

INDEX

1 WIRED MODEL INSTALLATION	
SPEED SENSOR & MAGNET.....	2
MOUNTING BRACKET.....	6
HEAD UNIT.....	7
CADENCE SENSOR & MAGNET.....	8
INSTALLATION TESTS.....	11
2 WIRELESS MODEL INSTALLATION	
WL2X DOUBLE WIRELESS SPEED & CADENCE TRANSMITTER INDICATOR	
Low Battery Indicator.....	12
Installation Alignment Indicator.....	13
WL2X WIRELESS SPEED TRANSMITTER & MAGNET.....	14
WL2X WIRELESS CADENCE TRANSMITTER & MAGNET.....	17
WIRELESS ACTIVE MOUNT.....	20
HEAD UNIT.....	20
INSTALLATION TESTS.....	21
3 BATTERY TYPE & LIFE	22
4 WARRANTY POLICY	22
REQUIREMENTS FOR WARRANTY SERVICING.....	23
ITEMS TO BE INCLUDED IN RETURNS	24

V100

SERIES

1. WIRED MODEL INSTALLATION

SPEED SENSOR & MAGNET

The V100 series optional wired speed and cadence kit comes with a mounting bracket that features two wire leads: a speed sensor lead (85cm) and a cadence sensor lead (150cm). Mounting pad, cadence magnet, spoke magnet, tape and zip ties are also included.

- Step 1:** Use the zip-tie supplied to hold loosely the wired speed sensor and mounting pad to the inside of either fork leg. We recommend mounting it as high up on the fork leg as possible to help protect it from being hit by rocks, branches or other objects while riding. (Fig. 1)
- Step 2:** Tighten the spoke magnet to any spoke on the "sensor side" of the front wheel so that it passes over the alignment mark on the sensor. (Fig. 1, 2)
- Step 3:** Attach the alignment setup spacer to the magnet temporarily. (Fig. 3)
- Step 4:** Slide and rotate the sensor until the alignment mark just touches the spacer tip on the magnet. (Fig. 4)
- Step 5:** Route the sensor wire up the fork blade and secure it with the tape. Wrap excess wire around the front brake cable housing, leaving enough slack to attach the mounting bracket easily to the handlebar and allow for movement of the bar and stem.

CAUTION: When installing the speed sensor on a suspension fork, make sure that the fork is fully extended to ensure there is enough wire to reach the mounting bracket properly. Excess sensor wire should be taped down or wrapped around the brake cable housing for safety.

Step6: Snug the zip tie down to hold the sensor in its final position.

Step 7: Remove the spacer and verify that the magnet and sensor spacing stayed the same. (Fig. 5)

Note: Do not use a zip-tie tightening tool or a third hand tool when doing the final tensioning of the zip-ties. This can tear and damage the sensor or transmitter.

Fig. 1

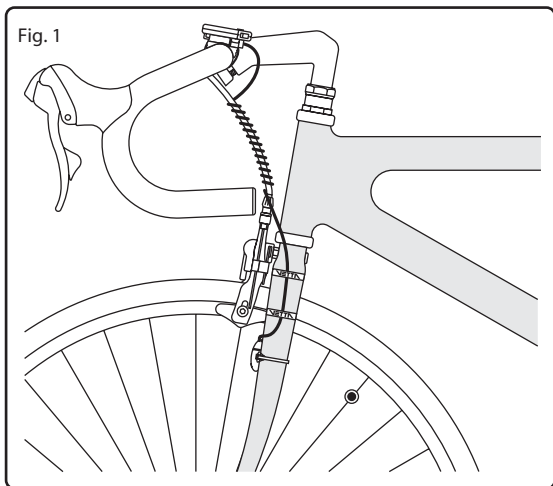


Fig. 2

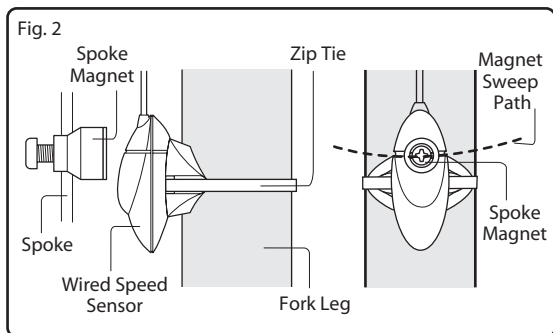


Fig. 3

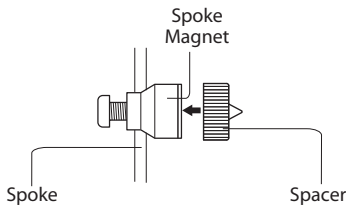


Fig. 4

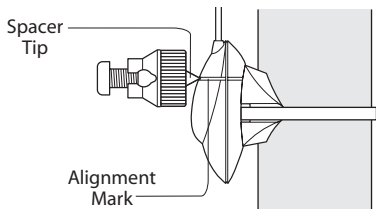
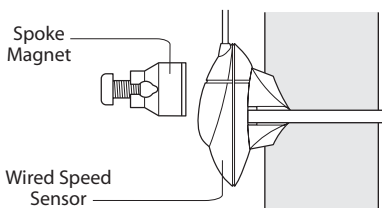
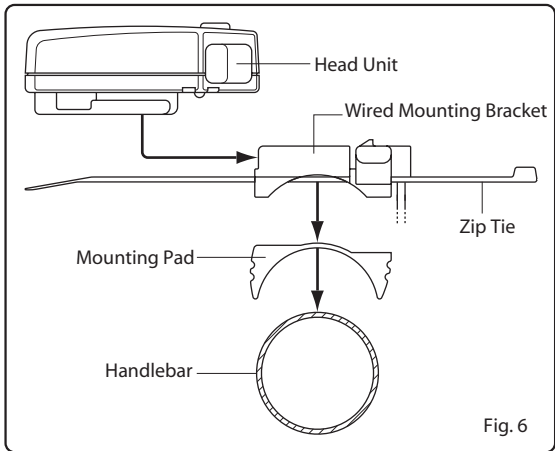


Fig. 5



MOUNTING BRACKET



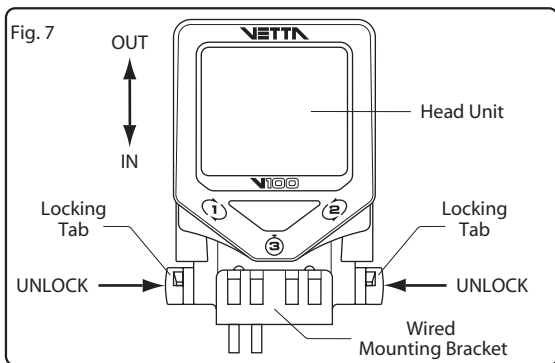
Step 1: Install wired mounting bracket and mounting pad to the handlebar using the 2 zip ties provided. (Fig. 6)

Step 2: Tighten the zip ties so that the mounting bracket holds its position on the bar yet can be easily adjusted. Trim excess.

CAUTION: Do not use zip ties but tapes provided to hold wires to the frame, fork, bars or stem to avoid damaging or cutting the wires accidentally.

HEAD UNIT

The head unit is designed to slide into the wired mounting bracket from the front to the back and lock into position. You should hear an audible **"CLICK"** when the head unit has been properly locked into position. This indicates proper alignment between the computer head pins and the mounting bracket contacts. To remove the computer head from the bracket, gently pinch the two locking tabs inward and slide the head unit forward and out of the bracket. (Fig. 7)



CADENCE SENSOR & MAGNET

- Step 1:** Route the cadence sensor wire from the mounting bracket down the down-tube.
- CAUTION:** Be sure to leave enough wire at the handlebar so that its movement is free and unrestricted.
- Step 2:** Route the cadence sensor wire under the bottom bracket and along the left side chain-stay. Use the zip-tie supplied to hold loosely the cadence sensor and mounting pad to the outside of the chain-stay facing the left crank arm. (Fig. 8)
- Step 3:** Use the zip-tie to hold the cadence magnet to the inside of the left crank arm so that it passes over the alignment mark on the sensor. (Fig. 8 & 9)
- Step 4:** Attach the alignment setup spacer over the magnet temporarily. (Fig. 10)
- Step 5:** Slide and rotate the sensor until the alignment mark just touches the spacer tip on the magnet. (Fig. 11)
- Step 6:** Snug the zip tie down to hold the sensor in its final position. **CAUTION:** Make sure excess wire is taped down or wrapped around cable housing or frame tubes to secure it.
- Step 7:** Remove the spacer and verify that the magnet and sensor spacing stayed the same. (Fig. 12)

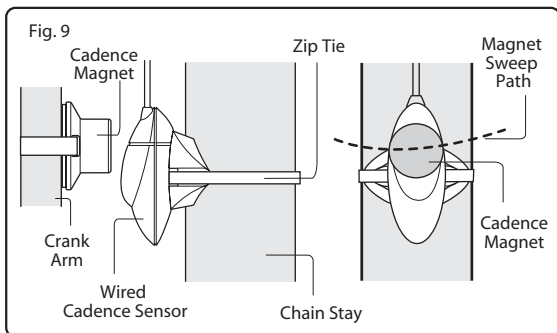
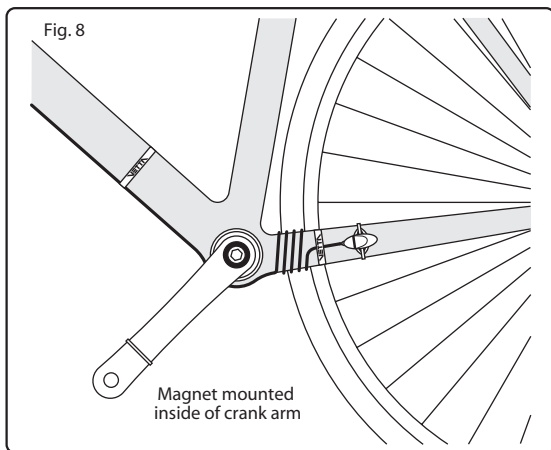


Fig. 10

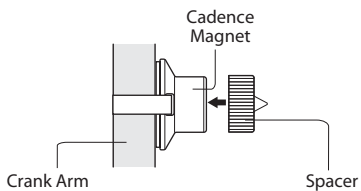


Fig. 11

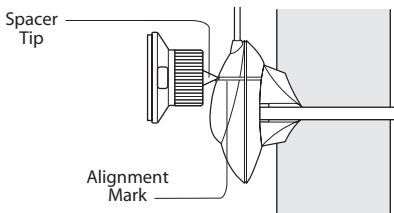
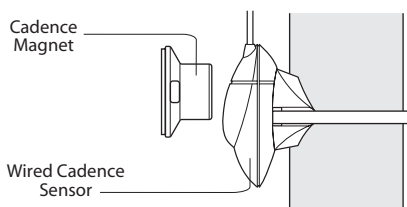


Fig. 12



INSTALLATION TESTS

Once installation is complete, the computer should be tested to make sure it is working properly.

To test the **wired speed sensor** installation: (1) Advance the computer to the SPD/DST screen mode using Button #2. (2) Pick up the front of the bicycle and spin the front wheel or ride the bike a short distance. The computer should display a speed reading after a few seconds.

To test the **wired cadence sensor** installation: (1) Advance the computer to the SPD/CAD screen mode using Button #2. (2) Turn the crank or ride the bike a short distance. The computer should display a cadence reading after a few seconds.

If there is no speed or cadence reading, make sure the timers (RT/TT) are running; check the alignment and spacing between the magnet and sensor; make sure that the head unit is completely snapped into position. If these checks do not solve the problem, talk to an Authorized Vetta Retailer or connect to www.vetta.com.

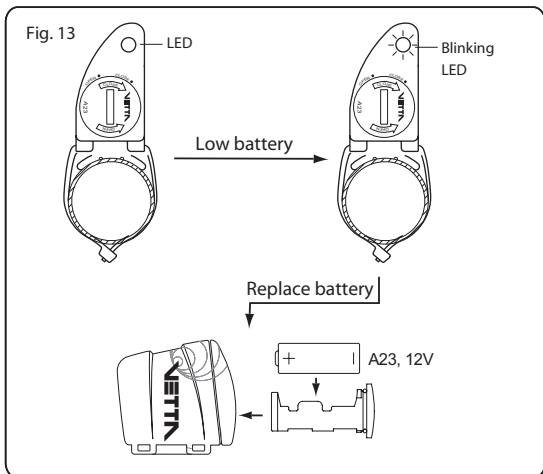
IMPORTANT: Following the installation tests above, make sure that the spoke magnet locking screw and all zip ties are properly tightened.

2. WIRELESS MODEL INSTALLATION

WL2X DOUBLE WIRELESS SPEED & CADENCE TRANSMITTER INDICATOR

LOW BATTERY INDICATOR

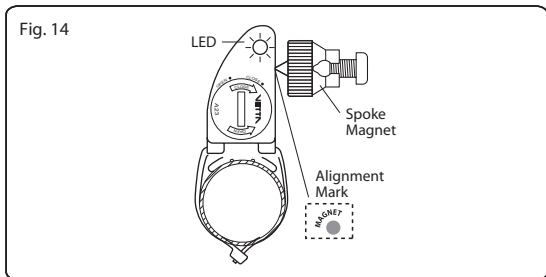
The Vetta V100 series WL2X wireless speed or cadence transmitter automatically measures the battery power as soon as it receives input from the wheel/crank motion. When the battery runs low and needs to be replaced, the LED indicator on the top of the transmitter will blink while receiving input from wheel/crank motion and stop blinking after receiving no input for 5 minutes. (Fig. 13)



RIDING TIP: If the speed or cadence shows erratic reading, it is most probably because of low battery transmitter. Once you find this happen, please check the Low Battery Indicator.

INSTALLATION ALIGNMENT INDICATOR

Correct alignment can be verified by using the installation alignment function. This function will automatically start once a new battery is installed. The Installation Alignment Indicator (that is also the Low Battery Indicator) will blink for one time when the transmitter receives input from the magnet. This function will automatically be switched off after the LED indicator has turned-on for 10 times. (Fig. 14)



Note: If the alignment cannot be completed after the indicator has turned-on for 10 times, please re-install the battery to initiate the alignment function again.

WL2X WIRELESS SPEED TRANSMITTER & MAGNET

The V100 series computers are designed to operate as a wireless unit with the installation of a special active mount and WL2X wireless speed and cadence transmitters.

- Step 1:** Use the zip-ties supplied to hold loosely the WL2X wireless speed transmitter and mounting pad to the left fork leg. **Note:** To maximize signal reception, position the transmitter as high up on the fork leg as possible. (Fig. 15)
- Step 2:** Tighten the spoke magnet to any spoke on the "transmitter side" of the front wheel so that it passes over the alignment mark on the transmitter. (Fig. 15, 16)
- Step 3:** Attach the alignment setup spacer to the magnet temporarily. (Fig. 17)
- Step 4:** Slide and rotate the transmitter until the alignment mark just touches the spacer tip on the magnet. (Fig. 18)
- Step 5:** The installation alignment indicator will blink for one time when the transmitter receives input from the magnet. (See the section "**INSTALLATION ALIGNMENT INDICATOR**" for details).
- Step 6:** Snug the zip ties down to hold the transmitter in its final position.
- Step 7:** Remove the spacer and verify that the magnet and transmitter spacing stayed the same. (Fig. 19)

Fig. 15

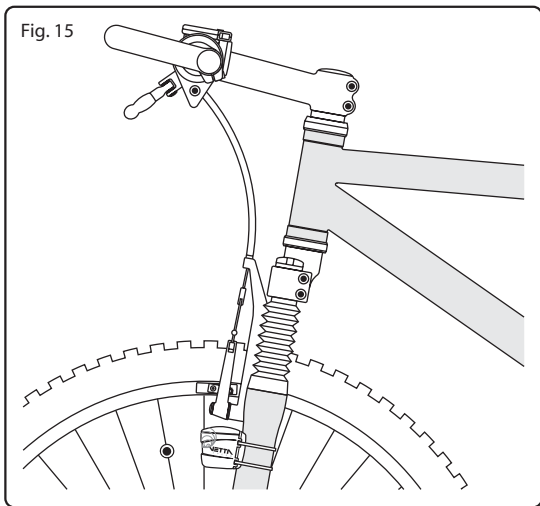


Fig. 16

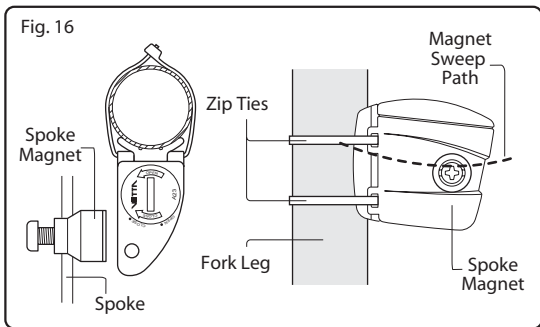


Fig. 17

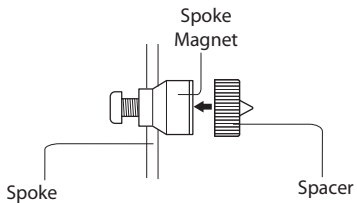


Fig. 18

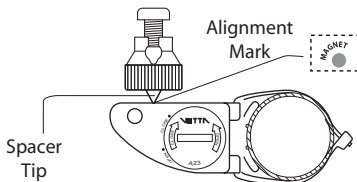
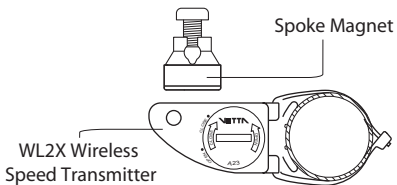


Fig. 19



WL2X WIRELESS CADENCE TRANSMITTER & MAGNET

- Step 1:** Use the zip-ties supplied to hold loosely the WL2X wireless cadence transmitter and mounting pad to the left side chain-stay. (Fig. 20)
- Step 2:** Use the zip-tie to hold the cadence magnet to the inside of the left crank arm so that it passes over the alignment mark on the transmitter. (Fig. 20 & 21)
- Step 3:** Attach the alignment setup spacer over the magnet temporarily. (Fig. 22)
- Step 4:** Slide and rotate the transmitter until the alignment mark just touches the spacer tip on the magnet. (Fig. 23)
- Step 5:** The installation alignment indicator will blink for one time when the transmitter receives input from the magnet. (See the section "**INSTALLATION ALIGNMENT INDICATOR**" for details).
- Step 6:** Snug the zip ties down to hold the transmitter in its final position.
- Step 7:** Remove the spacer and verify that the magnet and transmitter spacing stayed the same. (Fig. 24)

Fig. 20

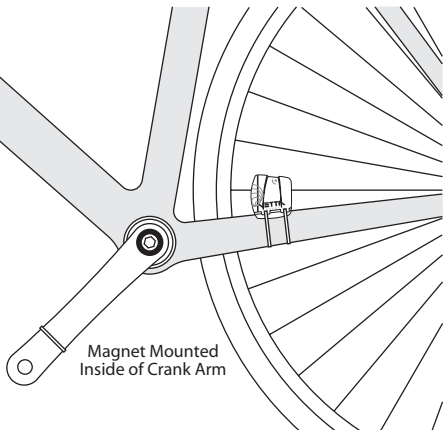


Fig. 21

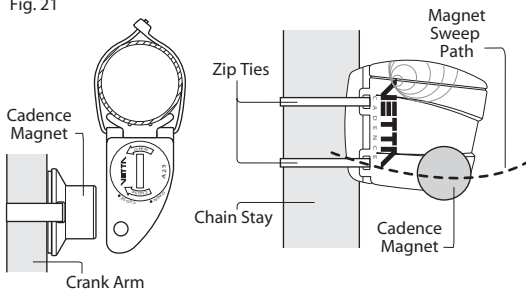


Fig. 22

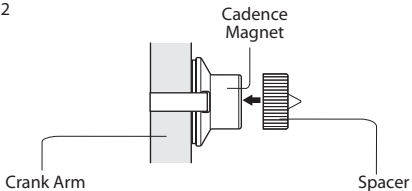


Fig. 23

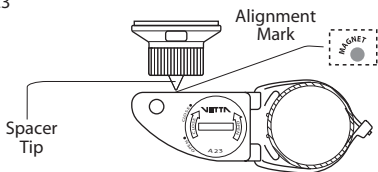
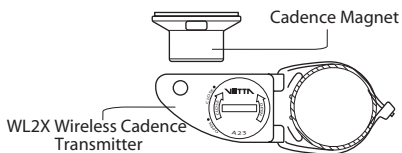


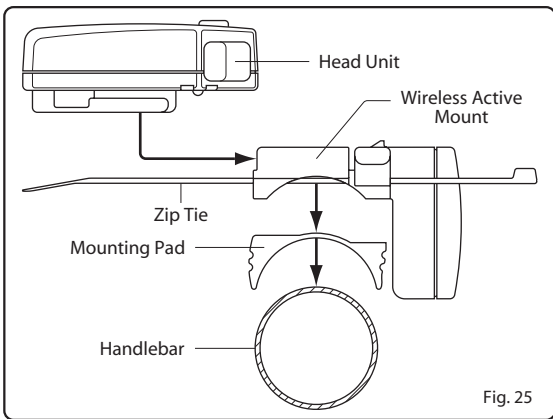
Fig. 24



WIRELESS ACTIVE MOUNT

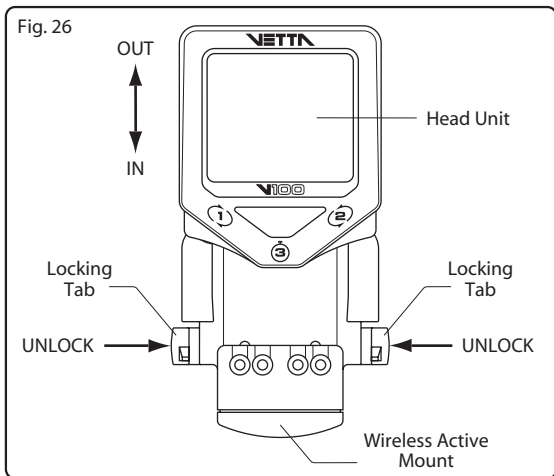
Attach the active mount and mounting pad to the handlebar using the zip ties provided. Adjust its position to your liking and tighten the zip ties. (Fig. 25)

CAUTION: Do not over tighten the zip ties on the active mount because this may bend the mount and affect the operation of the computer.



HEAD UNIT

The head unit is designed to slide into the wireless active mount from the front to the back and lock into position. You should hear an audible **"CLICK"** when the head unit has been properly locked into position. This indicates proper alignment between the computer head pins and the active mount contacts. To remove the computer head from the mount, gently pinch the two locking tabs inward and slide the head unit forward and out of the mount. (Fig. 26)



INSTALLATION TESTS

Once installation is complete, the computer should be tested to make sure it is working properly.

To test the **WL2X wireless speed transmitter** installation: (1) Advance the computer to the SPD/DST screen mode using Button #2. (2) Pick up the front of the bicycle and spin the front wheel or ride the bike a short distance. The computer should display a speed reading after a few seconds.

To test the **WL2X wireless cadence transmitter** installation: (1) Advance the computer to the SPD/CAD screen mode using Button #2. (2) Turn the crank or ride the bike a short distance. The computer should display a cadence reading after a few seconds.

If there is no speed or cadence reading, make sure the timers (RT/TT) are running; check the alignment and spacing between the magnet and transmitter; make sure that the head unit is completely snapped into position. If these checks do not solve the problem, talk to an Authorized Vetta Retailer or connect to www.vetta.com.

IMPORTANT: Following the installation tests above, make sure that the spoke magnet locking screw and all zip ties are properly tightened.

Tips: Rotating the angle of the transmitters or the handlebar receiver (slightly), can sometimes improve the signals being sent and received. Some bicycles have unusual frame tubes and angles, so by adjusting the components, can aid in trouble shooting by aligning the misdirected signals.

3. BATTERY TYPE & LIFE

Battery Type: A23 12V battery.

Battery Life: *WL2X Wireless Speed Transmitter*-approximate 130 hours continuously (at the speed of 20 miles per hour).

WL2X Wireless Cadence Transmitter-approximate 130 hours continuously (at 120 revolutions per minute).

4. 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 return freight shipping charges; when returning items for warranty service.

ACUMEN INC. will pay 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 an 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.

TEMS 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 to replace 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.

101A Executive Dr., Suite 100,

Sterling, VA 20166, USA.

E-Mail: customerservice@vetta.com

Website: www.vetta.com