

LEICA CINE 1

KURZANLEITUNG QUICK START GUIDE MODE D'EMPLOI SUCCINCT BEKNOPTE HANDLEIDING GUIDA RAPIDA INSTRUCCIONES ABREVIADAS КРАТКАЯ ИНСТРУКЦИЯ

FOREWORD

Dear Customer,

we wish you a great deal of enjoyment and every success with your new Laser TV. Please read this manual to familiarize yourself with the full scope of functions your Laser TV has to offer. Your Leica Camera AG

SCOPE OF DELIVERY

Before using your Laser TV for the first time, please check the accessories supplied for completeness. The standard scope of delivery* contains the following:

- Leica Cine 1
- Remote control
- 2x AAA battery
- Mains cable
- Quick Start Guide

*The actual scope of delivery may vary depending on model.

Caution

• Desiccants and plastic bags must be stored out of the reach of children. Plastic bags pose a risk of suffocation and desiccants are a health hazard when swallowed.

Only the accessories specified and described in this manual or by Leica Camera AG must be used with the Laser TV (mains plug, mains cable, cables, etc.). These accessories must only be used with this product. Third-party accessories may result in malfunctions or damage to the product. Leica Camera AG shall not accept liability for damages arising from the use of the device for purposes other than its intended use.

Please read the chapters "Legal information", "Safety remarks", and "General information" before using your Laser TV for the first time. Knowledge of the content will prevent inadvertent damage to the product, possible injuries and other risks.

LEGAL INFORMATION

COPYRIGHT NOTICE

Compliance with copyright laws is mandatory. The recording and publication of pre-recorded media like tapes, CDs, or other published or broadcast material may breach copyright laws. The same applies for all software supplied as part of the scope of delivery.

TECHNICAL DATA

Product changes with regards to the product or services may have occurred after the editorial deadline. The manufacturer reserves the right to effect structural or shape changes, color deviations and changes to the scope of delivery or service, where these changes or deviations are reasonably acceptable for the customer, while taking into consideration the interests of Leica Camera AG. To that extent, Leica Camera AG reserves the right to changes and errors. The images in this manual may depict accessory, special features or other items that are not part of the standard scope of delivery or service. Some pages may contain model types and services, which are not offered in specific countries.

BRANDS AND LOGOS

The brand names and logos used in this document are protected trademarks. These brands or logos must not be used without prior approval by Leica Camera AG.

LICENSE RIGHTS

Leica Camera AG intends to provide you with innovative and informative documentation. Due to the amount of creativity that has gone into its design, we ask for your understanding that Leica Camera AG must protect its intellectual property, including patents, trademarks and copyrights, and that possession of the documentation does not infer any licensing rights of the intellectual property of Leica Camera AG.

THIRD-PARTY TRADEMARKS AND LOGOS

The terms HDMI and HDMI High Definition Multimedia Interface, as well as the HDMI logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

▶**■ Dolby** vision·atmos

Dolby, Dolby Vision, Dolby Atmos and the double-D icon are registered trademarks of Dolby Laboratories Licensing Corporation. Manufactured under license by Dolby Laboratories. Confidential, non-published works. Copyright© 2012-2022 Dolby Laboratories. All rights reserved.

dts нэ

For DTS patents, see http://patents.dts.com. Manufactured under license from DTS Licensing Limited. DTS, DTS-HD Master Audio, DTS-HD, Virtual:X, and the DTS-HD logo are registered trademarks or trademarks of DTS, Inc. in the United States and other countries. © 2022 DTS, Inc. ALL RIGHTS RESERVED.

REGULATORY INFORMATION

CE MARK

The CE mark on our products documents compliance with the fundamental requirements of applicable EU guidelines.

English Declaration of Conformity (DoC) "Leica Camera AG" hereby declares that this product is in compliance with the basic requirements and other relevant provisions of Directive 2014/53/EU. Customers can download a copy of the original DoC for our Radio Equipment products from our DoC server: www.cert.leica-camera.com Please contact Leica Camera AG. Am Leitz-Park 5, 35578 Wetzlar. Ger-

Please contact Leica Camera AG, Am Leitz-Park 5, 35578 Wetzlar, Germany in case of any further questions



The housing must not be opened to avoid the hazard of electrocution. The device does not contain any parts the user can maintain autonomously. Repairs must only be carried out by authorized service centers.

DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT WEEE (WASTE OF ELECTRICAL AND ELECTRONIC EQUIPMENT)

WEEE (WASTE OF ELECTRICAL AND ELECTRONIC EQUIPMENT) European Directive 2012/19/EU



(Applies within the EU and for other European countries with active 🗸 waste separation policies.)

This device contains electrical and/or electronic components which must not be disposed of in general household waste. Instead, it should be disposed of at a recycling collection point provided by your local authority. This service is free of charge.

Any standard or rechargeable batteries used in this device must be removed and disposed of separately in accordance with local regulations.

Please contact your local authorities, waste disposal collection point or the retailer, from whom you purchased the device for more information on correct waste disposal.

Depleted batteries must never be disposed of in household waste as they contain toxic materials that are harmful to the environment.

ROHS (RESTRICTION OF HAZARDOUS SUBSTANCES) European Directive 2011/65/EU



This European directive limits the use of hazardous materials, which are difficult to recycle. Recycling is therefore facilitated as an important contribution to the protection of the environment. The substances used in the manufacture of this device comply with the RoHS Directive.

OTHER IDENTIFIERS

The icons displayed on this product (incl. the accessories) have the following meaning:

∼ Alternating current (AC) Class II devices (the product has a double-insulated
=== Direct current (DC)	aesign)

IMPORTANT NOTES REGARDING THE USE OF WLAN/BLUETOOTH®

- Appropriate measures must be taken to ensure security and protect against disruptions to the systems in place where devices or computer systems are in use that require more stringent security than WLAN devices.
- It is assumed that the WLAN function is used in the countries in which this device is sold. There may be a risk of breaching statutory wireless communication regulations when using the device in other countries. Leica Camera AG shall not accept liability for such breaches.
- A general risk of unauthorized third party interception of wirelessly communicated data exists. We highly recommend that you activate encryption in the wireless access point settings to ensure data safety.
- Use of the device in areas where it can be exposed to magnetic fields, static electricity or other interferences, e.g. near a microwave oven, is to be avoided. RF transmissions may otherwise not reach the device.
- Using this device near devices like microwave ovens or wireless phones that use the 2.4 GHz RF band may negatively affect the performance of both devices.
- Connecting to wireless networks for the use of which no authorization has been granted may be illegal and should be avoided.
- The device will automatically search for wireless networks, once the WLAN function is enabled. A list, including networks you are not authorized to access, will be displayed (SSID: Network identifier for a WLAN network). Do not attempt to connect to third party network, as this could be construed as unauthorized access.
- The use of the WLAN-RF band between 5150 MHz and 5350 MHz is permitted only in enclosed spaces.

SAFETY REMARKS



The lens must not be touched directly or wiped with a cleaning cloth. Doing so may damage the lens coating, which would negatively affect the image quality.



The recommended distances (see illustration) must be adhered to in order to ensure sufficient ventilation for the device.



No objects must be placed over or in front of the lens, as the laser light would cause the object to heat up considerably. Fire hazard!



The Laser TV must not be switched on in ambient temperatures of below 5°C or above 40°C.



The Laser TV must not be set up in an enclosed space with limited ventilation. Doing so would cause the device to overheat.



Do not spill liquids onto the Laser TV. Doing so would cause severe damage. Do not leave drinks on or near the Laser TV!

Any manipulation of the device poses the hazard of electrocution. The device must not be disassembled, reassembled or repaired by unauthorized parties. The manufacturer warranty is void, once a device was disassembled, reassembled or repaired.

GENERAL INFORMATION

- Compatibility of third-party products, software and services is not guaranteed. We cannot be held liable for damage or loss incurred by the operation, use, or connection to incompatible devices or apps.
- The recording and rendering of content on this or other devices may require the permission of the rights holder of the content. It is the responsibility of the user to ensure that applicable copyright laws and regulations are complied with in the country of use. If in doubt, contact the rights holder.
- The flash icon inside an equilateral triangle notifies the user of the existence of an uninsulated, dangerous voltage inside the housing of the product, which may be potent enough to cause an electric shock.
- The exclamation mark inside an equilateral triangle notifies the user of important operating and maintenance instructions detailed in the device documentation provided.
- Desiccants and plastic bags must be stored out of the reach of children. Plastic bags pose a risk of suffocation and desiccants are a health hazard when swallowed.

OPERATING CONDITIONS AND USE

- This device is designed to display video and audio signals at home or in the office. It should not be used in areas with high ambient humidity or dust concentration. The warranty applies only where the device is operated according to its intended use.
- High ambient humidity or dust concentration may result in short circuiting.
- Do not expose the device to rain, moisture, dripping or splashing liquids, and do not place objects filled with water (such as vases or cups) on or over the device. The device must not be touched with wet hands.
- Do not install the device directly in front of an air conditioning unit.
- Following a change in the installation location with a significant change in ambient temperature, the device must not be switched on until all accumulated condensation has evaporated.
- Keep open flames (e.g. candles) away from the device. Keep the device away from sources of heat or high temperatures.
- Unplug the mains plug immediately if the device displays unusual behavior.
- In case of fire, the use of a CO₂ or powder fire extinguisher is recommended. Where this type of fire extinguishers is unavailable, the mains power supply must be disconnected before using water to extinguish the fire.
- Remove the mains power plug from the wall socket immediately if an object or water gets into the device. Please contact Leica Customer Care.
- Do not touch any of the interfaces or other openings on the device with a sharp or metallic object. Doing so could result in a short circuit, damage to the product, and electric shock.
- A Laser TV must never be placed on an uneven surface. The device could fall over and result in serious injury or death.
- Many injuries specifically injury to children can be prevented with the following simple safety measures: Only use cabinets or stands recommended by the manufacturer and/or furniture with the appropriate load bearing capacity to safely hold the device. The device must not protrude beyond the edge of the furniture. The device must not be installed on top of high pieces of furniture (e.g. a closet or bookcase) if the device or furniture cannot be anchored securely. The device must be placed directly on the piece of furniture (not on top of a cloth or similar). Children must be made aware of the danger posed by climbing on furniture (for example to reach the Laser TV or its remote control). These instructions also apply for later location changes.
- Children should not play unsupervised in the vicinity of the device. The device could fall over, be accidentally pushed from its base or pulled down and cause bodily injury. Children must not be permitted to stand on or climb onto the device.
- Once switched on, the device must never be left unattended.
- Caution with the handling of moving parts (injury hazard).

POWER SUPPLY

- Incorrect voltage input can damage the device. The device must only be connected to a power supply with the voltage and frequency stated on the type plate of the device and only via the mains cable provided.
- The power socket used must remain freely accessible.
- The device consumes power as long as it is connected to a power socket, including in standby mode.
- We recommend using a separate circuit for this device. Power sockets should never be overloaded with too many devices. Overloading power sockets and using multiple extension cables can be hazardous and may lead to electric shock and fires.
- The device should not be switched on again less than 5s after it was switched off. Frequent activation/deactivation of the power supply may impede the normal function of the device.

NETWORK UND MAINS CABLE

- The device must not be touched with wet hands.
- Mains cables must be routed in such a way as to protect them from kinking, sharp edges, chemicals and sources of high heat. Do not place heavy objects on top of the mains cable. A damaged mains cable poses a hazard of electrocution and a fire hazard.
- Pull the mains plug on the plug body only. Never pull it by the cable.
- The device must not be moved as long as it is connected to a power socket.Use only the mains cable provided for this device. A damaged or loose
- mains cable or a damaged power socket must not be used.
- Any connected aerial cables and the mains cable must be unplugged during a lightning storm. An electrical overload due to lightning strike can damage the device via the aerial cable and the mains cable.

VENTILATION AND HIGH TEMPERATURES



- The device must always be well ventilated. A space of at least 20 cm on both sides and of 15 cm on the back of the device must always be main-tained to ensure optimal air circulation.
- Excessive heat and insufficient ventilation can result in the premature failure of some electric components and may pose a fire hazard.
- The air vents must be unobstructed at all times.
- Do not touch the device while it is running or just after it has been switched off, as it can be very hot.
- Do not insert any foreign objects into the air vents!

REMOTE CONTROL BATTERIES

- Only the battery type stated and described in this manual must be used. Any improper use of the batteries or the use of unapproved battery types may result in an explosion!
- Incorrectly inserted batteries can leak, corrode, or explode.
- Batteries must only ever be replaced with the same battery type. Do not mix depleted with fresh batteries or with different battery types.
- Do not expose the batteries to direct sunlight, heat, humidity or moisture for prolonged periods of time. They must not be placed in a microwave oven or a high-pressure container as this would pose a fire or explosion hazard!
- Never dispose of batteries in fire and never attempt to heat, recharge, dismantle or break open a battery.
- Applicable disposal regulations must be complied with.
- Depleted batteries must never be disposed of in household waste as they contain toxic materials that are harmful to the environment.
- Remove the batteries from the housing if you will not be using the product for an extended period of time. In case of battery leakage, the battery compartment must be wiped clean with a cloth.
- Please do not use alkaline batteries, standard (carbon zinc) batteries or rechargeable (NiCd, NiMH, etc.) batteries.
- Batteries must always be stored out of the reach of children. Batteries must never be left lying around unattended, as they could be swallowed by children or pets. Batteries can cause suffocation when swallowed. A swallowed battery can additionally cause severe internal injuries or death.

FIRST AID

- Battery fluid may cause blindness if it comes into contact with the eyes. Rinse the eyes thoroughly with clean water immediately. Avoid rubbing. Seek medical attention immediately.
- Leaked battery fluid poses an injury hazard when it comes in contact with clothing or skin. Rinse the affected areas thoroughly with clean water.

GROUNDING OF THE HOUSE AERIAL

• Where a house aerial is to be used, the aerial system must be appropriately protected against overvoltage and static discharge.

VOLUME

- Loud music and noise can cause irreparable damage to hearing. Extreme volumes should be avoided, especially during long-term exposure and when using headphones.
- Reduce the volume immediately or avoid using headphones for a while if you experience tinnitus or pain.

WARNINGS REGARDING THIS LASER PRODUCT

Attention

- This device comes with a laser module. Do not disassemble or modify the device in any way. Doing so may pose injury hazards. Emitting laser radiation may pose a serious health risk.
- Never look directly into the lens while the device is operational. Never look directly into the emitted light beam! Doing so may cause severe damage to your eyes or permanent blindness!
- RG2: Never look directly into the emitted light beam! IEC 62471-5: 2015
 - CLASS 1 Laser PRODUCT
- $\lambda = 459 471 \text{ nm} / 519 531 \text{ nm} / 635 651 \text{ nm}$
- Any operation not described in this manual or any alterations made to the device may result in hazardous radiation exposure.
- Eye protection with an optical density of 4 or more (wavelength 459-651 nm) must be worn if this unit requires repair.



GENERAL INFORMATION

- New products and materials may release chemicals into the air through evaporation. For the initial first few hours of operation, the device can therefore generate some odor. This is caused by some of the device components heating up for the first time. All materials used fully comply with environmental requirements and regulations. The vapors responsible for the odor will diminish over time. We recommend running the machine in a well ventilated environment for some time before its actual initial use.
- All data, including personal information, may be changed or deleted due to incorrect or accidental operation, static discharge, accidents, malfunctions, repairs and other actions. Leica Camera AG does not accept liability for direct or consequential damage due to the manipulation or destruction of data and personal information.

CARE AND STORAGE

- Do not touch the device while it is running or just after it has been switched off, as it can be very hot.
- Do not wipe down the device with oil, as it could corrode surfaces or damage the coating.
- Prolonged direct contact with rubber or ethylene products can contaminate this device.
- The lens must not be touched directly or wiped with a cleaning cloth. Use a dust blower to remove dust from the lens. Grease, dirt and fingerprints must be carefully cleaned off by a professional using an optical cleaning cloth, lens paper, or professional cleaning solutions. Otherwise the optical film on the lens can be destroyed and result in a negative impact on the image quality.
- The device must always be switched off and the mains cable must be disconnected before cleaning.
- The device and the remote control should always be cleaned using a soft, moist, clean, naturally dyed cloth. Please do not use any chemicals.
- The surfaces or glass components of the device can be damaged or even destroyed if the device is exposed to insect repellents, solvents, or other volatile substances.
- During cleaning, no water or other liquids must be sprayed or poured directly onto the device. Doing so would cause severe damage.
- The mains plug can be cleaned regularly with a dry cloth.
- The device consumes power as long as it is plugged into a power socket, including in standby mode. The mains plug and all connected aerial cables

must be unplugged if the device will be left unattended for an extended period of time.

• The mains plug is used as a disconnect device. It must be easily accessible at all times.

MAINTENANCE AND REPAIR

• The housing must not be opened to avoid the hazard of electrocution. The device does not contain any parts the user can maintain autonomously. Repairs must only be carried out by authorized workshops.

WARRANTY

In addition to your statutory warranty rights regarding your retailer, you will receive an additional Leica Camera AG product warranty valid from the date of purchase from an authorized Leica retailer. Previously, the product warranty was included in the packaging with the product. As a new service, the product warranty will from now on only be available online. You will be able to review the warranty conditions for your product at any time, without having to search for the document. Please note that this new policy applies only for products that are no longer delivered with a hardcopy product warranty included in the delivery. Any products still delivered with the warranty document remain governed exclusively by that document. For more information regarding the warranty scope, warranty services, and limitations, please visit: https://war-ranty.leica-camera.com



- **1** Status LED
- Remote control receiver
- **Eye protection sensor**
- 4 Main switch

Attention

The cover opens/closes automatically when powering On or Off. The movement of the cover must not be impeded by objects or fingers, etc. Otherwise there could be damage to the device or personal injury.

5 Lens with laser

Attention

Never look directly into the lens while the device is operational. Never look directly into the emitted light beam! Doing so may cause severe damage to your eyes or permanent blindness!

- 6 Foreign body sensor
- Ventilation grille
- Service port

2 Ethernet port



Note

• A router is needed to establish an Internet connection.

10 Service port

11 Slot for CI+ module



12 Headphone output

Caution

• Excessive sound pressure from headphones can cause hearing loss.

13 Aerial port 1

Power supply for satellite aerial (13/18 V, max. 0.5 A)



14 Aerial port 2

Suitable for aerial cables (75Ω) for VHF/UHF aerials



15 HDMI ports for external devices

16 USB port

17 Audio output

· · · · ·





REMOTE CONTROL



1	ပံ button Laser TV On/Off
2	INFO button Information display On/Off
3	INPUT button Input source selection
4	Microphone for voice control
	Note This function is only supported in some countries or regions
5	Number pad Direct channel selection or number input
6	GUIDE button Channel list display
Z	CH.LIST button Program preview
8	Function buttons
9	E button Show menu
10	▶ II button Start/Stop playback
11	 ▲ / ▼ / ◄ / ► (directional buttons) Menu navigation System settings adjustment
12	DK button Confirm selection
13	5 button Go back one step
14	EXIT button Exit the menu
15	Volume
16	☆ button Display Home screen
17	CH button Change channel
18	✿ button Mute On/Off
19	TEXT button Teletext function On/Off
20	₽ button Voice control On/Off
	Note • This function is only supported in some countries or regions
21	Media mode Display of available network devices and devices connected via USE This mode allows quick access to own images/music/videos.
22	Quick access to apps
	Note This function may vary depending on country and/or region.

CHANGING THE BATTERIES

Please note the information provided in the section "Safety Remarks" for the handling of batteries.

- Press the marking on the underside
 The battery compartment unlocks.
- Slide open the battery compartment cover as shown in the illustration
- Insert two AAA batteries
- Ensure correct battery polarity.
- Slide closed the battery compartment cover as shown in the illustration



Note

• The remote control should not be used if it is very warm or even hot.

REMOTE CONTROL WORKING RANGE

The remote control operates correctly up to a distance of 8 m from the Laser TV. At a distance of 6 m, the remote control can be tilted to an angle of $\pm 30^{\circ}$ (horizontal) or $\pm 15^{\circ}$ (vertical). This angle is covered via infrared if the remote control was not paired.

PAIRING THE REMOTE CONTROL

- Switch on the device
- ► Keep the remote control within a 3 m radius of the device
- ▶ Press and hold the button for at least 3 s
 - The pairing process will begin.
 - A message will appear in the display area to indicate whether pairing was successful or unsuccessful.

Notes

- In case of an unknown error in the remote control, the reason could be a connection error. A new pairing attempt may resolve the cause of the error.
- In case of an unknown error in the remote control, the error may sometimes be resolved by removing the batteries and then pressing and holding any button for 1–2 s.
- Pairing will not be successful if the Laser TV is in standby mode.

BEFORE INITIAL USE

New products and materials may release chemicals into the air through evaporation. For the initial first few hours of operation, the device can therefore generate some odor. This is caused by some of the device components heating up for the first time. All materials used fully comply with environmental requirements and regulations. The vapors responsible for the odor will diminish over time.

We recommend running the machine in a well ventilated environment for some time before its actual initial use.

MOUNTING THE SCREEN

Check the user manual of the product for information.

SETTING UP THE DEVICE

- This device should always be transported by two people.
- When handling the device, it must always be assured that the lens is protected.
- We recommend plugging in all cables on the back of the device before placing it in its final position.
- Ensure that all cables are plugged in correctly and in their correct ports.
- Loose cable connections can impact negatively on the image quality.

PICTURE GEOMETRY

Follow the steps below to align the picture of the Laser TV on the screen. Afterwards, you can still apply a geometric correction as a final tweak. The recommended sequence is as follows:

- 1. Align the lower edge of the image horizontally
- 2. Align the lower edge of the picture on the screen
- 3. Align the lower edge of the image to the width of the screen
- 4. Align the upper right corner
- 5. Align the upper left corner
- 6. Align the top edge of the image to the width of the screen

Attention

Never look directly into the lens while the device is operational. Never look directly into the emitted light beam! Doing so may cause severe damage to your eyes or permanent blindness!

Notes

- The dotted line depicts the position before alignment, the dark area the position after alignment.
- Use the wrench supplied for turning the adjustment feet in or out.
- We recommend turning the adjustment feet all the way in before beginning the alignment.

STEP 1 ALIGN THE LOWER EDGE OF THE IMAGE HORIZONTALLY

The lower edge of the image is lower on the left and higher on the right

▶ Turn the device anti-clockwise



The lower edge of the image is higher on the left and lower on the right

Turn the device clockwise



STEP 2

ALIGN THE LOWER EDGE OF THE PICTURE ON THE SCREEN

The image is shifted to the left

 Place the device slightly more to the right



The image is shifted to the right

Place the device slightly more to the left



Note

• The lower edge of the image should always remain parallel to the screen.

STEP 3

ALIGN THE LOWER EDGE OF THE IMAGE TO THE WIDTH OF THE SCREEN

The lower edge of the image is too wide

Place the device closer to the screen



The lower edge of the image is too narrow

Place the device further away from the screen

Note

• The lower edge of the image should always remain parallel to the screen.

STEP 4

ALIGN THE UPPER RIGHT CORNER

You may have to repeat the following steps several times when aligning the upper edge of the image, until both the upper and the lower edge of the image are parallel to the screen.

The upper edge of the image is too high on the

- right
- Turn the two levelling feet out on the right to the same height
- Turn the device anti-clockwise, until the lower edge of the image is once again parallel to the screen
- Repeat the process as necessary







The upper edge of the image is too low on the right

- Turn the two levelling feet in on the right to the same height
- Turn the device clockwise, until the lower edge of the image is once again parallel to the screen
- Repeat the process as necessary





STEP 5

ALIGN THE UPPER LEFT CORNER

<u>The upper edge of the image is too high on the</u> <u>left</u>

- Turn the two levelling feet out on the left to the same height
- Turn the device clockwise, until the lower edge of the image is once again parallel to the screen
- Repeat the process as necessary









The upper edge of the image is too low on the left

- Turn the two levelling feet in on the left to the same height
- Turn the device anti-clockwise, until the lower edge of the image is once again parallel to the screen
- Repeat the process as necessary





STEP 6

ALIGN THE TOP EDGE OF THE IMAGE TO THE WIDTH OF THE SCREEN

The top edge of the image is too wide

 Turn the two front levelling feet out a little, until the lateral edges of the image are parallel to the edges of the screen



The top edge of the image is too narrow

- Turn the two rear levelling feet out a little, until the lateral edges of the image are parallel to the edges of the screen
- Place the device slightly further away from the screen to enlarge the image to the width of the screen

Should the two rear levelling feet have reached their max. height and cannot be turned out more, then you can try turning in the two front levelling feet instead.





MEDIA SOURCES

NETWORK

CABLE CONNECTION (LAN)

 Connect the LAN port on the rear of the device with an external modem or router via a LAN cable (Ethernet Cat 5)



WIRELESS CONNECTION (WLAN)

The Laser TV can be connected wirelessly to a WLAN network. This will require a Wi-Fi router or a wireless modem.

- Access the setup assistant in the device menu
- Follow the instructions provided



Notes

- Using the device with wireless networks requires the activation of the integrated WLAN module. External USB network adapters are not supported.
- Connecting to a wireless network is a lot easier if the router used supports DHCP.
- The device supports the following security standards: WEP, WPA, WPA2.
- For optimal reception, the distance between router and the Laser TV should not exceed 10 m.

CI+ MODULES

The Laser TV supports the installation of CI+ modules.

- Switch off the device
- Connect the CI+ module complete with the chip card as per the arrow markings on the module and the chip card
- ▶ Then follow the instructions of the service provider to connect the CI+ card

Notes

- Depending on which channel you want to receive, you will have to source from the provider one CI+ module and one card.
- The CI+ module should not be repeatedly connected and disconnected, as this could damage the interface and cause errors.
- Cl+ is not supported in some countries and regions Please contact your retailer if you have any questions.

USB CONNECTION

When connecting an external drive or a USB hub, the power supply of the connected device should always be used. Exceeding the total power usage can result in damage. The max. permissible power usage of the USB 1.1 and USB 2.0 devices is 500 mA. The USB port supports a max. voltage of 5 V.

Note

• Some non-standard high-capacity drives may cause the Laser TV to reboot or self-lock if their surge current is greater than or equal to 1 A. This device does not support these types of external drives.

MENU SETTINGS

PROJECTION MODE

Depending on the positioning of the Laser TV relative to the screen, the image may have to be flipped or mirrored.

GEOMETRIC CORRECTION

AUTOMATIC

Automatic geometric correction is possible if the Laser TV and your mobile device are connected to the same WLAN network.

- Position the device
- You may have to adjust the height of the levelling feet to fit the entire projected image into the screen area (see p. 23)



- Access the menu function for automatic geometric correction
- Confirm automatic correction
- All previous data will be deleted.
- Ensure that the mobile device and the Laser TV are connected to the same network
- Select "Next" in the menu
- Scan the QR code on the screen with the mobile device
 - Automatic geometric correction begins.
 - An alignment grid appears on the screen.



- Tap "+" on the mobile device to record an image of the entire image area
 Best results are achieved with landscape recordings from a distance of approx. 3 m.
- ► Tap "Upload" on the mobile device
- The correction is executed.

MANUAL

During this correction process, points are moved using the remote control to align the projected image exactly with the screen.

- Use the directional buttons of the remote control to select the desired point
- Press the OK button
- Use the directional buttons to move the selected focus point
 - Press and hold: quick change.
 - Press and release: fine setting.
- Press the OK button
 - The setting is saved and you can proceed with the next point.

Returning to factory setting

Select the "Reset" button

Note

• Manual geometric correction is only available in specific device models and countries/regions

EYE PROTECTION MODE

Attention

Never look directly into the lens while the device is operational. Never look directly into the emitted light beam! Doing so may cause severe damage to your eyes or permanent blindness!

The eye protection mode prevents corneal damage due to accidental viewing of the light beam. The light output will be temporarily deactivated after a countdown of 5 s if anyone gets too close to the projector while it is running. We highly recommend keeping the eye protection mode activated at all times!

MENU OVERVIEW

Additional settings, including the network connection, can be configured under the menu item "Laser TV settings".

Language	Menu language	
TV Mode	Available selections: "Home Mode" or "Store Mode"	
Projection Mode	Various modes, depending on the placement of the Laser TV	
Wireless Network	Where an Ethernet connection is not possible or wanted, a WLAN connection can be set up under this menu item. A network can be added from the displayed list of networks, or a hidden network can be added.	
Country	The country, where the device will be used	
Time zone	The time zone, in which the device will be used	
Auto Geometric Correction	Automatic geometric correction via app will be executed, and any existing correction data will be overwritten	
End User License Agreement	The use of this device is governed by the end user license agreement. All smart functions of the device will remain deactivated if the end user license agreement is not accepted. All smart fun- ctions can be activated and deactivated individu- ally. The relevant data protection regulations and provisions are deemed accepted, once all smart functions are activated.	
Improved Display	The picture and sound mode can be automatically adapted to the displayed content (provided they are correctly identified by the automated content recognition service). This function is only available in specific device models and countries/regions	
Setup Screen for VIDAA Account	Linking the Laser TV to a VIDAA account.	

FAQ

In many cases, issues with the Laser TV can be rectified with a simple restart of the device. The following tips might be helpful if the problem persists after a restart.

Display It takes a few seconds for the image to be displayed after the device is switched on The TV initializes and searches for information about artier settings Wait until the device is ready The light output of the projector is too low and the operating indicator flashes red 5x The foreign body sensor has detected an object Remove the object Clean the foreign body sensor Sound and Display Clean the foreign body sensor flashes red 5x Clean the foreign body sensor Clean the foreign body sensor Sound and Display Ensure that the mains cable is connected correctly to a power socket. The device is connected to mains power if the LED lights up. No picture/no sound after connection on of an external source Connection problem Check the connection (correct output port on the source, cor- rect input port on the Laser TV) Picture is normal, but there is no sound Sound output is deactivated Check the volume setting Sound and/or picture are distorted or appear wavy Incorrect color setting Check, whether the color setting is set to 50 or higher Try various TV channels Sound and picture are blurred or fail intermittently No/bad reception Try various TV channels Sound and picture are blurred or fail intermittently Try back and white picture, or only a black and white picture, or only a black and white picture Try various TV channels	Problem	Possible causes to check	Troubleshooting suggestions	
It takes a few seconds for the image to be displayed after the device is singlawed after the device is singlawed after the device is a singlawed after the device is ready Wait until the device is ready The light output of the projector is too low and the operating indicator fashes red 5x The foreign body sensor has detected an object Remove the object Sound and Display The foreign body sensor is dirty Clean the foreign body sensor Clean the foreign body sensor Sound and Display Ensure that the mains cable is connected correctly to a power sockt. The device is connected to mains power if the LED lights up. No picture/no sound after connection of an external source Connection problem Check the connection (correct output port on the Laser TV) Sound is normal, but there is no picture, or only a black and white picture, or only a black and white picture are distorted Sound cortex cling Check, whether the color setting in again after 60s Sound and/or picture are distorted or appear wavy Interference from an electric device nearby activated Check, whether the color setting is set to 50 or higher No active reception Try vis disconnected from power supply Try visuing a connection problem in again after 60s Sound and/or picture are distorted or appear wav Interference from an electric device nearby active are electric devices or position them at a greater distance to the Laser TV is disconnected from power supply Try visuing TV channels <tr< th=""><th>Display</th><th>·</th><th></th></tr<>	Display	·		
The light output of the projector is to low and the operating indicator The foreign body sensor has detected an object Remove the object It foreign body sensor is dirty Clean the foreign body sensor Clean the foreign body sensor Sound and Display Ensure that the mains cable is connected correctly to a power socket. The device is connected to mains power if the LED lights up. No sound or no picture Laser TV is in standby mode Press the O button of the remote control No picture/no sound after connection or of an external source Connection problem Check the connection (correct output port on the source, correct pout port on the Laser TV) Picture is normal, but there is no picture, or only a black and white picture, or only a black and white picture ere distorted Sound output is deactivated Check, whether the device is set to mute Sound and/or picture are distorted Incerrect color setting Check, whether the color setting is set to 50 or higher Sound and picture are blurred or fail interference from an electric device nearby Switch off all nearby electric devices or position them at a greater distorted Sound and picture are blurred or fail interference from an electric device nearby Try connecting to another power socket Sound and picture are blurred or fail interference from power supply Try connecting to another power socket Sound and picture are blurred or fail interfe	It takes a few seconds for the image to be displayed after the device is switched on	The TV initializes and searches for information about earlier settings	Wait until the device is ready	
too low and the operating indicator flashes red 5x The foreign body sensor is dirty Clean the foreign body sensor Sound and Display Ensure that the mains cable is connected correctly to a power socket. No sound or no picture Laser TV is in standby mode Press the O button of the remote control No picture/no sound after connection on of an external source Connection problem Press the O button of the remote control No picture/no sound after connection on of an external source Volume is set too low Check the connection (correct output port on the source, cor- rect input port on the Laser TV) Picture is normal, but there is no picture, or only a black and white picture Software or system crash Disconnect the mains cable from the power socket and plug it in again after 60s Sound and/or picture are distorted or appear wavy Interference from an electric device nearby Switch of all nearby electric devices or position them at a gre- ater distance to the Laser TV Sound and picture are buirred or fail intermittently No/bad reception When using an external aerial: check the direction, position and connection of the aerial Sound and picture are buirred or fail intermittently Temperature changes during operation may cause the device to slightly expand or shrink, which may cause clicking sound Try connecting the aerial; check the direction, position and connection of the aerial The plastic housing i	The light output of the projector is	The foreign body sensor has detected an object	Remove the object	
Sound and Display Ensure that the mains cable is connected correctly to a power socket. No sound or no picture Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket. No picture/no sound after connection of an external source Connection problem Press the O button of the remote control No picture/no sound after connection of an external source Volume is set too low Check the connection (correct output port on the source, correct input port on the Laser TV) Picture is normal, but there is no sound Sound output is deactivated Check, whether the device is set to mute Sound and/or picture are distorted or appear wavy Software or system crash Disconnect the mains cable from the power socket and plug it in again after 60s Sound and picture are blurred or fail Interference from an electric device nearby Switch off all nearby electric devices or position them at a greater distance to the Laser TV Sound and picture are blurred or fail No/bad reception Try connecting to another power socket The plastic housing is emitting a clicking sound Temperature changes during operation may cause the channel Adjust the alignment of the aerial, reset the channel, or fine-ture the channel The remote control is not functioning Laser TV is disconnected from power supply That is completely normal and the device is in perfec	too low and the operating indicator flashes red 5x	The foreign body sensor is dirty	Clean the foreign body sensor	
No sound or no picture Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket. The device is connected to mains power if the LED lights up. No picture/no sound after connection of an external source Connection problem Check the connection (correct output port on the source, correct input port on the Laser TV) Picture is normal, but there is no sound Sound output is deactivated Check the volume setting Sound source Sound output is deactivated Check, whether the device is set to mute Sound a normal, but there is no sound Software or system crash Disconnect the mains cable from the power socket and plug it in again after 60 s Picture Incorrect color setting Check, whether the color setting is set to 50 or higher No active reception Try various TV channels Switch off all nearby electric devices or position them at a greater distance to the Laser TV Sound and picture are blurred or fail intermittently No/bad reception Try connecting to another power socket Sound and picture are blurred or fail intermittently No/bad reception When using an external aerial: check the direction, position and connection of the aerial Adjust the alignment of the aerial, reset the channel, or fine-turne the channel Temperature changes during operation may causes the channel The remote contr	Sound and Display			
Laser TV is in standby modePress the Ø button of the remote controlNo picture/no sound after connectionConnection problemCheck the connection (correct output port on the source, correct input port on the Laser TV)Picture is normal, but there is no soundVolume is set too lowCheck the volume settingSound output is deactivatedCheck, whether the device is set to muteSound is normal, but there is no picture, or only a black and white pictureSoftware or system crashDisconnect the mains cable from the power socket and plug it in again after 60sSound and/or picture are distorted or appear wavyIncorrect color setting No active receptionCheck, whether the color setting is set to 50 or higher Try various TV channelsSound and picture are blurred or fail intermittentlyNo/bad receptionTry connecting to another power socketSound and picture are blurred or fail clicking soundNo/bad receptionWhen using an external aerial: check the direction, position and connection of the aerial, reset the channel, or fine-tu- ne the channelThe plastic housing is emitting a clicking soundTemperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking soundThat is completely normal and the device is in perfect working orderThe remote control is not functioningLaser TV is disconnected from power supplyEnsure that the mains cable is connected correctly to a power socket.	No sound or no picture	Laser TV is disconnected from power supply	Ensure that the mains cable is connected correctly to a power socket.	
Laser IV is in standby modePress the O button of the remote controlNo picture/no sound after connectio on of an external sourceConnection problemCheck the connection (correct output port on the Laser TV)Picture is normal, but there is no soundVolume is set too lowCheck the volume settingSound output is deactivatedCheck, whether the device is set to muteSound s normal, but there is no picture, or only a black and white pictureSoftware or system crashDisconnect the mains cable from the power socket and plug it in again after 60'sSound and/or picture are distorted or appear wavyIncorrect color settingCheck, whether the color setting is set to 50 or higherSound and picture are blurred or fail intermittentlyNo/bad receptionTry connecting to another power socketSound and picture are blurred or fail clicking soundNo/bad receptionWhen using an external aerial: check the direction, position and connection of the aerialThe plastic housing is emitting a clicking soundTemperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking soundThat is completely normal and the device is in perfect working orderThe remote control is not functioningLaser TV is disconnected from power supplyEnsure that the mains cable is connected correctly to a power socket.			Ine device is connected to mains power if the LED lights up.	
No picture/no sound after connection problem Check the connection (correct output port on the source, correct input port on the Laser TV) Picture is normal, but there is no sound Sound output is deactivated Check, whether the device is set to mute Sound is normal, but there is no picture, or only a black and white picture Software or system crash Disconnect the mains cable from the power socket and plug it in again after 60s Sound and/or picture are distorted or appear wavy Incerrect color setting Check, whether the color setting is set to 50 or higher Sound and picture are blurred or fail intermittently Interference from an electric device nearby Switch off all nearby electric devices or position them at a greater distance to the Laser TV Laser TV is disconnected from power supply Try connecting to another power socket When using an external aerial: check the direction, position and connection of the aerial The plastic housing is emitting a clicking sound Temperature changes during operation may cause the device is in perfect working order That is completely normal and the device is in perfect working order The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.		Laser IV is in standby mode	Press the ${f O}$ button of the remote control	
Picture is normal, but there is no sound Volume is set too low Check the volume setting Sound output is deactivated Check, whether the device is set to mute Sound is normal, but there is no picture, or only a black and white picture Software or system crash Disconnect the mains cable from the power socket and plug it in again after 60s Incorrect color setting Check, whether the color setting is set to 50 or higher No active reception Try various TV channels Sound and/or picture are distorted or appear wavy Interference from an electric device nearby Switch off all nearby electric devices or position them at a gre- ater distance to the Laser TV Sound and picture are blurred or fail intermittently No/bad reception Try connecting to another power socket The plastic housing is emitting a clicking sound Temperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking sound That is completely normal and the device is in perfect working order The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.	No picture/no sound after connecti- on of an external source	Connection problem	Check the connection (correct output port on the source, correct input port on the Laser $TV)$	
soundSound output is deactivatedCheck, whether the device is set to muteSound is normal, but there is no picture, or only a black and white pictureSoftware or system crashDisconnect the mains cable from the power socket and plug it in again after 60sIncorrect color settingIncorrect color settingCheck, whether the color setting is set to 50 or higherSound and/or picture are distorted or appear wavyInterference from an electric device nearbySwitch off all nearby electric devices or position them at a gre- ater distance to the Laser TVSound and picture are blurred or fail intermittentlyNo/bad receptionTry connecting to another power socketSound and picture are blurred or fail intermittentlyNo/bad receptionWhen using an external aerial: check the direction, position and connection of the aerialThe plastic housing is emitting a clicking soundTemperature changes during operation may cause th device to slightly expand or shrink, which may cause a clicking soundThat is completely normal and the device is in perfect working orderThe remote control is not functioningLaser TV is disconnected from power supplyEnsure that the mains cable is connected correctly to a power socket.	Picture is normal, but there is no	Volume is set too low	Check the volume setting	
Sound is normal, but there is no picture, or only a black and white pictureSoftware or system crashDisconnect the mains cable from the power socket and plug it in again after 60spictureIncorrect color settingCheck, whether the color setting is set to 50 or higherNo active receptionTry various TV channelsSound and/or picture are distorted or appear wavyInterference from an electric device nearbySwitch off all nearby electric devices or position them at a gre- ater distance to the Laser TVSound and picture are blurred or fail intermittentlyNo/bad receptionWhen using an external aerial: check the direction, position and connection of the aerial Adjust the alignment of the aerial, reset the channel, or fine-tu- ne the channelThe plastic housing is emitting a clicking soundTemperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking soundThat is completely normal and the device is in perfect working orderThe remote control is not functioningLaser TV is disconnected from power supplyEnsure that the mains cable is connected correctly to a power socket.	sound	Sound output is deactivated	Check, whether the device is set to mute	
picture Incorrect color setting Check, whether the color setting is set to 50 or higher No active reception Try various TV channels Sound and/or picture are distorted or appear wavy Interference from an electric device nearby Switch off all nearby electric devices or position them at a gre- ater distance to the Laser TV Sound and picture are blurred or fail intermittently No/bad reception When using an external aerial: check the direction, position and connection of the aerial The plastic housing is emitting a clicking sound Temperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking sound That is completely normal and the device is in perfect working order The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.	Sound is normal, but there is no picture, or only a black and white	Software or system crash	Disconnect the mains cable from the power socket and plug it in again after 60s	
No active reception Try various TV channels Sound and/or picture are distorted or appear wavy Interference from an electric device nearby laser TV is disconnected from power supply Switch off all nearby electric devices or position them at a gre- ater distance to the Laser TV Sound and picture are blurred or fail intermittently No/bad reception When using an external aerial: check the direction, position and connection of the aerial The plastic housing is emitting a clicking sound Temperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking sound That is completely normal and the device is in perfect working order The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.	picture	Incorrect color setting	Check, whether the color setting is set to 50 or higher	
Sound and/or picture are distorted or appear wavy Interference from an electric device nearby Switch off all nearby electric devices or position them at a gre- ater distance to the Laser TV Sound and picture are blurred or fail intermittently Interference from an electric device nearby Try connecting to another power socket No/bad reception When using an external aerial: check the direction, position and connection of the aerial Adjust the alignment of the aerial, reset the channel, or fine-tu- ne the channel The plastic housing is emitting a clicking sound Temperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking sound That is completely normal and the device is in perfect working order The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.		No active reception	Try various TV channels	
Laser TV is disconnected from power supply Try connecting to another power socket Sound and picture are blurred or fail intermittently No/bad reception When using an external aerial: check the direction, position and connection of the aerial The plastic housing is emitting a clicking sound Temperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking sound That is completely normal and the device is in perfect working order The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.	Sound and/or picture are distorted or appear wavy	Interference from an electric device nearby	Switch off all nearby electric devices or position them at a greater distance to the Laser TV	
Sound and picture are blurred or fail No/bad reception When using an external aerial: check the direction, position and connection of the aerial Intermittently Adjust the alignment of the aerial, reset the channel, or fine-tune the channel The plastic housing is emitting a clicking sound Temperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking sound That is completely normal and the device is in perfect working order The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.		Laser TV is disconnected from power supply	Try connecting to another power socket	
Adjust the alignment of the aerial, reset the channel, or fine-tu- ne the channelThe plastic housing is emitting a clicking soundTemperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking soundThat is completely normal and the device is in perfect working orderThe remote control is not functioningLaser TV is disconnected from power supplyEnsure that the mains cable is connected correctly to a power socket.	Sound and picture are blurred or fail intermittently	No/bad reception	When using an external aerial: check the direction, position and connection of the aerial	
The plastic housing is emitting a clicking soundTemperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking soundThat is completely normal and the device is in perfect working orderThe remote control is not functioningLaser TV is disconnected from power supplyEnsure that the mains cable is connected correctly to a power socket.			Adjust the alignment of the aerial, reset the channel, or fine-tu- ne the channel	
The remote control is not functioning Laser TV is disconnected from power supply Ensure that the mains cable is connected correctly to a power socket.	The plastic housing is emitting a clicking sound	Temperature changes during operation may cause the device to slightly expand or shrink, which may cause a clicking sound	That is completely normal and the device is in perfect working order	
The device is connected to mains newer if the LED lights up	The remote control is not functioning	Laser TV is disconnected from power supply	Ensure that the mains cable is connected correctly to a power socket.	
No betteries inserted or betteries depleted		No bottorios inserted or bottorios deploted	Peolese the betteries	
The batterise are incorrectly incorrectly incorrect.		The batteries are incorrectly incorted	Chock polarity and insert the batteries correctly	

TECHNICAL DATA

Model Name	Leica Cine 1 - 80	Leica Cine 1 - 100	Leica Cine 1 - 120
Active picture diagonal	80"	100"	120"
Image resolution	3840x 2160px (4K)	3840x 2160px (4K)	3840x 2160px (4K)
Audio output strength	2×25W	2 x 25 W	2×25W
Power supply	120-240V - 50/60Hz	120-240V - 50/60Hz	120-240V - 50/60Hz
Energy consumption			
Normal operation	max 200 W	max. 300W	max. 300W
Power usage in network standby mode (Wake on LAN)	≤2.0W	≤2.0W	≤2.0W
Energy consumption in standby mode	≤0.5W	≤0.5W	≤0.5 W
HDMI port	RGB / 60Hz (640x480, 800x600, 1024x768) YUV / 60Hz (480i, 480p, 720p, 1080i, 1080p) YUV / 50Hz (576i, 720p, 1080i, 1080p) 3840x2160 / 24Hz, 3840x2160 / 25Hz, 3840x2160 / 30Hz, 3840x2160 50Hz, 3840x2160 60Hz	RGB / 60Hz (640x480, 800x600, 1024x768) YUV / 60Hz (480i, 480p, 720p, 1080i, 1080p) YUV / 50Hz (576i, 720p, 1080i, 1080p) 3840x2160 / 24Hz, 3840x2160 / 25Hz, 3840x2160 / 30Hz, 3840x2160 50Hz, 3840x2160 60Hz	RGB / 60Hz (640x480, 800x600, 1024x768) YUV / 60Hz (480i, 480p, 720p, 1080i, 1080p) YUV / 50Hz (576i, 720p, 1080i, 1080p) 3840x2160 / 24Hz, 3840x2160 / 25Hz, 3840x2160 / 30Hz, 3840x2160 50Hz, 3840x2160 60Hz
Receiver system Analog Digital	PAL-D/K, B/G, I, SECAM-D/K, B/G DVB-T/T2, DVB-C, DVB-S/S2	PAL-D/K, B/G, I, SECAM-D/K, B/G DVB-T/T2, DVB-C, DVB-S/S2	PAL-D/K, B/G, I, SECAM-D/K, B/G DVB-T/T2, DVB-C, DVB-S/S2
Wi-Fi	IEEE802.11 a/b/g/n/ac	IEEE802.11 a/b/g/n/ac	IEEE802.11 a/b/g/n/ac
WLAN module Model Frequency range Output (max.)	TX7921AU64T 2.4-2.4835 GHz 5.15-5.85 GHz 5.9-6.425 GHz 2.4-2.4835 GHz, 17 dBm 5.15-5.25 GHz, 14 dBm 5.25-5.35 GHz (DFS Band), 14 dBm 5.49-5.71 GHz (DFS/TPC Band), 14 dBm 5.725-5.85 GHz (for non-EU countries),	TX7921AU64T 2.4-2.4835 GHz 5.15-5.85 GHz 5.9-6.425 GHz 2.4-2.4835 GHz, 17 dBm 5.15-5.25 GHz, 14 dBm 5.25-5.35 GHz (DFS Band), 14 dBm 5.49-5.71 GHz (DFS/TPC Band), 14 dBm 5.725-5.85 GHz (for non-EU countries),	TX7921AU64T 2.4-2.4835GHz 5.15-5.85GHz 5.9-6.425GHz 2.4-2.4835GHz, 17dBm 5.15-5.25GHz, 14dBm 5.25-5.35GHz (DFS Band), 14dBm 5.49-5.71GHz (DFS/TPC Band), 14dBm 5.725-5.85GHz (for non-EU countries),
	14 dBm 5.9-6.425 GHz, 14 dBm	14 aBm 5.9-6.425 GHz, 14 dBm	14 aBm 5.9-6.425 GHz, 14 dBm
Bluetooth	BT 5.0	BT 5.0	BT 5.0
Bluetooth module Model Frequency range Output (max.)	TX7921AU64T 2.4-2.4835 GHz 2.4-2.4835 GHz, Class1, 6 dBm	TX7921AU64T 2.4-2.4835GHz 2.4-2.4835GHz, Class1, 6dBm	TX7921AU64T 2.4-2.4835GHz 2.4-2.4835GHz, Class1, 6dBm
Remote control Model Frequency range Output (max.)	ERF6A64/ERF6B64H 2.4-2.4835GHz 2.4-2.4835GHz, 5dBm	ERF6A64/ERF6B64H 2.4-2.4835GHz 2.4-2.4835GHz, 5dBm	ERF6A64/ERF6B64H 2.4-2.4835GHz 2.4-2.4835GHz, 5dBm
Operating conditions	Temperature: 5°C-40°C Humidity: 20%-80% RH Atmospheric pressure: 86kPa-106kPa	Temperature: 5°C-40°C Humidity: 20%-80% RH Atmospheric pressure: 86kPa-106kPa	Temperature: 5°C-40°C Humidity: 20%-80% RH Atmospheric pressure: 86kPa-106kPa
Weight (console only)	13.6 kg	15.1 kg	15.1 kg
Dimensions LxWxH (console only)	600 x 378 x 149 mm	600 x 378 x 149 mm	600 x 378 x 149 mm

Subject to changes in design and model features.

LEICA CUSTOMER CARE

Please contact the Customer Care department of Leica Camera AG for the maintenance of your Leica equipment and for help and advice regarding Leica products and how to order them. You can also contact the Customer Care department or the repair service provided by your regional Leica subsidiary for repairs or warranty claims.

LEICA GERMANY

Leica Camera AG

Leica Customer Care Am Leitz-Park 5 35578 Wetzlar Germany

Phone: +49(0)6441 2080-189 Fax: +49(0)6441 2080-339 Email: customer.care@leica-camera.com https://leica-camera.com

YOUR NATIONAL REPRESENTATIVE

You will find the Customer Care department responsible for your locality on our homepage:

https://leica-camera.com/en-US/contact