

CLAUSS



Rodeon
modular
First Steps

12/01/13

This quick guide is supposed to lead you quickly to the first readiness for taking panoramic pictures. It does not replace the operation manual which is included in pdf-format on the CD. We recommend to read through and follow the operation manual before the initial startup.

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1 Introduction and intended purpose

Many thanks for deciding for the CLAUSS RODEON modular. We are sure that you will have much pleasure with this purchase if you first read through these instructions and follow them afterwards.

The RODEON modular is an automatic pan-and-tilt-head for segmented panoramic photography, wide-angle shots, 360° and multirow sphere panoramic photography.

The specified working orientation is in principle standing (under special conditions a hanging operation is allowed – see below) on a photographic or extra high tripod.

A lying operation is not permissible.

For such special applications or for especially heavy or large cameras, special designs are available on request.

The RODEON modular is not designed for working under hard conditions like bad weather (rain, storm...) or continuous run in the open air.

1.1 Safety notes:

During the operation there are mass-shiftings and acceleration-strengths necessitated by the function. It is to be guaranteed therefore, that the installation on a sufficiently stable tripod is secure against overturn. Guarantee that no possible collision of the attached camera with the device itself or in interaction with other objects, for example cables or lamps, occurs!

Slight tripods are generally unsuitable.

The lock of the accumulator is only designated for the standing working orientation. For the hanging operation the accumulator must be secured!

Always remove the accumulator first before taking off the device from the tripod!

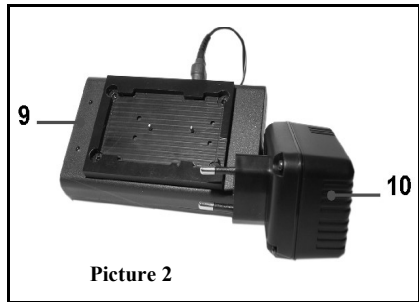
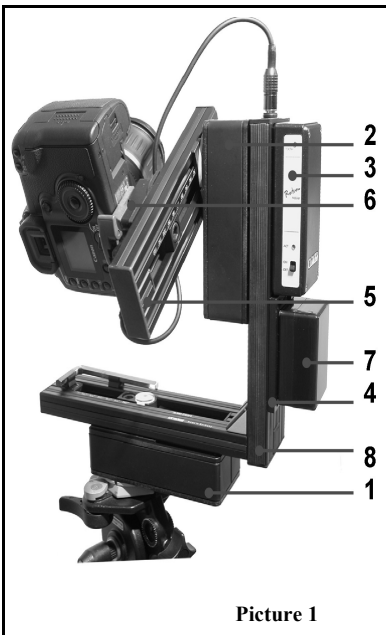
The accumulator is only allowed to be charged with the original accessories, plug-in power supply unit or optional vehicle power supply adapter under supervision.

For damages, also secondary damages, which are caused by non-observance of these tips at our product, other objects or persons, the manufacturer does not take over any liability.

2 Device definition

The components (the camera shown is not included in the scope of delivery)

- pan-and-tilt-head (8) with horizontal- (1) and vertical-drive (2), transceiver-module (3), adapter for the accumulator (4), camera-bar (5) and quick release plate adapter with camera-plate (6) - (1 bis 5) mounted readily as an unit!
- quick interchangeable accumulator (7)
- charging-adapter (9)
- plug-in power supply unit (10)
- antenna
- transportation case
- user-software and operation manual on CD
- PDA (11) with USB-cable, plug-in power supply unit and operation manual (optional)



3 Getting started

3.1 Handling the RODEON modular

- Take your RODEON modular out of the transportation case and attach a suitable quick release camera-plate (in the tripod's scope of delivery) to the horizontal drive (picture 1 page 4). Afterwards, put the RODEON modular on a not too slight and secure against overturn placed tripod. Pay attention to a correct and fixed connection between RODEON modular and tripod.
- Please attach your camera as shown with the objective upturned if the camera-bar stands in „packing“-position. For mounting, please use the supplied quick release camera-adapter. Please pay special attention to the safety notes on page 3 of this instruction.
- Screw the antenna onto the transceiver-modul
- Put in the accumulator as shown in picture 5 on page 6.
- Complete your system with the remote-control-connection between your camera and RODEON modular. For doing so, connect the remote-control-cable that is suitable for your camera to the vertical-drive (mini-DIN-connector) and to the remote-control-connector of your camera. Please ensure that the camera is able to move with the assigned cable.
Please note: For some cameras, the remote-control-connector must be activated by the camera-menu.
- Turn on your RODEON modular and run the controlling software on a PDA or Windows PC/Laptop.
- After setting up the Bluetooth-connection (please refer to the operation manual) the camera-bar moves around 90° to the basic position. The RODEON modular is now ready for your first photo.
- To take optimal panoramic photos, the Nodalpoint has to be adjusted. Please read more about this procedure in chapter 6.2 of the operation manual.



Picture 4



Picture 5

3.2 Control elements at the transceiver

ON/OFF: For switching the device on and off. As there is in most cases only one type of power supply used, the device is off in the respective opposite switch position.

Please quit the user-software (PDA, PC, Laptop) before switching off the device to initiate the device moving the camera-bar into the „packing“-position. To save the accumulator, the device should be switched off in case of longer breaks.

ACT: Indicator to check the function

- Blue LED: Status Bluetooth
- Yellow LED: Status RS232 via Mini-DIN-connector
- Green LED: Status external data bus (e.g. USB-Hub module)

flashing light sleep-mode/ready to work
constant flashing light..... data connection successful

4 Installation of the controlling software

4.1. Installation of the controlling software on a PDA (Handheld)

Requirements:

- *Hardware:* We recommend types of PDA that we tested ourselves. You can purchase them from us with already installed software.
 - Bluetooth class 1 or 2
 - Aspect ratio 4:3 (Touchscreen)
 - Type of processor: ARM V.4 or ARM V.5
 - 2MByte free flash storage
- *Software:* Windows Mobile 2003 / 5 / 6.x

With the controlling software „RODEONmodular“ contained in the scope of delivery you can control the VR head just like using a remote control or by programming complete motions with camera shutter releases. Free updates are available at our download center at <http://www.dr-clauss.de>.

Caution: The functionality can not be guaranteed for all PDA systems.

You can get more information about using the PDA in the corresponding operation manual that is included in the provided product-CD. It is pointed out insistently, that using the PDA is much different to using a PC with MS-Windows.

The currently offered Pocket-PC's/ PDA's are partially very much different in their storage management. Often, a hardware reset or removal of the accumulator is causing the lost of all data that was not explicitly copied into the ROM of the device. The ROM (read only memory) is understood as the storage that keeps it's data even without power supply. In this case we recommend to copy the installation files into the ROM in order to be able to have access to them in every situation.

Please follow the further instructions to install the controlling software „RODEON-modular“:

1. Switch on the PDA and if needed, proceed the common procedure (e.g. adjusting the touchscreen etc.).
2. Switch to the directory with the installation files by using the Fileexplorer (perhaps switch to „My Device“ and „ROM Storage“ or „Recovery“)
3. Activate the installation files in the order
„CLAUSS_RootCA.cab“ (not available in Windows Mobile 2003)
„RodeonAPI.cab“
„RODEONmodular_GUI.cab“
and follow the instructions
The controlling software is now installed and ready to use.
Please note: Some types of PDA allow linking the programs by quick buttons .
If this function is not supported, such a linking can be placed on the desktop for achieving a faster operating principle.
4. Activate the Bluetooth interface of the PDA (in most cases by clicking on the corresponding symbol bottom right)
5. Search for new Bluetooth-devices by using the Bluetooth-manager (often by using „new“ and „search Bluetooth device“.
6. After the device was found, a symbol with the designation „RODEONmodular“ appears. Please choose this symbol by clicking on it and type in the pass word **CLAUSS** (in capitals!) and confirm with Enter/Return.
7. Please activate „Generic Serial“ and continue!
8. Confirm with „ready“ and close the current window by clicking on the cross top right. The installation is completed now.

After the start of the controlling software the PA automatically connects with the VR head and work can be started.

4. 2. Installation of the controlling software on a Windows-PC

- System requirements:**
- Windows 2000/XP/Vista
 - Desktop-PC/Laptop
 - Bluetooth Class 1 or 2 (wireless connection)
 - RS232-/USB-interface (wired connection)
 - CD-ROM drive

You can find the program „RODEONmodular“ on the provided CD. This program is used for remote-controlling the VR head and for automation of complete motions in the directory „Software“. Helpful tools for specific functions can be found on the product-CD in the subfolder „Utilities“.

Please note our hints for:

- installation of the controlling software on a PC
- installation of an optional Bluetooth-Modul on a PC (example)
- maintenance and care of the VR head and the accumulator
- optional accessories
- fault tracing

You can find them in the operation manual on CD.

5 Technical data

RODEON VR-Head CL / RODEON VR-Station CL:

Dimensions (WxHxD)	300 x 310 x 66 mm (without PDA terminal)		
Weight	3,3 kg including accumulator		
Thread	- Tripod $\frac{3}{8}$ "; Camera $\frac{1}{4}$ " (quick release adapter)		
Pan/tilt-range	- horizontal	0°...360°	(unlimited)
	- vertical	-180°...+180°	(unlimited)
Shifting range	- horizontal (lens height)	34..97mm	
	- vertical (Nodalpoint)	±20..124mm	
Angular resolution	- horizontal	0,015°	(24000 steps per 360°)
	- vertical	0,015°	(12000 steps per 180°)
Drive torque	- horizontal	> 4000 mNm	
	- vertical	> 4000 mNm	
Power supply	- NiMH-Accum., 7,2V/2600 mAh, for ca.2h work		
	- battery charger with accumulator supervision and plug-in power supply unit		
Data interface	- RS232 and Bluetooth Class 1		
Camera-triggering	- Pretrigger (pressure point)/ Trigger		
	- 2 independent galvanically uncoupled switching outputs (normally open contact)		
	- Cable-connection to special camera-plug, e.g. Nikon, Canon, Hasselblad, Panasonic, Leica, Sony, Olympus...(Cable is not part of the standard scope of delivery)		

RODEON VR-Head ST / RODEON VR-Station ST:

Dimensions (WxHxD)	300 x 325 x 66 mm (without PDA terminal)		
Weight	4,1 kg including accumulator		
Thread	- Tripod $\frac{3}{8}$ " ; Camera $\frac{1}{4}$ " (quick release adapter)		
Pan/tilt-range	- horizontal	0°...360°	(unlimited)
	- vertical	-180°...+180°	(unlimited)
Shifting range	- horizontal (lens height)	34..97mm	
	- vertical (Nodalpoint)	±20..124mm	
Angular resolution	- horizontal	0,015° (24000 steps per 360°)	
	- vertical	0,005° (36000 steps per 180°)	
Drive torque	- horizontal	> 4000 mNm	
	- vertical	> 11000 mNm	
Power supply	- NiMH-Accum., 7,2V/2600 mAh, for ca.2h work		
	- battery charger with accumulator supervision and plug-in power supply unit		
Data interface	- RS232 and Bluetooth Class 1		
Camera-triggering	- Pretrigger (pressure point)/ Trigger		
	- 2 independent galvanically uncoupled switching outputs (normally open contact)		
	- Cable-connection to special camera-plug, e.g. Nikon, Canon, Hasselblad, Panasonic, Leica, Sony, Olympus...(Cable is not part of the standard scope of delivery)		

RODEON VR-Head HD / RODEON VR-Station HD:

Dimensions (WxHxD)	480 x 345 x 66 mm		
Weight	6 kg including accumulator		
Thread	- Tripod $\frac{3}{8}$ " ; Camera $\frac{1}{4}$ " quick release adapter		
Pan/tilt-range	- horizontal	0°...360°	(unlimited)
	- vertical	-180°...+180°	(unlimited)
Shifting range	- horizontal (lens height)	34..245mm	
	- vertical (Nodalpoint)	±20..280mm	
Angular resolution	- horizontal	0,005° (72000 steps per 360°)	
	- vertical	0,005° (36000 steps per 180°)	
Drive torque	- horizontal	> 11000 mNm	
	- vertical	> 11000 mNm	
Power supply	- NiMH-Accum., 7,2V/2600 mAh, for ca.2h work		
	- battery charger with accumulator supervision and plug-in power supply unit		
Data interface	- RS232 and Bluetooth Class 1		
Camera-triggering	- Pretrigger (pressure point)/ Trigger		
	- 2 independent galvanically uncoupled switching outputs (normally open contact)		
	- Cable-connection to special camera-plug, e.g. Nikon, Canon, Hasselblad, Panasonic, Leica, Sony, Olympus...(Cable is not part of the standard scope of delivery)		

6 Guarantee

Guarantee terms, scope and conditions

If a product manufactured by Dr. Clauss Bild- und Datentechnik GmbH (CLAUSS) turns out to be defective within 24 months after the purchase date at the trader or directly at the manufacturer (please present the original invoice or sales receipt), CLAUSS provides and honors this guarantee against the first final user worldwide. During this guarantee period, all defects that affect the practical value of the device and result from material or manufacturing defects or processing errors will be remedied at the cost of the manufacturer with own discretion by repair or replacement following the terms and limitations below. Optical deficiencies are excluded from these guarantee terms. All products and parts of products that were replaced become property of CLAUSS. Repair and partially replacement does not prolong the originally warranty period.

For repair or replacement, the product has to be send in to the manufacturer in sufficient packing. The costs occurring for a safe transport to the manufacturer and back to the customer has to be payed by the customer. Customers bear the transportation risk. Therefore, we recommend to take out a suitable and sufficient transportation insurance. Furthermore, the returned products have to be immediately checked if they are intact and free of defects after receiving in order to observe existing deadlines for indication and complaint. Removable media and potential accessories have to be removed before submitting the product for exercising the warranty claim in order to avoid their loss and data loss. Installed software, files and programs have to be secured before repair, backedup and re-installed after the repair again. Purchased parts and components by other manufacturers are excluded from guarantee by CLAUSS. In these cases, the requirements of the particular manufacturers apply.

Limitations and Exclusions

Interventions into the device by unauthorized third parties, impermissible adaptations or changes implemented at the product as well as changing, deleting, removing or defacement of the serial number result in the termination of this warranty claim.

Besides the above-named cases, there is no guarantee accepted for quality, precision, and performance as well as fitness for purpose, reliability, or further product characteristics or characteristics of the associated software (not explicitly, not implicit, not legally, not otherwise). This guarantee does not cover the periodic maintenance and inspection of the product, repair or parts replacement due to fair wear and tear, damages or defects, that are caused by use, running or treatment of the product and which do not correspond to normal, common and intended use, as well as damages respectively product changes by inappropriate use including damages caused by:

- Non-observance of the installation instructions and care and service instructions
- physical treatment, that is causing surface or cosmetic damages or damage to liquid crystal displays
- installation or product use for another purpose than intended
- use of the product with other systems, devices or spare parts than CLAUSS-products which are not designed for or approved for using it with the product
- product installation against technical standards or safety laws in the country where it is installed or used
- product upgrades, that result in features or specifications described in the instruction manual becoming void
- Software, that was not included in the scope of delivery or software that was installed inappropriate
- force majeure and other circumstances that are not open to the manufacturer's influence

Guarantee furthermore excludes

- adjustment work and recalibration of the device
- damages at resp. loss of software programs or removable media or consequences of a virus attack
- further material/ immaterial losses or consequential damages like loss of image, loss of order, loss of orders or earnings, absence from duty, profit setback, data loss, unavailability or function failure of the product resp. associated components

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Data privacy

The Dr. Clauss Bild- und Datentechnik GmbH (CLAUSS) is saving and using all customer data for processing and administration of the warranty case and is allowed to pass on to authorities these data if legally necessary.

CLAUSS is allowed to pass on all customer data to agencies and associated enterprises for customer service and marketing purposes. Beyond that, there will be no pass on of these data to third parties.

If you should not agree or disagree with using your data by CLAUSS, their agencies and their associated enterprises, please contact us in written form at our manufacturer's address.

7 **Manufactured by:**

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9 Questions about RODEON modular?

Please use the following possibilities, ideally in this order:

- operation manual on CD In most cases, a supposed malfunction turns out to be an operating error. Please read the operation manual on CD first to get more information for fundamental understanding!
(please also see chapter 11 „Hints for fault tracing“)
- Internet Current changes and supplements, that are possibly not yet available in your operation manual can be found on our website www.dr-clauss.de .
- E-Mail general You can contact us with general questions:
mail@dr-clauss.de
- E-Mail service You can contact our service at:
service-vr@dr-clauss.de.
Please tell us the serial number of your device in every E-mail. Please try to describe the error as precise as possible.
- Fax +49 37754 507 28 Please tell us the serial number of your device. Please try to describe the error as precise as possible.

Technical changes and errors excepted.