

# User manual

**mezzo *EDU***

**NE**



Please read this user manual carefully prior to installation, use and maintenance for your own safety and in order to avoid damages at your system.

# **Konformitätserklärung**

## **Declaration of conformity**

Wir erklären in alleiniger Verantwortung für alle unsere Systeme,  
dass diese mit den folgenden Richtlinien übereinstimmen.

*We declare under our sole responsibility that the systems, which have been brought  
into the market by us, meet the requirements of the following regulations.*

### **mezzo EDU**

**Richtlinie 2017/745/EU  
Medical Device Regulation (MDR)  
Risikoklasse I nach Anhang VIII Regel 13  
CE Konformität nach Anhang IX  
und  
RoHS II (Richtlinie 2011/65/EU)**

**Regulation (EU) 2017/745  
concerning medical devices risk class I  
according to Annex VIII standard 13  
CE conformity of Annex IX  
and  
RoHS II Regulation (EU) 2011/65**

Die CE– Kennzeichnung auf dem Gerät dokumentiert diese Übereinstimmung.  
*The CE mark on the system points out this accordance.*

Alsbach-Hähnlein,

.....**01.01.2021**.....

Ort und Datum der Ausstellung  
*Place and date of issue*

M. Reinecker Geschäftsführer  
*M. Reinecker General Manager*

..........

Name und Unterschrift des Befugten  
*Name and signature of the authorized person*

## Content

|  |    |  |    |
|--|----|--|----|
| <b>I. General Information</b> .....  | 6  | Description of the control bar .....                   | 15 |
| Notes on the electromagnetic compatibility (EMC) .....                     | 6  | Switching button distance mode / document mode .....   | 15 |
| Storage of the user manual .....   | 6  | Menu settings ON/OFF .....                             | 15 |
| Product description .....  | 6  | Brightness .....                                       | 15 |
| Medical device .....   | 7  | Color settings .....                                   | 16 |
| Purpose .....  | 7  | Zoom OUT .....   | 16 |
| Evolution and lifetime of products .....                                   | 7  | Zoom IN .....  | 16 |
| Safety advice .....  | 7  | Auto-focus ON/OFF .....                                | 16 |
| Combination with other medical products .....                              | 7  | Line marker/Shadowing / Auto-Exposure ON / OFF .....   | 16 |
| Precautions by alteration of the performance of the system .....           | 8  | Auto-Exposure ON/OFF (autom. aperture control) .....   | 17 |
| Reinstatement/installation and maintenance .....                           | 8  | Line marker/Shadowing horizontal .....                 | 17 |
| Cleaning of the system .....   | 8  | Line marker/Shadowing vertical .....                   | 17 |
| Special advice for transport and storage .....                             | 8  | 5-button control panel (distance camera control) ..... | 17 |
| Disposal of the unit according to (EU) 2012/19 .....                       | 8  | Navigation of the distance camera .....                | 17 |
| Power supply .....   | 8  | Down .....   | 17 |
| Safety instructions to avoid damage .....                                  | 9  | Right .....  | 17 |
| <b>II. Instructions for the reading system mezzo EDU</b> .....             | 10 | Saving the position of the distance camera .....       | 18 |
| Delivery content .....   | 10 | Recall saved positions .....                           | 18 |
| Available Options .....  | 10 | Function „Last position“ .....                         | 18 |
| Cameras .....  | 10 | Menu settings mezzo EDU .....                          | 19 |
| Focus camera: FullHD camera with digital zoom and comfort auto-focus ..... | 10 | Opening the menu .....                                 | 19 |
| Distance camera: FullHD+ camera with optical and digital zoom .....        | 10 | Select menu options .....                              | 19 |
| Starting with mezzo EDU .....  | 10 | Change menu options and confirm .....                  | 19 |
| Mains operation .....  | 10 | Menu options .....                                     | 20 |
| Power ON .....   | 10 | Menu settings distance camera .....                    | 22 |
| Power OFF .....  | 11 | Opening menu .....                                     | 22 |
| Automatic saving of device settings .....                                  | 11 | Change menu option and confirm .....                   | 22 |
| Replacement of lighting .....  | 11 | Change menu option .....                               | 22 |
| Important note to the use of power supply .....                            | 11 | Menu options .....                                     | 22 |
| Installation of the system .....   | 11 | Troubleshooting .....                                  | 30 |
| Alignment of monitor .....   | 13 | Technical details .....                                | 30 |
| Connection of the unit .....   | 14 | Warranty Information .....                             | 31 |
| Description of the control elements .....                                  | 14 | Notes .....  | 32 |
| Power switch ON/OFF .....  | 14 |  |    |
| Light adjustment (50% / OFF / 100%) .....                                  | 14 |  |    |
| General note on using the LED-light .....                                  | 14 |  |    |

## I. General Information

### Important notes on the operation of the reading system mezzo EDU!

Please read them carefully prior to the operation of the reading system!

### Notes on the electromagnetic compatibility (EMC)

This reading system is suited for use in all set-ups including the domicile that are connected directly to a public power supply for buildings with residential purposes.

This reading system is designed for the use in the indicated electromagnetic environment. The user should ensure the use in the indicated environment.

This reading system operates on HF-Energy exclusively for its own function.

Therefore the emitted interference of high frequency disturbances is very low and the interference with other appliances operated close-by is improbable. When operating the reading system simultaneously with other systems, however, the possibility of disturbances of the system or other systems should not be neglected.

For this reason it should be ensured that the system is not placed directly beside or on top of another system. If the set-up of this system in the proximity of medical, measuring devices cannot be avoided, the operator of these devices has to be informed that it is necessary to observe the performance of the system to control the conventional use of the system in the chosen set-up.

Electronic devices are sensitive towards electric discharge and towards high frequency electromagnetic fields.

**Attention:** In order to avoid high frequency disturbances the operator should respect a minimum distance of one meter to portable and mobile HF-telecommunication devices.

Please also see chapter: Safety advice (page 7).


### Storage of the user manual

The user manual is an essential part of your reading system. Please keep the booklet in a safe place for future reference.

### Product description

mezzo EDU is an opto-electronic reading system for magnifying text and pictures for professional and permanent private use.

Text and pictures are captured using the integrated cameras and displayed on the monitor.

- lightweight and compact reading system with 16" LED monitor for comfortable reading and distance viewing
- two easy-to-use cameras, high ease of use of the motorized distance camera: switch between internal and distance camera picture display with up to four storable positions
- switchable monitor display (distance camera to document camera image and vice versa)
-  -technology for high quality pictures with virtually no picture noise

- Adjustable monitor for comfortable reading position, easy positioning and effortless assembly/disassembly
- compact folding function

### Medical device

This reading system is classified as a medical device, class I according to (EU) 2017/745, Annexe VIII, standard 13. For the distribution to countries outside the EU the respective country-specific guidelines have to be regarded.

### Purpose

This opto-electronic reading system is a medical device to assist with the reading and magnifying of printed text and pictures. Visually impaired people can compensate for their loss of visual acuity by using this device.

### Evolution and lifetime of products

The Medical Device Directive regulates by law that manufacturers of medical devices shall determine a period of safety operation of a product. We fulfill hereby legal requirements and determine - for formal reasons - a period of three years after date of first purchase.

#### Note:

The mentioned life span does not reflect the complete life span of the mezzo EDU. It is rather an indication on when the product might be obsolete and substitution might be recommended due to new product developments.

### Safety advice

The device has to be installed in closed and dry rooms only. Do not plug it into an electrical circuit that is also being used for any life sustaining or support systems. The device may not be used in the patients environment.

This device should not be operated in explosion-endangered environments. This opto-electronic device should only be installed in conjunction with modern electrical circuitry.

### Combination with other medical products

If the device is used near another electrical device, monitor the other device to ensure that it is working properly. In case of doubt please contact Reinecker Vision GmbH or any licensed distribution partner.

## **Precautions by alteration of the performance of the system**

Stop using the reading device if technical features or performances should change.  
Switch the device OFF and disconnect the power supply from the mains wall socket.  
Refer directly to your authorized dealer or to Reinecker Vision GmbH Service Center.  
Do not use the system again in this condition.

## **Reinstatement/installation and maintenance**

This device may be technically maintained and reconditioned by Reinecker Vision GmbH only or by an authorized technician. Reinstatement may only take place after the system has been cleaned and safety checked.

## **Cleaning of the system**

- mezzo EDU has to be disconnected from the power supply before cleaning.
- Clean the system with a slightly damp cloth and a mild household detergent.
- Interior of device must NOT come in contact with liquids.

## **Special advice for transport and storage**

For reasons of safety, the unit must only be transported and stored in the original packing. The unit must be stored in dry and closed rooms in the original packing. The following conditions for transport and storage have to be respected:

- Air pressure 700 - 1000 hPa
- Temperature range +5°C to + 50°C
- Relative air humidity 30% to 80%

## **Disposal of the unit according to (EU) 2012/19**

The device contains of electronic components. To avoid damage to the environment, the country-specific rules have to be respected.

## **Power supply**

Only use the original power supply and cables which are included in the delivery by Reinecker Vision GmbH.

### **Caution:**

The use of any other equipment might lead to an increased electromagnetic emission and to a product damage.

## **Safety instructions to avoid damage**

Please respect the following instructions for your own safety:

1. Do not plug the AC adapter into a faulty electrical outlet. Doing so may cause electrical shock or fire.
2. Do not touch the AC adapter with wet hands.
3. Only use the original power supply and cables which are included in the delivery by Reinecker Vision GmbH. The use of any other equipment might lead to a product damage.
4. For mezzos with battery operation only: Only use the original battery, which is included in the delivery by Reinecker Vision GmbH. The use of any other equipment might lead to a product damage.
5. Do not expose the system to direct sunlight or to very hot or cold environment, as this would harm the picture quality.
6. Do not operate this device below +5°C or above +40°C.
7. No liquids must reach the interior of the system. Only operate the device in a dry environment.
8. The device may not be operated next to medical devices (patients environment).
9. Do not lean on the screen, touch the screen with any object or lay heavy objects on the device. This may cause damage to the device.
10. Do not try to repair or to dismantle the system by your own. This would automatically void the warranty. If you need any technical assistance please get in contact with the local distributor or with Reinecker Vision GmbH.
11. Always switch OFF the system and disconnect it from the power supply before cleaning it. Only use a soft and slightly damped cloth. Only use a mild household detergent. Do not use alcohol containing or strong detergents.



## II. Instructions for the reading system mezzo EDU

### Delivery content

- Reading system mezzo EDU, 16" monitor
- Carrying bag (Space for mezzo EDU 16")
- Power adapter 12V DC / 5000mA
- Adapter cable (country-specific)
- User manual
- Service information

MEZEDU01  
MEZVARTA

### Accessories


- XY-table mezzo with friction brake
- XY-table mobile

ZBXTFIX0  
ZBMEZZXT

### Cameras

mezzo EDU is equipped with the following camera types:

#### Focus camera: FullHD camera with digital zoom and comfort auto-focus

- Magnification from approx. 2,1 to 24x\* (at monitor 16" class)  
\*factory settings, extended magnification range adjustable in the menu
-  - Technology: high quality pictures with virtually no picture noise

Distance camera: FullHD+ camera with optical and digital zoom

### Starting with mezzo EDU

#### Mains operation

For mains operation, make sure that the enclosed power supply unit is connected to the power supply and to the power supply socket (12 VDC) of the reading system.

#### Power ON

Press the ON/OFF button to switch ON the device. When the mezzo and the base plate is illuminated, you can put a page or an object onto the table.

All the possible settings – for example zoom, colour or brightness – can be adjusted individually.

#### Power OFF

Switch OFF the device by pressing the ON/OFF button.

#### Automatic saving of device settings

All latest used settings of the device will remain active, when switching ON the device again.

#### Replacement of lighting

The electronic magnifier is equipped with a high power LED Illumination.

If replacement of the lamp is required it should only be done by a specialist or by Reinecker Vision GmbH.

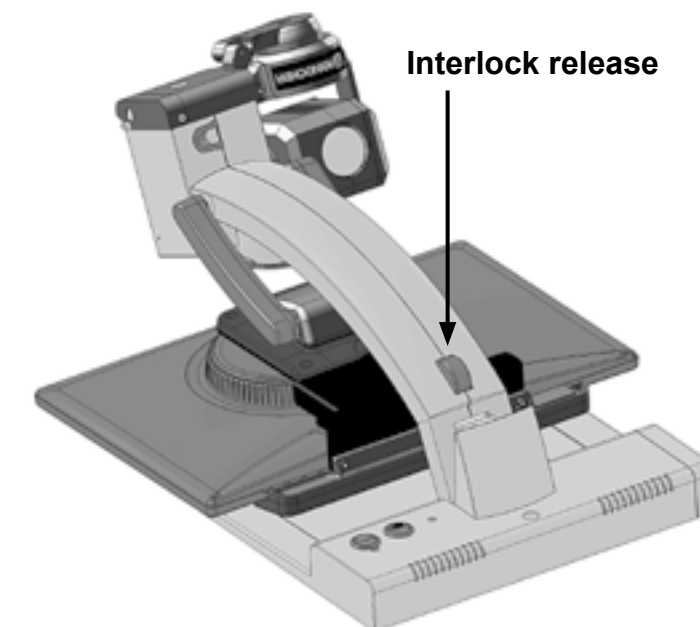
#### Important note to the use of power supply

**Please only use the power supply included in the delivery. Use of any other power supply will void the warranty!**

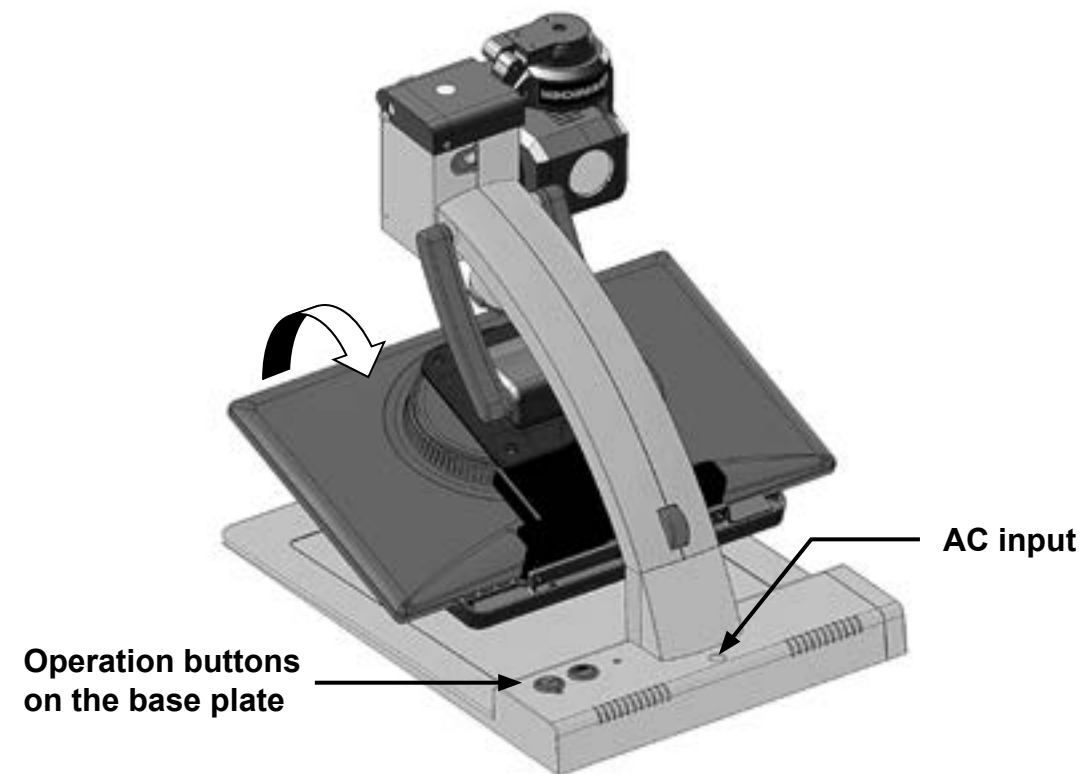
### Installation of the system

Unpack your mezzo EDU carefully and place it on a solid horizontal surface. If you have not purchased an optionally available stand that fits to the product you must provide a solid surface for the system with sufficient surface area.

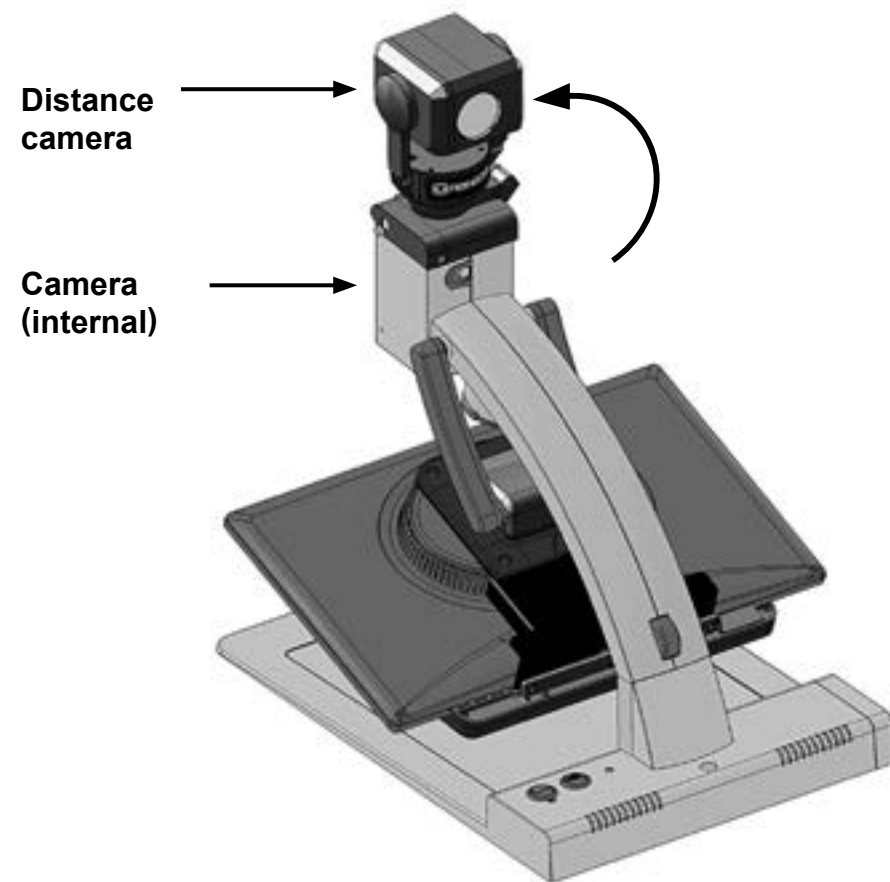
Set up your mezzo EDU as described below:



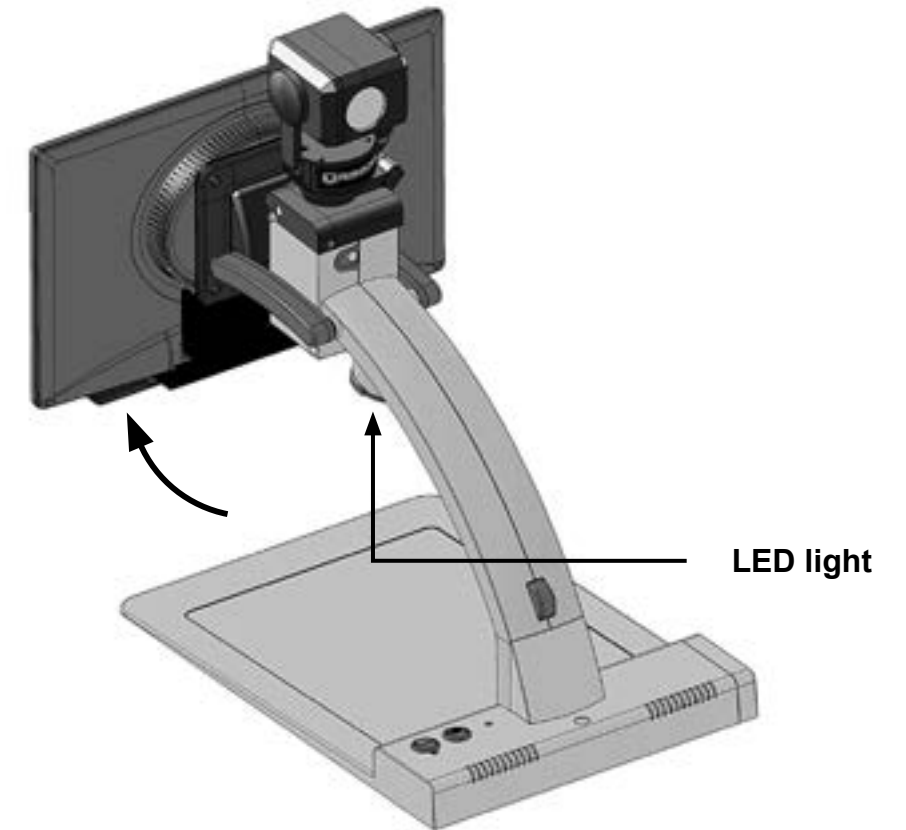
- Folded mezzo EDU for transport.



- Bring the camera/monitor arm in the upright position until the interlock release snaps in.



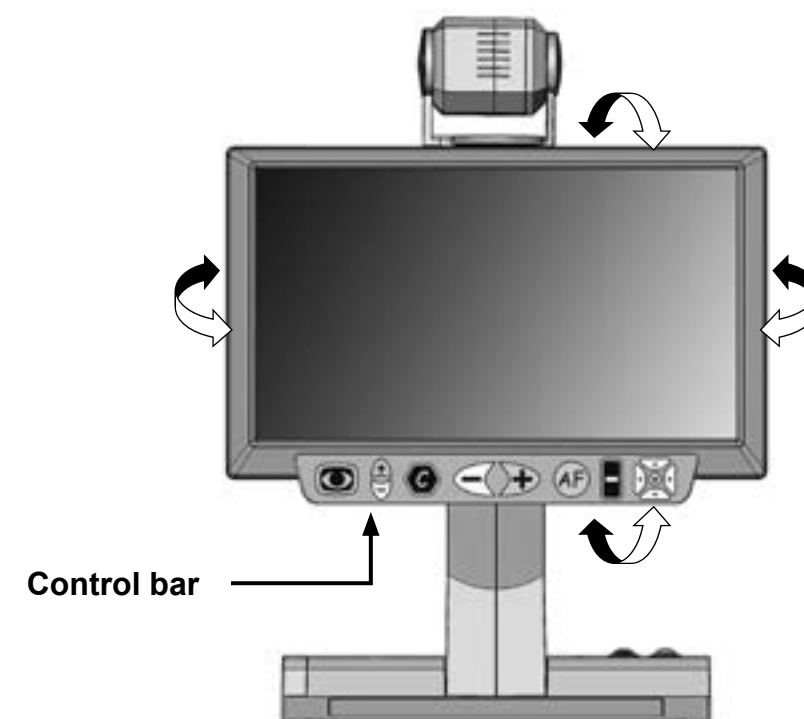
- Bring the distance camera up until the sub-contruction of the distance camera is held by the magnet.



- Move the monitor upwards.

### Alignment of monitor

Due to the monitor's technology contrast and brightness change depending on the angle of view.  
The highly flexible monitor arm enables you to adjust the monitors height and angle according to your best ergonomic position.

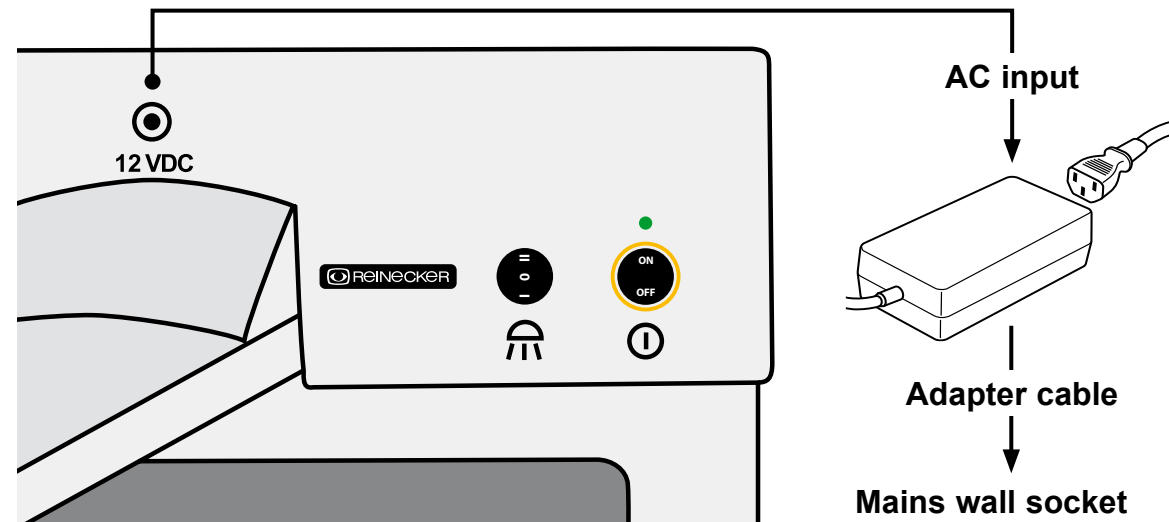


## Connection of the unit

Connect the power supply to a mains wall socket and plug the adapter end of the cable into the AC input socket (12V DC) located on the base plate of the mezzo EDU.

### Note:

The supplied plug-in power supply is exclusively for the operation of this device.  
Please do not use any other power adaptor or cable. Once the device is plugged in, it is ready to use.



## Description of the control elements

### Power switch ON/OFF



Only after connecting mezzo successfully to the power supply, the device can be switched ON or OFF using the toggle switch. After switching ON, the green power LED above the toggle switch lights up.



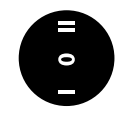
When the device will be turned OFF, the latest used settings are saved automatically.

When switching ON again, the latest used settings are recalled.

#### Attentions!:

If the base plate is not lit up after switching ON the device, please check, if the LED-light is ON (please see next paragraph).

### Light adjustment (50% / OFF / 100%)



Press the toggle switch to adjust the LED lighting accordingly:

I = LED-light min. 50%

0 = LED-light OFF

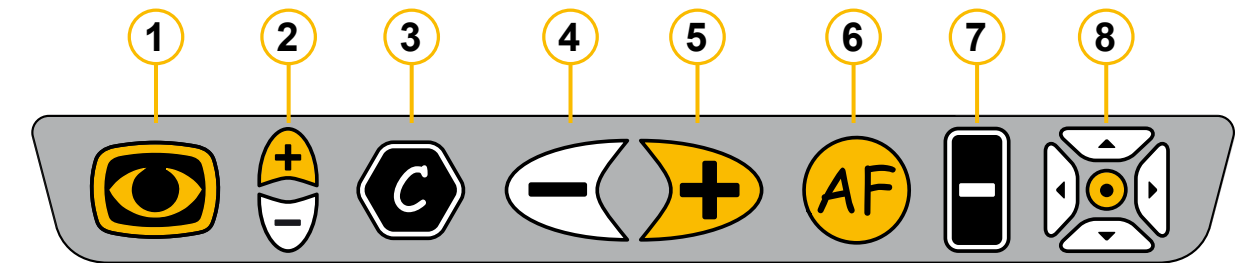
II = LED-light max. 100%



### General note on using the LED-light

While using the device, it could be helpful to switch OFF or reduce the LED-light of the device, for example, when the light in the room or from outside changes (sunlight).

## Description of the control bar



- 1) Switching button distance mode/document mode, Menu settings ON/OFF
- 2) Brightness
- 3) Color selection
- 4) Zoom OUT
- 5) Zoom IN
- 6) Auto focus ON/OFF
- 7) Line marker/Shadowing/Auto-Exposure ON/OFF (autom. aperture control)
- 8) 5-Button-Control (distance camera control)

### Switching button distance mode/document mode



By briefly pressing the control key, you can switch from document mode (internal camera) to distance mode or vice versa.

### Menu settings ON/OFF



Press the control button (in distance or document mode) for approx. 5 seconds to access the respective menu settings of the active camera. In document mode (internal camera) you will access the menu of the internal camera. In distance viewing mode, you will access the menu of the distance camera.

If you want to leave the menu settings, confirm the menu item „Exit“ or hold the control button pressed until the menu window disappears from the screen.

### Brightness



Use the „plus / minus button“ to adjust the brightness (light intensity) of the image shown on the monitor.

**Plus-Button:** Increase brightness

**Minus-Button:** Reduce brightness



## Color settings



By briefly pressing the color selection button, the following colors can be selected by default:

Position 1: full color display

Position 2: black font, white background

Position 3: white font, black background

Position 4: green font, black background

Position 5: yellow font, black background

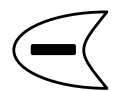
Position 6: yellow font, blue background

The chosen color mode appears temporarily on the lower side of the screen (when activated).

### Note:

Individual color combinations can be defined via the internal menu. You also have the possibility to reduce the number of color combinations.

## Zoom OUT



By briefly pressing the control button, the screen view is gradually reduced. When the control button is pressed continuously, the screen view is continuously reduced.

## Zoom IN



By briefly pressing the control button, the screen view is gradually enlarged. When the control button is pressed continuously, the screen view is continuously enlarged.

## Auto focus ON/OFF



By briefly pressing and releasing the central ("zoom") button the auto-focus can be activated/deactivated. By having the auto-focus activated, the camera adjusts the picture sharpness automatically.

## Line marker/Shadowing/Auto-Exposure ON/OFF



Repeated pressing of the control buttons gives you the following options:

- 1) Line marker/Shadowing horizontal\*
- 2) Line marker/Shadowing vertical
- 3) Line marker/Shadowing deactivation

*\*In distance mode, only the horizontal line marker can be activated.*

## Auto-Exposure ON/OFF (autom. aperture control)



When the control button is pressed permanently, the automatic aperture control (auto-exposure) in the distance camera is switched ON or OFF.

### Auto-Exposure ON:

The brightness of the camera image is automatically adopted according to the lighting conditions.

### Auto-Exposure OFF:

The brightness of the camera image is no longer automatically adopted to the lighting conditions.

## Line marker/Shadowing horizontal



Use the „plus“ button to move the line marker upwards.

Use the „minus“ button to move the line marker down.

As soon as the line marker passes the lower edge of the screen, the shadowing will appear from above and below (symmetrical).

## Line marker/Shadowing vertical



Use the „plus“ button to move the line marker to the left.

Use the „minus“ button to move the line marker to the right.

As soon as the line marker passes the lower edge of the screen, the shadowing will appear from the left and the right (symmetrical).

## 5-button control panel (distance camera control)



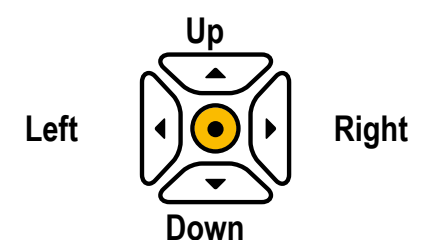
The 5-button control panel allows you to do the following actions and settings.

## Navigation of the distance camera

The distance camera can be moved to the desired position by pressing the „arrow buttons“.

When moving, a crosshair will be shown at the center of the screen. The crosshair is an indication of where the camera is pointing and is focussed.

(The crosshair can be turned off in the menu.)

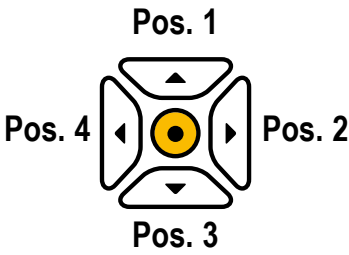


**Saving the position of the distance camera**

The distance camera is made to save up to 4 different positions.

**Alternative 1:**

Briefly press the yellow control button to activate the saving process. Then press and hold the desired position button (Pos. 1-4) until the selected memory position briefly appears on the screen.



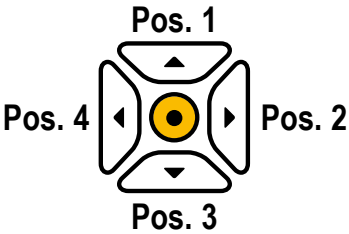
**Alternative 2:**

Press the yellow control button in equal intervals one after the other until you have reached the desired memory position. In this position, press and hold it. (Pos. 1-4).

**Recall saved Positions**

**Alternative 1:**

Press the yellow control button quickly one after the other and release it at the desired memory position (Pos. 1-4). The distance camera then moves to the saved camera position.



**Alternative 2:**

First press the yellow control button briefly and then quickly press the desired position button (Pos. 1-4). The distance camera then moves to the saved camera position.

**Function „Last position“**

Press the yellow control button briefly to switch between the two last selected saved positions. The message of the selected saved position appears briefly on the screen.



**Menu settings mezzo EDU**

**Opening the menu**



Press the control button for approx. 5 seconds until the menu window appears on the screen.

| Main Menu                    |          |
|------------------------------|----------|
| Color saturation             | +50      |
| Language                     | English  |
| AF Modus                     | auto     |
| Min. Magnification           | Standard |
| Max. Magnification           | Standard |
| Mains Frequency              | 50Hz     |
| Monitor Brightness           | 80%      |
| Reset to Factory Settings... |          |
| Advanced Settings...         |          |
| Exit                         |          |

**Select menu options**



Use the up/down arrow buttons to move the cursor to the option you like to change.

**Change menu options and confirm**



Confirm the selected option with the „Auto focus“ button. Then change the value with the arrow keys „up / down“. Then confirm the entry with the „Auto focus“ control button.


Menu options

|                              |   |
|------------------------------|---|
| Main Menu                    |   |
| Color saturation             | Adjustment range from -50 to +50  |
| Language                     | English   German   French   Swedish   Italian   Norwegian   Japanese  |
| AF mode                      | auto   manual (via pressing the button)   |
| Min. Magnification           | Low   Standard  |
| Max. Magnification           | High   Standard   |
| Mains Frequency              | 50Hz   60Hz   |
| Monitor Brightness           | 100%   75%   50%   25%  |
| Reset to Factory Settings... | Press button „Auto-focus“, to recall to factory settings  |
| Advanced Settings...         | Confirm selection to enter advanced settings (please see overview)  |
| Exit                         |   |
| Overview:                    | Advanced Settings<br>Color Combination Setup...<br>Color Ruler...<br>Mask Transparency<br>OSD Messages<br>Reflection Filter<br>Save User Settings<br>Recall User Setting<br>Change factory Setup...<br>Return |
| Main Menu                    |   |
| Advanced Settings            |   |
| Color Combination Setup...   |   |
| Color Combinations 1-6       |   |
| Mode                         | Disabled   Full Colour   Greyscale   False Colour   |
| Foreground                   | Black   Red   Green   Blue   Yellow   Magenta   Cyan   White   User 1   User 2  |
| Background                   | Black   Red   Green   Blue   Yellow   Magenta   Cyan   White   User 1   User 2  |
| Swap Fore-/Background        | Press „Auto-focus“ to invert foreground and background colours  |
| Exit                         |   |

|                            |   |
|----------------------------|---|
| Main Menu                  |   |
| Advanced Settings          |   |
| Color Combination Setup    |   |
| User colours               |   |
| User colour 1 - Red        | Adjustment range from 0 to 31                               |
| User colour 1 - Green      | Adjustment range from 0 to 31                               |
| User colour 1 - Blue       | Adjustment range from 0 to 31                               |
| User colour 2 - Red        | Adjustment range from 0 to 31                               |
| User colour 2 - Green      | Adjustment range from 0 to 31                               |
| User colour 2 - Blue       | Adjustment range from 0 to 31                               |
| Return                     |   |
| Main Menu                  |   |
| Ruler/Mask Settings        |   |
| Color Ruler                |   |
| Red                        | Adjustment range from 0 to 31                               |
| Green                      | Adjustment range from 0 to 31                               |
| Blue                       | Adjustment range from 0 to 31                               |
| Return                     |   |
| Main Menu                  |   |
| Advanced Settings          |   |
| Mask Transperancy          | 50%   25%   0%  |
| OSD Messages               | ON   OFF  |
| Anti Reflecion Mode        | ON   OFF  |
| Save user Settings         | Press button „Auto-focus“ to save the user settings         |
| Recall User Settings       | Press button „Auto-focus“ to recall the saved user settings |
| Recall factory settings... | Access only by authorized service                           |
| Return                     |   |


Menu settings distance camera

Opening menu


 Press the control button for approx. 5 sec. until the menu window appears on the screen.

| Extended Menu      |         |
|--------------------|---------|
| Image Settings...  |         |
| Color Settings...  |         |
| Preset Settings... |         |
| OSD-Messages       | ON      |
| Language           | English |
| User Menu...       |         |
| Exit               |         |


Select options

 Use the up/down arrow buttons to move the cursor to the option you like to change.

Change menu option and confirm

 Confirm the selected option with the „Auto-focus“ button. Then change the value with the arrow keys „up/down“. Then confirm the entry with the „Auto-focus“ control button.

Change menu option

 Alternatively, you can change the selected option directly with the „Line marker/shadowing“ control button.

Menu options

| Extended Menu              |  |
|----------------------------|--|
| Image Settings...          |  |
| Image Rotation             | 0°   +90°   180°   -90°  |
| Detail enhancement         | Adjustment range from 0 to 24  |
| Max. Digital Zoom False    | OFF   Adjustment range from 1,5x to 15,0x                            |
| Max. Digital Zoom Real RHC |  |
| AF                         | Continuous   Semi-automatic   Semi-autom. + Zoom   Continuous / Zoom |
| Return                     |  |

| Extended Menu          |   |
|------------------------|---|
| Color settings...      |   |
| White Balance Mode     | Autom.   via button                                       |
| Gain Red               | Autom.  |
| Gain Blud              | Autom.  |
| Perform Semi-autom. WB | Confirm selection to perform semi automatic white balance |
| Color saturation       | Adjustment range from -64 to +64                          |
| Background Color       | n/a   |
| Foreground Color       | n/a   |
| Mode                   | n/a   |
| Return                 |   |

| Extended Menu            |   |
|--------------------------|---|
| Preset Settings          |   |
| Function 1               | Zoom Tele   Zoom Wide   Auto-Focus   Focus Near   Focus Far   Mask ON/OFF |
| Function 2               | Zoom Tele   Zoom Wide   Auto-Focus   Focus Near   Focus Far   Mask ON/OFF |
| Function 3               | Zoom Tele   Zoom Wide   Auto-Focus   Focus Near   Focus Far   Mask ON/OFF |
| Restore Default Settings | Confirm to recall standard settings                                       |
| Use Alternative Settings | Confirm to recall alternative settings                                    |
| Return                   |   |

| Extended Menu |   |
|---------------|---|
| OSD Messages  | ON   OFF  |
| Languages     | English   German   French   Swedish   Norwegian |
| User menu...  | Confirm to go to main menu (see overview)       |
| Exit          |   |

|           |                           |            |
|-----------|---------------------------|------------|
| Overview: | Main Menu                 |            |
|           | Brightness                | +50        |
|           | Contrast                  | +50        |
|           | Color Saturation          | - 30       |
|           | Ruler/Mask...             | Aus        |
|           | Ruler/Mask Settings...    |            |
|           | AF Mode                   | Continuous |
|           | Reset to factory settings |            |
|           | Recall User Settings      |            |
|           | Advanced Settings....     |            |
|           | Exit                      |            |

|                  |   |
|------------------|---|
| Main Menu        |   |
| Brightness       | Adjustment range from -50 to +50  |
| Contrast         | Adjustment range from -50 to +50  |
| Color Saturation | Adjustment range from -50 to +50  |
| Ruler/Mask       | OFF   Line marker and shadowing disabled<br>Ruler   Line marker active<br>Mask   Shadowing active |
| Return           |   |

|                |  |
|----------------|--|
| Main Menu      |  |
| Ruler/Mask     |  |
| Ruler/Mask     | OFF   Line marker and shadowing disabled<br>Line marker   Line marker active<br>Shadowing   Shadowing active |
| Ruler position | 0 to 100   Line marker is adjustable   |
| Mask position  | 0 to 100   Shadowing reducable   |
| Ruler Mode     | Horizontal   place line marker horizontal<br>Vertical   place line marker vertical                           |

|                     |   |
|---------------------|---|
| Main Menu           |   |
| Ruler/Mask Settings |   |
| Mask Mode           | Left/Right   Shadowing left/right; Shadowing covers max. 50%<br>Top/Bottom   Shadowing top/bottom; Shadowing covers max. 50%<br>Left/Right FS   Shadowing left/right; Shadowing covers max. 90%<br>Top/Bottom FS   Shadowing top/bottom; Shadowing covers max. 90%<br>Full-Screen   Shadowing covers all of the monitor |
| Mask Transparency   | 50%   25%   0%  |
| Return              |   |

|             |                               |
|-------------|-------------------------------|
| Main Menu   |                               |
| Ruler/Mask  |                               |
| Ruler Color |                               |
| Red         | Adjustment range from 0 to 31 |
| Green       | Adjustment range from 0 to 31 |
| Blue        | Adjustment range from 0 to 31 |
| Return      |                               |

|                           |  |
|---------------------------|--|
| Main Menu                 |  |
| AF Mode                   | Continuous   Semi-automatic   Semi-autom. + Zoom   Continuous / Zoom |
| Reset to factory settings | Confirm selection to the reset to factory settings                   |
| Reset to User Settings    | Confirm selection to the reset to user settings                      |
| Advanced Settings         | Confirm selection to go to advanced settings (see overview)          |
| Exit                      |  |



|           |                         |         |
|-----------|-------------------------|---------|
| Overview: | Advanced Settings       |         |
|           | Color Combination Setup |         |
|           | Anti Reflection Mode    | OFF     |
|           | Monitor Brightness      | 100     |
|           | Language                | English |
|           | Perform White Balance   |         |
|           | White Balance Mode      | Autom.  |
|           | Sharpness Settings...   |         |
|           | OSD Messages            | ON      |
|           | Special Settings...     |         |
|           | Return                  |         |

|                         |  |
|-------------------------|--|
| Advanced Settings       |  |
| Color Combination Setup |  |
| Color Combinations 1-6  |  |
| Mode                    | Adjustment range from -50 to +50   |
| Foreground              | Black   Red   Green   Blue   Yellow   Magenta   Cyan   White   User 1   User 2 |
| Background              | Black   Red   Green   Blue   Yellow   Magenta   Cyan   White   User 1   User 2 |
| Swap Fore-/Background   | Confirm selection to change viewing mode                                       |
| Return                  |  |

|                         |                               |
|-------------------------|-------------------------------|
| Advanced Settings       |                               |
| Color Combination Setup |                               |
| User Colors             |                               |
| User Color 1 - Red      | Adjustment range from 0 to 31 |
| User Color 1 - Green    | Adjustment range from 0 to 31 |
| User Color 1 - Blue     | Adjustment range from 0 to 31 |
| User Color 2 - Red      | Adjustment range from 0 to 31 |
| User Color 2 - Green    | Adjustment range from 0 to 31 |
| User Color 2 - Blue     | Adjustment range from 0 to 31 |
| Return                  |                               |

|                       |  |
|-----------------------|--|
| Advanced Settings     |  |
| Anti Reflection Mode  | OFF   ON   Auto (0-9)   autom. setting is adjustable |
| Monitor Brightness    | Adjustment range from 37 to 100                      |
| Language              | English   German   French   Swedish   Norwegian      |
| Perform White Balance | Confirm selection to perform white balance           |
| White Balance Mode    | Automatic   via button                               |

|                       |                               |
|-----------------------|-------------------------------|
| Advanced Settings     |                               |
| Sharpness Settings    |                               |
| Real Color Sharpness  | Adjustment range from 0 to 24 |
| False Color Sharpness | Adjustment range from 0 to 24 |
| Return                |                               |

|                     |   |
|---------------------|---|
| Advanced Settings   |   |
| OSD Messages        | ON   OFF  |
| Special Settings... | Confirm selection to go to special settings<br>(see overview) |
| Zurück              |   |

|           |                              |      |
|-----------|------------------------------|------|
| Overview: | Special Settings             |      |
|           | Zoom Extension               | Ein  |
|           | Max. Digital Zoom            | 3.5x |
|           | Customize Buttons...         |      |
|           | Store User Settings          |      |
|           | Recall User Settings...      |      |
|           | Reset to Factory Settings... |      |
|           | Expert Settings...           |      |
|           | Monitor Size                 | Auto |
|           | Room Camera Settings...      |      |
|           | Zoom Extension               |      |
|           | Return                       |      |

| Special Settings                |  |
|---------------------------------|--|
| Zoom Extension                  | ON   OFF   |
| Max. Digital Zoom               | OFF   Adjustment range from 1,5x to 15,0x  |
| Special Settings                |  |
| Customize Buttons...            |  |
| Up                              | Disabled   Zoom Tele   Zoom Wide  <br>Brightness +   Brightness -   False colours  <br>Overview mode   Auto-focus   Focus Near  <br>Fokus Far   Auto Exposure            |
| Down                            |  |
| Left                            |  |
| Right                           |  |
| Center*<br>(Go to second level) | Disabled   Zoom Tele   Zoom Wide  <br>Brightness +   Brightness -   False colour  <br>2. Layer*   Overview mode   Auto-focus  <br>Focus Near   Fokus Far   Auto Exposure |
| 2nd.+Up                         | Disabled   Zoom Tele   Zoom Wide  <br>Brightness +   Brightness -   False colour  <br>2. Layer*   Overview mode   Auto-focus  <br>Focus Near   Fokus Far   Auto Exposure |
| 2nd.+Down                       |  |
| 2nd.+Left                       |  |
| 2nd.+Right                      |  |
| Return                          |  |
| Special Settings                |  |
| Store User Settings             | Confirm selection to save user settings  |
| Recall User Settings            | Confirm selection to recall user settings  |
| Reset to Factory Settings       | Confirm selection to reset to factory settings   |
| Expert Settings                 | Access only by authorized service personell  |
| Monitor Size                    | Auto   19"   22"   24"   |
| Room Camera Settings...         | Confirm selection to go to distance camera settings<br>(see overview)  |
| Return                          |  |

| Overview:                | Room camera settings                            |
|--------------------------|---|
|                          | Crosshair ON                                    |
|                          | Speed Left 8                                    |
|                          | Speed Right 4                                   |
|                          | Speed Up/Down 20                                |
|                          | Zoom Dependance 110                             |
|                          | Speed Blackb. Scan 10                           |
|                          | Line Height Blackb. Scan 20                     |
|                          | Reinitialize head...                            |
|                          | Return  |
| Room camera settings     |   |
| Crosshair                | OFF   ON  |
| Speed Left               | Adjustment range from 1 to 100                  |
| Speed Right              | Adjustment range from 1 to 100                  |
| Speed Up/Down            | Adjustment range from 1 to 100                  |
| Zoom dependance          | Adjustment range from 0 to 150                  |
| Speed Blackb. Scan       | Adjustment range from 1 to 99                   |
| Line Height Blackb. Scan | Adjustment range from 1 to 99                   |
| Reinitialize Head...     | Confirm selection to initialize distance camera |
| Return                   |   |

Troubleshooting

| Problem   | Solution   |
|---|--|
| No image is shown.  | Check the mains connection, the cable connection to the monitor and that all relevant systems are switched ON or activated.                |
| Screen is dark.   | Check the brightness and contrast settings of the camera/monitor.  |
| True color is not displayed correctly.                                | Check your reading material, color mode setting, brightness, color saturation and camera lighting.   |
| Battery does not charge or battery charging indicator does not light. | Check that the power supply is correctly connected to the mains socket and that the adapter cable is correctly connected to the mezzo EDU. |

Technical details

|                                |   |   |
|--------------------------------|---|---|
| mezzo EDU<br>16"-class monitor | LED flat screen monitor<br>16"-class monitor   ca. 41 cm (1366 x 768 pixel) | Weight: approx. 6,5 kg<br>Measurements (WxHxL) expanded:<br>approx. 38 x 50 x 52 cm<br>folded:<br>ca. 31 x 19 x 51 cm |
| Color mode                     | True colors, preset and individually adjustable artificial colour modes     |   |
| Autofokus                      | Can be switched OFF   |   |

Warranty Information

1. Reinecker Vision GmbH grants a warranty of 24 months (warranty period only valid within the European Union) against defects in manufacture counted from date of invoice ex Reinecker Vision GmbH.
2. All parts that have been replaced when repairing the unit will automatically become property of Reinecker Vision GmbH.
3. Damage caused by improper use or by non-compliance with the operating instructions will result in the invalidation of the warranty.
4. Interventions from persons other than Reinecker Vision GmbH authorised specialists may lead to invalidity of warranty.
5. Partial warranty is valid for light sources serving to illuminate the reading object, batteries and other parts subject to wear and tear.
6. If a warranty claim is necessary, the system has to be returned to the manufacturer in Alsbach-Hähnlein or to your authorized dealer in the original packaging including all components. The manufacturer does not carry the cost for transport, packaging and insurance.

Phone number: +49 6257 93110

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Your authorized distributor:



## Notes

[illegible][illegible]

|                            |                               |
|----------------------------|-------------------------------|
| Type:                      | mezzo EDU ( <b>MEZEDU01</b> ) |
| Serial number:             |                               |
| Manufacturer:              | Reinecker Vision GmbH         |
| Final examination:         |                               |
| Power supply:              | 100 VAC – 240 VAC 50-60 Hz    |
| With plug-in power supply: | 12V DC/5000mA                 |
| Power consumption:         | max. 80 watt                  |



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In case service is necessary, please  
contact your authorized distributor.

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Bitte wenden Sie sich bei Fragen  
oder einem Servicefall direkt an unser  
Hauptwerk in Alsbach-Hähnlein oder  
an eine unserer Niederlassungen.

Bei im Ausland erworbenen Produkten  
kontaktieren Sie im Servicefall bitte  
Ihren dort ansässigen Händler.