



HAC1.2
HAC1.2⁺

OPERATION MANUAL



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DELIVERY

HAC 1.2 / HAC 1.2+

- 1 Hac 1.2 Cycling Computer
- 2 Cockpit handlebar bracket
- 3 Handlebar bracket
- 4 Adapter
- 5 Speedsensor
- 6 Cadence sensor*
- 7 Heartrate belt*
- 8 Mounting material
- 9 Quick start guide
- 10 Komoot code (not shown)

*Only in HAC 1.2+



1.FOREWORD

Thank you for buying the HAC1.2/HAC1.2+ from Ciclosports.

A modern cycling computer provides more than showing speed or altitude.

The HAC1.2/HAC1.2+ offers more than a normal cycling computer – an intuitive user friendliness.

It is distinguished by a navigation app which was realized by Komoot. The navigation can be paired and synchronized with the Komoot App from your Smartphone. This can make your cycling exciting and eventful.

2. FIRST STEPS

2.1 MOUNTING

2.1.1 COCKPIT HANDLEBAR BRACKET

Loosen the screw of the bracket with the allen key. Be careful not to lose a part. Take one of the rubbers and place it on the handlebar. Open the cockpit handlebar bracket and fix it at the desired place. Tighten the screw with the allen key hand tight.

2.1.2 HANDLEBAR BRACKET

You can mount the handlebar bracket at the handlebar or stem. Pull off the adhesive protection and fix the rubber on the bottom side of the handlebar bracket. Pass the cable ties through the eyelets of the handlebar bracket and place it on the handlebar or stem. Press the handlebar bracket down and tighten the cable ties. You can cut the over standing cable ties with a scissor or a side cutter. If you like to mount the with the rubber o-rings you have to fix those at the holding noses.

2.1.3 ADAPTER

Please press the adapter into the holder of the handlebar- or cockpit handlebar bracket.

You can also mount the adapter if it is turned around in 90° to fix the handlebar bracket to the stem.

2.1.4 SPEEDSENSOR

Attach the transmitter to the fork or the left chain stay. Pull the cable ties through the eyelets of the transmitter, place it in the desired location and tighten the cable ties. The ends of the cable ties can be cut off with a clipper or scissors.

2.1.5 CADENCE SENSOR

Attach the cadence sensor on the chain stay towards the middle of the crank (please do not tighten the cable ties at once). Fix the cadence Magnet on the crank with a distance of a maximum of 3 mm to the cadence sensor. After you have initialised/ paired the cadence sensor to the HAC1.x you can tighten the cable ties.

2.1.6 SPOKE MAGNET

Attach the magnet to a spoke on the opposing of the transmitter.

Please note that the distance between the sensor and the magnet shall not be more than 3mm.

Please make sure to align the magnet on the markings on the sensor.

2.1.7 CADENCE MAGNET

The cadence magnet can be mounted with a cable ties to the crank. The distance to the Cadence sensor can be up to 3mm. Please make sure to align the magnet on the markings on the sensor.

2.1.8 HEARTRATE BELT

Every person who carries out sport should have a general medical checkup on his/her general state of health Especially beginners, persons older than 35 years of age and anyone who has suffered from illnesses or injuries in the past. It is recommended that a doctor is consulted in case of risk factors, such as smoking, high blood pressure, high cholesterol values, diabetes, lack of exercise and excess weight.

Pacemaker wearers should consult their doctor before using any heart rate measurement device!

Moisten the contacts on the harness and attach the transmitter belt. The chest strap should be worn centered just below the nipples.

A measurement of the heartbeat is possible if

- the heartrate belt is worn correctly
- the battery is full
- the heartrate sensor is paired/initialiced correctly

2.2 BEFORE YOU START

2.2.1 INSTALLATION OF THE BATTERY

Please open the battery cover with a coin. Insert the battery CR2450, positive pole upwards. Now you can close the battery cover.

2.2.2 UPDATE

As we improve our products continuously (you can send suggestions to us) we recommend to update your device before the first usage. This also helps you to find out the basic functions of the product.

Please follow the steps for an update:



- please download the CicloApp (QR-Code)
- open the app and follow the instructions
- to connect a device to the CicloApp please choose "device"(left side) and activate "searching"
- open the short menu in the HAC1.2, choose "cell phone connection " and press the middle button
- both devices are in the mode "searching"
- as soon as both devices have recognized each other you can see the Smartphone name in the HAC1.2 and the HAC 1.2 named in the CicloApp
- now you can do the update
- as soon as both devices have recognized each other you can see the Smartphone named in the HAC1.2 and the HAC 1.2 named in the CicloApp
- now you can do the update

2.2.3 CONNECT SENSORS

To connect the sensors please go to the short menu and choose the sensors you want to initialize/pair. For example choose the speedsensor, press the middle button and turn your front wheel. As soon as the signal is received by the HAC1.x (the speedsensor is initialized) you will get a confirmation on the device.

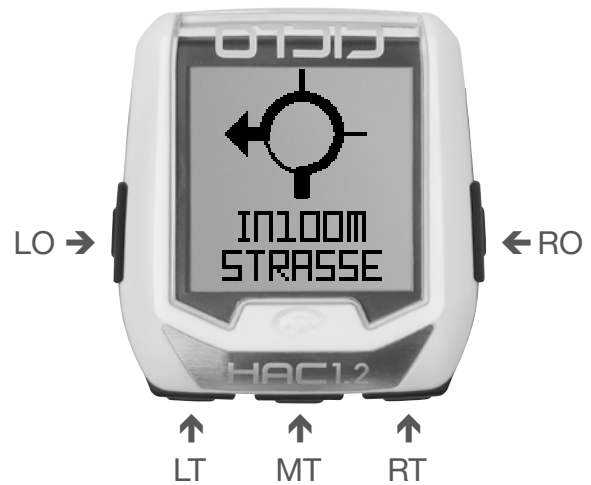
2.2.4 SETTING CIRCUMFERENCE

Set the circumference of you wheel at "Settings" → "Profile" → "Circumference"

2.2.5 START CYCLING

Choose "Start" in the main menu and enjoy the first ride with the HAC1.x

3 INSTRUCTIONS



- LO = button top left
- RO = button top right
- LT = left button
- MT = middle button
- RT = right button

Important instructions

Switch on/off → press **LO** for 4 seconds

Start recording → press **LO** for 1 second (out of functional view)

Change to functional view → press **LO** for short

Back to last view → press **RO** for short

Change to main menu v press **RO** for 3 seconds

LT = step down in menu

RT = step up in menu

MT = choose the menu point

4 MENU

In the following part every point of the menu will be explained

4.1 START

Via the “Start menu” you get to the cycling mode. Here you can see the “Function view” and the “Navigation view”

4.2 SHORT MENU

In the short menu you can do the most important settings in a short time

4.2.1 PROFILE

Here you can change the actual profiles. Please be aware that your computer knows the used profile by checking the used sensors (for an automatical recognition of a profil a sensor for each profile must be paired) This does not apply for heartrate sensors.

4.2.2 SENSOREN

Here you can pair/initialize sensors with your HAC1.x. You can choose a sensor like “speedsensor” or you can choose a search for “all” sensors. As you choose “all” the HAC1.x will search for all sensors which can be found.

You can pair the following sensors to the HAC1.x:

- Speedsensor
- Cadence sensor
- Heartrate belt
- Combined speed/cadence sensor
- Power measurement sensor

4.2.3 ALTITUDE

4.2.3.1 ALTITUDE

Here you can set the actual altitude

4.2.3.2 HOME ALTITUDE

Here you can store the altitude of the normal starting point of your training sessions.

4.2.4 CELLPHONE CONNECTION

Here you can connect you're Smartphone (with BLE, Bluetooth Low Energy) to the HAC1.x. This has to be done if you like to use your HAC 1.x together with the Komoot or CicloApp.

4.3 HISTORIE

Here you can see an overview of your recording.

You can choose a recording to see basic data.

You can transfer your recording to the CicloApp and then get a link to download the tour.

If you possess an account at Ciclosport your recording can be stored on the CicloApp.

4.4 SETTING

4.4.1 GENERAL

Here you can make the general settings that are not profile-related.

4.4.1.1 LANGUAGE

Here you can change the system language of the device.

4.4.1.2 UNITS

Here you can set the unit of measurement to be used in the computer.

4.4.1.3 INTERVALL

Here you can define the interval for recording the values.

If you choose a smaller interval time the recording size will be bigger which means the memory will be full faster!

Intervals in seconds:

1 – 2 – 5 – 10 – 30 – 1min

4.4.1.4 DISPLAY

4.4.1.4.1 CONTRAST

Here you can set the display contrast.

4.4.1.4.2 LIGHT MGR

Here you can set the light manager.

Off - light never goes on

Auto - light goes on when the middle, left or right button is pressed for 3 sec, light stays on 5 seconds on.

On - always on

Attention! Lighting significantly reduces battery life

4.4.1.5 WEIGHT

Here you can set your current weight. (Necessary for the calculation of the calculated power measurement)

4.4.1.6 TONES

Here you can activate the tones during navigation. If the tones are activated, you will hear a signal tone before each navigation change.

4.4.1.7 DATE

Here you can set the date.

4.4.1.8 TIME

Here you can set the time.

4.4.2 PROFILES

Here you can choose which profile you would like to change. The changed values are saved per profile.

4.4.2.1 NAME

Here you can change the name of the profile. e.g. MTB or road bike

4.4.2.2 WHEEL CIRCUMFERENCE

Here you can adjust the wheel circumference. Circumference mm” appears in the display Set with the left and right buttons. Press the middle button to confirm the setting and the unit switches to the next menu item.

Note: The wheel circumference can be taken from the table or measured by yourself.

Tire-size		Circumference
40-559	26 x 1,5	2026 mm
44-559	26 x 1,6	2051 mm
47-559	26 x 1,75	2070 mm
50-559	26 x 1,9	2026 mm
54-559	26 x 2,00	2089 mm
57-559	26 x 2,125	2114 mm
37-590	26 x 1 3/8	2133 mm
32-620	27 x 1 1/4	2199 mm
40-622	28 x 1,5	2224 mm
47-622	28 x 1,75	2268 mm
40-635	28 x 1 1/2	2265 mm
37-622	28 x 1 3/8	2205 mm
20-622	700 x 20C	2114 mm
23-622	700 x 23C	2133 mm
25-622	700 x 25C	2146 mm
28-622	700 x 28C	2149 mm
32-622	700 x 32C	2174 mm

If you want to measure the wheel circumference yourself, place a mark on the front tyre (e.g. with chalk) on the ground. Then go straight ahead with your bike, exactly one turn of the wheel (with the correct air pressure and rider weight) and mark the spot on the ground. Now the exact wheel circumference between the two markings on the ground can be measured (in mm).

4.4.2.3 WHEEL WEIGHT

Here you can enter your bike weight, this helps in the power measurement calculation.

4.4.2.4 ZONES

Here you can change the values for the lower, upper and maximum heart rate limit.

4.4.3 DISPLAY

In this menu you can change the function views. Up to 8 views can be configured.

For each display you can determine how many functions (1 to 8) you would like to display. Now you can select the individual windows and select the desired function from the list.

4.4.4 DEVICE

4.4.4.1 VERSION

Here you can see the current software version of your device.

4.4.4.2 MEMORY

Here you can see the current memory allocation on the device.

4.4.4.3 RESET

Here you can set all stored values to 0. Records and settings are saved.

4.4.4.4 FACTORY SETTINGS

Here you can reset the device to factory settings.

5 CICLOAPP & KOMOOT

5.1 CICLO APP

- Install the Ciclo App
- You can use the app with or without registration, but without registration your routes will not be taken save
- Activate Bluetooth on your smartphone
- Synchronize → switch HAC 1.2 on → short menü → Telefon
- Automatic connection → visible HAC in the Select App
- Latest version select → on app visible HAC → update

NFC Function:

You can also use the NFC technologie in your device to connect your HAC to the CicloApp. For this please go to the shortmenu and search for a telephone. Then put the HAC onto the display of your NFC compatible smartphone while the CicloApp is open.

The CicloApp will automatically connect your HAC to the Phone.

5.2 KOMOOT APP

- Install the Komoot app on your smartphone and log in
- Go to your profile to Settings to activate Bluetooth connect
- Turn on the HAC → press and hold LO for 4 seconds
- In the main menu first → RT to “Short menu”, then MT
- Establish connection with App → press RT, at “Press “Telephone” MT
- Start route → on the app in the main menu bar on “tarpaulins” below
- enter your starting position and your destination and go to the click on “Start Navigation”
- your bike computer automatically shows the direction and your route can begin

5.3 ANDROID & KOMOOT

- Download the Komoot App and Komoot Connect from PlayStore and install them on your smartphone
- please open the app “Komoot Connect”
- for HAC 1.x, the telephone connection in the active “profile” enable
- in the “Komoot Connect” app and wait until the connection is established (green tick appears)
- Now you can open the Komoot App and start your tours project
- In HAC 1.x – after the tour has started – the turn-by-turn instructions are displayed by arrow navigation

6 SERVICE & TROUBLESHOOTING

Do you have questions or a problem with HAC 1.2 / HAC 1.2 +?

You can contact us from Monday to Thursday from 9:00 to 16:00

by telephone on +49 (0) 89 - 89 52 70 61.

You can also send us an e-mail to:

ciclo-service@ciclosport.de

6.1 TROUBLESHOOTING

6.1.1 FAULTY DISPLAY

Check the battery for the following points:

- Voltage > 3.0V
- High quality battery
- If the battery fits correctly

6.1.2 NO SPEED / CADENCE / HEART RATE

- Transmitter not correctly initialized.
- Check that the transmitter is correctly installed
- Check whether the distance between the transmitter and the magnet is 3mm maximum.
- Battery in transmitter reversed for 10 seconds to reset the transmitter to the factory setting. Then repeat the initialization.

6.1.3 SPEED IS NOT DISPLAYED CORRECTLY

- Check adjusted wheel circumference
- Check unit of measurement

6.1.4 HEIGHT SHOWS WRONG VALUES

- Air pressure has changed, here you have to adjust the height manually.
- Home height incorrectly adjusted

6.1.5 HEART RATE NOT DISPLAYED CORRECTLY OR NO DISPLAY

- Check the battery in the chest strap, replace if necessary
- Moisten the contacts on the chest strap

6.1.6 THE HEIGHT CHANGES EVEN THOUGH I AM IN THE SAME PLACE

The height measurement of the HAC 1.2 is barometric, which means that the height is measured above the air pressure. If the air pressure changes due to the weather, the height in the computer also changes. Here you can adjust the height via the short menu.

6.2 SENDING IN A DEVICE FOR REPAIR

If you wish to return your device for repair, please complete the warranty certificate at the end of the operating instructions. Please always send in the complete product. If the device is sent in for repair or if a warranty claim is not accepted, repair will be carried out up to Euro 30 without consultation.

Please enclose the following with the package:

- Copy of invoice
- warranty certificate
- widget

Please make sure to prepay the return shipment.

We regret that we cannot accept freight collect shipments.

Our service address:

**Ciclosport
Service
Lohenstrasse 11
DE - 82166 Graefelfing
Germany**

6.3 WARRANTY

We grant the original purchaser of this product a warranty of 2 years from the date of purchase according to the conditions below.

Within this warranty period, we will rectify defects on the device free of charge which can be proven to be due to a material and / or manufacturing defect. Excluded from the warranty are damages caused by improper handling, commercial use or accident / fall.

Wear parts and broken housings of the device and the transmitter are also excluded from the warranty.

The guarantee is provided, at our discretion, by repair or replacement of defective parts.

The warranty does not cover direct or indirect damage or consequential damage in connection with the product.

In case of warranty, please contact your dealer or your local distributor or send the computer with the proof of purchase and all accessories sufficiently stamped directly to us.

Ciclosport
Service
Lohenstrasse 11
DE - 82166 Gräefelfing
Germany
E-Mail: ciclo-service@ciclosport.de

Please read the operating instructions carefully again before sending in the device and check the battery.

If the warranty claims are justified, the repaired device or a replacement device will be returned free of charge.

Repair:

If the device is sent in for repair or if a warranty claim is not accepted, repair will be carried out up to Euro 30 without consultation.

6.4 WARRANTY CERTIFICATE

Sender:

Name:

First name:

Street / No:

Postcode / City:

E-Mail:

Product type:

With accessories sent in:

Error description / reason for submission:

After the warranty has expired, repairs should be carried out up to _____ Euro.



Disposal of used electrical and electronic equipment (applicable in the countries of the European Union and other European countries with a separate collection system for these devices). The symbol on the product or its packaging indicates that this product is not to be treated as normal household waste but must be disposed of at a collection point for the recycling of electrical or electronic equipment. By contributing to the correct disposal of this product, you protect the environment and the health of your fellow human beings. The environment and health are endangered by incorrect disposal. Material recycling helps to reduce the consumption of raw materials. For more information on how to recycle this product, contact your local authority, municipal waste management company or the store where you purchased this product.

6.5 TECHNICAL DATA

Operating temperature: 0°C to 50°C
Battery: CR2450 Lithium
Transmission frequency
Bluetooth: 2402MHz - 2480MHz
ANT+: 2457MHz
NFC(receiver): 13.56MHz
Max power: BLE : <6dBm , ANT+ : <0dBm
FCC ID: O4GHAC
Model: HAC1.2

FCC STATEMENT

Caution: If any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

The RF Exposure Compliance distance is 20 millimeters

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Subject to errors and technical changes.