

**WARNINGS & CAUTIONS**

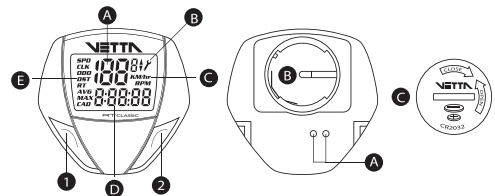
- Vetta cycle computers are sophisticated electronic instruments. Vetta recommends that this product be installed only by a qualified bicycle retailer. Failure to read these instructions and/or improper installation of this device may void the warranty. If in doubt about any aspect of the installation 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. However, 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.

**FUNCTIONS / FEATURES**

	RT Classic	RT233
Speed (Current)	•	•
Speed (Avg / Max)	•	•
Cumulative Odometer	•	•
Trip Distance	•	•
Freeze Frame Memory	•	•
LCD Screens	2	2
12 /24 Hour Clock	•	•
Interchangeable Front Cover	•	•
EZ Tire Setup	•	•
Service Timer	•	•
Universal Bike Mount	•	•

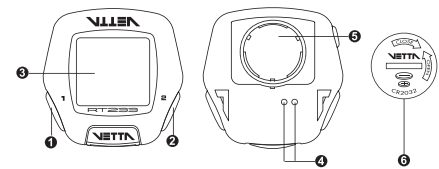
**ILLUSTRATIONS**

**HEAD UNIT (RT Classic)**



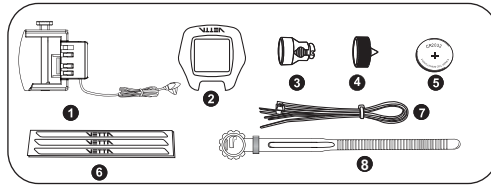
- A** Upper Display (Speed)
- B** Service Timer Icon
- C** Speed / Distance Units
- D** Lower Display
- E** Function Icons
- 1** Set / Select Button (Left)
- 2** Mode / Advance Button (Right)
- A** Contact Points
- B** Battery Compartment
- C** Battery Cover

**HEAD UNIT (RT233)**



- 1** Button ①
- 2** Button ②
- 3** Main Display
- 4** Contact Pins
- 5** Battery Compartment
- 6** Battery Cap

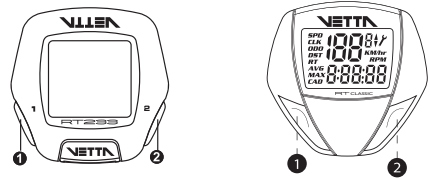
**COMPONENTS**



- 1. Wired Speed Sensor with Mounting Bracket
- 2. Extra Clear Front Cover
- 3. Bladed Spoke Magnet
- 4. Spacer
- 5. Head Unit Battery (CR2032, 3-Volt)
- 6. Wire Securing Tape
- 7. Zip-Ties
- 8. Screw Strap

RT Classic: ①③④⑤⑥⑦⑧  
RT233: ①②③④⑤⑥⑦⑧

**BUTTON FUNCTIONS**



- Press momentarily**  
Button ②: Lower Screen Modes
- 1 Set / Select Button (Left)**  
**2 Mode / Advance Button (Right)**

**Press & hold for 2 seconds**  
Button ① & ② when the lowest screen is in the CLK Mode: NOM Setup  
Button ① & ② when the lowest screen is in the DST Mode: Reset Ride Data

**BATTERY INSTALLATION**

**HEAD UNIT**

The Head Unit uses a CR2032 3-Volt Lithium button cell battery.  
Battery Run Time (1 hour training / day): Approx. 12 months  
**Important:** Most cycle computer problems are caused by weak or dead batteries. See the Trouble Shooting section near the end of the manual for details.

- Remove the battery cap from the bottom of the Head Unit using a coin.
- Install a new battery as shown with the positive (+) side facing out. Do not touch or bend any of the battery contacts during installation.
- Screw the battery cap firmly into place making sure the O-ring seal does not get pinched or distorted.

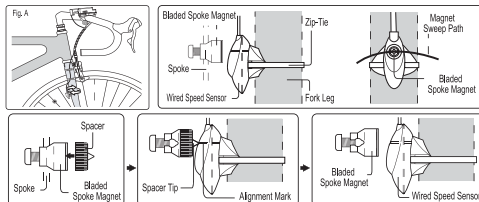
**Caution:** To avoid damage to the battery cap, do not over tighten.

**INSTALLATION**

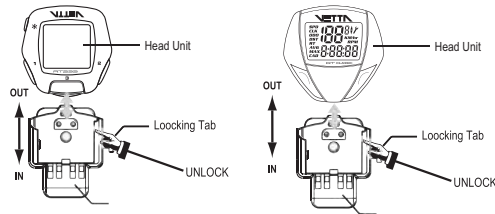
**Important:** Use the tapes provided with the package (NOT ZIP-TIES) to hold wires to the frame, fork, bars or stem to avoid damaging or cutting the wires accidentally. Make sure excess wire is taped down or wrapped around brake cable housing to secure it.

**WIRED SPEED SENSOR & MAGNET**

Attach the Wired Speed Sensor with the Zip-Ties supplied and tighten the Bladed Spoke Magnet to the bicycle. **Mounting the sensor as high up on the fork leg as possible.** (see Fig.A). Adjust the sensor and magnet spacing with the Spacer. Remove the Spacer after tightening the Zip-Tie down to hold the sensor in its final position.



**MOUNTING BRACKET & HEAD UNIT**



Attach Mounting Bracket to the handlebar on the "Sensor Side". Adjust its position to your liking and fasten the screw.  
Slide the Head Unit into the Wired Mounting Bracket as shown until it clicks into position. Remove by pressing in the locking tab as shown.

**Note:** Secure wire with tape supplied and by winding it around cables. Be sure to leave enough slack in the wire to accommodate the movement of fork and handlebars.

**INSTALLATION TESTS**

Once installation is complete, the computer should be tested to make sure it is working properly.  
**Step 1:** Advance the computer to the SPD screen mode using Buttong #2.  
**Step 2:** Pick up the front of the bicycle and spin the front wheel or ride the bicycle a short distance. The LCD 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. Make sure that the Head Unit is completely locked into position. If these checks do not solve the problem, talk to an Authorized Vetta's Retailer or connect to [www.vetta.com/support.asp](http://www.vetta.com/support.asp).  
**Important:** Once the sensor is aligned, tighten the magnet's locking screw and Mounting Bracket Strap.

**SETUP & PROGRAMMING**

In Setup, Button ① is used to select or set a value and to advance to the next digit or Mode. Button ② is used to switch between settings and to increase values.

**Initial Setup**

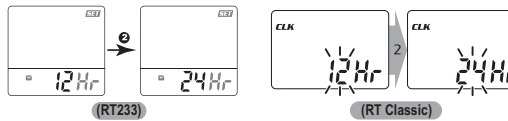
RT233 (RT Classic) is programmed to enter the Initial Setup Mode after new battery replacement. In the Initial Setup, riders can program the Basic Settings for the computer, the content of settings are same as NOM Setup for Basic Setting.

**NOM Setup**

After completed the Initial Setup, riders can change any values or correct any errors by re-entering the NOM Setup. To enter the NOM Setup Mode, press & hold ① & ② simultaneously when the lowest screen is in the clk Mode.

**Important:** Computer CANNOT exit during the Setup Mode until all the Basic Settings are finished.

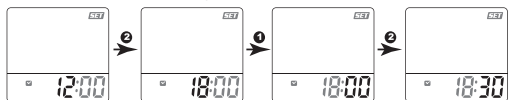
**12/24 CLOCK**



Press ② to toggle between flashing 12 and 24 hour formats. Press ① to select your desired format (without PM icon implies AM in 12 hour format) and advance to Time setting.

**TIME**

Press ② to advance hour digits to correct hour (hold button for rapid advance). Press ① to select and advance to minute setting. Press ② to advance minute digits to correct minute. Press ① to select and advance to the next Setup Mode.

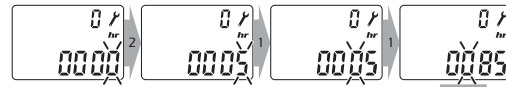


**SPEED/ DISTANCE UNIT**

Press ② to toggle between flashing M/hr and KM/hr. Press ① to select and advance to the next Setup Mode.

**SET SERVICE TIMER**

(RT Classic)



**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.

**SERVICE TIMER**

(RT233)

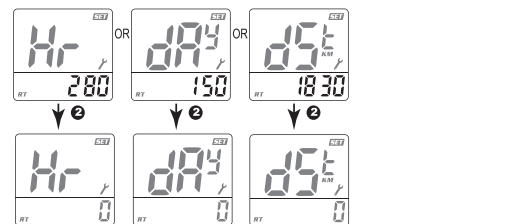
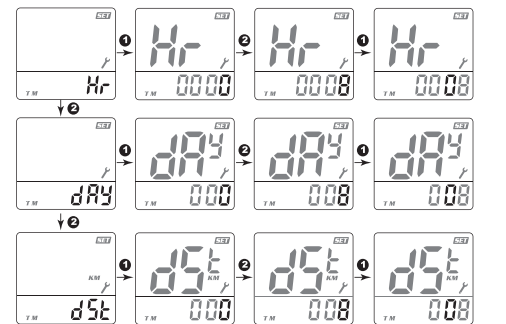
Service Timer could be programmed with a selected number of ride time (hours or days) or distance as the interval for servicing the bicycle or any component on it, such as a front or rear shock.

The default settings "0000" means the Service Timer is turned off.

Press ② to scroll flashing hr (hour), day or dst (distance) as the Service Time unit. Press ① to select the desired Service Timer unit.

When the desired Service Timer unit has been chosen, press ② to scroll the flashing digit to the desired number. Press ① to select this number and advance to next digit. Repeat this procedure until all digits are selected.

Press ① to advance the next setup Mode. (Maximum settings: hour / day / distance=1999 / 199 / 9999)



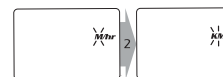
When the Ride Time (the elapsed time for Service Timer) or the elapsed distance begins to flash, press & hold ② to reset to zero;

OR press ① to reserve the digits, and advance to the next Setup Mode.

**Important:** In the Initial Setup, the elapsed time [ distance] for Service Timer doesn't exist.

**SET SPEED/DISTANCE SCALE**

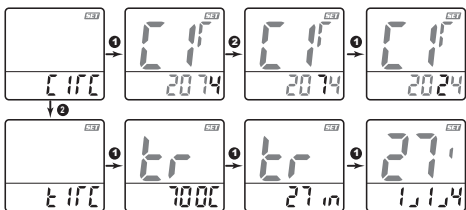
(RT Classic)



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 screen mode, press and hold Buttons #1 and #2 simultaneously for 2 seconds until "M/hr" begins to flash).

## WHEEL/ TIRE SIZE (RT233)

Press **2** to toggle between flashing **circ** (circumference) and **tire** (tire type). Press **1** to select the desired and advance the settings.



If pre-set to **circ** (see Table of Tire Size Vs Circ), press **2** to scroll the flashing digit to the desired number. Press **1** to select this number and advance to next digit. Repeat this procedure until all four digits are selected.

If pre-set to **tire**, press **2** to scroll the flashing **700c**, **650c**, **27in**, **26in**, **24in**, **20in** or **16in**. Press **1** to select and advance to next setting to complete the Tire Size. Again, press **2** to scroll and press **1** to finalize the Size Tire and advance to the next Setup Mode.

### (RT Classic)



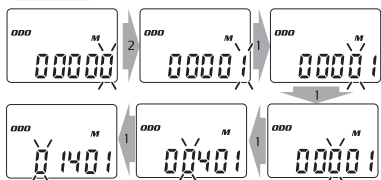
Default wheel circumference setting is 2074mm. Choose correct wheel circumference figure from Wheel Reference Chart.

Press **Button #2** to advance digits as needed and **Button #1** to select and advance. (Range: 0050-2999mm)

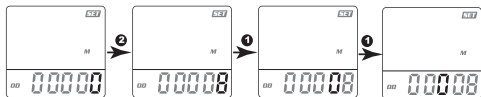
TIRE SIZE	CIRC	TIRE SIZE	CIRC	TIRE SIZE	CIRC	TIRE SIZE	CIRC
700C x 20mm	2074	700C x 38mm	2180	26" x 2.1"	2095	26" x 1.9/1.95"	2055
700C x 23mm	2105	700C Tubular	2130	26" x 2-1/4"	2115	24" x 1.9/1.95"	1916
700C x 25mm	2124	650C x 23mm	1990	26" x 2.3"	2135	20" x 1-1/4"	1618
700C x 28mm	2136	650C x 20mm	1945	26" x 1.0"	1913	16" x 2.0"	1253
700C x 30mm	2145	27" x 1-1/4"	2161	26" x 1-1/4"	1953	16" x 1.95"	1257
700C x 32mm	2155	27" x 1-1/8"	2155	26" x 1-1/2"	1985	16" x 1-1/2"	1206
700C x 35mm	2168	26" x 2.0"	2074	26" x 1-3/4"	2035		

## ODOMETER

### (RT Classic)



### (RT233)



Press **2** to scroll the flashing digit to the desired number. Press **1** to select this number and advance to next digit. Repeat this procedure until all five digits are selected. Press **1** to advance the next Setup Mode. (Maximum setting: 99999)

## FUNCTIONS

Press **2** to scroll the lower screen Modes.

To enter the NOM Setup Mode, press & hold **1** & **2** simultaneously for 2 seconds when the lowest screen is in the CLK Mode;

To reset Ride Data to zero, press & hold **1** and **2** simultaneously for 2 seconds when the lowest screen is in the DST Mode.

### RT233

### SPD



Speed is shown at all times on upper display. It is accurate to 0.1 Mph or KM/hr and the maximum reading is 139.9M/hr or 199.9 KM/hr.

## DST



DST displays trip distance of current ride to a maximum of 999.9 miles or kilometers. It is accurate to 0.1 Mile or KM.



Note: When the Trip Distance exceeds 999.9 miles [kilometers], symbol "E" appears indicating that further measurement is impossible.

## ODO



The odometer displays distance to 99999 Miles or kilometers. It is accurate to 1.0 Mile or KM.

## CLK



Time is displayed in use-selected 12 / 24 hour formats.

### RT Classic

### SPD



Speed is shown at all times on upper display. It is accurate to 0.1 Mph or KM/hr and the maximum reading is 139.9M/hr or 199.9 KM/hr.

## CLK



Time is displayed in user-selected 12 or 24 hour formats.

## ODO



The odometer displays distance to 99999 Miles or kilometers. It is accurate to 1.0 Mile or KM.

## DST



Displays trip distance of current ride to a maximum of 999.9 miles or kilometers (0.1 mile / km).

## OTHER FEATURES

### RT233

### SLEEP MODE



Computer enters Sleep Mode after 5 minutes without input from any buttons or wheel, and displays the clock only. Computer exits Sleep Mode and returns to the screen last displayed when any button is pressed or the wheel turns.

### SERVICE TIMER (⚡)



Blinking "⚡" alerts rider the Service Time is reached.

### ALL CLEAR RESET

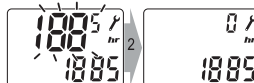
All Clear Reset: Remove battery and reinstall. When you remove the battery, all data and all time and odometer setting will be cleared. When battery is reinstalled, computer will automatically enter the Setup program.

## RT Classic

### SERVICE TIMER (⚡)

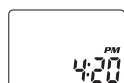


Blinking wrench icon alerts rider the Service Time is reached. To view or reset Accumulated Ride Time and Service Time, press and hold Buttons #1 and #2 for 2 seconds in the SPD/CLK screen mode.



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

### SLEEP MODE



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 or wheel.

### ALL CLEAR RESET

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

## TROUBLE SHOOTING

- 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.**
- Screen readings are erratic and read too high or too low.**
- 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.**

**ACUMEN INC.** at its sole discretion will repair or replace items at its own cost. Users are responsible for all freight and 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.

In **USA**, securely package and return the product prepaid to:

Acumen Inc.

101A Executive Drive Suite 100, Sterling, VA 20166 USA

### REQUIREMENTS FOR WARRANTY SERVICING

- 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#.

- To obtain an RA#, you must either contact the retailer where the product was originally purchased from, or contact **VETTA** directly at customer service @ vetta.com.
- 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

- The defective product(s)
- A letter clearly stating the problem(s) with the returned item(s).
- Copy of the original sales receipt showing proof of purchase date.
- The Company is not responsible for loss or additional damages while in transit to **ACUMEN INC.**
- 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.

**Outside USA**, you should contact the local dealer or Acumen distributor in your country for custom service.

**Acumen Europe BV**

**Website: www.vetta.com**

**Email: customerservice@vetta.com**