

4403000000_20090423_v1

halfords

151640 Halfords 12 Function Computer

LCD Display

MODE

SET

1/2

BATTERY CHANGE

COIN

1.5V battery LR44

INDEX:

ⓂⓉ

Means press button **N** more than 2 seconds

Ⓜ

Means press button **N** quickly.

N=KEY NUMBER:

[Ⓜ:Mode Button, Ⓣ: Set Button, Ⓟ:Bike1/Bike2 Selection Button]

a. WHEEL CIRCUMFERENCE

2nd

1st

b. POPULAR TIRES CIRCUMFERENCE REFERENCE TABLE

Tire Size	Circumference Number
18 Inch	1436 mm
20x1.75	1564
20 Inch	1596
22 Inch	1759
ATB 24x1.75	1888
24 Inch	1916
24x 13/8	1942
ATB 26x1.40	1995
ATB 26x1.50	2030
ATB 26x1.75	2045
26inch (650A)	2073
ATB26x2.0(650B)	2099 mm
700C TUBULAR	2117
700x20C	2092
700x25C	2124
700x28C	2136
27 Inch(700x32c)	2155
700x35C	2164
700x38C	2174
27.5 Inch	2193
28 Inch (700B)	2234
28.6 Inch	2281

English

INDEX:

ⓂⓉ

MEANS PRESS BUTTON **N** MORE THEN 2 SECONDS.

Ⓜ

MEANS PRESS BUTTON **N** QUICKLY

N=KEYNUMBER: Ⓜ MODE Button. Ⓣ SET Button. Ⓟ 1/2 Button.

MAIN UNIT SETUP (Fig.1)

INITIATE THE COMPUTER (ALL CLEAR)

- A battery is already loaded in the main unit when purchased.
- Hold down the MODE button **Ⓜ** and 1/2 button **Ⓟ** simultaneously for more than 3 seconds to initiate the computer and clear all data.
IMPORTANT: Be sure to initiate the computer before it is be used, otherwise the computer may run errors.
- The LCD segments will be tested automatically after the unit is initiated.
- Press MODE button **Ⓜ** to stop LCD test, then the flickering "Km/h".

UNIT SELECTION

Press MODE button **Ⓜ** to choose Km/h or Mile/h. Then press the SET button **Ⓣ** to store selection.

ODO1, ODO2 and T-TM DATA SETTING

- The function is designed to re-key in former data of ODO1, ODO2 and T-TM when battery is replaced.
- A new user does not need to set this data. Each press of the SET button **Ⓣ** skips one setting data process.
- Data setting process:**
 - The data is adjusted each digit separately. The setting digit is flickering.
 - Quickly press the MODE button **Ⓜ** to increase the digital value by 1.
 - To change the setting digit by hold down the MODE button **Ⓜ** for more than 2 seconds.
 - Press the SET button **Ⓣ** to store the data then change to the next setting or the normal operation.

WHEEL CIRCUMFERENCE

- Roll the wheel until the valve stem at its lowest point close to the ground, then mark this first point on the ground. **(Fig. a)**
- Get on the bike and have a helper push you until the valve stem returns to its lowest point. Mark the second point on the ground. (Sitting on the bike achieves a more accurate reading since the weight of the rider slightly changes the wheel circumference).
- Measure the distance between the marks in millimeters. Enter this value to set the wheel circumference.
- Option: Get a suitable circumference value from the table. (Fig. b)**
- Adjust the wheel circumference as the data setting process.
- Unit will change to the normal operation after this circumference setting.

FUNCTIONS

Ⓜ : Current Speed **Ⓜ** 0.0–199.9Km/h (120.0 Mile/h), 0.1Km/h (Mile/h), +/- 0.1%
The current speed is always displayed on the upper set when riding. It displays current speed up to 199.9 Km/h or 120.0 Mile/h (for wheel diameters over 24 inches).

ODO1, ODO2: Bike1 odometer, Bike2 odometer **Ⓜ** 0.0–99999.9 Km (Miles), 0.1Km (Mile), +/- 0.1%
1. The odometer cumulates the total distance as long as the bike is running.
2. This computer design has 2 wheel circumference memories to calculate data for 2 bikes. The odometer is separated for each bike.
3. It displays one ODO data only when the bike is selected in the current status.

T-TM: Total Riding Time **Ⓜ** 0H00M-9999H59M, 1 Minute, +/- 0.003%
The T-TM accumulates total riding time while riding the bike1 and bike2.

T-ODO: Total Odometer **Ⓜ** 0.0–99999.9 Km (Miles), 0.1Km (Mile), +/- 0.1%
The T-ODO is the sum of the ODO1 plus ODO2.

Ⓜ : 12HR or 24HR Clock **Ⓜ** 1H00M00S–12H59M59S or 0H00M00S–23H59M59S, 1 Second, +/- 0.003%
It can display the current time either in 12HR or 24HR clock.

AVG: Average Speed **Ⓜ** 0.0–199.9 Km/h (120.0 Mile/h), 0.1Km/h (Mile/h), +/- 0.1%
1. It is calculated from the DST divided by the TM. The average data counted is from the last RESET to current point.
2. It will display "0.0" when TM is less than 4 seconds.
3. It is updated about one second when TM is over 4 seconds.
4. It displays an "Err" symbol when either the TM is over 100 hours or the DST is over 1,000 km (or miles). Reset the unit in order to restart.

DST: Trip Distance **Ⓜ** 0.00–99.99 Km (Miles), 0.01Km (Mile), +/- 0.01%
The DST function accumulates the distance data from the last RESET operation as long as the bike is being ridden.

TM: Riding Time **Ⓜ** 0M00.0S-59M59.9S, 0.1 Second, 1H00M00S-99H59M59S, 1 Second, +/- 0.003%
1. The TM totals the riding time from the last RESET operation.
2. It will automatically begin counting upon ding, and continue to count 2 seconds to confirm that no more wheel sensing signal is sent when riding is stopped.
But this computer revises back the overcounted 4 seconds automatically.
3. It displays in 0.1 second increments when TM is less than 1 hour and changes to 1 second increments after 1 hour. It will restart from zero after 100 hours.

MAX: Maximum Speed **Ⓜ** 0.0–199.9Km/h (120.0 Mile/h), 0.1Km/h (Mile/h), +/- 0.1%
It shows the highest speed from the last RESET operation

DST/D: Distance Today **Ⓜ** 0.00–999.99Km (Miles), 0.01Km (Mile), +/- 0.01%
The DST/D function accumulates the distance data for one day rode. The data will be cleared at AM 12:00:00 (0:00:00) automatically.

Ⓜ / Ⓜ : Speed Pacer
It flashes the "Ⓜ" speed pacer arrow while the current speed is higher than the average speed and flashes the "Ⓜ" conversely as long as the bike is being ridden.

1. ALL CLEAR UNIT SELECTION

3s

Ⓜ

Ⓣ

Ⓟ

LCD SEGMENTS AUTO TEST

Ⓜ

Km/h

Mile/h

Ⓣ

ODO1 SETTING (Bike1)

Ⓜ

Ⓣ

Ⓟ

0

000000

Ⓜ

Ⓣ

Ⓟ

0

000000

Ⓜ

Ⓣ

Ⓟ

ODO2 SETTING (Bike2)

Ⓜ

Ⓣ

Ⓟ

0

000000

Ⓜ

Ⓣ

Ⓟ

0

000000

Ⓜ

Ⓣ

Ⓟ

T-TM SETTING

Ⓜ

Ⓣ

Ⓟ

0

000000

Ⓜ

Ⓣ

Ⓟ

0

000000

Ⓜ

Ⓣ

Ⓟ

CIRCUMFERENCE SETTING (Bike1)

Ⓜ

Ⓣ

Ⓟ

0

2155

Ⓜ

Ⓣ

Ⓟ

0

2155

Ⓜ

Ⓣ

Ⓟ

END SETTING

Ⓜ

Ⓣ

Ⓟ

0

00

Ⓜ

Ⓣ

Ⓟ

0

00

Ⓜ

Ⓣ

Ⓟ

2. ODO1 (ODO 2) T-TM T-ODO CLOCK AVG DST TM MAX DST/D

00

75.9

Ⓜ

Ⓣ

Ⓟ

00

00

Ⓜ

Ⓣ

Ⓟ

00

16.13

Ⓜ

Ⓣ

Ⓟ

208

12:08:12

Ⓜ

Ⓣ

Ⓟ

208

15.6

Ⓜ

Ⓣ

Ⓟ

208

17.2

Ⓜ

Ⓣ

Ⓟ

208

106.2

Ⓜ

Ⓣ

Ⓟ

208

30.8

Ⓜ

Ⓣ

Ⓟ

208

15.02

Ⓜ

Ⓣ

Ⓟ

3. BIKE 1, BIKE 2 SELECTION

0

75.9

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

0

85.4

Ⓜ

Ⓣ

Ⓟ

5. CLOCK SETTING

00

12:08:12

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

24H

12:08:12

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

24H

13:08:12

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

24H

13:08:12

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

OK!

4. BIKE 1, BIKE 2 (CIRCUMFERENCE SETTING)

00

85.4

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

2050

2

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

2050

2

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

6. RESET OPERATION (AVG=0, DST=0, TM=0, MAX=0)

00

20.6

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

00

00

Ⓜ

Ⓣ

Ⓟ

Ⓜ

Ⓣ

Ⓟ

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Ⓜ

Ⓣ

Ⓟ

BUTTON AND OPERATIONS

MODE BUTTON Ⓜ
Quickly press this button to move in a loop sequence from one function screen to another. **(Fig. 2)**

SET BUTTON Ⓣ
Press this button to get in or out the setting screens when you want to reset to bike1, bike2 circumference, or the current time of the **Ⓜ**.

1 / 2 BIKE SELECTION BUTTON Ⓟ
1. This computer design has 2 sets of circumference memory to calculate 2 bikes' data separately.
2. Press 1/2 BIKE SELECTION button to switch between bike1 and bike 2. **(Fig. 3)**

BIKE1 or BIKE2 WHEEL CIRCUMFERENCE (Cmm) RE-SETTING
1. Press the 1/2 button **Ⓟ** to select either bike1 or bike 2. **(Fig. 4)**
2. Press the MODE button **Ⓜ** to change to the ODO display.
3. Press the SET button **Ⓣ** enter the circumference setting screen.
4. Adjusting the data as the data setting procedures.

CLOCK SETTING
1. Change the LCD display to **Ⓜ** screen. **(Fig. 5)**
2. Press the SET button **Ⓣ** to enter the clock adjusting screen to setting the clock.
3. A quick press of the MODE button **Ⓜ** to select 12HR or 24HR.
4. Adjust the clock data as the data setting procedures.
Assuming the current time is 13:17:15, adjusting the clock value as 13:18: --.When the current time advances to 13:18:00, for instance, press the SET button **Ⓣ** to store the setting value and synchronize it with the current time. (The undisplayed Second value is restarted at 0).

RESET OPERATION
1. Hold down the MODE button **Ⓜ** till the LCD digit is blanked, then release it. The computer will reset AVG, DST, TM and MAX data from stored values to zero. **(Fig. 6)**
2. It cannot reset ODO, T-TM, T-ODO, **Ⓜ**, DST/D.

AUTOMATIC START/STOP
1. The computer will automatically begin counting data upon riding and stop counting data when riding is stopped.
2. The flickering symbol "Ⓜ" indicates that the computer is at start status.

POWER AUTO ON/OFF
To preserve battery, this computer will automatically switch off and just displays the "Ⓜ" data when it has not been used for about 4 minutes. The power will be turned on automatically by riding the bike or by pressing the button.

LOW BATTERY INDICATOR
1. The symbol "Ⓜ" will appear to indicate the battery is nearly exhausted.
2. Replace battery with a new one within a few days after the symbol was appeared, otherwise the stored data may be lost when the battery voltage is too low.

BATTERY CHANGE (Fig. c)

1. When the brightness of the LCD display is dim, it means that the battery is nearly exhausted.

2. Replace a new LR44 (Cross reference type A76, AG13 or V13GA) battery in the compartment on the back of the computer with the positive (+) pole toward the battery cap.

TROUBLE SHOOTING

Check the following before taking unit in for repairs.

PROBLEM	CHECK ITEM	REMEDY
No display	1. Is the battery dead? 2. Is there incorrect battery installation?	1. Replace the battery. 2. Be sure that the positive pole of the battery is facing the battery cap.
No current Speed or incorrect data	1. Is it at the recalibrating or clock setting screen? 2. Are the contacts between the main unit and the bracket poor? 3. Are the relative positions and gap of sensor and magnet correct? 4. Is the wire broken? 5. Is the circumference correct?	1. Refer to the adjusting procedure and complete the adjustment. 2. Wipe contacts clean. 3. Refer to Installations (Fig.B3~B4) and readjust data correctly. 4. Repair or replace wire. 5. Refer to "CALIBRATION" and enter correct value.
Irregular display		Refer to the "MAIN UNIT SETUP" and initiate the computer again.
LCD is black	Did you leave main unit under direct sunlight when not riding the bike for a long time?	Place main unit in the shade to return to normal state.No adverse effect on data.
Display is slow	Is the temperature below 0°C (32°F)?	Unit will return to normal state when the temperature rises.

PRECAUTIONS

1. This computer can be used in the rain but should not be used under water.

2. Don't leave the main unit exposed to direct sunlight when not riding the bike.

3. Don't disassemble the main unit or it's accessories.

4. Check relative position and gap of sensor and magnet periodically.

5. Clean the contacts of the bracket and the bottom of the main unit periodically.

6. Don't use thinner, alcohol or benzine to clean the main unit or its accessories when they become dirty.

7. Remember to pay attention to the road while riding.

Ⓜ

Sensor:

No Contact Magnetic Sensor.

Ⓜ

Battery Type:

1.5V Battery X 1.(Typical No. LR44 / A76 / AG13 / V13GA.)

Ⓜ

Battery Operating Life:

Ⓜ About 2 years. (The original factory-attached battery may be shorter than this period due to shipping and storage time.)

Ⓜ

Dimensions/Weight:

44.5 x 50.0 x 18mm / 25g

Ⓜ

Wheel Circumference Setting:

1mm - 3999mm (1mm increment)

Ⓜ

Operation Temperature:

0°C ~ 50°C (32°F ~ 122°F)

Ⓜ

Storage Temperature:

-10°C ~ 60°C (14°F ~ 140°F)