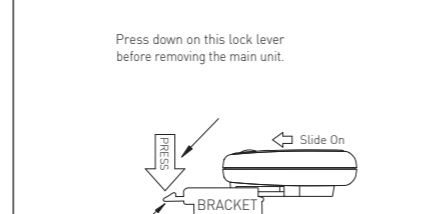
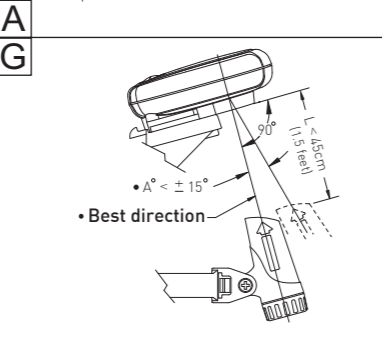
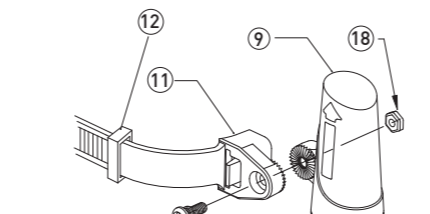
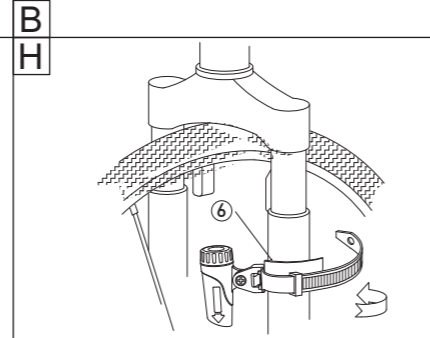


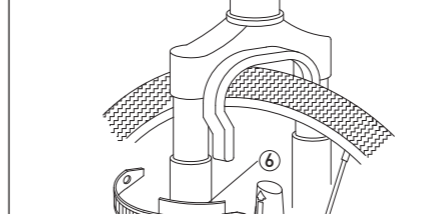
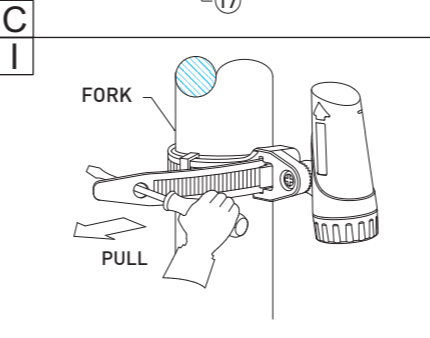
* Adjust the arm, elbow and bracket with the angle you need, and then fasten it.



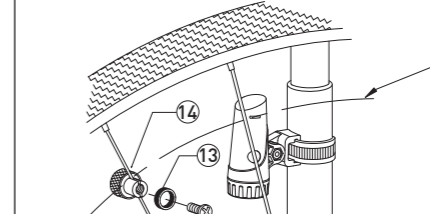
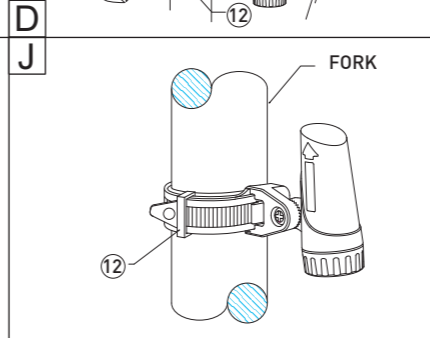
Press down on this lock lever before removing the main unit.



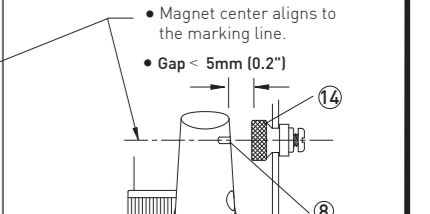
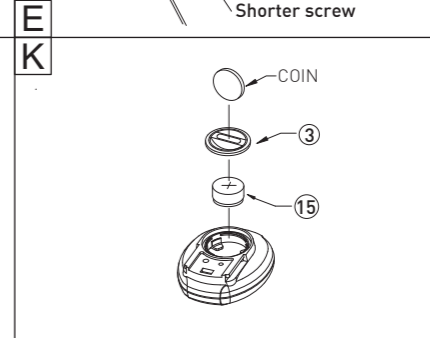
Slide On



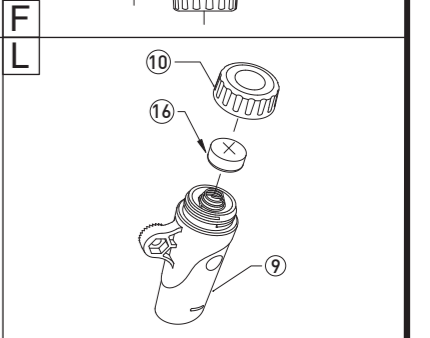
Shorter screw



• Magnet center aligns to the marking line.
• Gap < 5mm (0.2")



COIN



- A. PHYSICAL DESCRIPTIONS**
- | | | |
|------------------------|-------------------------|------------------------------------|
| 1. LCD DISPLAY | 8. SENSOR ZONE | 15. 3V BATTERY (CR2032) |
| 2. MODE BUTTON | 9. SENSOR (TRANSMITTER) | 16. 1.5V BATTERY (LR44 IS TYPICAL) |
| 3. MAIN BATTERY CAP | 10. SENSOR BATTERY CAP | 17. SCREW |
| 4. SET BUTTON | 11. SENSOR BAND | 18. NUT |
| 5. SLIDE ON/OFF SWITCH | 12. BAND CARRIER | |
| 6. RUBBER PAD x 2 | 13. RING | |
| 7. BRACKET | 14. MAGNET | |

- B. INSTALLATION**
- INSTALL THE BRACKET AND MAIN UNIT**
- Attach the bracket ⑦ to the handlebar and fit the rubber pad ⑥ between the handlebar and the band of the bracket. Tighten the screw securely until the bracket is secure. **(Fig. A)**
 - Slide the main unit onto the bracket from front to rear until it clicks into position. To remove the main unit, press down on the bracket locking lever then push the main unit forward and off. **(Fig. B)**

- INSTALL SENSOR AND MAGNET**
- Attach the sensor ⑨ to the sensor band ⑪ with the screw ⑬. Mount the band carrier ⑫ onto sensor band. **(Fig. C)**
 - Mount the sensor unit on the right front fork with rubber pad. **(Fig. D)**
 - Mount the magnet ⑭ on one spoke of the front wheel. The magnet should face the sensor's mark line ⑩. Place the ring ⑬ around the magnet to enhance the reliability of the set screw. **(Fig. E)**
 - Adjust the relative position between the main unit and the sensor, according to the following key points:
 - Adjust the magnet fixed position until the center of the magnet is aligned with the line marked on the sensor. **(Fig. E)**
 - Adjust the sensor to set the gap between the magnet and the line marked on the sensor at about 5mm (0.2"). **(Fig. F)**
 - Adjust the angle of the sensor to aim in the direction of the main unit +/- 15°. The best performance is achieved with the sensor arrow oriented perpendicular (90°) to the battery cap of the main unit. **(Fig. G)**

- Install the sensor as close to the main unit as possible and no more than 45 cm (1.5 feet) to improve wireless performance. The computer will function with the sensor arrow pointed down (Fig. H), but by pointing the arrow up the performance will be improved by reducing the transmitting distance.
- Refer to the TEST section to test the installation before tightening the sensor band with a screwdriver. **(Fig. I)**
- Secure the excess sensor band ⑪ by inserting it into the band carrier ⑫. **(Fig. J)**

- TEST**
- The main unit has a "On/Off Detecting Switch" ⑮ (patents pending) to turn ON/OFF the power of the wireless receiver. It can receive the wireless wheel signals only after the main unit is installed onto the bracket.
 - Spin the front wheel to check if installation is correct. Correct installation is confirmed if the main unit blinks the " " symbol. The installation is incorrect if " " is not displayed. Please check the relative position of the main unit, the sensor and the magnet, or refer to the trouble-shooting table.

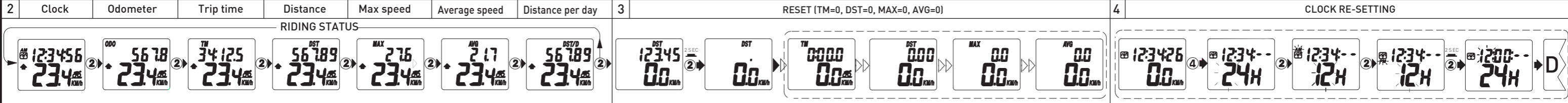
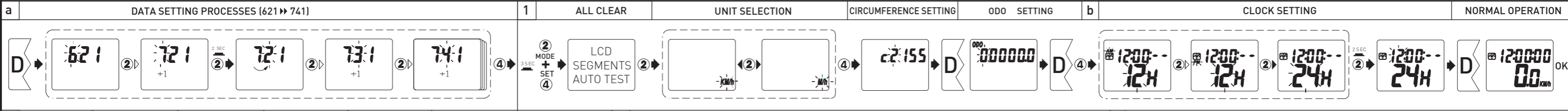
- C. WIRELESS SYSTEM PERFORMANCE**
- The sensor transmits the rotating wheel signal to the receiver in the main unit by wireless transmission. To protect the receiver from interference from other wireless noises - causing the main unit to display false data, install the transmitter according to the following key points to improve performance.
 - The receiver is designed to receive a signal from only a certain direction and angle to reduce the noise interference from other sources. Adjust the installation angle of transmitter to aim in the direction of the main unit within a +/- 15°. The best performance is with a vertical orientation.
 - The receiver will receive a stronger wireless signal if the transmitter is closer to the receiver. A stronger sensing signal not only has better noise immunity, but also increases the transmitter battery's operating life. For good wireless performance, please install the transmitter as close to the main unit as possible and within 45 cm (1.5 feet).

- D. BATTERY CHANGE**
- 1. MAIN UNIT BATTERY CHANGE**
- The symbol " " will appear to indicate the battery is nearly exhausted.
 - Replace the battery with a new battery within a few days after the symbol was appeared.
 - All data will be cleared when battery is replaced, but this computer allows you to re-key in ODO which you have ridden after replacing battery, record this data before you remove the old battery.
 - Replace with a new CR2032 battery ⑮ **(Fig. K)** and initiate the main unit.
- 2. CHANGING THE SENSOR (TRANSMITTER) BATTERY**
- The patent-pending transmitter circuit is designed to reduce power consumption; a 1.5V battery (typically an LR44) can operate for over 24,000km (15,000miles) riding distance or 2 years.
 - Replace a new battery when the transmitter's battery power is nearly exhausted, otherwise the transmission power of the wheel signal will be weak, causing the main unit to display unstable data.
 - Replace with a new LR44 battery ⑯ with the positive (+) pole toward the sensor cap ⑰. **(Fig. L)**

- 2. PRECAUTIONS**
- This computer experiences almost no cross-talking interference when 2 bicycles carrying the same or similar wireless cycle computers are ridden side by side, as long as the cross-distance is over 40cm (15.8").
 - This computer has excellent noise immunity to some forms of electromagnetic interference, but it may be effected by strong electromagnetic waves which will cause the main unit to display erroneous data while it is near the source of strong interference; such as TV transmission stations, radar stations, and some heavy industrial machines.
 - This computer has a "On/Off Detecting Switch" ⑮ to check that the main unit is installed on the bracket.
 - To reduce the power consumption of the main unit and to increase the battery operation life, but also to protect against all indoor electromagnetic interference from electrical equipment (such as PC monitors, mobile-phones, etc.). It will turn off the power supply of the receiver when the main unit is removed from the bracket.
 - The main unit can only receive the wheel signals after it is installed onto the bracket.

- 2. CHANGING THE SENSOR (TRANSMITTER) BATTERY**
- The patent-pending transmitter circuit is designed to reduce power consumption; a 1.5V battery (typically an LR44) can operate for over 24,000km (15,000miles) riding distance or 2 years.
 - Replace a new battery when the transmitter's battery power is nearly exhausted, otherwise the transmission power of the wheel signal will be weak, causing the main unit to display unstable data.
 - Replace with a new LR44 battery ⑯ with the positive (+) pole toward the sensor cap ⑰. **(Fig. L)**
- Sensor and Transmitter:** □ No Contact Magnet sensor and Wireless Transmitter.
- Suitable Fork Size:** □ □ 12mm to 50mm (0.5" to 2.0") Forks.
- Wireless Transmission Distance:** □ □ 55cm (1.8 feet) between the transmitter and the main unit.
- Cross-Talking Interference:** □ □ Within 40 cm (15.8"), no interference by 2 bicycles carrying similar cycle computers, even when ridden side by side.
- 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)
- Main Unit Battery Power:** □ □ 3V battery x 1 (CR2032), battery operating life is about 2 years. (Based on an average of 1.5 hours use per day)
- Transmitter Battery Power:** □ □ 1.5V battery x 1 (typical LR44). About 24,000km/15,000 miles riding distance or 2 years battery operating life. (The original factory-attached battery life may be shorter than this period due to shipping and storage time).
- Dimensions and Weight:** □ □ **Main Unit:** 44.0 x 54.5 x 19.73mm/30.8g
□ □ **Transmitter:** 20.0mm x 48.0mm/13.3g
- * The specifications and designs may be changed without notice.

INDEX: (N) ^{2 SEC} Means press button N more than 2 seconds. (N) Means press button N quickly. N=KEY NUMBER: (2):Mode Button; (4):Set Button



• INDEX: (N) ^{2 SEC} MEANS PRESS BUTTON N MORE THAN 2 SECONDS.
 (N) MEANS PRESS BUTTON N QUICKLY {N=KEYNUMBER: (2) MODE Button, (4) SET Button.}

E. MAIN UNIT SETUP (Fig. 1) English

COMPUTER SET-UP
 1. A battery is already loaded in the main unit when purchased. Hold down the MODE button (2) and SET button (4) simultaneously for more than 3 seconds to initiate the computer and clear all data.
IMPORTANT: Be sure to initiate the computer before it is used, otherwise the computer may run errors.
 2. The LCD segments will be tested automatically after the unit is initiated.
 3. Press the MODE button (2) to stop LCD test, then the flickering "KM/h".

UNIT SELECTION
 Press MODE button (2) to choose KM/h or M/h (Mile/h). Press the SET button (4) to select either as desired.

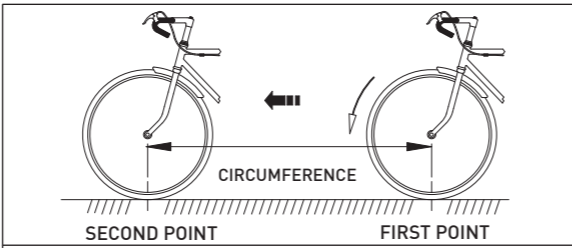
ODO SETTING
 1. This function is designed to re-enter ODO data when battery is replaced. New users do not need to enter this setting. Pressing the SET button (4) skips one step in the set-up process.

2. Data Entry Processes (621 → 741): (Fig a)
 A. The each digit is adjusted separately. The digit to be set blinks.
 B. Press the MODE button (2) to increase the value by 1.
 C. Advance to the next digit by holding down the MODE button (2) for more than 2 seconds.
 D. Press the SET button (4) to store the data and change to the next setting.

CIRCUMFERENCE DATA SETTING
 1. "c2155" is displayed as the default value 2155mm. Measure the circumference of your wheel or refer to the quick reference table provided in this manual.
 2. Adjust the circumference data as described in the **Data Setting Processes**.
 3. The display will change to the Clock setting screen after the "SET" button (4) is pressed to store the desired data.

WHEEL CIRCUMFERENCE
 • **Precise Measurement (Fig. M)**
 Roll the wheel until the valve stem is at its lowest point close to the ground, then mark this first point on the ground. Roll the bicycle forward in a straight line until the valve stem returns to its lowest point. Mark the second point on the ground. Measure the distance between the marks. Enter this value to set the wheel circumference.
 • **Quick Reference Table (Fig. N):** Select a suitable circumference value from the table

CLOCK SETTING (Fig. b)
 1. The "Error" symbol is displayed in the clock mode.
 2. 12H/AM, 12H/PM or 24H selection. Press the MODE button (2) to select 12H/AM, 12H/PM or 24H. Hold down the MODE button (2) for more than 2 second to change to the clock setting screen.
 3. Adjust the time setting according to the **Data Setting Processes**.



POPULAR TIRES CIRCUMFERENCE REFERENCE TABLE			
Tire Size	Circumference Number	Tire Size	Circumference Number
18 Inch	1436 mm	ATB 26 x 2.0 (650B)	2099 mm
20 x 1.75	1564	700C TUBULAR	2117
20 Inch	1596	700 x 20C	2092
22 Inch	1759	700 x 25C	2124
ATB 24 x 1.75	1888	700 x 28C	2136
24 Inch	1916	27 Inch (700 x 32C)	2155
24 x 13/8	1942	700 x 35C	2164
ATB 26 x 1.40	1995	700 x 38C	2174
ATB 26 x 1.50	2030	27.5 Inch	2193
ATB 26 x 1.75	2045	28 Inch (700B)	2234
26 Inch (650A)	2073	28.6 Inch	2281

F. FUNCTIONS and SPECIFICATIONS

Current Speed 0.0 - 199.9 Km/h or 120.0 Mile/h +/- 1% (Typical)
 1. The current speed is always displayed on the upper display when riding. It displays current speed up to 199.9 KM/h or 120.0 M/h (for wheel diameters of over 24 inches).
 2. When riding is stopped, the speed will continue to be calculated for 4 seconds to confirm that the bicycle has come to a complete stop.
ODO: Odometer 0.0 - 99999.9 Km or Miles +/- 0.1%
 1. The odometer accumulates the total distance the bike has traveled.
 2. The ODO data can not be cleared to zero by the RESET operation.
TM: Riding Time 0M00.0S-59M59.9S, 1H00M00S-99H59M59S +/- 0.003%

12HR AM/PM or 24HR Clock 0:00'00" - 12:59'59" AM/PM or 23:59'59" +/- 0.003%
 Displays the current time in 12HR AM/PM or 24HR clock.

AVG: Average Speed 0.0 - 199.9 Km/h / 0.0 - 120.0Mile/h +/- 0.1%
 1. Is calculated from the DST divided by the TM. The average speed data is calculated from the last RESET to the current point.
 2. "0.0" is displayed when TM is less than 4 sec., and is updated approximately every second after the first 4 seconds.
 3. An "Error" symbol is displayed when either the TM is over 100 hours or the DST is over 1.000km (or miles). Reset the unit in order to restart.

DST: Trip Distance 0.00 - 999.99 Km or Miles +/- 0.1%
 The DST function accumulates the total distance traveled since the last RESET.

DST/D: Distance Today
 The DST/D function calculates the distance traveled in a given day. The data is cleared at 12:00:00 AM (0:00:00) automatically.

MAX: Maximum Speed 0.0 - 199.9 Km/h or 120.0 Mile/h +/- 1%
 Displays the highest speed since the last RESET operation.

Speed Pacer
 It flashes the "▲" speed pacer arrow while the current speed is higher than the average speed, and the down arrow "▼" flashes conversely.
*** Remarks: All data functions are updated approximately once per second.**

G. BUTTONS and NORMAL OPERATION

MODE BUTTON (2) (Fig. 2)
 1. Quickly press this button to move in a loop sequence from one function screen to another.
 2. The ODO function is skipped while riding.

SET BUTTON (4)
 Press this button to get in or out of the setting screens in order to re-set to wheel circumference or the current time of the clock.

RESET OPERATION (Fig. 3)
 1. Hold down the MODE button (2) until the display goes blank, then release. The computer will reset AVG, DST, TM and MAX data from stored values to zero.
 2. ODO cannot be reset.

MAIN UNIT ON/OFF DETECTION
 The computer has a detecting switch (patents pending) to avoid noise interference when the main unit is removed from the bracket. The main unit can receive the wheel signal only when it is installed on the bracket.

AUTOMATIC START/STOP & AUTO SLEEP MODE

The computer will automatically begin receiving data upon riding and stop receiving data when riding is stopped. The flickering symbol "Error" indicates that the computer is at start status.
 To preserve the battery, this computer will automatically power down into a sleep mode. Only the "Error" data will be displayed when it has not been used for about 30 minutes. Power up by pressing the MODE button (2).

CIRCUMFERENCE, CLOCK RE-SETTING (Fig. 4)
 1. Press the MODE button (2) to change to one of the following mode displays.
 a. Change to "Error" screen to set Circumference.
 b. Change to "Error" screen to set Clock.
 2. Press the SET button (4) to enter to the relative setting screen.
 3. Adjust the desired value according to the **Data Setting Processes**.
 4. Press the SET button (4) to store the desired data and complete the current setting.

H. TROUBLE SHOOTING

PROBLEM	CHECK ITEMS	REMEDY
Main Unit: 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 MAIN UNIT SETUP or another setting screen? 2. Are the relative positions and gap between sensor and magnet correct? 3. Is the circumference correct? 4. Is the sensing distance too long or the installation angle of the sensor incorrect? 5. Is the sensor battery nearly exhausted? 6. Is any strong interference source nearby?	1. Refer to the setting procedure and complete the adjustment. 2. Refer to (Fig. G) and (Fig. H) and re-adjust position and gap correctly. 3. Refer to "Circumference Setting" and enter correct value. 4. Refer to (Fig. F) to adjust distance or angle between the main unit and the sensor. 5. Replace with a new battery. 6. Move away from the source of interference.
Irregular display		Refer to the "MAIN UNIT SETUP" and initiate the computer again.
LCD is black	Was the 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. Don't leave the main unit exposed to direct sunlight when not riding the bike.
 2. Don't disassemble the main unit or its accessories.
 3. Check relative position and gap of sensor, magnet and main unit periodically.
 4. Don't use thinner, alcohol or benzine to clean the main unit or its accessories when they become dirty.
 5. Remember to pay attention to the road while riding.