VETTA

RT33 RT55 RT77 RT88
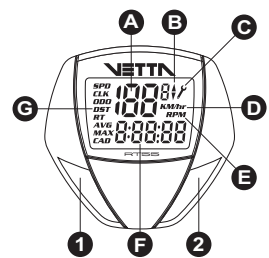
CE ♻

REV. 9.0   ENGLISH

WARNINGS & CAUTIONS

- Vetta cycle computers are sophisticated electronic instruments. Vetta recommends that this product be installed only by a qualified bicycle retailer. Failure to read these instructions and/or improper installation of this device may void the warranty. **If in doubt about any aspect of the installation or operation of this product, consult your local bicycle retailer for clarification.**
- The head unit is water resistant and sealed to withstand wet weather conditions. Do not deliberately place it in water.
- Avoid leaving the head unit exposed to extremely hot weather conditions.
- Vetta encourages you to ride safely. Wear a helmet every time you ride, use front and rear lights at night, and always keep your eyes on the road ahead of you.
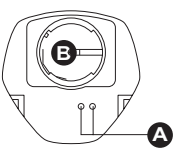
HEAD UNIT: FRONT

A Upper Display (Speed)
B Speed Comparator Icon
C Service Timer Icon
D Speed/Distance Units
E RPM Indicator
F Lower Display
G Function Icons

1 Set/Select Button (Left)
2 Mode/Advance Button (Right)

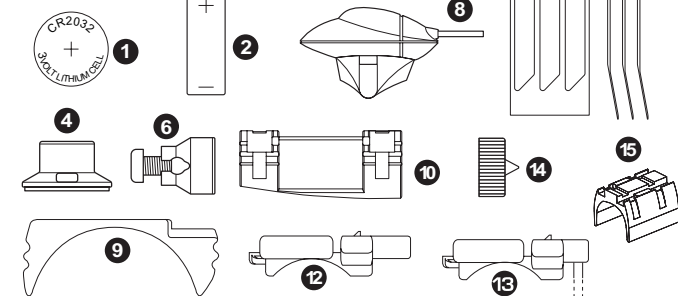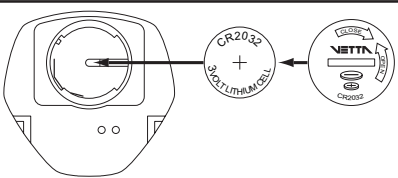## HEAD UNIT: REAR

A Contact Points
B Battery Compartment
C Battery Cover

COMPONENT ILLUSTRATIONS

1 Head Unit Battery (CR2032, 3-Volt)
2 Wireless Transmitter Battery (A23,12-Volt)
3 Wired Cadence Sensor (RT77)
4 Composite Cadence Magnet (RT77)
5 WL Wireless Speed Transmitter (RT88)
6 Bladed Spoke Magnet
7 Wire Securing Tape
8 Wired Speed Sensor
9 Bracket Rubber Pad
10 Bracket Rubber Pad (Riser Handlebar)
11 Zip-Ties
12 Wireless Mounting Bracket (RT88)
13 Wired Mounting Bracket
14 Spacer
15 Wireless Transmitter Shim

BATTERY INSTALLATION

MAIN UNIT SETUP

All RT series computers are programmed to enter the Setup Mode after battery installation. In Set-Up, Button #1 is used to select or set a value and to advance to the next digit or screen mode. Button #2 is used to switch between settings and to increase values.

SET 12/24 CLOCK

Press Button #2 to switch between flashing "12" and "24" hour formats. Press Button #1 to select your desired format (without PM icon implies AM in 12 hour format) and advance to time setting.

SET TIME

To set the time in CLK Mode: Press button #2 to advance hour digits to correct hour (hold button for rapid advance). Press Button #1 to select and advance to minutes setting. Press Button #2 to advance minute digits and press Button #1 to select.
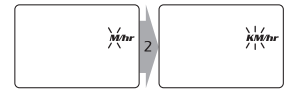
SET SERVICE TIMER

Service Timer could be programmed with a selected number of ride time hours as the interval for servicing the bicycle or any component on it, such as a front or rear shock.
Accumulated Ride Time is displayed on the upper line and Service Time is displayed on the lower line. To set the Service Time, press Button #2 to advance hour digits. (The hour digits appear on the lower level with the right hand digit flashing.) Press Button #1 to select and advance to next digit. (Maximum hour setting = 1999 hours)
The default setting for the Service Timer is "0000" hours, which means the Service Timer is turned off.

SET SPEED/DISTANCE SCALE

Press Button #2 to switch between "M/hr" and "KM/hr" and Button #1 to select desired units and advance. **(To change units in SPD/ODO Mode, press and hold Buttons #1 and #2 simultaneously for 2 seconds until "M/hr" begins to flash).**

SET WHEEL SIZE

Default wheel circumference setting is 2074mm. Choose correct wheel circumference figure from Wheel Reference Chart. **Press Button #2 to advance digits as needed and Button #1 to select and advance. (Range: 0050-2999mm).**

TIRE SIZE	CIRC	TIRE SIZE	CIRC	TIRE SIZE	CIRC
700c x 38mm	2180	650c x 23mm	1990	26" x 1.75"	2035
700c x 35mm	2168	650c x 20mm	1945	26" x 1.5"	1985
700c x 32mm	2155	27" x 1-1/4"	2161	26" x 1.25"	1953
700c x 30mm	2145	27" x 1-1/8"	2155	26" x 1.0"	1913
700c x 28mm	2136	26" x 2.3"	2135	24" x 1.9"/ 1.95"	1916
700c x 25mm	2124	26" x 2.25"	2115	20" x 1-1/4"	1618
700c x 23mm	2105	26" x 2.1"	2095	16" x 2.0"	1253
700c x 20mm	2074	26" x 2.0"	2074	16" x 1.95"	1257
700c Tubular	2130	26" x 1.9"/ 1.95"	2055	16" x 1.5"	1206

If your wheel size is not on the chart, or if you want a more precise calibration, wheel circumference may be calculated as follows:
Mark the tire and a spot on the floor. Roll the wheel forward one complete revolution until the tire mark touches the floor again and mark that spot. Measure the distance between the marks on the floor in millimeters and enter the result into the computer. (1 inch = 25.4mm)

SET ODOMETER

Press Button #2 to advance digits to previous mileage reading (after battery change). Press Button #1 to select and advance to next digit. After final selection, computer will exit Setup and enter SPD/CLK Mode. (Maximum setting: 99999).

PRIMARY FUNCTIONS

SPD   RT 33|55|77|88

Speed is shown at all times on upper display. It is accurate to 0.1 M/hr or KM/hr and the maximum reading is 75.0 M/hr or 120.0 KM/hr.

CLK   RT 33|55|77|88

Time is displayed in user-selected 12 or 24 hour formats. **(To change the CLK format, Time or Service Time Interval, press and hold Buttons #1 and #2 simultaneously for 2 seconds in the SPD/CLK Mode until "12/24" hour format digits flash).**

ODO   RT 33|55|77|88

The odometer displays distance to 99999 Miles or Kilometers (1.0 mile/km). User selectable ODO setting in Setup Mode. **(To change units in SPD/ODO Mode, press and hold Buttons #1 and #2 simultaneously for 2 seconds until "M/hr" begins to flash).**

DST   RT 33|55|77|88

Displays trip distance of current ride to a maximum of 999.9 miles or kilometers (0.1 mile/km). **To reset trip distance DST (+ MAX, AVG, RT, AVG/CAD, MAX/CAD) to zero in normal operation, hold both buttons simultaneously for two seconds in SPD/DST Mode.**

RT   RT 55|77|88

Displays actual, cumulative ride time to 9:59:59. Reset to zero manually by pressing and holding Buttons #1 and #2 simultaneously for two seconds in the SPD/DST Mode.

AVG   RT 55|77|88

Average Speed is displayed in the SPD/AVG screen mode and reads to within 0.1 miles or kilometers per hour. **Reset to zero manually by pressing and holding Buttons #1 and #2 simultaneously for two seconds in the SPD/DST Mode.**

MAX   RT 55|77|88

Maximum Speed is displayed in the SPD/MAX Mode and reads to within 0.1 miles or kilometers per hour. **Reset to zero manually by pressing and holding Buttons #1 and #2 simultaneously for two seconds in the SPD/DST Mode.**

CAD   RT 77

Cadence is displayed in the SPD/CAD Mode and measures revolutions per minute (RPM) of the crank. The RPM indicator lights when the CAD function is displayed.

↯   RT 55|77|88

Speed Comparator: Arrow symbols indicate if current speed is slower ▼ or faster ▲ than current average speed.
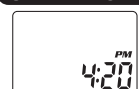
⚒   RT 33|55|77|88

Blinking wrench icon alerts rider the Service Time is reached. To view or reset Accumulated Ride Time and Service Time, press and hold Buttons #1 and #2 for 2 seconds in the SPD/CLK Mode.

To reset Accumulated Ride Time to "0", hold Button #2 when upper digits are flashing during Setup.
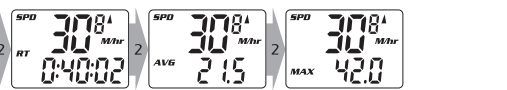
SPECIAL FEATURES

SLEEP MODE   RT 33|55|77|88

To conserve battery life, computer enters Sleep Mode after 5 minutes without input from buttons or speed sensor and displays the time. **Computer exits Sleep Mode and returns to screen last displayed with input from buttons (RT 33/55/77/88) or wheel (RT 33/55/77).**

FREEZE FRAME MEMORY   RT 55|77|88

Rider can freeze Distance, Ride Time, Average Speed and Maximum Speed readings at any time by pressing Button #1 for two seconds while in the SPD/DST or SPD/RT Modes. Display flashes to indicate it has been frozen. Saved data can be scrolled and reviewed by pressing Button #2. Press Button #1 to return to DST or RT Mode.

ALL CLEAR RESET   RT 33|55|77|88

All Clear Reset: Remove battery and reinstall. When you remove the battery all data and all time and odometer settings will be cleared. When battery is reinstalled, computer will automatically enter the Setup program.

RT 77 SECONDARY FUNCTIONS

Secondary Screen functions include Average Cadence and Maximum Cadence. To access, press and hold Button #1 while in the SPD/CAD Mode. Press Button #2 to switch between AVG/CAD and MAX/CAD Modes. Press Button #1 to return the primary SPD/CAD Mode.

AVG/CAD   RT 77

Average Cadence is displayed in the AVG/CAD Mode. It is calculated by dividing total revolutions by total ride time. **Reset to zero manually by pressing and holding Buttons #1 and #2 simultaneously for two seconds in the SPD/DST Mode.**
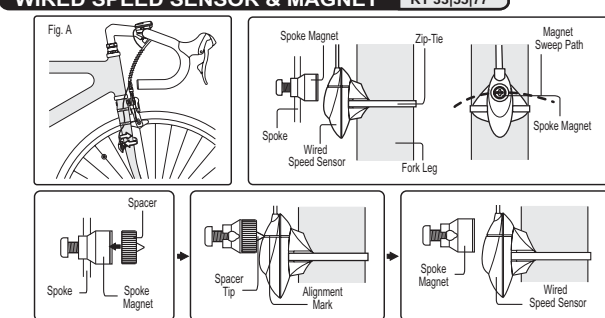
MAX/CAD   RT 77

Maximum Cadence is displayed in the MAX/CAD Mode. It is updated once per second based on current RT and Cadence readings. **Reset to zero manually by pressing and holding Buttons #1 and #2 simultaneously for two seconds in the SPD/DST Mode.**
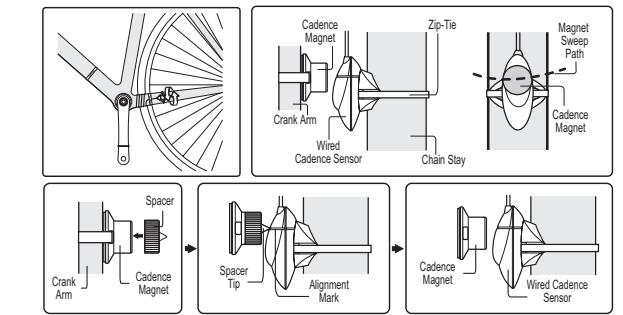
INSTALLATION PROCEDURES

WIRED SPEED SENSOR & MAGNET   RT 33|55|77
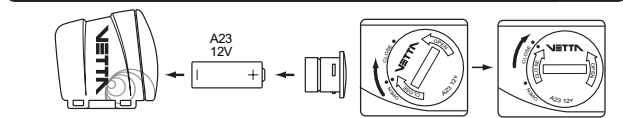

Fig. A

Attach the Wired Speed Sensor with the Zip-Tie supplied and tighten the Spoke Magnet to the bicycle. Adjust the sensor and magnet spacing with the spacer. Remove the spacer after snugging the Zip-Tie down to hold the sensor in its final position.

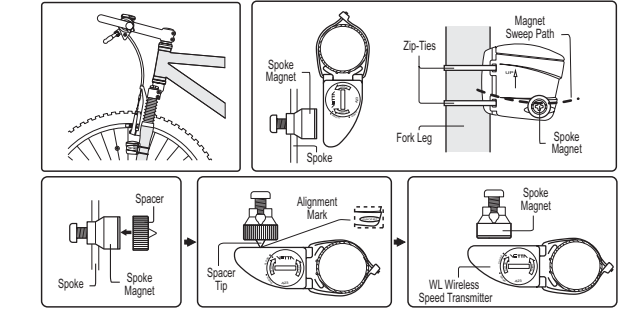## WIRED CADENCE SENSOR & MAGNET   RT 77

RT77 only - Attach the Wired Cadence Sensor and Cadence Magnet with the Zip-Ties supplied to the bicycle. Adjust the sensor and magnet spacing with the spacer. Remove the Spacer after snugging the Zip-Tie down to hold the sensor in its final position. (See Figures above)

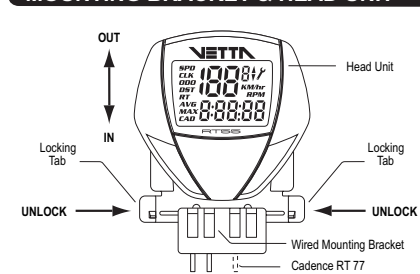## WL WIRELESS SPEED TRANSMITTER & MAGNET   RT 88

WL Wireless Speed Transmitter uses an A23 12V battery. Install the battery as shown: remove cap, install battery with positive (+) side up, replace battery cap.

RT88 only - Attach the WL Wireless Speed Transmitter with the Zip-Ties supplied and tighten the Spoke Magnet to the bicycle. Adjust the transmitter and magnet spacing with the Spacer. Remove the Spacer after snugging the Zip-Ties down to hold the transmitter in its final position. (See Figures above)

MOUNTING BRACKET & HEAD UNIT

Attach Mounting Bracket. **Note:** Be sure to leave enough slack in the wire to accommodate the movement of fork and handlebars. Tighten Mounting Bracket as needed. (See fig. "A") Slide main unit into bracket as shown (left) until it clicks into position. Remove by pressing in the two locking tabs as shown. Secure wire with tape supplied and by winding it around cables.

INSTALLATION TESTS

Once installation is complete, the computer should be tested to make sure it is working properly.
To Test the Speed Sensor/Transmitter Installation:
Step 1: Advance the computer to the SPD Mode using Button #2.
Step 2: Pick up the front of the bicycle and spin the front wheel. The computer should display a speed reading within 2-3 seconds.
If there is no speed-reading, check the alignment and spacing between the magnet and sensor/transmitter. Make sure that the Head Unit is completely locked into position and **the handlebar mount is not over tightened.** If this check does not solve the problem, talk to your Vetta Retailer or connect to **www.vetta.com**.
To Test the Cadence Sensor Installation:
Turn the crank backwards or ride the bike a short distance. After a few revolutions, a cadence-reading should appear on the lower line of the SPD/CAD Mode. If there is no cadence-reading, check the alignment and spacing between the magnet and sensor.
IMPORTANT: Following the installation tests above, make sure that the Spoke Magnet locking screw and all Zip-Ties are properly tightened. CAUTION: Do not over tighten!

PROBLEM/ITEMS TO CHECK/SOLUTION

- **Current speed-reading is erratic or does not appear.**
  Check the alignment of the wheel magnet and sensor, and the distance between the two components. Realign the magnet and sensor with the spacer.
- **Current speed-reading is erratic or does not appear.**
  Inspect the wiring for any breaks or kinks. Replace Mounting Bracket and sensor as needed.
- **Incorrect data appears on screen during operation.**
  Accuracy of the Setup data may be a problem (wheel size setting, etc.).
- **Data display is extremely slow.**
  Computer LCD does not like extremely low temperatures. Operating range is: 0°C to 50°C or 32°F to 122°F. Return the computer to a warmer climate.
- **Screen is dark and display characters look "strange".**
  Computer screens do not like to be left in direct sunlight for extended periods of time. Move the computer into the shade until the screen recovers. No effect on data.
- **Screen reading is weak or fading.**
  Symptom of a weak battery. Replace the battery.
- **Screen readings are erratic and read too high or too low.**
  Symptom of a weak battery. Replace the battery.
- **Screen "frozen", no response to buttons.**
  Symptom of a weak battery. Replace the battery.
- **No display whatsoever.**
  Battery is completely dead, or not installed. Replace or install the battery.

WARRANTY POLICY

ACUMEN INC. WARRANTS ALL **VETTA** (The Company) PRODUCTS AGAINST MANUFACTURER DEFECTS FOR A PERIOD OF 3 YEARS. Subject to the following limitations, terms and conditions, components will be free of manufacturing defects in materials and workmanship. The 3 year limited warranty is conditioned upon the components being used and operated in normal riding conditions. This warranty does not cover normal wear and tear (i.e. battery replacement, broken wire…), rider abuse, acts of God, improper installation or product alteration. **This warranty is void if the components were not purchased (new) from or through an authorized VETTA retailer or dealer; examples of unauthorized dealers are online auction sites or online retailers that do not offer service.**

ACUMEN INC. at its sole discretion will repair or replace items at its own cost. Users are responsible for all freight shipping charges when returning items for warranty service.

ACUMEN INC. will pay the freight when returning serviced items via USPS or UPS to consumers or dealers once the item(s) has been repaired or replaced.

REQUIREMENTS FOR WARRANTY SERVICING
1. Prior to shipping an item back, you must first obtain a Return Authorization Number (s) (RA#). Each item being returned must have an individual RA#.
2. To obtain a RA #, you must either contact the retailer where the product was originally purchased from, or contact **VETTA** directly at customerservice@vetta.com.
3. For trouble shooting purposes, we request that the complete unit with packaging be returned to **ACUMEN INC.** unless otherwise stated by VETTA representative.

ITEMS TO BE INCLUDED IN RETURNS
1. The defective product(s)
2. A letter clearly stating the problem(s) with the returned item(s).
3. Copy of the original sales receipt showing proof of purchase date.
4. The Company is not responsible for loss or additional damages while in transit to **ACUMEN INC.**
5. Clearly mark the RA# on the outside of the return packaging. All items without an RA # will be refused and returned to the return address on the package.

The Company shall not be held responsible for replacing items with new items for greater than the amount of the original item purchase price. This limited warranty does provide the original owner with certain legal rights and recourse. The original owner may possess other rights or recourse, depending on the state or country. Please check the web to help answer any question and service manual.

ACUMEN INC CUSTOMER SERVICE CENTERS