displayed in vertical half-screen windows.
- Shift + Up/Down arrow** Adjusts the height of the video window when video is displayed in horizontal half-screen windows.

7.4.2 Functions via menus and buttons

The application can be controlled via menus or buttons.



- To access the menus, move the cursor to the top left corner of the application. The "Menu" button will then be displayed. Click on this to access the menus.
- To access the buttons, move the cursor to the top right corner of the application. The button with a gearwheel will then be displayed. Click on this to access the other buttons.

7.4.2.1 Functions via menus

The menus contain settings for the application.



- **Application**
Contains general settings for the application.

- **Video**
Settings that shall apply for video are set here.
- **Recording**
Here are recording settings.
- **OCR (only MLS-CM03)**
Contains settings for the OCR engine.
- **Speech (only MLS-CM03)**
Here you can access settings for reading.
- **Short cut commands**
Click here to change the short cut commands.
- **About**
Click here if you require information regarding the software version in use and your license.

7.4.2.2 Functions via buttons

The buttons let the user control the program. Below is a description of what they do.



1. Shows the camera image in natural colours or in black and white.
2. Shifts between the MagniLink S camera's artificial colours.
3. Switches between autofocus and locked focus modes.
4. Zooms out.
5. Zooms in.
6. Switches between the pre-set split screen modes.
7. Starts the reading of OCR-processed text. Press once - the text will be read aloud. Press again - reading is paused (only MLS-CM03).

8. Stops the reading of OCR-processed text. The next reading will begin from the start of the text (only **MLS-CM03**).
9. Increases the light intensity in natural colours or raises the contrast level in artificial colours.
10. Reduces the light level in natural colours or lowers the contrast level in artificial colours.
11. Begins OCR-processing of the image shown. When the OCR-processing is complete, the program switches to text mode and the OCR-processed text is read aloud (only **MLS-CM03**).
12. This button switches between camera view and text view (only **MLS-CM03**).
13. Switches to display mode for OCR-processed text. The available display modes are side view, line view, word view and a silent mode where the text moves sideways on the screen (only **MLS-CM03**).

7.4.3 Information and settings window

The Information and settings window consists of a number of different tabs that contain application information and alternative settings.

7.4.3.1 Applications Settings



Activate CCTV interface

By activating this function, MagniLink S is able to work with the magnification software from Dolphin and AiSquared

MagniLink S is compatible with ZoomText version 10 and with SuperNova version 12 or more recent. We recommend deactivation of the CCTV interface when working with older versions of the programs mentioned above.

Activate automatic updates

MagniLink S will automatically search for new versions of MagniLink S software. You can also deselect this and update manually instead (note: Internet connection is required for both automatic and manual updating).

Search for updates now

Press **OK** to search for updates (requires Internet connection).

Language

The system is set to use the computer's standard language. If the language is not available for MagniLink S software, English is automatically chosen as the standard. Languages can be changed manually under Application Settings.

Available languages:

- English
- German
- Danish
- Spanish
- Finnish
- French
- Dutch
- Norwegian
- Swedish

7.4.3.2 Video Settings



Resolution

Select from the camera's various resolution options. The best picture quality is achieved by selecting the highest resolution. Lower resolutions may be required if the application is used on a computer with a lower level of performance.

Frame rate

This setting lets the user limit the frame rate. For the best video quality, the frame rate should be 60 Hz, but it may be appropriate to set the frame rate at 30 Hz for computers with a lower level of performance.

Rotate image

Allows you to set the rotation angle of the camera image. MagniLink S supports rotation of the camera image to the following angles: 0°, 90°, 180° and 270°.

Mirror image

When this function is active, the camera image is mirrored.

Use position sensor

When this function is active, the application remembers the user's settings for reading and distance modes. See the Position sensor page 17 for more information.

7.4.3.3 Recording Settings



Limit the duration of recording

Activate this function if you wish to limit the duration of the recording.

Duration in minutes

If you have chosen to limit the duration of the recording, you can set the maximum duration in minutes from 1 to 60.

Frame rate

Frame rate of the recording, the number of images that can be recorded per second, can be set from 1 to 30 (1 to 24 images per second when the program runs together with ZoomText). A lower frame rate provides poorer quality on the recorded video, but takes up less space on the hard disk.

Record sound

If your computer is equipped with a microphone, (internal or external) sound can be added to your video recording.

Sound source

Select which microphone is to be used for video recording with sound. Normally only one sound source may be selected.

ZoomText recording optimization

This function can be used to reduce the CPU load when the program runs together with ZoomText. This is done by not enlarging the camera image shown on the screen.

Carefully read the following information before using the video recording function.

The MagniLink S software can record video sequences from the MagniLink S camera in Windows Media Video (.wmv) format. It is possible to record video with or without audio. The video recording is started with the keyboard (Ctrl + F5) and a red indicator is displayed at the bottom right of the video window while video is being recorded.

The camera image is viewable in the application window while recording video, but since the video recording is quite CPU demanding, the frame rate of the camera is lowered to 30 Hz while the recording is in progress. This will affect the camera image quality compared to the image quality of 60 Hz frame rate. Since the video recording is relatively CPU demanding, the quality of the recorded video can vary on some computers. In that case, the recording frame rate can be lowered to reduce the CPU load.

There must be 50 MB of free disk space in which to save the file when a video recording starts. If, while recording, the disk space falls below 50 MB, the video recording stops automatically. 1 minute of video at 10 Hz takes about 20 MB of disk space. We recommended that you always save the files on the local hard disk and not move them to another folder until the video is finished.

7.4.3.4 OCR Settings

This settings tab is only visible if the camera supports OCR (MLS-CM03).



Typeface

Here the user can set the typeface used for viewing text that has been OCR-processed. The typeface in use has no effect on the OCR-processing.

Column mode

When this setting is active, the OCR engine processes the text in columns, which is appropriate if it is a newspaper text that is to be processed.

Start speech after OCR

If this box is ticked, text will automatically be read aloud after an image has been OCR-processed.

Smart start

Smart start works as follows. If a text has already been read aloud and a new OCR conversion is starting, the reading will start from the position where the reading of the old text stopped.

Automatic language detection

When this function is active, the application will try to detect the language of the text and change the voice to the detected language. Automatic language detection will only work for those languages for which the application has licensed voices. If a text on a different language is to be OCR-processed, then this function needs to be deactivated.

Quality of OCR processing

To achieve the best possible results from OCR processing, bear the following in mind.

- Ensure the magnification is sufficient. Very small text produces poor results in the OCR software. A minimum of 12pt is recommended for the lowest magnification on the reading camera.
- Avoid glossy paper as this results in reflections in the image. This impairs the results of the OCR conversion. If you intend to use glossy paper, we recommend that the light on the unit is switched off.
- Certain fonts can be difficult for the OCR engine to interpret.
- It is important that the text contrast is sufficient.
- It is important that the OCR engine's language is the same as that of the text.
- The camera's resolution should be set at 1280x720, see Video Settings page 32 for more information.

7.4.3.5 Speech Settings

This settings tab is only visible if the camera supports OCR (MLS-CM03).



Voice

If several voices are available, the user may select from these

Volume

Set the sound level for the voice.

Speed

Set the speed of the voice.

7.4.3.6 Settings for short cut commands



Here the short cut commands used for the application can be changed. To change a short cut command, tab to the command that is to be changed and enter the new keyboard combination. If a combination already being used for another command is entered, the second command will be erased. A new keyboard combination will need to be entered in order to change the command.

7.4.3.7 About the application



Information regarding the software version and copyright can be found under this tab. If there is no Internet connection, press the "**Enter license**" button to license the software.

8 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.

9 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.

10 Technical information

Magnifying area SD camera	1,6 - 75 x (15,4" 16:9 screen)
Magnifying area HD camera	1,4 - 75 x (15,4" 16:9 screen)
Power output	5 W
Power output, standby	1.7 W
Weight	1.7 kg
Refresh rate	60 Hz
Dimensions BxDxH	350x270x390 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.

11 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:	Reading Aid
Brand name or trade mark:	MagniLink S
Type designation:	MLS- M01, M02, C01, CM01, CM02, CM03
Product class:	Class 1.
Manufacturer:	LVI Low Vision International AB
Address	Verkstadsgratan 5 S-352 46 Växjö 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

12-11-2012

Signature



Erik Bondemark

Position

Managing Director

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