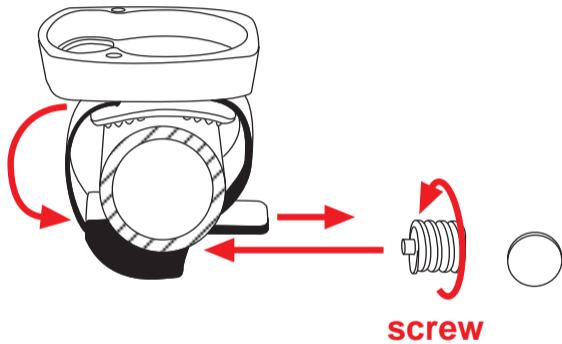
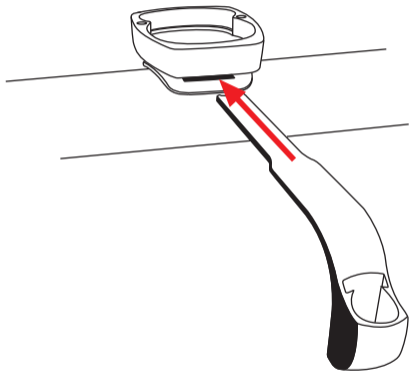


# VDO

**CYCLECOMPUTING**

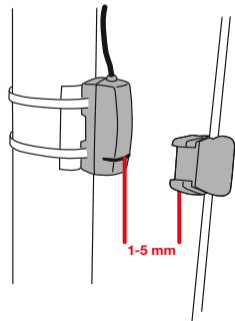
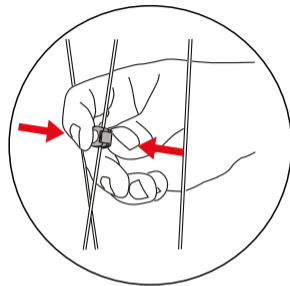
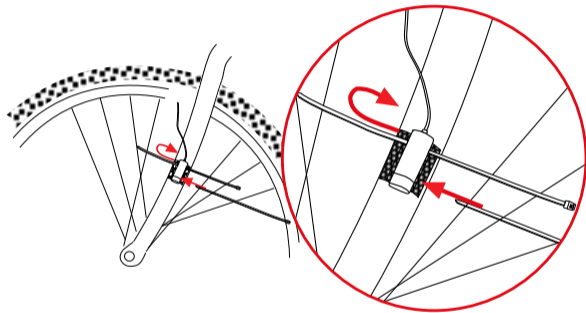
*INSTRUCTION MANUAL  
BEDIENUNGSANLEITUNG  
MANUEL D'INSTALLATION ET D'UTILISATION  
MANUALE D'INSTALLAZIONE E FUNZIONAMENTO  
INSTALACION Y OPERACIÓN MANUAL  
HANDLEIDING*

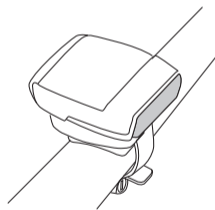
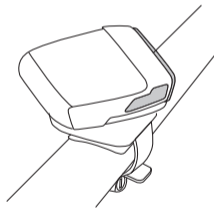
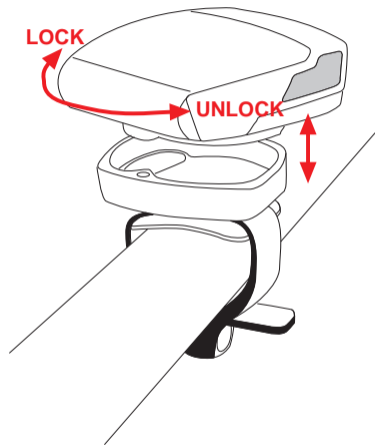
**HC12.6**

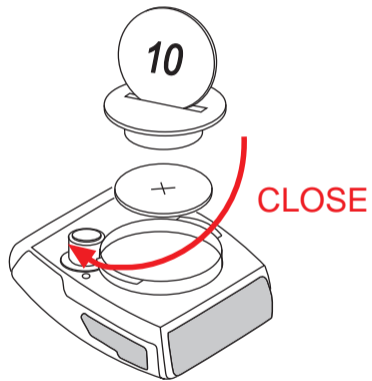
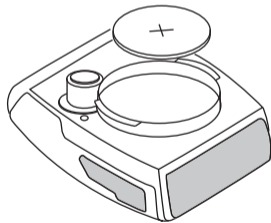
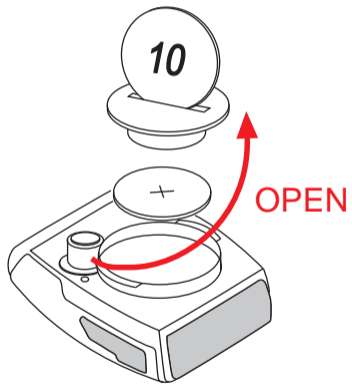


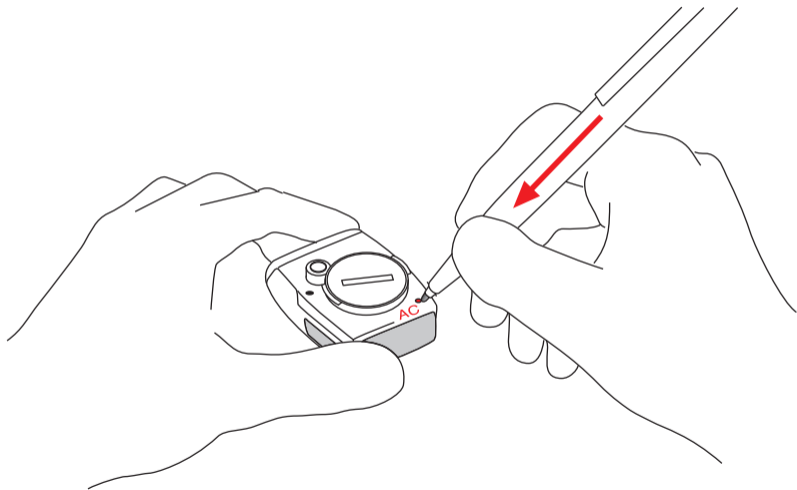
P2

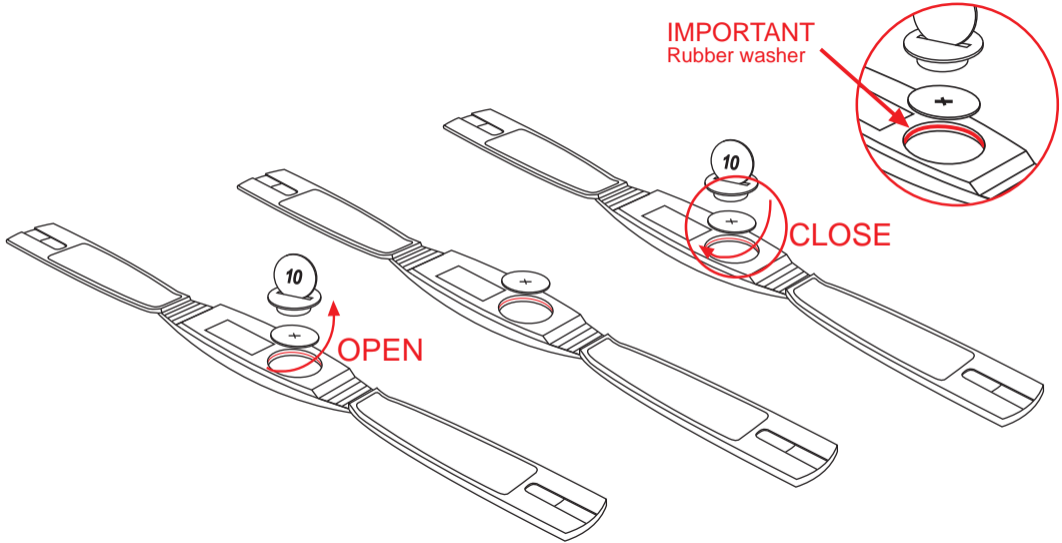
P3











Press AC-Button to Begin  
or install battery (P6)



automatic  
.....



Press MODE 2 for next  
press MODE 1 to select



Press MODE 2 for next  
press MODE 1 to select



Press MODE 2 for next  
press MODE 1 to select



Press MODE 2 for next  
press MODE 1 to select



Press MODE 2 for next  
press MODE 1 to select

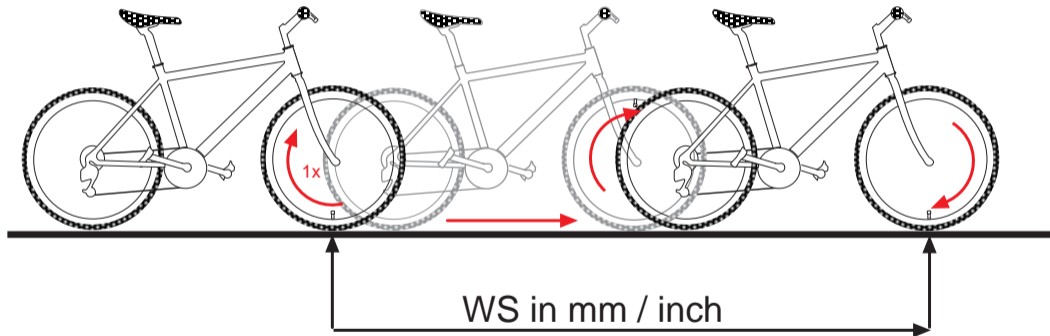


Press MODE 2 for next  
press MODE 1 to select

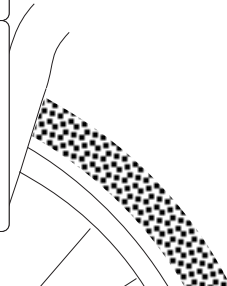


Press MODE 2 for next  
press MODE 1 to select



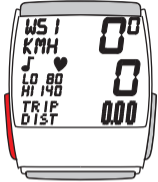


ETRTO		WS in mm KMH	WS in inch MPH
47-305	16x1,75	1272	50,1
47-406	20x1,75	1590	62,6
34-540	24x1 3/8	1948	76,7
47-507	24x1,75	1907	75,1
23-571	26x1	1973	77,7
40-559	26x1,5	2026	79,8
44-559	26x1,6	2051	80,7
47-559	26x1,75	2070	81,5
50-559	26x1,9	2089	82,2
54-559	26x2,00	2114	83,2
57-559	26x2,125	2133	84,0
37-590	26x1 3/8	2105	82,9
20-571	26x3/4	1954	76,9



ETRTO		WS in mm KMH	WS in inch MPH
32-630	27x1 1/4	2199	86,6
40-622	28x1,5	2224	87,6
47-622	28x1,75	2268	89,3
40-635	28x1 1/2	2265	89,2
37-622	28x1 3/8	2205	86,8
18-622	700x18C	2102	82,8
20-622	700x20C	2114	83,2
23-622	700x23C	2133	84,0
25-622	700x25C	2146	84,5
28-622	700x28C	2149	84,6
32-622	700x32C	2174	85,6
37-622	700x37C	2205	86,8
40-622	700x40C	2224	87,6

**SET Metric System**

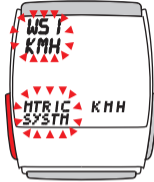


Start at TRIP DIST  
Press MODE 1 for 3 sec.

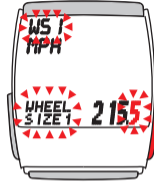


Press MODE 2 to select  
between KMH and MPH

**SET WS 1**



Press MODE 1  
to set WS1



Press MODE 2  
to increase



Press MODE 1 to  
switch and  
MODE 2 to increase  
continue for  
all 4 digits

**SET WS 2**



Press MODE 2  
to increase

Press MODE 1 to set WS2  
Press MODE 1 3 sec.  
to end without setting WS2

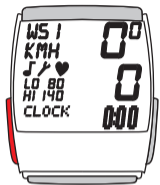


Press MODE 1  
to switch

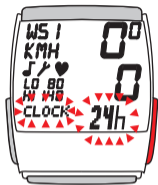


Press MODE 1  
3 sec. to end





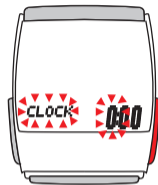
Press MODE 1  
3sec.to start



Press MODE 2 to  
switch between  
24h or 12h



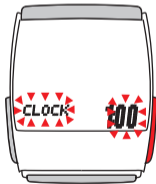
Press MODE 1  
to set the hours



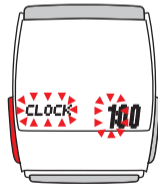
MODE 2 to  
increase the hours



Press MODE 1  
3 sec. to end

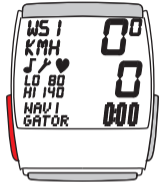


Press MODE 2  
to increase the  
minutes



Press MODE 1  
to set the minutes

## Set



Press MODE 1  
3sec.to start



Press MODE 2  
to increase



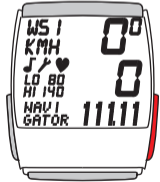
Press MODE 1  
to switch



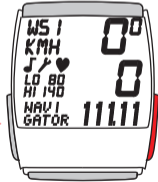
Press MODE1 3 sec. to end  
after you set the navigator



## Reset



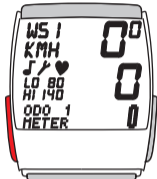
Important  
Navigator in Display



Press MODE 2  
to reset



## Set ODOMETER



Press **MODE 1**  
3sec.to start



Press **MODE 2**  
to increase



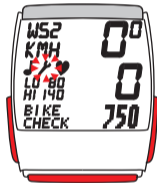
Press **MODE 1**  
to switch



Press **MODE1**  
3 sec. to end  
after you set  
the odometer



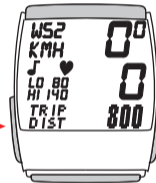
## BIKE CHECK



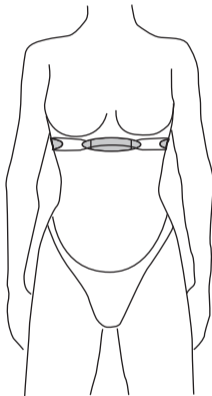
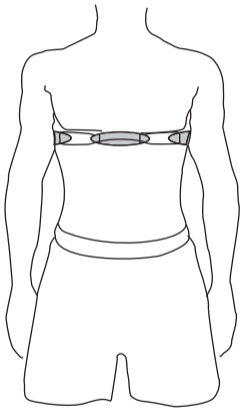
Press any button  
BIKE CHECK disappears



The service icon will remain flashing.  
Another 50 km/35 mi.

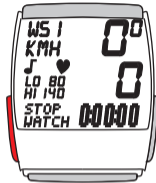


Then the service interval  
icon will also disappear



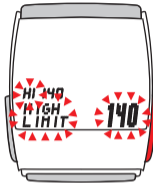


## Set limits

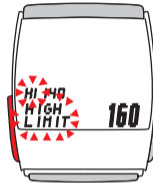


Press MODE1  
3sec.

## High-limit



Press MODE 2  
to increase

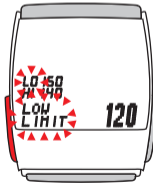


Press MODE1  
to set Low Limit

## Low-limit



Press MODE 2  
to decrease

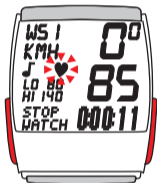


Press MODE1  
to end





Press PULS



Press MODE1+  
MODE2 to stop



Press MODE1+  
MODE2 to start again



**Preface****1. Mounting**

- 1.1 Handlebar holder
- 1.2 Speed transmitter (sensor)
- 1.3 Spoke magnet
- 1.4 Twist-Click mounting of computer onto handlebarholder

**2. Basic information on how to operate your VDO HC 12.6**

- 2.1 Interrogating information
- 2.2 Calling set-up mode
- 2.3 Button / key covering in set-up mode
- 2.4 Resetting of information modes to zero
  - 2.4.1 Cycling Information
  - 2.4.2 Heartrate Information
  - 2.4.3 NAVI GATOR

**3. Installing the batteries**

- 3.1 Installing battery into computer head
- 3.2 Installing battery into chest belt transmitter

**4. Initial set-up of your VDO HC 12.6**

- 4.1 Selecting your language
- 4.2 Selecting the wheelsize
  - 4.2.1 How to determine the precise wheelsize
  - 4.2.2 How to switch from wheelsize 1 to wheelsize 2
  - 4.2.3 Entering the precise wheelsize

- 4.3 Entering time / clock
- 4.4 The NAVIGATOR
  - 4.4.1 Presetting the NAVIGATOR
  - 4.4.2 Resetting the NAVIGATOR to zero
- 4.5 Presetting the odometer
- 5. **Service interval indicator**
- 6. **Sleep mode**
- 7. **Heart rate information of your VDO HC 12.6**
- 8. **Putting on the chest belt**
- 9. **Presetting your upper and lower heart rate limits**
- 10. **The stopwatch**
  - 10.1 Stopwatch (automatic)
  - 10.2 Manual operation of the stopwatch
- 11. **Calling up your average heart rate**
- 12. **Display of training times within preset target range training zones.**
- 13. **Activating / deactivating the BEEPER**
- 14. **FAQ / Troubleshooting**
- 15. **Warranty**
- 16. **Technical data**
- 17. **Packaging contents**

## Preface

Thank you very much for buying a VDO HC 12.6 bicycle computer featuring heart rate / pulse functions. The more familiar you get with this model, the more enjoyable your trips are going to be.

Hence, our urgent request:

Please read thoroughly all the information provided in this manual. You are getting important and useful hints for operation to make you fully benefit from all the technical features of your VDO HC 12.6.

We wish you enjoyable trips and rides on your bike with VDO  
CYCLE PARTS GMBH

## 1. Mounting

### 1.1 Mounting the handlebar holder

The handlebar holder fits handlebars of any diameter. Before mounting the system, decide if you will be using your left or right hand to operate the computer and then mount the handlebar holder on the respective side. Position the handlebar holder, insert the strap and adjust it by tightening the screw.

**Warning:** Before tightening the handlebar holder, make sure to adjust the position of the computer head (inclination) when the LCD-display is best visible for you. Only when you find the best position tighten the screw.

P1

### 1.2 Mounting the speed transmitter / sensor

The sensor should be mounted on the same side of the fork as the holder is on the handlebar. While mounting, be sure that there is ample cable left for left and right turns of your handlebar, do not lay the cable too tight.

P2

**Important:** Do not tighten the cable ties yet. Accurately position the sensor and the spoke magnet first, then tighten the cable ties.

### 1.3 Mounting the spoke magnet

Distance between magnet and sensor should be approx. 1-5 mm. In case this distance is not achievable in the current position, slide the sensor and the magnet on the fork or spoke accordingly.

P3

## 1.4 Twist-Click mounting of computer on to holder

The Twist-Click mounting has been exclusively developed for the new line of VDO computers. The VDO HC 12.6 also features the Twist-Click-System. The computerhead is put onto the handlebar and by a **right** turn of the computerhead (**TWIST**) fixed to the holder (**CLICK**). It is just as easy to remove the computerhead from the handlebar holder. Twist it to the **left**, remove computerhead from handlebar holder.

## 2. Basic information on how to operate your VDO HC 12.6

Make sure you are familiar with the computers basic operating instructions before the initial set-up and use.

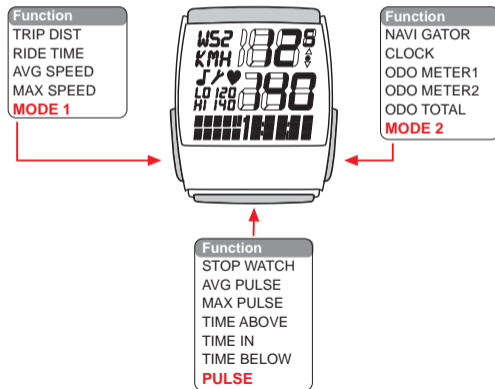
Your VDO HC 12.6 features 3 keys / buttons

Left ..... Center Right  
**MODE1.....PULSE.....MODE2**

### The display

The following information is permanently displayed:

- current / actual speed in KMH or MPH accurate to +/- 0.5 KMH / MPH
- symbol (MPH or KMH) for the conversion selected,
- wheelsize selected: Bike 1 (WS1) or Bike 2 (WS2)
- symbols to compare actual speed and average speed (up-arrow, down-arrow, dot)
- heart-symbol, that indicates pulse signals are being transmitted
- LO Pulse, preset lower limit of your training target zone
- HI Pulse, preset upper limit of your training target zone
- Note-symbol to indicate acoustic alarm ON/OFF



## 2.1 Interrogating information

With the **MODE1** key you call up following information: TRIP DIST/ RIDE TIME/ AVG SPEED/ MAX SPEED

<b>TRIP DIST</b>	trip counter for your individual trip, counting to 999.99 KM or M
<b>RIDE TIME</b>	trip timer featuring automatic start/stop function up to 19:59:59 h
<b>AVG SPEED</b>	average speed, accurate to two decimal points
<b>MAX SPEED</b>	maximum speed achieved during a ride up to 199.5 KM or M

**Important:** If the ride timer overflows 19:59:59 h, it is automatically reset to 00:00:00. Simultaneously, your average speed counter AVG SPEED is reset to zero. If your trip counter overflows 999.99 KM or M, it is automatically reset to 000.00. Simultaneously, your average speed counter AVG SPEED and your ride timer RIDE TIME are reset to zero.

With the **MODE 2** key you call up following information: NAVI GATOR/ CLOCK/ ODO1 METER/ ODO2 METER/ ODO TOTAL

<b>NAVI GATOR</b>	Second, manual trip counter, can be reset to zero individually, can be preset and counting up from there on.
<b>CLOCK</b>	Time of the day in 12h or 24h mode
<b>ODO 1 METER</b>	Odometer (sum of all trips) on Bike 1, up to 99.999 KM or MI.
<b>ODO 2 METER</b>	Odometer (sum of all trips) on Bike 2, up to 99.999 KM or MI.
<b>ODO TOTAL</b>	Odometer (sum of all trips on both bikes), sum of Bike 1 and Bike 2, up to 199.999 KM or M.

**Important:** Switching conversions from **mi** to **km** at odometer 62.111 mi and up leads to a reset to zero of the odometer. (62.111 mi converts to approx 100.000 km but the display holds 99.999 km max.)

With the **PULSE** key you call up following information: STOP WATCH/ AVG PULSE/ MAX PULSE/ TIME ABOVE/ TIME IN/ TIME BELOW

<b>STOP WATCH</b>	stop watch to keep track of your pulse training times, both automatic and manual start/stop possible, up to 19:59:59 h.
<b>AVG PULSE</b>	average pulse / heart rate during a training period.
<b>MAX PULSE</b>	maximum pulse during a training period
<b>TIME ABOVE</b>	time in which your pulse was above the preset upper limit
<b>TIME IN</b>	time in which your pulse was right in-between the preset upper and lower limits, per say, in your target zone.
<b>TIME BELOW</b>	time in which your pulse was below the preset lower limit

## 2.2 Calling up set-up modes

The **MODE 1** key calls up any set-up mode

Calling up the set-up modes requires a 3 sec pressing of the **MODE 1** key.

Set-up modes can be entered from various information displays:

You want to set up:	Display information needed
Wheelsize 1 or Wheelsize 2	TRIP DIST
Clock	CLOCK
Odometer for Bike 1	ODO 1 METER
Odometer for Bike 2	ODO 2 METER
Navigator, second trip counter	NAVIGATOR
Upper and lower limits for pulse	STOP WATCH or AVG PULSE or TIME ABOVE or TIME IN or TIME BELOW

## 2.3 Button / key covering in set-up mode

Once you have entered a set-up mode with **MODE 1**, the keys have the following (**different**) functions.

**MODE 1** key: jump from digit to digit; exit set-up mode (pressing **MODE 1** for 3 sec.)

**MODE 2** key: increase/change of digit selected; selecting display symbols

## 2.4 Resetting of information modes to zero

By pressing **MODE 2** for 5 sec. any of the following information is **simultaneously** reset to zero

### 2.4.1. Cycling Information

Get any of these informations in display

TRIP DIST--RIDE TIME--AVG SPEED--MAX SPEED

Press MODE 2 for 5 sec. to reset all of above information simultaneously.

### 2.4.2 Heartrate Information

Get any of these informations in display

STOP WATCH--AVG PULSE--MAX PULSE--TIME ABOVE--TIME IN--TIME BELOW

Press MODE 2 for 5 sec. to reset all of above information simultaneously.

### 2.4.3 NAVI GATOR

Call NAVI GATOR in your display

Press MODE 2 for 5 sec, information is being reset to zero.



### 3. Installing batteries

#### 3.1 Installing the battery into the computer head

To save battery power, your VDO HC 12.6 comes with the battery not yet fitted. Prior to initial use the batteries will first have to be installed with the positive pole on top.

**Warning:** Once the battery is installed your VDO HC 12.6 start the set-up of display language. See also chapter 4.1

If you find the computer is not functioning properly after the battery is changed, push the AC-button (Auto Clear) on the rear side of the computer to reset.

#### 3.2 Installing the battery into the chest belt

Open the battery door with a coin and remove it. Install the battery with the positive pole on top. Be sure that the rubber washer is precisely positioned when closing the battery door.

### 4. Initial setup of your VDO HC 12.6

#### 4.1 Selecting display language

After installing the battery or pressing the AC-button your VDO HC 12.6 automatically requests a display language to be selected. After installing the battery, your VDO HC 12.6 first greets you in English (by default) displaying "ENJOY YOUR HC12.6" The VDO HC12.6 will then automatically request you to select **your** display language. The VDO HC 12.6 subsequently displays 7 languages, i.e.:

ENTER LANGUAGE, -- EINGABE SPRACHE--CHOIX LANGUE--REGOL LINGUA--ENTER TAAL--AJUST LENGUA--USTAW JEZYK.

After this automatic scroll you can then select **your** language.

I.e. "LANGUAGE ENGL" will be in display

By pressing the MODE 2 key (right), the various languages will be displayed.

Process: LANGUAGE ENGL **M2**> SPRACHE DEUT **M2**> LANGUE FRAN **M2**> LINGUA ITAL **M2**> TAAL NEDL **M2**> LENGUA ESPAN **M2**> JEZYK POLSK

Once your language is displayed, press the **MODE 1** key for 3 sec. Your selected language is now stored, any further information is displayed in that language. The display now shows TRIP DIST, if you have chosen English for your language.

## 4.2 Selecting the wheelsize

Your computer VDO HC 12.6 indicates your wheel size as **WS (Wheelsize) = wheel circumference**. Your VDO HC 12.6 is able to process two different wheelsizes for two different bikes (i.e. road bike and mountainbike)

The following default values are preset

**Wheelsize 1 WS1 = 2155 mm wheel circumference**

**Wheelsize 2 WS2 = 2000 mm wheel circumference**

**Warning:** After a battery change the above defaults are automatically applied.

**After a battery change, you have to re-enter the precise values for your bike.**

### 4.2.1 How is the wheelsize precisely determined??

Place the front wheel of your bike with the valve at the bottom, mark this position with a line and push your bike ahead until exactly one rotation of the front wheel is completed. Draw another line where the valve now is. Take a ruler and measure the distance between marks 1 and 2 which reflects the wheelsize = wheel-circumference. The figure measured (inches or mm) is the wheelsize to be entered into your computer.

**If you have selected MPH readout you must enter your wheelsize in inches.**

**If you have selected KMH readout you must enter your wheelsize in mm.**

Standard wheelsizes and respective values in **mm** and **inches**.

### 4.2.2 How to switch from wheelsize 1 to wheelsize 2

You can switch from wheelsize 1 (WS 1) to wheelsize 2 (WS 2) and vice-versa by pressing the MODE 1+ MODE 2 button for 3 sec.

P9

P10

#### 4.2.3 Entering the precise wheelsize

**Step 1:** By pressing MODE 1 call TRIP DIST in your display.

**Step 2:** Press MODE 1 for 3 sec. In the upper part of the display you see "WS1" and "KMH" or "MPH" flashing. The lower part of the display alternately shows "ENTER MTRIC SYSTM" and "KMH"/"MPH"

**Step 3:** With MODE 2 you choose whether you want kilometers=KMH oder miles=MPH as a measuring unit.

**Step 4:** Once the conversion of KMH or MPH has been chosen, you proceed by briefly pressing (0.1 sec) MODE 1. The lower part of the display now alternates "ENTER WHEELSIZE1" and 2155. The last number "5" flashing. or 84.8. (if MPH selected)The last number "8"flashing.

**Step 5:** With MODE 1 and MODE 2 you enter your measured wheelsize 1 (bike1). MODE 2 increases the flashing number MODE 1 jumps to the next number, see set-up mode.

**Step 6:** Once you have entered the last number of wheelsize 1 and press the MODE 1 button, the computer automatically jumps to the setup mode for wheelsize 2. The lower part of the display alternately shows "ENTER WHEELSIZE2" and 2000 with the last number "0" flashing. Enter your wheelsize 2 as described in Step 5.The lower part of the display alternately shows "ENTER WHEELSIZE2" and 2000 or 78.7 (if MPH selected) with the last number "0" or "7" flashing.

**Step 7:** Once you have entered wheelsize 2, press MODE 1 for 3 sec to exit set-up mode. The computer will return to displaying TRIP DIST.

P11

**Warning:** Exiting setup procedure before having completely entered the precise wheelsize may lead to faulty readouts.

#### 4.3 setting the clock CLK

Your VDO HC 12.6 features a clock with hour and minute display in 12 or 24 h mode.

To access the clock setup mode proceed as follows:

**Step 1:** MODE 2 calls the CLK information into your display

**Step 2:** Press the MODE 1 for 3 sec. The set-up mode for the clock starts. The lower part of the display alternately shows "ENTER CLOCK" and "24h"/"12h"

**Step 3:** With MODE 2 you choose whether you want your time in a 24 or 12 hour mode.

**Step 4:** With MODE 1 you start the hour setup. The hour display will be flashing and can be changed with MODE 2.

**Step 5:** With MODE 1 you start the minute setup. The minute display will be flashing and can be changed with MODE 2.

**Step 6:** Once hours and minutes are correctly entered, you exit CLK set-up mode by pressing MODE 1 for 3 sec.

P12

#### 4.4 The NAVIGATOR

The NAVIGATOR is a second, individual trip distance counter that can be:

- manually reset to zero
- preset to a certain value, the trip distance is then counted from this value.

The NAVIGATOR is very helpful following road book instructions or tour suggestions of bike magazines.

For example, your road book tour wants you "to go straight for a mile and then make a right turn, then go on for half a mile and make a sharp left turn". These instructions can be precisely followed by using the NAVIGATOR. Once you have arrived at the first intersection after the first mile, you reset the NAVIGATOR to zero and follow the next leg for half of a mile. At the second intersection you reset to zero again and follow the next instruction of your road book.

The NAVIGATOR can be preset and proceed from this individual value. For example, you are unable to start your tour at the point 0 km/m, but at 5.3 km. This value can be preset / entered into the NAVIGATOR. The NAVIGATOR will then count on from 5.3 km. Also after a mistake in following the road book, you can reset/reenter the correct value.

##### 4.4.1 Presetting the NAVIGATOR

**Step 1:** MODE 2 calls NAVIGATOR into display

**Step 2:** Press MODE 1 for 3 sec. The lower part of the display alternately shows "ENTER NAVIGATOR" and "000.00" with the last digit "0" flashing.

**Step 3:** By pressing MODE 2 you increase the flashing number, by pressing MODE 1 you jump to the next number 000.00, etc.

**Step 4:** Once the NAVIGATOR is preset, exit setup mode by pressing MODE 1 for 3 sec. The display shows NAVIGATOR and the preset value.

Your VDO HC 12.6 will be counting on from this preset value.

##### 4.4.2 Resetting the NAVIGATOR to zero

**Step 1:** MODE 2 calls NAVIGATOR into display

**Step 2:** Press MODE 2 for 5 sec., the value indicated is being reset to zero. Your VDO HC 12.6 will be counting on from zero.

**Warning:** Before resetting to zero, make sure the information NAVIGATOR is called in.

**If NAVIGATOR is not in the display, you are accidentally re-setting other information to zero.**

P13

P14

#### 4.5 Presetting the odometer

After a battery change, you can re-enter previous odometer values (for both bikes) into your VDO HC 12.6.

**Step 1:** With MODE 2 call "ODO1 METER" or "ODO2 METER" into display, depending which one of these values you want to re-enter.

**Step 2:** Press MODE 1 for 3 sec. The lower part of the display alternately shows "ENTER ODO1 METER" or "ENTER ODO2 METER" plus the respective value with the last number flashing.

**Step 3:** With MODE 2 you increase the number, with MODE 1 you jump to the next number etc.

**Step 4:** Once you have entered your values for ODOMETER 1 and ODOMETER 2, you exit set-up mode by pressing MODE 1 for 3 sec.

P15

#### 5. Service Interval Indicator

Your VDO HC 12.6 features a Service Interval Indicator to remind you to have your bike serviced at your trusted bike shop. The service interval reminder is indicated separately for both your bikes. Every 750 km / 468 mi, the service icon is activated. The service icon flashes and the lower part of the display shows "BIKE CHECK"

By pressing any of the buttons, the "BIKE CHECK" information disappears. Other information can still be reviewed. The service icon will remain flashing.

After another 50 km / 35 mi, the service interval icon will also disappear.

P16

#### 6. Sleep-Mode

Your VDO HC 12.6 features SLEEP-Mode. During SLEEP-Mode the display is shut down. The clock and, if activated, the service interval icon, remain displayed.

**Additionally, the internal receiver for pulse signals is also shut down in order to save battery power!**

Your VDO HC 12.6 automatically goes into SLEEP-Mode after 5 min if

- no buttons are pressed
- no speed impulses are processed
- no pulse signals are received

SLEEP-Mode is terminated if

- any button is pressed
- speed impulses are processed

**Warning:** If you want pulse signals to be received and processed while you are off your bike, the SLEEP-Mode must be cancelled by switching the computer on / pressing any button.

## 7. Pulse information of your VDO HC 12.6

Your VDO HC 12.6 permanently displays following pulse / heart rate information:

- Actual pulse / heart rate
- Lower limit **LO**
- Upper limit **HI**
- Heart icon to indicate reception of signals
- Audible alarm / beeper (if activated)

Information that is displayed by pressing the **PULSE** button

<b>STOP WATCH</b>	Manual stopwatch for your pulse values
<b>AVG PULSE</b>	Your average pulse within a training period
<b>MAX PULSE</b>	maximum pulse during a training period
<b>TIME ABOVE</b>	Indication of the time your pulse / heart rate is above the pre-set limit
<b>TIME IN</b>	Indication of the time your pulse / heart rate is between the pre-set upper and lower limit.
<b>TIME BELOW</b>	Indication of the time your pulse / heart rate is below the pre-set limit

The pulse information can be viewed by pressing the PULSE button in the following order.

STOP WATCH/ AVG PULSE/ MAX PULSE/ TIME ABOVE/ TIME IN/ TIME BELOW

## 8. Putting on the chest belt

Men have to put on the chest belt below the pectoral muscles, women below the bust on the ribs. Electrodes incorporated to the chest belt measure your pulse.

**To ensure precise measuring either the electrodes or your skin must be moistened.**

A little water or saliva will do that. Later, during training, your sweat is then providing the required moist. The chest belt must not be put on too tight or your breathing may become hindered. The perfect fit of the chest belt is achieved by adjusting the elastic strap. When done training you may clean the **chest belt** by rinsing it with warm water. The **elastic strap** is machine washable

**The flashing heart icon in the display indicates the functioning transmission of pulse signals from the chest belt to the computer.**

## 9. Setting of pulse limits

With your VDO HC 12.6 you determine upper and lower limits for your pulse / heart rate to define your training zone.

During initial setup or when the AC-button at the rear of the housing has been pressed, following values apply by default:

- Lower limit LO 80
- Upper limit HI 140

**Step 1:** Call any pulse information into display by pressing the PULSE button.

**Step 2:** Press MODE 1 for 3 sec. The lower part of the display alternately shows "ENTER and HIGH LIMIT" plus the number "140" or the value you have last entered. The middle part of the display shows "HI" and the respective value

**Step 3:** By pressing MODE 2 you can change this value, pressing once increases by 1, constant pressing increases by increments of 5, i.e. up to 160. Upper limit may be set from 80 to 220 beats per minute. Exceeding 220, setup will start anew at 80.

**Step 4:** Once your upper limit is set, i.e. 160, MODE 1 will compulsorily take you to setup your lower limit.

The lower part of the display alternately shows "ENTER and LOW LIMIT" plus the number "150" (= set value for upper limit minus 10).

The middle part of the display shows "LO" and the respective value, here "150".

**Step 5:** By pressing MODE 2 you can change this value, pressing once decreases by 1, constant pressing decreases by increments of 5, i.e. "145".

**Step 6:** Once you have set up your lower limit, you may exit setup by pressing MODE 1 for 3 sec.

Preset values for your upper and lower pulse limits are permanently displayed in the middle part of the LCD. (**HI** and **LO**)

## 10. The stopwatch

### 10.1 Stopwatch (automatic)

With your VDO HC 12.6 running (not in Sleep-Mode), the receiver for pulse signals is activated as well. As soon as the chest belt (sender) starts transmitting pulse signals, the STOPWATCH will start **automatically**.

**The STOPWATCH may also be manually started and stopped.** (see manual operation of the stopwatch).

If you don't stop the STOPWATCH manually, it stops automatically as soon as the receiver is no longer being transmitted pulse signals from the chestbelt sender.

For example, you have put off the chestbelt after your training or the distance between receiver (computer) and sender (chestbelt) has become too big.

**Only with the STOPWATCH running, values and information for TIME ABOVE--TIME IN--TIME BELOW and AVG PULSE can be processed and displayed.**

### 10.2 Manual operation of the STOPWATCH

Only with the receiver (computer) on and the chestbelt transmitting pulse signals (actual pulse displayed), the STOPWATCH is manually operable.

**Step 1:** By pressing PULSE call STOPWATCH in your display

**Step 2:** To either stop or restart the STOPWATCH press MODE 1 and MODE 2 simultaneously.

Once you have put your STOPWATCH to an halt, the lower part of the display alternately shows "STOPWATCH" and the respective value. Additionally you see "FREEZ". **"FREEZ" indicates that the STOPWATCH has been put to a manual halt.** Restarting the STOPWATCH (MODE 1 and MODE 2 simultaneously), your display shows "STOPWATCH" and the respective value. "FREEZ" will then disappear from the display.

**P19**

## 11. Calling up your average pulse / heart rate

AVG PULSE information is called up by pressing the PULSE key. Average pulse is calculated by the number of heartbeats and the STOPWATCH time.

**With the STOPWATCH manually put to halt, average pulse can only be calculated for the time measured to date.**

With the STOPWATCH manually put to halt and calling up AVG PULSE, the lower part of the display alternately shows the then actual value and "FREEZ".

**"FREEZ" indicates that the STOPWATCH has been put to a manual halt.**



## 12. Display of training times within preset target range training zones.

With your VDO HC 12.6 you determine your upper and lower pulse limits  
Limits setup see **paragraph 9**.

**Training times within preset target range training zones are only registered if**

- the computer is switched on,
- the chestbelt sender is transmitting pulse signals,
- the STOPWATCH has not been put to a manual halt,

Training times within preset target range training zones are called up by pressing the PULSE button.

**TIME ABOVE** indicates the time your pulse has been above the preset upper limit, i.e. 12:15 mm:ss

In case the display alternately shows "**FREEZ**" and the actual value, the STOPWATCH has been put to a manual halt. Hence, registering training times within target zones has been interrupted. "FREEZ" indicates that status.

**TIME IN** indicates the time your pulse / heart rate is within the preset upper and lower limit window, i.e. 1:14:40 h:mm:ss This window is your desired target range zone in which you should be most of the time to achieve optimum results. Same here, "**FREEZ**" indicates the STOPWATCH has been put to a manual halt and time zone registering is interrupted.

**TIME BELOW** indicates the time your pulse has been below the preset lower limit, i.e. 8:40 m:ss

In case the display alternately shows "**FREEZ**" and the actual value, the STOPWATCH has been put to a manual halt.

## 13. BEEPER activating / deactivating

Should your actual pulse be either higher than the preset upper limit or lower than the preset lower limit, an audible alarm (BEEPER) warns you about that status.

The beeper may be activated or deactivated.

ON / OFF BEEPER

Press PULSE for 3 sec

The beeper icon emerges on or disappears from the display.

## 14. Troubleshooting

This chart outlines possible malfunctions, their causes and removal.

malfunctions	most likely cause	removal solutions
irregular LCD readout (i.e. after battery change)	computer software is not running smoothly	press AC-button at the rear of computer head to reset
no speed display	check for proper distance between sensor and magnet	readjust sensor and magnet
	cable from sensor to computerhead broken	check cable and replace if necessary
	computerhead is incorrectly twisted onto handlebarholder	place computerhead on handlebar holder and twist until detent (CLICK)
display fades or disappears	no wheelsize value entered	enter wheelsize number
	battery in computer empty	check battery and replace if necessary.
	temperatures below -15°C (40°F) dull display readout	Back in normal temperatures, display picks up working correctly.
no pulse display	computer in sleep-mode, receiver not activated	press any button to activate receiver
	chestbelt battery empty	check battery and replace if necessary.
	chestbelt electrodes not moistened	moisten the electrodes with water or saliva
	distance from computer to chestbelt is too big	reduce distance
no average pulse display - no time display for training zones	stopwatch not running, stopwatch manually arrested	start stopwatch or take off manual halt

## 15. Warranty

We warrant VDO HC 12.6 (chestbelt, sensor, computer head and handlebar holder) to the original purchaser for five years from date of purchase against defects in material and workmanship.

**This does not cover the batteries, cables** and defects resulting from normal wear and tear, improper care, accidents, abuse or alteration.

Please take care to retain your receipt of purchase.

In case of legitimate complaints, you are entitled to receive a comparable replacement model. Due to possible model changes, your model might not be available any more.

You may contact your retailer or store where you purchased your VDO HC 12.6 or send the computer directly to us:

CYCLE PARTS GMBH

Grosse Ahlmuehle 33

76865 Rohrbach / Germany

In case of technical queries, call our consumer-service-hotline Tel.+49-6349-9635-10.

Technical specifications of VDO HC 12.6 are subject to change.

**16. Technical data**

## dimensions

computer	width 42 x ht 52 x depth 14mm	weight 40(g)
chestbelt		weight 80(g)
handlebar holder		weight 30(g)
batteries	computer	3V, type 2032
	chestbelt	3V, type 2032
radio frequency	chestbelt	5,2 Khz (POLAR-compatibel)
chest belt (transmitter) range		0.75 m
operating temperature range	LCD-display	-15 °C to +80 °C
speed measuring range	2,5 km/h minimum	120 km/h maximum
trip distance counter		up to 999,99 km or mi
NAVIGATOR		up to 999,99 km or mi
odometer 1		up to 99.999 km or mi
odometer 2		
TOTODO odometers 1+2		up to 199.999 km or mi
wheelsize	100 mm minimum	3999 mm maximum
pulse measuring range	40 minimum	240 maximum

**17. Contents**

- 1 computer head
- 1 handlebar holder with sensor, cable and screw
- 1 rubber shim for sensor mount
- 1 spoke magnet
- 1 chestbelt plus Elastic strap
- 5 cable ties
- 1 battery 3 V Type CR 2032
- 1 installation and operation manual