

SERIES-X

I F GB D

VDO
CYCLECOMPUTING



X3DW

D Bedienungsanleitung

GB Instruction Manual

F Manuel d' Installation et d' Utilisation

I Manuale d' Installazione e Funzionamento

Preface

Congratulations

With your selection of a VDO computer you have opted for a technically very high quality appliance. In order to fully benefit from the potential of the computer, we recommend that you carefully read this manual. It contains all operating instructions and many other useful tips.

We hope you enjoy cycling with your VDO bike computer.

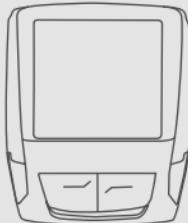
Cycle Parts GmbH

Pack contents

Please first check that this pack is complete:

1 VDO computer

Battery installed



1 rubber pad

for transmitter



1 speed transmitter

Battery installed



1 spoke magnet

(clip magnet)



1 universal handlebar holder



cable ties

for fitting the holder and transmitter



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„>>> P02“ links at the beginning of a chapter
are related to the respective picture in the
picture book!

1. Display

The display can be divided into 5 sections:

Section 1

always shows the current time.

Section 2

shows the current cadence, if the cadence transmitter is installed (optional).

You will also find indicator elements on the display

You can find the description of the individual indicators on the right hand side.



Section 3

shows the current speed.

Section 4

shows the value of the display function/information that you selected.

Section 5

shows the description of the selected function in the top line (info line). The second line (menu line) shows,

- whether there is more information „MORE“
- whether there is another selection option „SELECT“

Service indicator

shows that your bike should go for a service.
You can set the service interval individually for
bike 1 and bike 2

Stopwatch indicator

shows that a timer is still running whilst you have
retrieved other information on the display

Indicator bike 1/bike 2

The computer can work with two different settings
for 2 bikes. The indicator shows which of the
two bikes you have chosen to use.
The total distances are accordingly counted and
stored separately for bike 1 and bike 2.

KMH MPH Measurement unit (KMH or MPH)

The computer can display both KMH and MPH.
Distances are shown in kilometres or miles
accordingly. The indicator shows the selected
measurement unit

Speed difference indicator (current) to speed (average)

The computer compares the current speed
with the average speed.

The indicator shows

- whether the current speed is higher than
the average (+1 KMH)
- below the average (-1 KMH)
- or matches the average
(tolerance +/- 1 KMH).



Menu prompt indicator

When a submenu has been accessed, these indicators
flash and show that there are other selection
options or that the computer is waiting for
an entry (setting mode).

Alarm indicator

Shows whether an alarm/wake-up time has
been set.

2. Operation

To make your computer easy to use, we have developed the EMC Easy Menu Control system.

The EMC makes your computer easier to operate by means of a full text menu guidance, as is used on most mobile phones.

Menu indicators on the display flash to show that there are other selection options.

In function mode and setting mode, the computer is operated using the 4 buttons.



C = CLEAR

In function mode:

- ④ Jump back a menu level from the submenu.
- ④ Hold C for 3 seconds: Set timer back to zero.

In setting mode:

- ④ Jump back to function mode.
- ④ Correct an entry.
- ④ Jump back a digit.

▼ = DOWN

In function mode:

- ④ Scroll downwards within the functions.

In setting mode:

- ④ Scroll downwards within the setting modes.
- ④ Decrease a digit.

M = MENU

In function mode:

- ④ Access available submenu.
- ④ Confirm selection.
- ④ Start/stop timer.

You can recognise a submenu by the flashing menu indicators.

In setting mode:

- ④ Select a setting.
- ④ Confirm a setting.
- ④ Confirm a selection made.

▲ = UP

In function mode:

- ④ Scroll upwards within the functions

In setting mode:

- ④ Scroll upwards within the setting modes.
- ④ Increase a digit.

3. Functions

3.1 Information functions in function mode

TRIPDISTANCE

Shows the distance of the current trip since the last reset. Maximum value 999.99 KM.
If the maximum value is exceeded, the counter starts again at zero. At the same time the values for ride time and average speed are set back to zero

TRIPDISTANCE/MORE

MORE shows that there is a submenu for the main menu TRIPDISTANCE. You open the submenu with the **M** button. In the submenu you will find:

- Total kilometres BIKE 1 ODO BIKE 1 up to a maximum of 99,999 KM.
- Total kilometres BIKE 2 ODO BIKE 2 up to a maximum of 99,999 KM.
- Total kilometres for Bike 1 + Bike 2 ODO TOTAL up to a maximum of 199,999 km.

You leave the submenu by pressing **C** again.

RIDE TIME

Shows the ride time of the current day's trip since the last reset. Maximum 23:59.59 HH:MM:SS
If the maximum value is exceeded, the ride time measurement starts again at zero. At the same time the day's tripdistance and average speed are set back to zero.

RIDE TIME/MORE

MORE shows that there is a submenu for the main menu RIDE TIME. You open the submenu with **M**. In the submenu you will find.

- Total ride time bike 1 up to a maximum of 999:59 HHH:MM.
- Total ride time bike 2 up to a maximum of 999:59 HHH:MM.
- Total ride time bike 1+ bike 2 up to a maximum of 1999:59 HHHH:MM.

You leave the submenu by pressing **C** again.

Avg Speed

Shows the average speed, calculated from the day's tripdistance and ride time, since the last reset
Accuracy: 2 decimal places.

The average speed is recalculated if the day's tripdistance or ride time exceeds the maximum value.

Max Speed

Shows the maximum speed on the current trip since the last reset. Accuracy: 2 decimal places.

NAVIGATOR

The navigator is a second day's kilometre counter
The counter is:

- Independent of the day's tripdistance counter.
- Can be reset to zero as often as you want.
- Can be set to a starting value.
- Can count forwards or backwards from this starting value.

These special options make it easier to follow trips from a touring book or Roadbook.

NAVIGATOR/SELECT

SELECT shows that there is a submenu for the main NAVIGATOR menu. You open the submenu with **M**

- Set

You can set a starting value here and decide whether the counter counts forwards or backwards from

this starting value. Further details in Chapter 5.7.

- Reset

In the reset submenu you set the NAVIGATOR back to zero. You leave the submenu by pressing **C** again.

3.2 Timer-Functions

The X3DW has 7 different selectable timers. Only the timer selected is shown on the display.

STOPWATCH

You can use the stopwatch to measure as many times as you want. Maximum value: 23:59:59 HH:MM:SS. If the maximum value is exceeded, the counter starts again at zero.

Start with **M**. Stop with **M**.

Reset with **C** for 3 seconds.

TIMER1, TIMER2, TIMER1+2

A time can be entered for TIMER1 and TIMER2.

The timer counts up to the set time, jumps back to zero and counts again up to the set time.

At the end of TIMER1, 1 beep is heard, at the end of TIMER2, 2 beeps are heard. TIMER1+2 combines the two timers, e.g. for interval training.

The number of repeats for TIMER1+2 can be entered beforehand. Maximum value 23:59:59 HH:MM:SS, 99 repetitions. Start with **M**. Stop with **M**.

Reset with **C** for 3 seconds.

COUNTDOWN

On the countdown timer, a time can be set.

The timer counts down backwards from this time to zero. At the end of the countdown a beep is

heard. Start with **M**. Stop with **M**.

Reset with **C** for 3 seconds.

TIME TRIAL

On the TIME TRIAL timer, a distance can be set (time trial distance). Whilst cycling, the expected ride time, based on the average speed and the distance still to be cycled, is constantly shown alternately on the display.

Start with **M**. Stop with **M**.

Reset with **C** for 3 seconds.

LAP TIMER

The lap timer can store 30 laps.

For every lap, the following is saved:

- Time
- Distance
- Average speed

The next lap can be started either manually or automatically. For the automatic start, a distance is preset. Once this distance has been cycled, the next lap is started automatically.

Start the 1st lap with **M**. Start all other laps with **C**. Stop with **M**. Reset with **C** for 3 seconds. The lap counter is set to 1. The stored lap data can be recalled under:

- SETTINGS/SELECT
- LAP DATA/RECALL

The stored lap data are deleted and overwritten if lap 1 is started again or 30 laps are exceeded.

3.3 Cadence option

The cadence menu is only available if

- the cadence transmitter is installed,
- the transmitter was recognized during pairing.

After pairing the cadence transmitter, the current cadence is shown in section 2 of the display.

In function mode it is possible to select the CADENCE/MORE menu using the using the up/down buttons.

Confirming with opens the menu and gives you

access to the information.

Using you come to:

- AVG CADENCE
- MAX CADENCE

Resetting the trip data also sets the cadence data back to zero.

4 Installation

4.1 Fitting the transmitter, magnet and handlebar holder

>>> P01

Start by fitting the transmitter and magnet.

ATTENTION: The transmitting distance between the transmitter and the computer on the handlebars should not be more than 60 cm (transmission range).

step 1 Place the rubber pad under the transmitter. Fit the transmitter on the same side of the fork where you later want to fit the computer to the handlebars (right or left) using the cable ties supplied (loose at first, do not pull tight just yet).

ATTENTION: The sensor mark on the transmitter

must point to the spokes.

Depending on the room available, the transmitter can be fitted at the front on the forks, inner side of the fork or backside of the forks. **>>> P04**

step 2 Place spoke magnet around an outer spoke. The silver middle of the magnet points towards the transmitter. Align the magnet to the sensor mark on the transmitter with a gap of about 1 – 5 mm.

Step 3 Align transmitter and magnet for good and fasten in place: Pull cable ties tight and push magnet in firmly.

Step 4 Decide whether fitting to handlebar or stem and turn the base of the handlebar holder by 90° accordingly. To do so, undo the screws in the holder, take out the foot and turn it 90°, insert and tighten the screws again.

ATTENTION: Do not over tighten screws.

step 5 Guide the cable ties through the slot in the handlebar holder, place around the handlebars or the stem and pull (do not pull tight just yet).

Step 6 If fitting to handlebar: Align computer angle to achieve optimum readability. Now pull cable ties tight. Snip off protruding ends with clippers.

4.2 Switching on the computer for the first time

>>> P02, Display see Chapter 4.4

Waking up from despatch mode

The computer is delivered with a battery installed. To reduce the battery consumption, the computer is put into despatch mode. The display is empty (no display).

To wake it up out of despatch mode, press the  button simultaneously for a few seconds. The computer is now ready for use and tells you so by showing the language setting.

See also Chapter 4.4

4.3 Installing the battery in the computer

>>> P05

Your VDO computer is supplied with a 3V battery (type 2032).

The battery is already installed when supplied.
To change the battery, proceed as follows:

Step 1 Place the battery in the computer casing with the +terminal facing up.

Step 2 Make sure that the battery does not get wedged.

step 3 Take care that the rubber seal lies flat on the battery compartment lid.

Step 4 Insert the battery compartment lid into the opening and turn it with a coin to the right as far as it will go (approx. 1/3 turn).

TIP for changing battery: VDO recommends changing the battery once a year. Buy a new battery in good time to ensure the wireless transmission works perfectly. When the battery is changed, all settings and the total kilometres cycled are saved.

4.4 Language setting after battery change

After inserting the battery, your VDO computer automatically welcomes you in the English main menu.



LANGUAGE ENGLISH. Confirm with **M**

ENGLISH SELECT OK? Confirm with **M**

Computer confirms:
LANGUAGE SELECT DONE.

Automatic return to SETTINGS/SELECT.
You are now in function mode. If you do not want to make any more settings, you can recall the functions using **▲▼**. If you want to make further settings, confirm SETTINGS/SELECT with **M**.
When the battery is changed, all settings and the total kilometres cycled are saved.

4.5 Placing the computer into the handlebar holder

>>> **P06**

The VDO twist-click system fastens the computer securely with the handlebar holder.

Step 1 Place computer into the holder in 10 o'clock position.

Step 2 Twist computer to the right to 12 o'clock position and click into the holder system.

Step 3 To take the computer out, twist to the left (do not push or pull).

How to remember: **Rigid to the Right, Loose to the Left**

4.6 Transmitter pairing

The speed and cadence signals (Option: Item no. 7702) will be transmitted digitally and encoded to your computer. This technology is less prone to problems than analogue transmission. This way, when riding in a group there are no data overlaps (cross talk). So that the computer acquires the digital encodings from the transmitter, a pairing must be made:

step 1 Place the computer into the handlebar holder. The display for the speed and the cadence now flashes. The flashing shows that the computer is looking for its transmitter.

step 2 Spin the front wheel or simply set off and the computer acquires the digital encodings. When the computer has found the transmitters and has acquired the encodings (pairing), the speed and cadence are shown on the display.

ATTENTION: The time window for pairing is 5 minutes. If you do not start cycling during these 5 minutes, no pairing takes place. Speed and cadence are not displayed. The pairing then has to be repeated:

- Place the computer back into the handlebar holder **OR**
- press the buttons **C + M** together.

5. Basic settings

5.1 Setting the language



Using the **▲▼** buttons, go to SETTINGS/SELECT. Confirm with **M**.

You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).

▲▼ to LANGUAGE SELECT. Confirm with **M**.



▲▼ to LANGUAGE ENGLISH. Confirm with **M**.

ENGLISH SELECT OK? Confirm with **M**.

LANGUAGE SELECT DONE. The computer automatically returns to the start menu SETTINGS/SELECT.

5.2 Setting and measuring the wheel size

You must set the wheel size (wheel roll circumference) of your bike so that your VDO computer can measure correctly. There are 2 ways of doing this:

5.2.1 Setting using tyre table

The common types of tyres are listed in the tyre table. If your tyre type is not listed, we recommend entering the wheel size manually.

The values given in the table are approximate values. These values differ according to brand, tyre height and tyre profile. This can consequently also lead to discrepancies in the distance measured and the speed shown.

	mm-value	inch-value
16 x 1,75	1272	50,1
20 x 1,75	1590	62,6
24 x 1 3/8	1948	76,7
24 x 1,75	1907	75,1
26 x 1	1973	77,7
26 x 1,5	2026	79,8
26 x 1,6	2051	80,7
26 x 1,75	2070	81,5
26 x 1,9	2089	82,2
26 x 2,00	2114	83,2
26 x 2,125	2133	84,0
26 x 1 3/8	2105	82,9
26 x 3/4	1954	76,9
27 x 1 1/4	2199	86,6
28 x 1,5	2224	87,6
28 x 1,75	2268	89,3
28 x 1 1/2	2265	89,2
28 x 1 3/8	2205	86,8
30-622	2149	84,6
32-622	2174	85,6
37-622	2205	86,8
40-622	2224	87,6

How to set the tyre size by selecting the tyre:



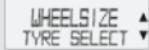
Using **▲▼** go to SETTINGS/SELECT. Confirm with **M**. You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).

Using up/down go to WHEELSIZE/SET. Confirm with **M**.

MEASUREMENT/KMH. Confirm with **M** or **▲▼** to change to MPH.



WHEELSIZE/BIKE 1 (use **▲▼** to go to setting for bike 2). Confirm with **M**.



WHEELSIZE/TYRE SELECT. Confirm with **M**.



TYRE SELECT/SELECT. Now select your tyres using **▲▼** Confirm with **M**.

The confirmation question appears "Tyresize/SELECT OK? When the displayed tyre size matches the one you want, confirm with **M**.

The display confirms WHEELSIZE/SET DONE. Automatic return to SETTINGS/SELECT.

5.2.2 Setting using wheel circumference

>>> P07

To enter the wheel size manually, you must first measure the wheel roll circumference on your bike.

Measuring wheel roll circumferences:

Step 1 Precisely align valve on the front wheel vertically to the ground.

Step 2 Mark this spot on the ground with a line (e.g. chalk).

step 3 Push the bike forwards one turn of the wheel until the valve is vertical to the ground again.

Step 4 Also mark this spot on the ground.

Step 5 Measure the distance between the two marks. That is your wheel circumference (=roll circumference).

Step 6 Enter the wheel circumference measured in this way into your VDO computer.

ATTENTION: If you have selected KMH display, you must enter the wheel circumference in mm (If MPH display is selected, enter the wheel circumference in inches).

How to set the wheel size manually:



Using ▲▼ go to SETTINGS/SELECT. Confirm with **M**.

You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode)



Using ▲▼ go to WHEELSIZE/SET. Confirm with **M**.



MEASUREMENT/KMH. Confirm with **M** or ▲▼ to change to MPH.

WHEELSIZE
BIKE 1

WHEELSIZE
MANUAL SET

2111
BIKE 1
CONTINUE

WHEELSIZE/BIKE 1.
(use ▲▼ to go to setting for bike 2) Confirm with **M**

Using ▲▼ go to WHEEL-SIZE/MANUAL SET. Confirm with **M**.

BIKE 1 ...SET SIZE/CONTINUE
Now set the wheel roll circumference measured using ▲▼.
Confirm the entry with **M**.

BIKE 1/SET OK? Confirm with **M**.

The display confirms: WHEELSIZE/SET DONE.
Automatic return to SETTINGS/SELECT.

Attention: The factory settings for bike 1 = 2155 mm and for bike 2 = 2000 mm. If you do not enter any wheel sizes, the computer works with these factory settings. The values measured in this way for speed, distance etc. can differ widely from the actual values.

5.3 Setting the Clock/Alarm (4)

How to set the clock:



Using **▲▼** go to SETTINGS/SELECT. Confirm with **M**. You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).



Using **▲▼** go to CLOCK/ALARM/SET. Confirm with **M**.



CLOCK/ALARM/24-H-MODE. You can switch to 12-H mode using **▲▼**. Confirm with **M**.



CLOCK...SET HOUR/CONTINUE. Set the hours using **▲▼**. Confirm the hour setting with **M**.



CLOCK...SET MINUTES/CONTINUE. Set the minutes using **▲▼**. Confirm the minutes setting with **M**.

CLOCK/SET OK? Confirm with **M**.

The display confirms: CLOCK/SET DONE. Automatic return to SETTINGS/SELECT.

How to set the alarm:



Using **▲▼** go to SETTINGS/SELECT. Confirm with **M**.



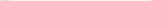
You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).



Using **▲▼** go to CLOCK/ALARM/SET. Confirm with **M**.



CLOCK/ALARM/CLOCK SET. Using **▲▼** you can switch to alarm set.



CLOCK/ALARM/ALARM SET. Confirm with **M**.

Confirm with **M** ALARM OFF or ALARM ON appears on the display. Switch the alarm OFF or ON using **▲▼**. With ALARM ON you come to the alarm time setting. Confirm with **M**.

00:00

ALARM
CONTINUE

ALARM...SET HOUR/CONTINUE
Set the hours using up/down.
Confirm the hour setting with **M**.

00:00

SET MINUTES
CONTINUE

ALARM...SET MINUTES/
CONTINUE. Set the minutes using **▲▼**. Confirm the minutes setting with **M**.

ALARM/SET OK? Confirm with **M**.

The display confirms: ALARM/SET DONE.
Automatic return to SETTINGS/SELECT.

If you have set the alarm to ON, the alarm symbol appears on the bottom left of the display
()-Symbol.

5.4 Setting the total kilometres

You can program the values on the distance counter at any time (e.g. at the end of a season).

1408
813 151
SETTINGS
SELECT

Using **▲▼** go to SETTINGS/
SELECT. Confirm with **M**.
You are now in setting mode
(pressing **C** for 3 seconds gets you back to function mode).



You can set the flashing digits using **▲▼**.

To access the next digit, confirm with **M**. Repeat the steps until the last digit on the right is flashing. Confirm with **M**.

ODOOMETER
SET

Using **▲▼** go to ODOMETER/
SET. Confirm with **M**.

ODOOMETER
ODO BIKE 1

ODOOMETER/ODO BIKE 1
(use **▲▼** to go to setting for BIKE 2). Confirm with **M**.
ODO BIKE 1...SET DISTANCE/
CONTINUE.

ODO BIKE 1/SET OK? Confirm with **M**.

The display confirms ODO BIKE 1/SET DONE.
Automatic return to SETTINGS/SELECT.

5.5 Switch from Bike1 to Bike2 12

>>> P03

Your VDO computer can be used on 2 bikes. If you switch from bike 1 to bike 2, the **computer recognises** the transmitter from bike 2. The computer then **automatically** switches to bike 2. All data are now saved for bike 2. When you use the computer again on bike 1, transmitter 1 is recognised. The computer switches to bike 1. The data are now saved for bike 1.



The selected Bike 1 or 2 is shown on the display bottom left (12).

Note: The transmitter on bike 2 must have been set to bike 2 before using it the first time. >>> P03

5.6 Service interval display 14

The VDO service interval display reminds you to have your bike checked in the workshop.

You can switch the service interval ON or OFF. You can set separate service intervals for 2 bikes. When the set service interval distance has been reached:

- The -symbol flashes on the display.
- The information line displays BIKE SERVICE/BIKE 1

You should now either carry out the recommended bike check yourself or have the bike checked by your dealer.

Press any button. The text BIKE SERVICE disappears again. After another 50 km the -also disappears. You can also switch off the flashing -symbol. To do so, enter the service interval again.

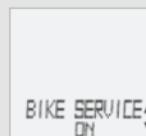
How to set the service interval:



Using go to SETTINGS/SELECT. Confirm with . You are now in setting mode (pressing for 3 seconds gets you back to function mode).



Using go to BIKE SERVICE/SET. Confirm with .



BIKE SERVICE/ON (switch to OFF using). Confirm with .

BIKE SERVICE
BIKE 1

BIKE SERVICE/BIKE 1
(use ▲▼ to switch to bike 2)
Confirm with **M**

00750
SET DISTANCE
CONTINUE

BIKE 1 ...SET DISTANCE/
CONTINUE. You can set the flash-
ing digits using ▲▼ To access
the next digit, confirm with **M**.

Repeat the steps until the last digit on the right
is flashing. Confirm with **M**

BIKE 1/SET OK?
Confirm with **M**

The display confirms: BIKE SERVICE/SET DONE.
Automatic return to SETTINGS/SELECT.

5.7 The navigator

With the VDO navigator you can complete trips according to Roadbooks. Roadbooks = tour descriptions with km information for certain points of orientation. The VDO navigator is an independent km counter and can count forwards or backwards. The km status can be set at any desired point. You can therefore start in the middle of a trip or make a km correction if you have taken a wrong turn.

Setting the navigator:

1426
813 10
53.37
1
NAVIGATOR
SELECT

Using ▲▼ go to NAVIGATOR/
SELECT. Confirm with **M**

NAVIGATOR
SET

NAVIGATOR/SET. Confirm with **M**
You are now in setting mode
(pressing **C** for 3 seconds gets
you back to function mode).

NAVIGATOR
FORWARD

Select NAVIGATOR/FORWARD
or NAVIGATOR/BACKWARD
using ▲▼
Confirm with **M**

0530 1
SET DISTANCE
CONTINUE

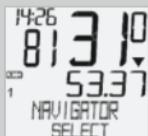
NAVIGATOR SET DISTANCE/
CONTINUE. The flashing digit is
ready to be set.
Using ▲▼ set the digits.

Access next digit with **M**. Repeat steps until last digit is flashing. Confirm with **M**. NAVIGATOR/SET OK? Confirm with **M**.

NAVIGATOR/SET DONE appears as confirmation and your VDO computer automatically returns to the NAVIGATOR/SELECT menu.

Note: The navigator always runs automatically at the same time, even if you have not set it.

Set navigator back to zero:



Using **▲▼** go to NAVIGATOR/SELECT. Confirm with **M**.

5.8 Sleep mode

Your VDO computer is equipped with a two-fold sleep mode function.

In sleep mode, a large part of the display is switched off to save battery power. Time, service interval display and the -symbol (if a timing function is running) continue to be displayed.

Sleep mode 1 switches itself on after 5 minutes if no speed impulses are processed and no button is pressed.

Sleep mode 1 is ended when speed impulses are processed again (when cycling) or a button is pressed.



NAVIGATOR/SET
Using **▲▼** switch to
NAVIGATOR/RESET.
Confirm with **M**.

Security question: NAVIGATOR/RESET?
Confirm with **M**.

NAVIGATOR/SET DONE appears briefly and your VDO computer automatically returns to the NAVIGATOR/SELECT start menu.

In **Sleep-Modus 2** the **wireless receiver** is also switched off. (after 15 min).



The display shows SLEEP MODE/PRESS BUTTON
Before continuing to ride, you must press a button to switch the receiver back on.



The display for the speed and the cadence flashes.

The computer now waits for speed and cadence signals (as long as cadence is installed). Simply set off riding now. The computer acquires the digital encodings from the transmitter.

5.9 Reset functions

You use the RESET function to set any of these back

- TOUR DATA
- ODO TOTAL
- TOT RIDE TM
- NAVIGATOR
- LAP DATA

With the respective reset modes, the following information is deleted:

- TOUR DATA: Day's tripdistance, ride time, average speed, max. speed, cadence (option)
- ODO TOTAL: Total km, km bike 1, km bike 2
- TOTAL RIDE TM: Total ride time, ride time bike 1, ride time bike 2.
- NAVIGATOR: all values from the second distance counter.
- LAP DATA: All stored lap times, distances, average lap values.



Using **▲▼** go to SETTINGS/SELECT. Confirm with **M**. You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).



Using **▲▼** go to DATA RESET/SELECT. Confirm with **M**.

Use **▲▼** to go to the data you want to reset:

- DATA RESET/TOUR DATA
- DATA RESET/TOT RIDE TM
- DATA RESET/ODO TOTAL
- DATA RESET/LAP DATA
- DATA RESET/NAVIGATOR

Confirm your selection with **M**.

Query: SELECTED DATA / RESET?

ATTENTION: This step cannot be reversed.

Only confirm with **M**, if you want to delete the selected data. The display confirms: DATA RESET/RESET DONE. Automatic return to SETTINGS/SELECT.

6. Timer functions

Your VDO computer has 7 different timing functions. When one of the timing functions is running, the  symbol always flashes at the bottom left of the display. You can only activate one timing function from the 7 available at any one time. The setting/measuring range for all timing functions is 0:00:00 h to 24:00:00 h.

1. STOPWATCH

Manual stopwatch for measuring the ride time for certain route sections.

2. TIMER1

You can program a time, e.g. for interval training. TIMER1 counts forwards from zero. At the end of TIMER1 a single beep is heard. TIMER1 starts again until you stop it.

3. TIMER2

You can program a time, e.g. for the rest period during interval training. TIMER2 counts forwards from zero. At the end of TIMER2 a double beep is heard. TIMER2 starts again until you stop it.

4. TIMER1+2

With this function, first TIMER1, then TIMER2 run alternately. At the end of TIMER1 a single beep is heard and TIMER2 starts to run automatically. At the end of TIMER2 a double beep is heard. TIMER1+2 keeps running until you stop this function or until the set number of repeats has expired.

5. COUNTDOWN

You can program a time, and the timer counts backwards from this time. At the end of the COUNTDOWN time a single beep is heard.

6. TIME TRIAL

On the TIME TRIAL timer, a distance can be set (time trial distance). Whilst cycling, the expected ride time, based on the average speed and the distance still to be cycled, is constantly shown alternately on the display.

7. LAP TIMER

The lap timer can store 30 laps. For every lap, the following is saved:

- Time
- Distance
- Average

The next lap can be started either manually or automatically.

For the automatic start, a distance is preset. Once this distance has been cycled, the next lap is started automatically.

6.1 Selecting timers



Using **▲▼** go to SETTINGS / SELECT. Confirm with **M** You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).



Using **▲▼** go to TIMER/ SELECT Confirm with **M**



Using **▲▼** select the timer you want:

- STOPWATCH
- COUNTDOWN
- TIMER1
- TIMER2
- TIMER1+2
- TIME TRIAL
- LAP TIMER

When confirming the SELECT the timing function last selected always appears.

Confirm with **M**

Timer/SELECT OK? Confirm with **M**

TIMER/SELECT DONE appears briefly and your VDO computer automatically returns to the start menu SETTINGS/ SELECT. The selected TIMING function is now available in function mode.

Note: If you have selected the TIMER or COUNTDOWN or TIME TRIAL modes, but have not set any time values or distance, the text „NO VALUE“ appears.

You then still have to enter the times or distances for the selected timer in the menu TIMER SET.

6.2 Setting timers

Setting timer and countdown counters:



Using **▲▼** go to SETTINGS / SELECT. Confirm with **M** You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).



TIMER
SET

Using **▲▼** go to TIMER/SET Confirm with **M**

Using ▲▼ select the timer you want to set:

- TIMER1
- TIMER2
- COUNTDOWN

Confirm with **M**. flashing digits are ready to be set.

Set hours using ▲▼. Confirm with **M**.

Set minutes using ▲▼. Confirm with **M**.

Set seconds using ▲▼. Confirm with **M**.

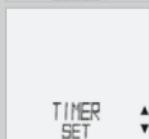
SET OK? Confirm with **M**.

TIMER1 or TIMER2 or COUNTDOWN/SET DONE appears briefly and your VDO computer automatically returns to SETTINGS/SELECT.

Setting TIMER1+2



Using ▲▼ go to SETTINGS / SELECT Confirm with **M**. You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).



Using ▲▼ go to TIMER/SET. Confirm with **M**.



Using ▲▼ select the timer you want to set TIMER1+2. Confirm with **M**.



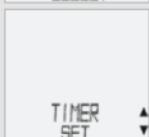
TIMER1+2/SET OK? Confirm with **M**.

Return confirmation: TIMER1+2/SET DONE Your VDO computer automatically returns to the menu SETTINGS/SELECT.

Setting TIME TRIAL timer:



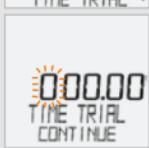
Using ▲▼ go to SETTINGS/SELECT. Confirm with **M**. You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).



Using ▲▼ go to TIMER/SET. Confirm with **M**.



Using ▲▼ select the timer you want to set TIMER/TIME TRIAL. Confirm with **M**.



TIME TRIAL...SET DISTANCE/CONTINUE. Now enter the distance for the time trial.

045.70
SET DISTANCE
CONTINUE

Set the flashing digits using **▲▼**. Change to the next digit with **M**. Repeat up to the last digit. Confirm with **M**.

TIME TRIAL/SET OK? Confirm with **M**.

Return confirmation on the display:

TIME TRIAL/SET DONE.

Return to SETTINGS/SELECT.

Setting lap timer:

On the lap timer, you can choose between starting the next lap manually or automatically. If you have chosen „automatic“, then you must specify a distance, after which the next lap is then started automatically.

1343
81320
SET
SETTINGS
SELECT

Using **▲▼** go to SETTINGS/SELECT. Confirm with **M**. You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).

TIMER
SET

TIMER
LAP TIMER

Using **▲▼** go to TIMER/SET. Confirm with **M**.

Using **▲▼** select the timer you want to set TIMER/LAP TIMER. Confirm with **M**.

LAP TIMER
MANUAL STARTY

LAP TIMER/MANUAL START (use **▲▼** to switch LAP TIMER/AUTO START. Confirm with **M**).

If you have chosen AUTO START, you must now enter the distance, after which the next lap is automatically started (e.g. 1 km)

LAP TIMER... SET DISTANCE/
CONTINUE

000.00
LAP TIMER
CONTINUE

LAP TIMER... SET DISTANCE/CONTINUE

The flashing digit is ready to be entered. Enter the value using **▲▼**. Change to the next digit with **M**. Repeat up to the last digit. Confirm with **M**.

LAP TIMER/SET OK? Confirm with **M**.

Return message LAP TIMER/SET DONE.
Return to SETTINGS/SELECT.

6.3 Operating the timers

STOPPUHR

Start with **M** Stop with **M** Reset with **C** for 3 seconds.

TIMER1, TIMER2, TIMER1+2

Start with **M** Stop with **M** Reset with **C** for 3 seconds.

COUNTDOWN

Start with **M** Stop with **M** Reset with **C** for 3 seconds.

ZEITFAHREN

Start with **M** Stop with **M** Reset with **C** for 3 seconds.

LAP TIMER

Start the 1st lap with **M**. Start all other laps with **C**. Stop with **M** Reset with **C** - 3 seconds, the lap counter is set to 1. The stored lap data are deleted and overwritten if lap 1 is started again or 30 laps are exceeded.

Or in case of automatic lap start: next lap starts automatically once the distance entered has been reached.

The stored lap data can be recalled under SETTINGS/SELECT.

Recalling lap data:



Using **▲▼** go to SETTINGS/SELECT. Confirm with **M**. You are now in setting mode (pressing **C** for 3 seconds gets you back to function mode).

Using **▲▼** go to LAP DATA/RECALL. Confirm with **M**.

LAP DATA/LAP 1.

Using **▲▼** you can selected the lap you want or confirm lap 1 with **M**.

Using **▲▼** you now get the following for lap 1:

- TIME
- DISTANCE
- AVG SPEED

Using **▲▼** you can recall the corresponding values for all other laps.

Pressing **C** for 3 seconds brings you back to function mode.

ATTENTION: The stored lap data are deleted and overwritten if lap 1 is started again or 30 laps are exceeded.

7. Terms of guarantee

VDO Cycle Parts grants a guarantee of 5 years from the date of purchase for your VDO computer. The guarantee covers material and processing defects on the computer itself, on the sensor/transmitter and on the handlebar holder. Cables and batteries as well as assembly materials are excluded from the guarantee. The guarantee is only valid if the parts concerned have not been opened (exception: battery compartment on the computer), no force has been used and there is no sign of wilful damage.

Please take care to keep the receipt as it must be presented in the event of a complaint.

If the complaint is justified, you will receive a comparable replacement appliance from us.

You are not entitled to an identical replacement model if the model in question is no longer in production due to a change of model.

Please contact the dealer from whom you purchased the device for all complaints and guarantee claims. Or send your complaint directly to:

Cycle Parts GmbH

Große Ahlmühle 33
D-76865 Rohrbach (Germany)

We would be pleased to answer any technical questions you might have at the following hotline number:

+49 (0) 63 49 - 96 35 - 10.

Additional technical information is available at:
www.vdocyclecomputing.com

We reserve the right to make technical changes in the course of further development.

8. Troubleshooting

Here you can find a list of possible faults, their causes and what you can do about them:

Error	Possible cause	Correction
Half segments on the display (e.g. after a battery change)	Computer software not running correctly after battery change	Take out battery and insert again
No speed display	Distance from sensor to magnet too big	Correct position of sensor and magnet
No speed display	Computer not properly clicked in the handlebar holder	Place computer head in the handlebar holder, twist until it clicks
No speed display	Wheel circumference is not correctly set or is at zero	Set wheel circumference
Display becomes weak	Battery dead	Check battery, replace if nec.
Display becomes weak	Temperatures under 5° make the display sluggish	At normal temperatures the display will work normally again

9. Technical spezifications

Computer:

approx. 45 x 52 x 16 mm, weight: approx. 45 g

Handlebar holder:

weight: approx. 15 g

Transmitter:

weight approx. 20 g

Computer battery:

3V, type 2032

Transmitter battery:

3V, type 2032

Computer battery life-span:

600 cycling hours, approx. 12,000 KM (7400 M)

Transmitter battery life-span:

1000 cycling hours (approx. 20,000 KM (12,000 M)

Working temperature of the display:

-15 °C to +60 °C

Speed range:

for wheel size 2155 mm, min 2.5 km/h, max 199.5 km/h

Ride time measurement range:

up to 23:59:59 HH:MM:SS

Stopwatch measurement range

up to 23:59:59 HH:MM:SS

Day's trip counter measurement range:

up to 999.99 km or mi

NAVIGATOR measurement range:

up to 999.99 km or mi

Total KM 1 and 2 measurement range:

up to 99,999 km or mi

Total kilometers measurement range:

up to 199,999 km or mi

Wheel circumference setting range:

from 100 mm to 3999 mm (3.9 to 157.4 inches)



SERIES-X

www.cyclecomputing.com

FCC ID: TFO7701

FCC Compliance and Advisory Statement

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, according 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 correct the interference by one or more of the following measures:

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

Any special accessories needed for compliance must be specified in the instruction manual.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.