

Thank you for purchasing an MSW® Miniac Double Wireless CC-317 Cycling Computer! At MSW® we believe that having essential accessories makes a good ride great.

⚠ WARNING: Cycling can be dangerous. Bicycle products should be installed and serviced by a professional mechanic. Never modify your bicycle or accessories. Read and follow all product instructions and warnings including information on the manufacturer's website. Inspect your bicycle before every ride. Always wear a helmet.

⚠ WARNING: Please read over the following information before using the MSW Miniac Double Wireless CC-317 Cycling Computer.

- Never use the cycling computer in combination with other medical/implanted electronic equipment and devices (especially heart pacemakers, EKG equipment, TENS equipment, cardio-pulmonary machines, or pacemakers). If you are severely ill or pregnant, please consult your doctor before using cycling computer. Keep this device away from children. It contains batteries, which might be swallowed by children.
- As is the case most wireless electronic devices, there can sometimes be interference that causes inaccurate display readouts. Avoid using your cycling computer near common sources of interference like high voltage power lines, air conditioning motor units, fluorescent lights, wristwatches, mobiles, and some other computers.

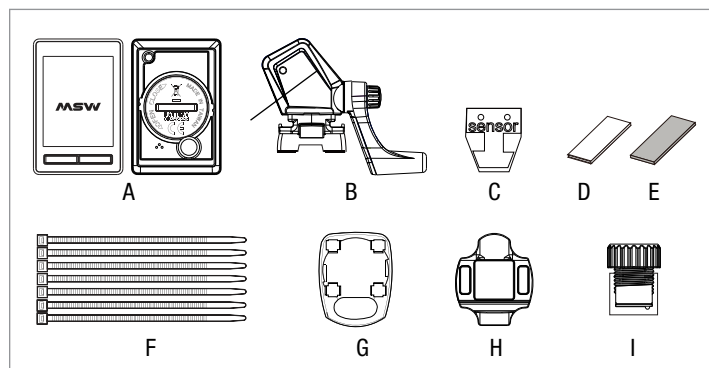
For additional product and safety information go to: www.mswbike.com/safety.

COMPATIBILITY

The Miniac Double Wireless CC-317 Cycling Computer. is compatible with MSW Speed and Cadence Sensor CC-314.

INCLUDED PARTS

Please check that all the following items have been included with the cycle computer before starting.



- | | |
|--|------------------------------------|
| A CC-317 cycling computer | E Black stabilizing pad for sensor |
| B Sensor | F 6 nylon zip ties |
| C Cadence magnet | G Mounting bracket |
| D White stabilizing pad for cadence magnet | H. Rubber shim |
| | I. Wheel magnet |

INSTALLATION

MOUNTING THE HANDLEBAR BRACKET

Fit the rubber pad to the back of the handlebar bracket and use the nylon ties to attach it to the bar. Do not fully tighten the nylon ties until you're certain the angle of the computer is correct. (figs 1, 2).

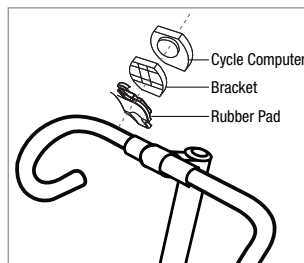


Figure 1

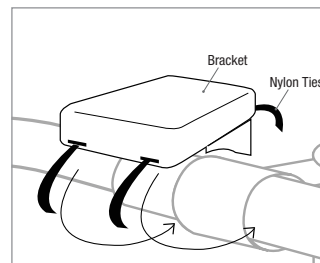


Figure 2

Place the cycle computer on the bracket and secure it by turning clockwise (fig 3).

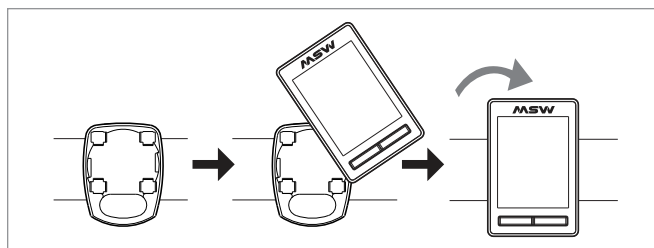


Figure 3

MOUNTING THE SENSOR

The sensor is mounted on the non-driveside chainstay, just behind the bottom bracket. The distance between the computer head unit at the handlebar and the sensor should not exceed 150cm.

The larger part of the sensor reads the crank arm magnet to register cadence, etc. The adjustable arm of the sensor unit registers speed, distance, etc. The larger part of the sensor faces the front of the bike, and the adjustable arm faces the back and sits along the inside of the chainstay. Loosen the knurled dial in front of the adjustable arm to rotate it in the optimal position (fig. 4). Do not tighten it until the optimal position has been determined.

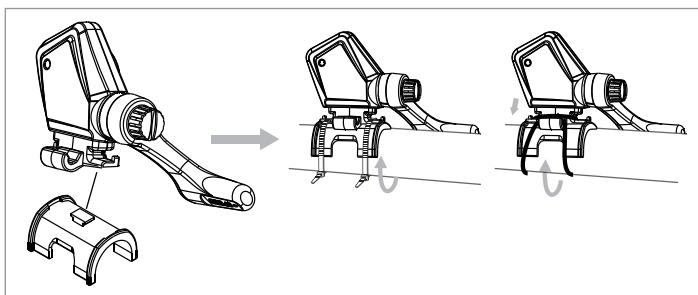


Figure 4

Place the included rubber pad between the sensor and the chainstay. The sensor is attached using two included zip ties, but do not fully tighten them until the wheel and crank arm magnets are in place, and the adjustments that yield the best readings are made between the sensor, sensor arm, and the magnets (fig. 5).

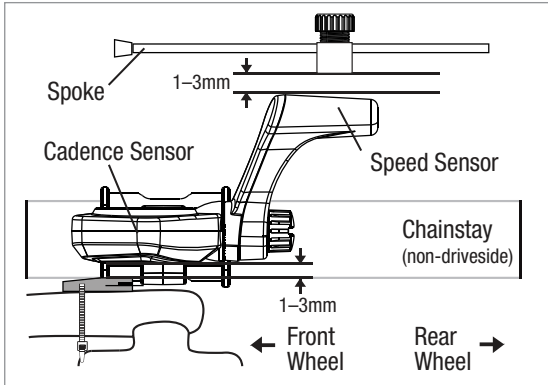


Figure 5

The distance between the crank arm magnet and the sensor, and between the rear wheel magnet and the sensor arm should not exceed 3mm.

MOUNTING THE CRANK AND WHEEL MAGNETS

1. Place the crank arm magnet on the inside of the crank arm 2 to 3cm up the arm from the pedal spindle and zip tie it in place.
2. Position the larger part of the sensor close enough to the crank arm that the required distance between it and the crank arm magnet is achieved (fig. 6).

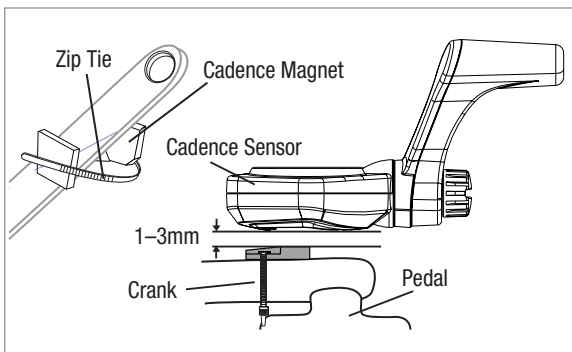


Figure 6

3. Using this sensor placement as a guide, position the wheel magnet in the approximate area that it will pass the sensor arm on the inside of the chainstay. The wheel magnet is tightened to the spoke by threading it into the magnet bracket that sits behind the spoke (fig. 7).

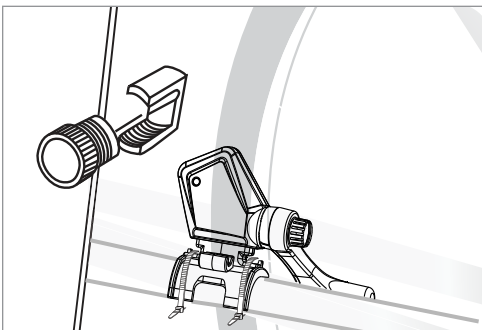


Figure 7

4. Holding the larger part of the sensor in place with one hand, rotate the arm of the sensor so that the required distance between it and the wheel magnet is achieved.
5. Use two zip ties to tighten the sensor to the chainstay, and snip off the excess length.
6. Make any final adjustments to the sensor arm to achieve the required distance between it and the wheel magnet, and tighten the knurled dial.
7. Test to make sure that the magnets are activating the sensor, and the computer head unit is registering the magnets as they pass the sensor.

WHEEL SIZE CHART

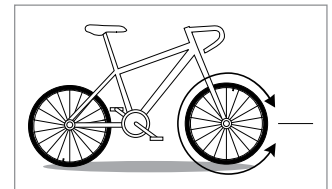
CALCULATING WHEEL CIRCUMFERENCE

To get the most accurate speed and distance data, the wheel size must be correct. Mark the tire or position the valve stem at the 6 o'clock position and push the bike until the mark or valve stem is back to 6 o'clock. Then measure the length between two points to get the circumference.

Refer to the wheel size chart for diameter and tire width. If your wheel and tire size is not listed, use the following wheel circumference equation:

$$\text{Circumference (mm)} = 2 \times 3.14 \times R \text{ (inch)} \times 2.54$$

(1 inch = 2.54cm), R = radius in centimeters.



Tire Scale	L (mm)
14 x 1.50"	1020
14 x 1.75	1055
16 x 1.50	1185
16 x 1.75	1195
18 x 1.50	1340
18 x 1.75	1350
20 x 1.75	1515
20 x 1-3/8	1615
22 x 1-3/8	1770
22 x 1-1/2	1785
24 x 1	1753
24 x 3/4 Tubular	1785
24 x 1-1/8	1795
24 x 1-1/4	1905
24 x 1.75	1890
24 x 2.00	1925
24 x 2.125	1965
26 x 7/8	1920
26 x 1 (59)	1913

Tire Scale	L (mm)
26 x 1 (65)	1952
26 x 1-1/8	1970
26 x 1-3/8	2068
26 x 1-1/2	2100
26 x 1.40	2005
26 x 1.50	2010
26 x 1.75	2023
26 x 1.95	205
26 x 175	2023
26 x 1.95	2050
26 x 2.00	2055
26 x 2.10	2068
26 x 2.125	2070
26 x 2.35	2083
26 x 3.00	2170
27 x 1	2145
27 x 1-1/8	2155
27 x 1-1/4	2161
27 x 1-3/8	2169

Tire Scale	L (mm)
27.5 x 2.10	2170
27.5 x 2.30	2202
29 x 2.10	2288
29 x 2.30	2326
650 x 35A	2090
650 x 38A	2125
650 x 38B	2105
700 x 18C	2070
700 x 19C	2080
700 x 20C	2086
700 x 23C	2096
700 x 25C	2105
700 x 28C	2136
700 x 30C	2146
700 x 32C	2155
700c Tubular	2130
700 x 35C	2168
700 x 38C	2180
700 x 40C	2200

Press and hold the C (Clear) button for three seconds to reset the data (fig. 9).



Press the **Mode** button or **C** button to change modes (fig. 10).



Figure 8

Press the MODE button for three seconds to save any changes and exit.

PAIRING THE COMPUTER WITH THE SENSOR

In any mode, press the M and C buttons, and hold for six seconds.

Press the C button. The computer will search for 30 seconds. The sensor should be paired after 5 seconds. If it is not paired check that the sensor and magnets are aligned; also check the battery (fig. 11). Press and hold the Mode button for three seconds to exit.

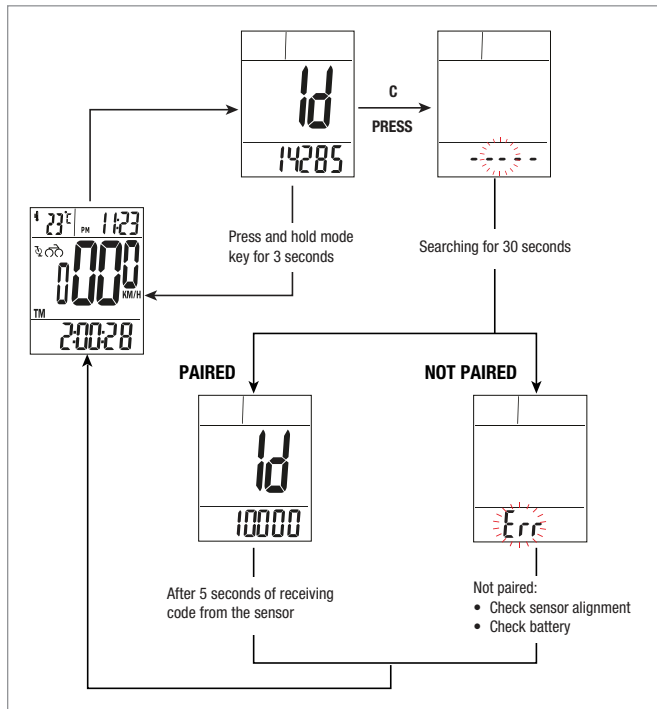


Figure 11

AUTO WAKE UP AND SLEEP

Auto Wake Up: The computer will “wake up” with any vibration or speed reading.

Auto Sleep: After six minutes with no vibration or speed, the computer will enter “sleep” mode.

Deep Sleep: If the sequence of Auto Wake and Auto Sleep repeats five times, the computer will enter “Deep Sleep” mode. Either button on the front of the computer will need to be pressed to wake the unit up.

BACKLIGHT

In any mode, press the Set button or press and hold Mode button for two seconds to turn on the backlight.

TROUBLESHOOTING

Q1. Display is black or very light:

The battery power may be low. Make sure the battery is installed correctly or replace if necessary.

Q2. Display becomes dark or black:

The unit is too hot. Place the unit in a shaded area and it will return to normal.

Q3. The unit operates slowly or struggles:

The unit is too cold. Warm the unit and it will return to normal.

Q4. Data in display varies enormously:

Check the surroundings for electromagnetic or high energy interference, e.g. power lines, and move away from the source of interference.

Q5. Data in display shows slowly:

The unit may be too cold. When the temperature rises, the data reading will return to normal.

Q6. Current speed does not appear

The sensor may be too far from the magnet. Make sure the gap is no wider than 3mm. Make sure the magnet is free of corrosion. Make sure the sensor battery is installed correctly or replace if necessary.

IMPORTANT HEALTH NOTICE!

Please read over the following information before using the Cycle Computer.

- Never use the cycle computer in combination with other medical/implanted electronic equipment or devices (especially heart pacemakers, EKG equipment, TENS equipment, cardio-pulmonary machines, or packemakers)
- If you are severely ill or pregnant, please consult your doctor before using the cycle computer
- Keep this device away from children. It contains batteries, which may be swallowed by children
- As with most electronic receiving devices, there can sometimes be interference that causes inaccurate display readouts. Avoid using your cycle computer near common sources of interference. These include high voltage power lines, air conditioning motor units, fluorescent lights, wristwatches, mobile phones, and computers

SPECIFICATIONS

Operating Temp	32–104°F (0–40°C)
Storage Temp	14–122°F (-10–50°C)
Battery (computer and sensor)	3V Lithium CR2032
Battery life (computer)	~1 yr (1 hr/day use)
Computer Weight	23g
Sensor Weight	20g
Timer Range	29 (hour) : 59 (minute) : 59 (second)
Current Speed Range	0~99.9kph / 0~62.4 mph
Average Speed Range	0~99.9kph / 0~62.4 mph
MAX Speed Range	0~99.9kph / 0~62.4 mph
(Trip) Distance Range	0~999.99km / 0~624.99 mi
Odometer Range	0~99999km / 0~62499 mi

MAINTENANCE

If the display contrast changes and figures become faint, it's time to replace the battery. Consider changing the computer sensor and transmitter batteries at the same time.

NOTE: Do not expose the computer to extremely cold or hot temperatures i.e. don't leave the unit in direct sunlight for extended periods of the time.

SENSOR

Check the position of sensor and magnet periodically. Rust or corrosion on the magnet may cause malfunction. The gap between magnet and sensor cannot exceed 3mm.

BRACKET / MAGNET / SENSOR BAND

These items can be wiped with a damp rag or mild soap solution.

BATTERY REPLACEMENT

COMPUTER

The battery symbol in the top left corner of the screen will appear when the battery is running low. Unscrew the back cover. The (+) side should be facing up. Gently remove the battery and replace it with a new battery model CR2032.

SENSOR:

A red light on the sensor will appear when its battery is running low. Unscrew the back cover. The (+) side should be facing up. Gently remove the battery and replace it with a new battery model CR2032.

BATTERY WARNINGS

A coin-cell, lithium-ion battery is used in this device. If these guidelines are not followed, batteries may experience a shortened lifespan or may present a risk of damage to the device, fire, chemical burn, electrolyte leak, and/or injury.

- Do not leave the device exposed to a heat source or in a high-temperature location, such as in the sun in an unattended vehicle. To prevent the possibility of damage, remove the device from the vehicle or store it out of direct sunlight, such as in the glove box
- Do not disassemble, modify, remanufacture, puncture or damage the device or batteries
- Do not immerse or expose the device or batteries to water or other liquids, fire, explosion, or other hazard
- Do not use a sharp object to remove the batteries
- KEEP BATTERIES AWAY FROM CHILDREN
- NEVER PUT BATTERIES IN MOUTH. Swallowing can lead to chemical burns, perforation of soft tissue, and death. Severe burns can occur within two hours of ingestion. Seek medical attention immediately
- Replaceable coin-cell batteries may contain perchlorate material. Special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate
- Only replace batteries with correct replacement batteries. Using other batteries presents a risk of fire or explosion
- Do not operate the device outside of the temperature ranges specified in these instructions
- Contact your local waste disposal department to dispose of batteries in accordance with applicable local laws and regulations

LIMITED 2-YEAR WARRANTY

MSW warrants this new MSW product against defects in materials and workmanship for two (2) years from the original date of retail purchase by the consumer. This limited warranty is expressly limited to the repair or replacement of the original product, at the option of MSW, and is the sole remedy of the warranty. This limited warranty applies only to the original purchaser of the MSW product and is not transferable.

In no event shall MSW be liable for any loss, inconvenience or damage, whether direct, incidental or consequential or otherwise resulting from breach of any express or implied warranty or condition of merchantability, fitness for a particular purpose, or otherwise with respect to this product except as set forth herein. This warranty gives the consumer specific legal rights, and those rights and other rights may vary from state to state.

This warranty does not cover the following:

- Damage due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the end user
- Products that have been modified, neglected, used in competition or for commercial purposes, misused or abused, involved in accidents or anything other than normal use
- Damage or deterioration to the surface finish, aesthetics or appearance of the MSW product
- Normal wear and tear
- Labor required to remove and/or refit and re-adjust the product within the bicycle assembly
- Installation of components, parts, or accessories not originally intended use with or compatible with MSW products

TO THE EXTENT NOT PROHIBITED BY LAW, THESE WARRANTIES ARE EXCLUSIVE AND THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS INCLUDING WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

WARRANTY PROCESS

If you and your shop think your MSW product is worthy of a warranty inspection, please return the product to the original place of purchase, accompanied by a sales receipt.

For complete warranty information, visit www.mswbike.com/safety/warranty.