

User manual

MANO *touch5*

ZE



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

Konformitätserklärung

Declaration of conformity

Wir erklären in alleiniger Verantwortung für alle unsere Systeme, dass diese mit den folgenden Normen oder normativen Dokumenten 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 directives.

MANOtouch 5

(MANOT050, MANOTP50)

**Richtlinie 93/42/EWG
des Rates vom 14. Juni 1993 über Medizinprodukte
Risikoklasse I nach Anhang IX Regel 12
CE Konformität nach Anhang VII
und
RoHS II (EG Richtlinie 2011/65/EU)**

***Council directive 93/42/EEC
of 14th June 1993 concerning medical devices
risk class I according to Annex IX standard 12
CE conformity of Annex VII
and
RoHS II (Council directive 2011/65/EEC)***

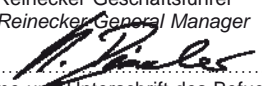
Die CE– Kennzeichnung auf dem Gerät dokumentiert diese Übereinstimmung.
The CE mark on the system points out this accordance.

Alsbach-Hähnlein,

27.04.2018

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

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I. General Information

Important notes on the operation of the reading magnifier MANOtouch5.
Please read them carefully prior to the operation of the reading magnifier!

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 .

Caution:

In order to avoid high frequency disturbances (e.g. microwaves) the operator should respect a minimum distance of one meter/three feet to portable and mobile HF-telecommunication devices .

The device may not be used in the patients environment .

Storage of the user manual

The user manual is an essential part of MANOtouch5 . Please keep the manual in a safe place for future reference .

Product description

MANOtouch5 is an electronic magnifier for text and pictures for permanent and private use .

- clear, virtual touch display (approx . 12,5 cm in diagonal)
- easy, intuitive operation via virtual, customizable buttons with optional tactile feed back (sensitively or acoustically)
- high resolution picture quality, contrast enhanced and flicker free
- continuous magnification from approx . 2,8x to 28x, thanks to cutting-edge camera technology
- multifunctional protective cover, which serves as a sturdy handle with two positions as well as a comfortable reading / writing stand
- distance viewing mode, trapezoid balance, time display, HDMI port, auto ON/OFF, auto focus ON/OFF, inductive charger (available as an option) and more
- the low weight and the ergonomically shaped recessed grips ensure easy and safe handling at home or en route

Medical Device

MANOtouch5 is classified as a medical device, class I, according to 93/42/EEC, Annexe IX, standard 12 . For the distribution to countries outside the EU the respective country-specific guidelines have to be regarded .

Purpose

This electronic magnifier is a medical device to assist with the magnification of printed text and pictures . Visually impaired people can compensate for their loss of visual acuity by using this device . For private appliance only .

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 product . It is rather an indication on when the product might be obsolete and substitution might be recommended due to new product developments .

Caution when using around medical devices

In case the end user intends to use this device in combination with another medical devices, it is recommended to get in contact with Reinecker Vision GmbH or with a licensed distributor .

Precautions by alteration of the performance of the device
Should any of the technical features or performances change, the device must be turned OFF and the battery must be taken out . **Please do not switch on the device again.** Refer directly to your authorized dealer or to Reinecker Vision GmbH Service Center .

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, disinfected and safety checked .

Cleaning of the system

- MANOtouch5 has to be disconnected from the power supply before cleaning .
- For cleaning please use the enclosed screen cleaning cloth or any other lint-free, lightly moistened cloth .
- Interior of device must NOT come in contact with liquids .

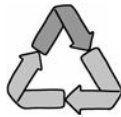
Special advice for transport and storage

For safety reasons, 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 to 1000 hPa
- Temperature range: +5°C to +40°C
- Relative air humidity: 30% to 80%

Disposal of the unit according to EU directive 2002/96/EEC
MANOtouch5 contains of electronic components . To avoid damage to the environment, the country-specific rules have to be respected .



Caution:

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

Safety instructions

Please respect the following safety instructions:

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 battery which is included in the delivery by Reinecker Vision GmbH . The use of any other equipment might lead to a product damage .
4. Do not expose MANOtouch5 to direct sunlight or to very hot or cold environment, as this would harm the picture quality .
5. Do not use this device below +5°C or above +40°C .
6. Keep liquids away from the system . Only operate the device in a dry environment .
7. The device may not be used next to medical devices (patients environment), if the device is connected with the power supply .
8. Do not try to repair or to dismantle the device 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 .
9. Always turn 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 on the adequate use of the electronic magnifier MANOtouch5

Scope of delivery

The following components are integrated in the delivery:

- HD-magnifier MANOtouch5 (without handle)
- HD-magnifier MANOtouch5+ (with handle), incl . 3-button adapter and induction charging station
- Power supply (5V DC / 2,4A) incl . connection cable
- 4 removable country adapters (EU, USA, UK, AUS)
- Carrying case with microfibre cloth, incl . hand strap
- User manual

Compatible Option

- Induction charger (order code: MANOTLAD)

Characteristics

Protective cover

The multifunctional protective cover is firmly connected to the device and protects the display when it is closed .

The device will be turned ON and OFF with the yellow slider .

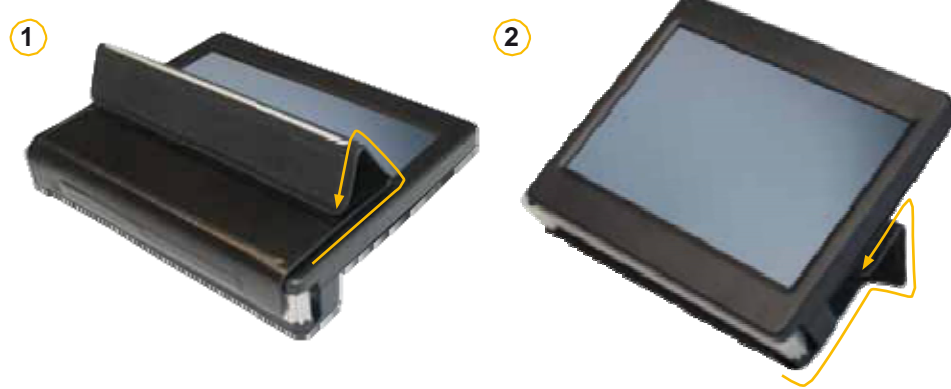
If you close the protective cover during use, the device switches to stand-by mode . When the protective cover is opened again, the device switches back to normal operation .



Opening the Protective cover

The protective cover can be folded in a few steps to a handle or to a stable, comfortable reading and writing tripod.

Using the protective cover as reading and writing stand:



Using the protective cover as handle:



Description of Ports and Controls



Description of the controls

ON/OFF slider

Move the yellow slider to the right in order to turn the unit ON . When the device is in start mode, you will feel two consecutive vibration signals after a few seconds . After about 20 seconds, the camera is activated .

If you move the yellow slider to the right again, the device switches to standby mode . If the slider is pressed for more than 2 seconds, the device will switch OFF .



Touch display

All functions of the device can be activated in an easy and intuitive manner just by tapping the display . All settings can be made via the screen / touch display .

Depending on the needs of the user, the user interface offers extensive configuration options to meet your individual needs .

Each touch of the screen / touch display generates a vibration, optionally the vibration mode can be switched ON or OFF .

Connections

USB type-C for data exchange and power supply

This connection is for the use of power supply and charging with the newest USB technology . You can use this connection also for importing updates or exchanging data e.g. with your computer .

Underneath of this connection you may feel a tactile point which shall give you the direction where to connect your plug . You can plug in your USB cable in any direction .

HDMI connection

With the HDMI output you can connect your TV, external monitor or other devices with a HDMI connection with MANO touch 5 . The camera picture will be displayed on the external device in high resolution picture quality .

Audio connection

Reserved for future operations . Connection for outputting audio signals produced by the device .

USB port type-A for extentions

This port is also reserved for upcoming features . It could for example be used for further communication options .

Touch screen functions

When the device is switched ON the screen displays a magnified image in the selected color mode .

Depending on the configuration settings some control elements can be displayed or not (automatically or manually) . You can also choose to display or hide them permanently .

Touch display with 3 functional areas

Area 2

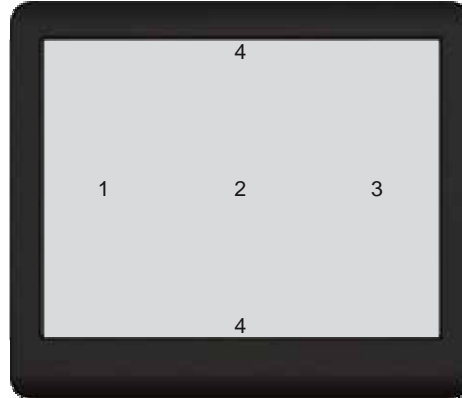
Tap this area in order to activate the manual auto focus .

Area 1 and 3

Tap these areas in order to show/hide virtual operation buttons .

Area 4

Not yet in use .



Using the interface

Note: Alternatively you can replace the „+“ / „-“ symbols by a zoom bar (see chapter „Icon arrangement“).



Zoom adjustment at the status bar

To change the zoom factor, touch and hold the zoom controller on the status bar . While keeping the controller pressed, move it to the zoom factor you wish to use .



Zoom in and Zoom out



Tap on the Plus or Minus icon and choose the requested zoom factor .



Color selection and menu selection

Briefly tap this icon in order to scroll within the (up to 14) colors.



Tap and hold this icon in order to activate the menu selection .

Camera icon



Briefly tap the camera icon in order to capture your current picture and to store it.

Tap and hold the camera icon in order to show all stored images .

Note: The photo function is only available, if there is connection from type-C-port (data transfer and power supply) to power supply or computer .

Description of the menu functions

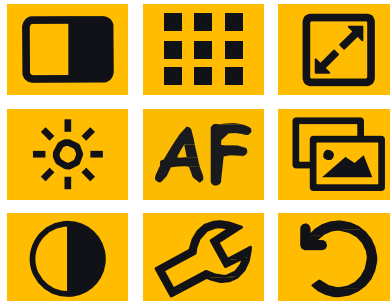
By using the menu it is simple to make the required settings for the user interface .

You can for example move the status bar for the zoom to a different position or change it plus or minus icon .


















Additionally, many other adjustments can be made .

Menu options


Tap and hold a menu icon for more than 1 second, all available options for adjustment will be displayed .




Color mode


Icon	Description	
	Briefly tap this icon . All available colours will be displayed . All colours marked with a green tick are activated . All colours with no green tick are deactivated . Select the colours you want to activate and mark them with a green tick in order to activate them . All other colours are deactivated .	
	Brief tap: previous colour selections	
	brief tap: next colour selections	
	true colors	 Grey scale
	black font, white background	 white font, black background
	black font, green background	 green font, black background
	black font, green background	 yellow font, black background
	blue font, yellow background	 yellow font, blue background
	red font, white background	 white font, red background
	red font, blue background	 blue font, red background

Back (to previous view)


Icon	Description
	Once you have finished a menu adjustment, tap this icon in order to return to the previous display .

Brightness

Icon	Description
	<p>Tap on this icon in order to adjust brightness to your individual needs .</p> <p>Tap and hold the brightness slider and move it in order to adjust your best suited brightness level .</p> <p>Alternatively tap the brightness control and adjust your brightness level .</p>

	Brightness range from 0% to 100%
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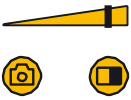






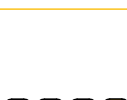




Contrast

Icon	Description
	<p>Tap this icon in order to adjust contrast to your individual needs .</p> <p>Tap and hold the contrast slider and move it in order to adjust your best suited contrast level .</p> <p>Alternatively tap the contrast control and adjust your contrast level .</p>






	Contrast range from 0% to 100%
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Note: Brightness and contrast can be adjusted individually for true colors and semi-colors (grey-scales) .




Icon arrangement





Icon	Description		
	Tap on this icon in order to customize your icons display on screen . Just by tapping to one of the following icon structures, it will be activated .		
	Tap briefly: shows previous structure		
	Tap briefly: shows next structure		
	Icon structure 1		Icon structure 8
	Icon structure 2		Icon structure 9
	Icon structure 3		Icon structure 10
	Icon structure 4		Icon structure 11
	Icon structure 5		Icon structure 12
	Icon structure 6		Icon structure 13
	Icon structure 7		


Auto focus


Icon	Description		
	Tap this icon in order to adjust the auto focus according to your individual needs . Just by tapping to one of the following icon structures, it will be activated .		
	Permanent auto focus		Auto focus will be activated by tapping in the centre of the display only.
	Auto focus will be activated when zooming in or out.		Permanent auto focus which can also be activated by tapping.


Advanced adjustments


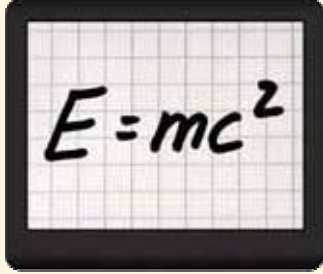
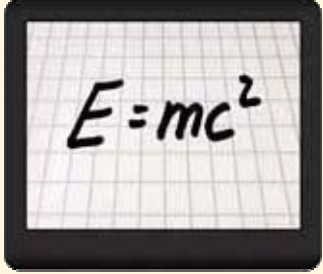

Icon	Description
	Tap this icon to open your tool bar .
	Tap briefly: shows previous options
	Tap briefly: shows next option

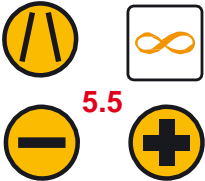
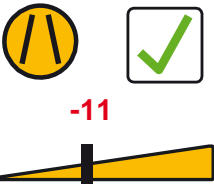

Icon	Description	Symbol	Description
	Show time		Time settings
	Set your hours and minutes by tapping the up and down arrows .		Save time settings and exit tool bar .


Icon	Description	
	LED lights	Illumination range from 0% to 100%


Icon	Description	
	Battery status	Battery icon shows the battery status in %




Icon	Description	
	Show icons permanently or hide them permanently .	0 = show icons permanently 1 = hide icons after 1 second 2 = hide icons after 2 seconds 3 = hide icons after 3 seconds 4 = hide icons after 4 seconds 5 = hide icons after 5 seconds







Icon	Description	
	Distortion correction (or: extended lens shift control) When inclining your magnifier, a distortion may occur (see below) . You have three possibilities to minimize this effect in order to see a real picture .	
	 With distortion correction	 Without distortion correction
	Icon	Tap this icon in order to select from three possibilities .


	Selection 1	Tap - or + in order to adjust the balance value which ranges from -10 to +10
	Selection 2	Manual range from -55% to +30%
	Selection 3	Trapezoid balance OFF


Icon	Description	
	Information	Touch this icon to get the software version of your device .

Icon	Description	
	Factory reset	Tab this icon in order to recall factory settings .





	Press briefly to get to the previous adjustment	
	Press briefly to get to the previous adjustment	
	When you select an icon by touching it, it will be confirmed by a green arrow . Touch this icon again, the green icon will disappear .	

	Factory reset	
	Recall user adjustment A	
	Recall user adjustment B	
	Your selection will be recalled when exit .	

Icon	Description	
	Intensity of vibration	Intensity of vibration adjustable in 6 steps .

	<p>0 = Vibration (tactile feed back) OFF</p> <p>1-5 = Vibration (tactile feed back) ON</p>
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Color scheme icon settings

Icon	Description
	Tap this icon in order to individually set your icons . The chosen setting will be activated by tapping .
	Tap briefly: shows previous icon view
	Tap briefly: shows next icon view
	When you select an icon by touching it, it will be confirmed by a green arrow . Touch this icon again, the green icon will disappear .















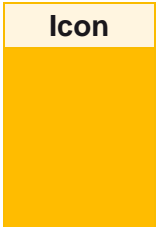








	small round icons (negative display)		big round icons (negative display)
	small square icons (negative display)		big square icons (negative display)
	small round icons, (positive display)		big round icons (positive display)
	small square icons (positive display)		big square icons (positive display)
	small round icons, multicolored (negative display)		small round icons, multicolored (positive display)
	small square icons, multicolored (negative display)		small square icons, multicolored (positive display)
	small round icons with reduced opacity (transparency)		Hide icons, all func- tions are still active .

Image gallery

Icon	Description
	Tap this icon in order to recall your picture gallery . Briefly tap a selected image to show it on full screen . While looking at pictures in full-screen mode, you can modify zoom factor and colour mode .

	Tap briefly: show previous pictures	
	Tap briefly: show next pictures	
	Exit picture gallery	
	When tapping this icon in full screen mode, you will lead back to the picture gallery .	
	To delete a picture from the gallery, tap and hold it for approx . 2 sec until the X icon appears . To revoke the deletion process, tap and hold the deleted picture for approx . 2 sec until the X icon disappears .	
	Tap and hold the semi-colored picture in the center until 2 arrows appear on screen . Move your finger in direction of the arrows in order to adjust the contrast of your picture .	
	Arrow upwards: decrease contrast	 Arrow downwards: increase contrast

Battery use

Note: Best conditions for a long life span of your battery is to follow the guidelines below:

- 1 . Make sure that the battery has been fully charged prior to first use or if the device haven't been in use for a longer period .
- 2 . Connect the enclosed power supply with your wall socket and the USB type C input of the device . During charging, the battery indicator shows a red signal . When fully charged, the battery indicator shows a green signal .
- 3 . When the battery status indicator on the screen shows no bar, means, that the battery level is low and the battery shall be charged .
- 4 . Charging time of the battery takes approx . 4 hours . When fully charged, operating time is approx . 2 - 2,5 hours, depending on the brightness adjusted .

Note: If the battery status is low, the unit turns off automatically . If this happens, just connect your unit with a power supply, as described above .

Replacement of batteries

Open the housing carefully at the rear side of the unit before inserting or replacing a battery . Make sure that the contacts of the battery correspond to the contacts of the unit . Then close the cover again .

MANOtouch5 is now ready for operation .



Disposal of batteries

Batteries must be disposed according to the country specific rules . They shall never be burned . Let neither your children nor your pets play with batteries .

Protective circuit of the battery

Despite the protection installed in the battery, it is forbidden to short circuit the contacts of the battery with a metal object . In this case there is a risk of explosion of the battery . This also represents a danger to humans .

Trouble shooting

Problem	Solution
MANO touch5 doesn't turn ON.	<ul style="list-style-type: none">• Make sure, the battery has been charged completely . Charge the battery for approx . 4 hours .
MANO touch5 has been turned ON but does not show a picture .	<ul style="list-style-type: none">• It is possible that the multifunction protective cover is not opened properly and is obscuring the camera .
Auto focus does not react .	<ul style="list-style-type: none">• Possibly the manual focus is set . In this mode MANO touch5 only focuses, if the focus button is pressed . To avoid this you can change from manual focus to auto focus mode in the menu setting .• Make sure that no dust comes into contact with the camera lens . Clean the lens with the cleaning cloth provided .
Display is too dark or too bright .	<ul style="list-style-type: none">• If no image can be seen on the screen, try adjusting brightness or contrast .
Derating of the battery .	<ul style="list-style-type: none">• By repeated charging and discharging the capacity of the battery can be reduced . This may lead to a shorter life span or a reduced performance of the battery .

Technical details

Type	MANOtouch 5 / 5+
Screen	LCD Display with approx . 12,5 cm screen diagonal
Camera	HD, 60 fps
Magnification levels without reading/writing stand	approx . 1 .0x - 33x
Magnification levels with a reading/writing stand	approx . 2 .8x - 28
Focus	auto focus / manual focus
Brightness of screen	approx . 500 cd/m2
Color Mode	14 color modes
Image memory	approx . 100 pictures
LED lights	Continuous / OFF
Time display	via menu
Reading stand	included in the delivery
Battery	Lithium-Polymer-battery, replaceable
Power supply	100-240 VAC 50-60 Hz / secondary 5 VDC 2 .4 A
Operating time	up to approx . 2,5 hours (depending on the brightness adjusted)
Charging time	approx . 4 hours
Weight	approx . 280 g (incl . battery)
Dimensions without handle	123 x 98 x 26 mm (WxHxD)

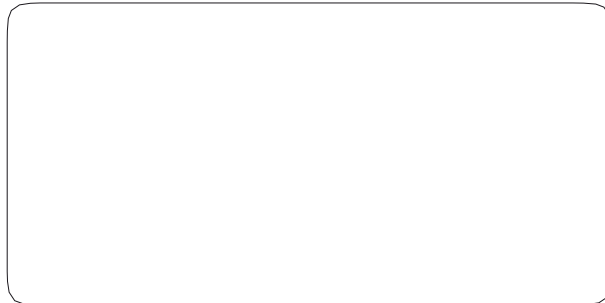
Warranty Information

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 authorised dealer in the original packaging including all components . The manufacturer does not carry the cost for transport, packaging and insurance .

Phone number: +49 6257 9311-0

View our General Terms and Conditions .

Your authorized distributor:



Type: MANOtouch5 (MANOT050)
MANOtouch5+ (MANOTP50)

Serial number:

Manufacturer: Reinecker Vision GmbH

Final examination:

Power supply: 100 VAC – 240 VAC 50-60 Hz

Via power supply unit: 5V DC / 2,4A

Power consumption: max . 12 watt

Reinecker Vision GmbH
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In case service is
necessary, please
contact your autho-
rized distributor.

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

Bei im Ausland erwor-
benen Produkten
kontaktieren Sie im
Servicefall bitte Ihren
dort ansässigen
Händler .