VETTA

VL110
OPERATION MANUAL

VETTA

VL110 series

ENGLISH CONTENTS

INSTALLATION

IMPORTANT

- The Vetta's VL110 series SmartLite Cycle Computers are sophisticated electronic instruments. Vetta recommends that these products 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 of this product, consult your local bicycle retailer for clarification.

- Always follow the sections that are marked with "⚠"
- Specifications and design are subject to change for improvement without notice.
- If you have any questions or concerns about this manual, please contact ACUMEN INC at www.vetta.com.

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BATTERY INSTALLATION

HEAD UNIT

The VL110 series Head Unit use CR2450, 3-Volt Lithium button cell batteries.

Important Most cycle computer problems are caused by weak or dead batteries. See the Trouble Shooting section near the end of OPERATION MANUAL for details.
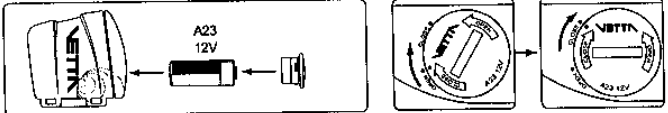
1. Remove the battery cap from the bottom of the computer using a coin.
2. Install a new battery as shown with the positive (+) side facing out. Do not touch or bend any of the battery contacts during installation.
3. Screw the battery cap firmly into place making sure the O-ring seal does not get pinched or distorted.

⚠ CAUTION: TO AVOID DAMAGE TO THE BATTERY CAP, DO NOT OVER TIGHTEN.

WL WIRELESS SPEED TRANSMITTER
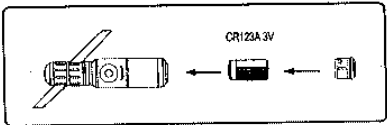
The WL Wireless Speed Transmitter uses an A23, 12-Volt battery. Remove the battery cap using a coin and install battery with positive (+) side up, replace battery cap.

⚠ CAUTION: MAKE SURE THE BATTERY CAP IS PROPERLY INSTALLED TO INSURE GOOD SIGNAL TRANSMISSION.

INTEGRATED T2X TORPEDO

Integrated T2X Torpedo uses a CR123A, 3-Volt Lithium battery. Remove the battery cap from the bottom of the Torpedo using a coin and install battery with positive (+) side in, screw the battery cap firmly.
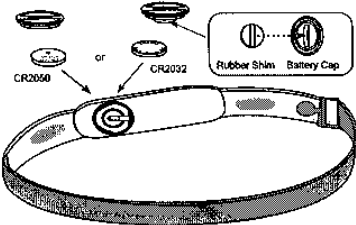
HEART RATE TRANSMITTER (HR MODELS ONLY)

The Vetta's Heart Rate Transmitter uses either a CR2050 or a CR2032 with a rubber shim, both of them are 3-Volt Lithium button cells and included.

Important For a CR2032 battery, make sure install the rubber shim into the battery cap first before put the battery cap back.

⚠ CAUTION: TO AVOID DAMAGE TO THE BATTERY CAP, DO NOT OVER TIGHTEN.
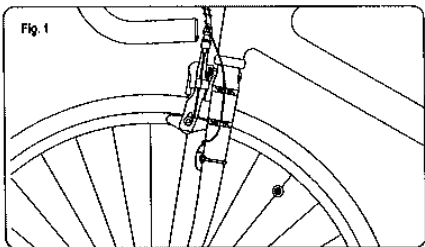
CR2050　　or　　CR2032　　Rubber Shim　Battery Cap

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INSTALLATION

HD MODELS INSTALLATION

SPEED SENSOR & MAGNET

1. Use the Zip-Tie supplied to hold loosely the Wired Speed Sensor and Bracket Mounting Pad to the inside of either fork leg. We recommend mounting it as high up on the fork leg as possible to protect it from being hit by rocks, branches or other objects while riding. (see Fig. 1)

Fig. 1

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2. Tighten the SPD Magnet to any spoke on the "sensor side" of the front wheel so that it passes over the Alignment Mark on the sensor. (see Fig. 1, 2)

3. Attach the Spacer to the magnet temporarily. (see Fig. 3)

4. Slide and rotate the sensor until the Alignment Mark just touches the Spacer tip on the magnet. (see Fig. 4)

Fig. 2
SPD Magnet
Magnet Sweep Path
Zip-Tie
SPD Magnet
Spoke
Fork Leg
Wired Speed Sensor

Fig. 3   SPD Magnet
Spacer
Spoke

Fig. 4
Spacer Tip
Alignment Mark

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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.

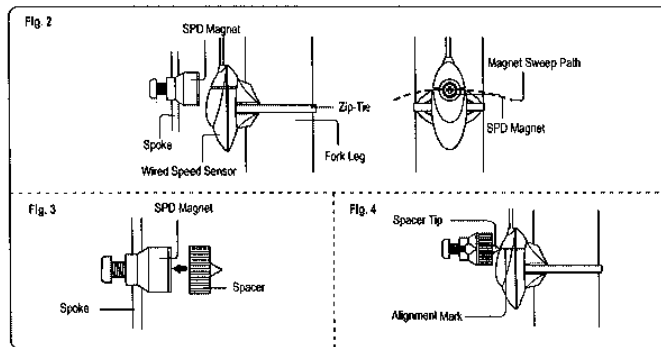⚠ CAUTION: WHEN INSTALLING THE SPEED SENSOR ON A SUSPENSION FORK, MAKE SURE THAT THE FORK IS FULLY EXTENDED TO ENSURE THERE IS ENOUGH WIRE TO REACH THE MOUNTING BRACKET PROPERLY. EXCESS SENSOR WIRE SHOULD BE TAPED DOWN OR WRAPPED AROUND THE BRAKE CABLE HOUSING FOR SAFETY.

6. Snug the Zip-Tie down to hold the sensor in its final position.

7. Remove the Spacer and verify that the magnet and sensor spacing stayed the same. (see Fig. 5)

Fig. 5
SPD Magnet
Wired Speed Sensor
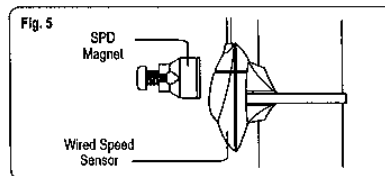
Important Do not use a Zip-Tie tightening tool or a third hand tool when doing the final tensioning of the Zip-Ties. This can tear and damage the sensor.

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MOUNTING BRACKET

1. Install the Wired Mounting Bracket and Bracket Mounting Pad to the handlebar using the Zip-Ties provided. (see Fig. 6)
2. Tighten the Zip-Ties so that the Mounting Bracket holds its position on the bar. (see Fig. 7) Trim excess.

Fig. 6
Head Unit
Mounting Bracket
Bracket Rubber Pad   Zip-Tie
Handlebar

Fig. 7
Head Unit
Mounting Bracket
Bracket Rubber Pad
Zip-Tie
Handlebar

⚠ CAUTION:
1. 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.
2. DO NOT OVER TIGHTEN THE ZIP-TIES BECAUSE THIS CAN BEND THE MOUNTING BRACKET, WHICH CAN AFFECT THE OPERATION OF THE COMPUTER ITSELF AS WELL AS THE SECURITY OF THE HEAD UNIT IN THE MOUNT.

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HEAD UNIT

1. Slide the Head Unit into the Mounting Bracket from the front to the back and lock into position.
2. 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.
3. 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. (see Fig. 8)

Fig. 8
OUT
IN
VETTA
Head Unit
Locking Tab
Locking Tab
UNLOCK   UNLOCK
Mounting Bracket
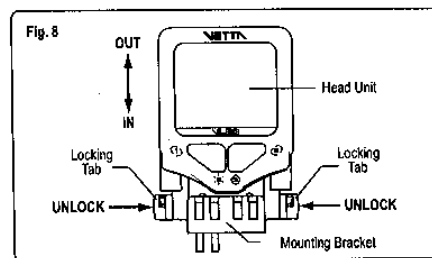
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WL MODELS INSTALLATION

WL WIRELESS SPEED TRANSMITTER & MAGNET

The WL models are designed to operate as a wireless unit with the installation of a special Active Mount and WL Wireless Speed Transmitter.

1. Use the Zip-Ties supplied to hold loosely the WL Wireless Speed Transmitter and Mounting Bracket Pad to the left fork leg.

Important To maximize signal reception, position the transmitter as high up on the fork leg as possible. (see Fig. 9)
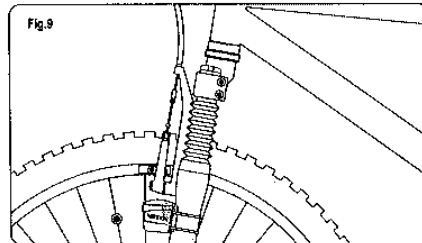
Fig.9

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2. Tighten the SPD Magnet to any spoke on the "transmitter side" of the front wheel so that it passes over the Alignment Mark on the transmitter. (see Fig. 9, 10)

3. Attach the Spacer to the magnet temporarily. (see Fig. 11)

4. Slide and rotate the transmitter until the Alignment Mark just touches the Spacer tip on the magnet. (see Fig. 12)

5. Snug the Zip-Ties down to hold the transmitter in its final position.

6. Remove the Spacer and verify that the magnet and transmitter spacing stayed the same. (see Fig. 13)
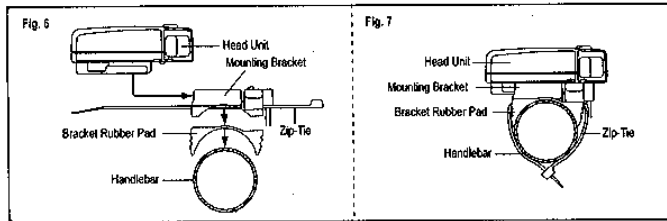
Fig. 10 — Magnet Sweep Path, Zip-Ties, SPD Magnet, Fork Leg, SPD Magnet, Spoke

Fig. 11 — SPD Magnet, Spoke, Spacer

Fig. 12 — Alignment Mark, Spacer Tip

Fig. 13 — SPD Magnet, WL Wireless Speed Transmitter
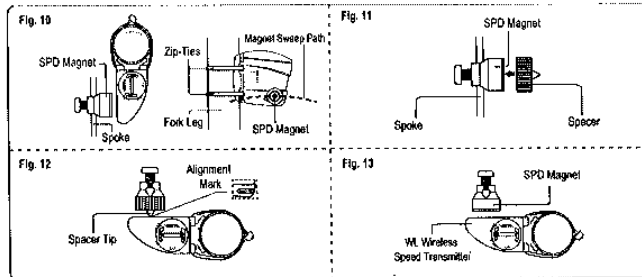
10

WL WIRELESS SPEED ACTIVE MOUNT

1. Attach the WL Wireless Speed Active Mount and Bracket Mounting Pad to the handlebar using the Zip-Ties provided (see Fig. 14).

2. Tighten the Zip-Ties so that the Mounting Bracket holds its position on the bar. (see Fig. 15).

⚠️ CAUTION: DO NOT OVER TIGHTEN THE ZIP-TIES ON THE WL WIRELESS SPEED ACTIVE MOUNT BECAUSE THIS MAY BEND THE MOUNT AND AFFECT THE OPERATION OF THE COMPUTER.

Fig. 14 — Head Unit, WL Wireless Speed Active Mount, Zip-Tie, Bracket Rubber Pad, Handlebar

Fig. 15 — Head Unit, Bracket Rubber Pad, Handlebar, Zip-Tie, WL Wireless Speed Active Mount

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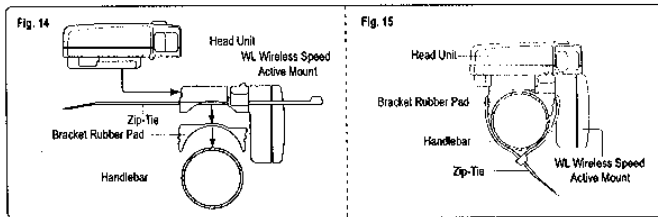
HEAD UNIT

1. Slide the Head Unit into the WL Wireless Speed Active Mount from the front to the back and lock into position.

2. 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.

3. 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. (see Fig. 16)

Fig. 16 — OUT, IN, Head Unit, Locking Tab, Locking Tab, UNLOCK, UNLOCK, WL Wireless Speed Active Mount

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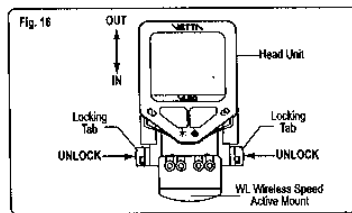
T2X MODELS INSTALLATION

IMPORTANT: The computer can ONLY recognize the transmitter — Integrated T2X torpedo after they go through the ID Learning procedure. This feature makes the computer suitable for group training without cross talk. (see page 19, Section of HOW TO RECOGNIZE YOUR INTEGRATED T2X TORPEDO).

INTEGRATED T2X TORPEDO & MAGNETS

For the 1st time battery installation (or after replace a new battery), Torpedo will automatically turn on the installation alignment function for 5 minutes. During this period, the Light Ring of the Torpedo will turn on in green if receiving inputs from magnets. This function can be re-activated when the Torpedo button is pressed momentarily.
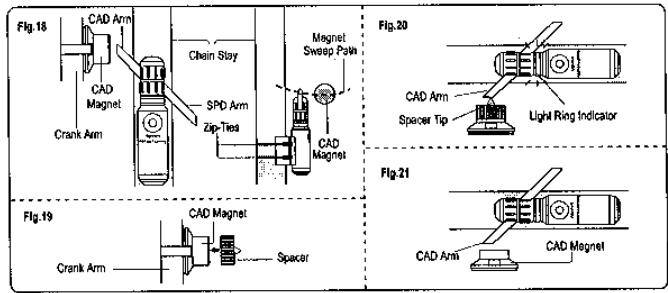
1. Use the Zip-Tie provided to hold the Integrated T2X Torpedo and Torpedo Shim loosely TOP Ⓐ or BOTTOM Ⓑ of the left chain-stay (see Fig.17).

⚠ WARNING: TO AVOID THE SPD ARM BEING BROKEN BY THE SPINNING SPOKE, MAKE SURE THE SPD ARM ALWAYS POINTING DOWNWARD.

Fig.17

CAD Magnet Mounted Inside of Crank Arm

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2. Use the Zip-Tie to hold the CAD Magnet to the inside of the left crank arm so that it will pass over the Alignment Mark on the CAD Arm. (See Fig.17 & 18)

3. Cover the magnet by the spacer. (See Fig.19)

4. Slide the Torpedo and rotate CAD Arm until the Alignment Mark just touches the Spacer tip. The Light Ring Indicator will turn on in green when the Torpedo receives input from the magnet. (See Fig.20)

5. Remove the Spacer and verify that the magnet and CAD Arm spacing stayed the same. (See Fig.21)

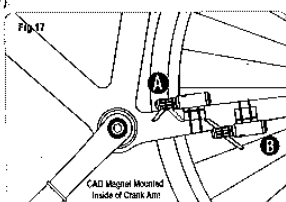Fig.18 CAD Arm Chain Stay Magnet Sweep Path Fig.20 CAD Arm Spacer Tip Light Ring Indicator

CAD Magnet SPD Arm Zip-Ties CAD Magnet

Crank Arm

Fig.19 CAD Magnet Fig.21 CAD Arm CAD Magnet

Crank Arm Spacer CAD Arm

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6. For SPD Magnet installation, move the CAD magnet away from CAD Arm by turning the crank arm. This will make sure the Light Ring indicator can only be turned on by the SPD Magnet.

7. Tighten the SPD Magnet to any spoke on the 'Torpedo side' of the rear wheel so that it will pass over the Alignment Mark of the SPD Arm. (see fig.22)

fig.22

Ⓐ

Ⓑ

⚠ WARNING: TO AVOID THE SPD ARM BEING BROKEN BY THE SPINNING SPOKE, MAKE SURE THE SPD ARM ALWAYS POINTING DOWNWARD.

SPD Magnet Mounted Any Spoke of the Rear Wheel

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8. TO AVOID THE SPD ARM BEING BROKEN BY THE SPINNING SPOKE, MAKE SURE THE SPD ARM ALWAYS POINTING DOWNWARD. (see Fig.23 & Fig.24)
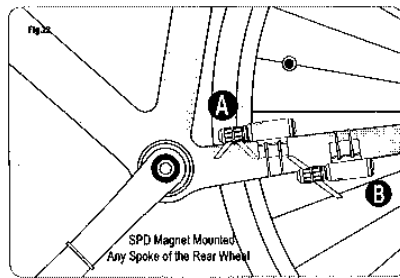
Above the Chain-Stay   **Underneath the Chain-Stay**

Fig. 23

CAD Arm
SPD Arm
Chain-Stay

Fig. 24

Chain-Stay
CAD Arm
SPD Arm

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9
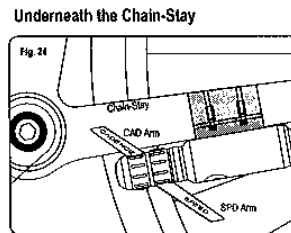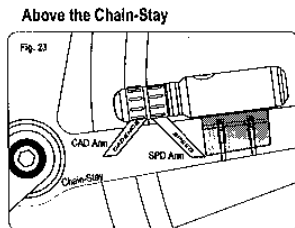
9. Repeat Step 3 to Step 5. (see Fig.25 to Fig.28)

Fig.25

Magnet
Sweet
Path

SPD Magnet

Zip-Ties

CAD Arm

SPD Arm   Spoke

SPD Magnet

Fig.27

Spacer Tip

SPD Arm

Light Ring Indicator

Fig.26

SPD Magnet

Spoke   Spacer

Fig.28

SPD Magnet
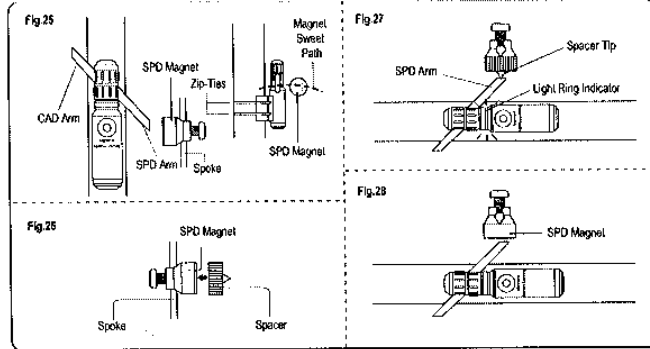
10. Snug the Zip-Ties down to hold the Torpedo in its final position.

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INTEGRATED T2X ACTIVE MOUNT

Please follow the same procedure described before (see page 11, Section of WL WIRELESS SPEED ACTIVE MOUNT).

⚠ CAUTION: DO NOT OVER TIGHTEN THE ZIP-TIES ON THE INTEGRATED T2X ACTIVE MOUNT BECAUSE THIS MAY BEND THE BRACKET AND AFFECT THE OPERATION OF THE COMPUTER.

Fig. 29

Head Unit

Integrated T2X
Active Mount

Zip-Tie

Bracket Rubber Pad

Handlebar

Fig. 30

Head Unit

Bracket Rubber Pad

Handlebar

Zip-Tie

Integrated T2X
Active Mount

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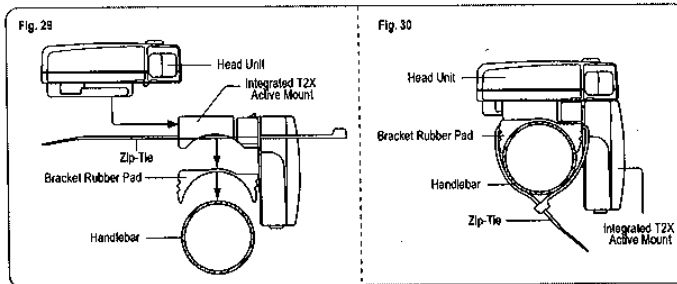
HEAD UNIT

Please follow the same procedure described before (see Page 12, Section of HEAD UNIT OF WL MODELS INSTALLATION)

Fig. 31

OUT
IN

Head Unit

Locking Tab

Locking Tab

UNLOCK — UNLOCK

Integrated T2X Active Mount
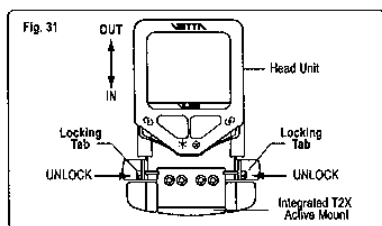
HOW TO RECOGNIZE YOUR INTEGRATED T2X TORPEDO

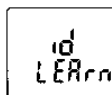1. If your Integrated T2X Torpedo is purchased as a complete set with the VL110 series computer, your computer has been programmed to recognize the Torpedo in the factory.

2. If a new Integrated T2X Torpedo or Integrated T2X Active Mount is purchased for replacement, please follow the ID Learning Procedure.

3. If a complete set of Integrated T2X Mounting Kit is purchased for your 2nd bike, please make sure you had chosen Bike II in the NOM Setup mode (see page 11 of the OPERATION MANUAL , Section of Dual Bike in NOM Setup), and follow the ID Learning Procedure.
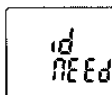
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ID LEARNING PROCEDURE

id NEEd

id LEArn

id donE

Step 1: Install the computer on the Integrated T2X Active Mount.

Step 2: After the screen display "id NEEd", press & hold the Torpedo's button for 3 seconds. The Light Ring Indicator of the Torpedo will turn on for 2 seconds in red.

Step 3: During the process, the computer will display "id LEArn" for 3 seconds.

Step 4: When done successfully, the computer will display "id donE" and gives 2 short beeps. The computer will go back to the screen last displayed.

Button ⓐ — — Button ⓑ

Button ⓒ Button ⓓ
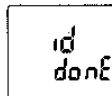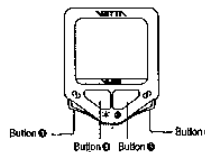
FAILURE

If the computer always displays "id NEEd", please check if there are any objects emitting electromagnetic waves (television, radio control toys, etc.). Keep the unit away from any object that may be causing interference. Then press & hold the Torpedo' button for 3 seconds again, and follow the Step 3 & 4 to finish the ID Learning Procedure.

If this cannot solve the problem, re-install the battery and start from the Step 1 (as above) again.

Important To re-activate the ID Learning Procedure, press & hold ⓒ & ⓓ simultaneously for 2 seconds in the SPD/DST Mode with RT/TT timers are off.

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INSTALLATION TESTS

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

To Test Sensor/Transmitter Installation (HD/WL models):

1. Advance the computer to the RT/TT Mode by using Button ❷.
2. Make sure the RT/TT timers are running, or reset to zero by press & hold Button ❸.
3. Advance the computer to the SPD/DST Mode by using Button ❷.
4. 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 and make sure that the head unit is completely snapped into position. If these checks do not solve the problem, talk to an Authorized Vetta's Retailer or connect to www.vetta.com.

To Test Torpedo Installation (T2X models):

1. Advance the computer to the RT/TT Mode by using Button ❷.
2. Make sure the RT/TT timers are running, or reset to zero by press & hold Button ❸.
3. Advance the computer to the SPD/CAD Mode using Button ❷.
4. Ride the bicycle a short distance, after a few revolutions, a speed-reading and a cadence reading should appear on the display. If there is no speed or cadence reading, check the alignment and spacing between the magnets and Torpedo.

Important Make sure the magnets 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.

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ATTACH YOUR HEART RATE TRANSMITTER (HR MODELS ONLY)

1. Moisten the transmitter electrodes by applying a small drop of water on each of the two contact areas. (see Fig.32)
2. Attach the adjustable Chest Strap to HR Transmitter. Insert round end of clip through the hole and twist gently. (see Fig.33)
3. Strap the HR Transmitter around your chest.
4. Adjust the tension of the Chest Strap to fit snugly, but comfortably around your chest. (see Fig.34)

Important When the computer receiving signals from HR Transmitter, the each of the screen displays will show Heart Rate reading and the blinking heart icon. If not, make sure the correction installation.

Fig. 32　　Electrode

Fig. 33

Fig. 34　　or

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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 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.

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.

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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.

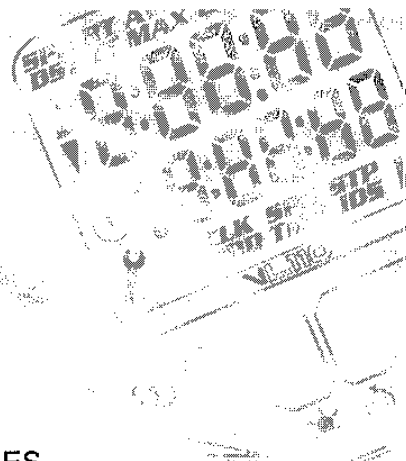## CUSTOMER SERVICE CENTERS

Acumen Inc.
101A Executive Dr., Suite 100, Sterling, VA 20166, USA.

Acumen Europe BV
Splijtbakweg 117, 1333 HJ, Almere, The Netherlands.

E-Mail: customerservice@vetta.com
Website: www.vetta.com

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VL110 SERIES
INSTALLATION MANUAL

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OPERATION

INTRODUCTION

Thank you for purchasing a Vetta VL110 cycle computer. Please take time to familiarize yourself with all the functions of the VL110 model so you can take full advantage of its programs. And don't forget to store this manual in a safe place for future reference!
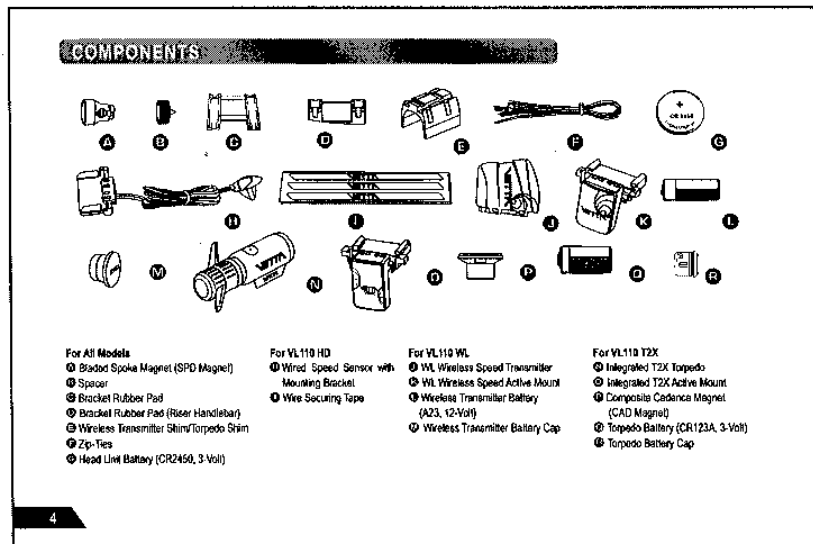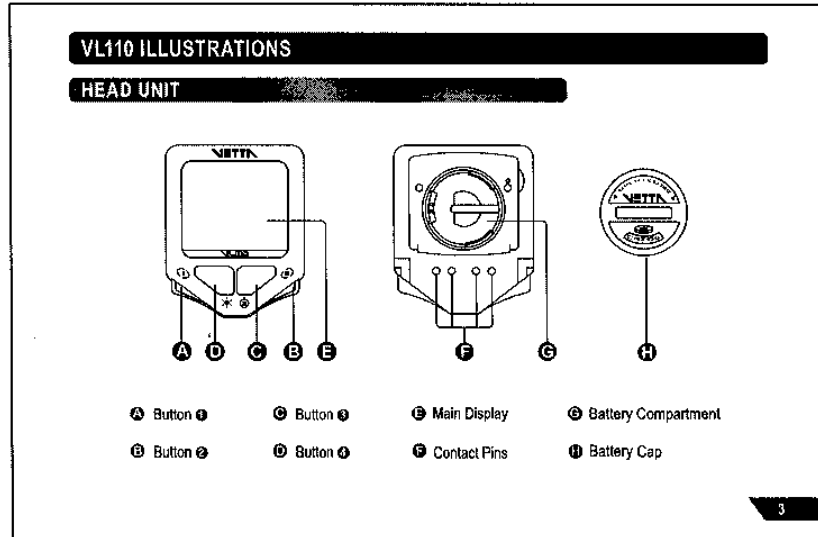
WARNINGS & CAUTIONS

* 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 splash proof and sealed to withstand wet weather conditions. Do not deliberately place it in water.

* Avoid leaving the Head Unit exposed to extremely hot or cold weather conditions.

1
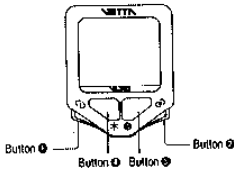
FUNCTIONS / FEATURES

	HD	WL	T2X		HD	WL	T2X
Smart Signal			●	Ambient Temperature	●	●	●
Current / Average / Maximum Speed	●	●	●	Maximum / Minimum Temperature	●	●	●
Speed Comparator	●	●	●	Dual Bike Memory	●	●	●
Cumulative Odometer	●	●	●	Freeze Frame Memory	●	●	●
Trip Distance	●	●	●	Energy Saving Sleep Mode	●	●	●
Intermediate Distance	●	●	●	Low Battery Warning (Head Unit)	●	●	●
12/24 Hour Clock	●	●	●	Low Battery Warning LED Indicator (Torpedo)			●
Stopwatch	●	●	●	Auto Fire Up - Auto Start up & Awake	●	●	●
Ride Time	●	●	●	NiteLite with SmartLite Function	●	●	●
Total Time	●	●	●	Current / Average / Maximum Cadence			●
Service Timer	●	●	●				

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VL110 ILLUSTRATIONS

HEAD UNIT

A Button ❶   **C** Button ❸   **E** Main Display   **G** Battery Compartment

B Button ❷   **D** Button ❹   **F** Contact Pins   **H** Battery Cap

3

COMPONENTS

For All Models
- ⓐ Bladed Spoke Magnet (SPD Magnet)
- ⓑ Spacer
- ⓒ Bracket Rubber Pad
- ⓓ Bracket Rubber Pad (Riser Handlebar)
- ⓔ Wireless Transmitter Shim/Torpedo Shim
- ⓕ Zip-Ties
- ⓖ Head Unit Battery (CR2450, 3-Volt)

For VL110 HD
- ⓗ Wired Speed Sensor with Mounting Bracket
- ⓘ Wire Securing Tape

For VL110 WL
- ⓙ WL Wireless Speed Transmitter
- ⓚ WL Wireless Speed Active Mount
- ⓛ Wireless Transmitter Battery (A23, 12-Volt)
- ⓞ Wireless Transmitter Battery Cap

For VL110 T2X
- ⓜ Integrated T2X Torpedo
- ⓝ Integrated T2X Active Mount
- ⓟ Composite Cadence Magnet (CAD Magnet)
- ⓠ Torpedo Battery (CR123A, 3-Volt)
- ⓡ Torpedo Battery Cap

4

BUTTON FUNCTIONS

Button ❸　Button ❹
Button ❶　Button ❷

SETUP MODE

Button ❶　• Sets digits or units
　　　　　• Advances to the next item, screen or setting mode

Button ❷　• Advances digits or toggles through units
　　　　　• Hold for fast advance
　　　　　• Resets RT to zero for Service Timer
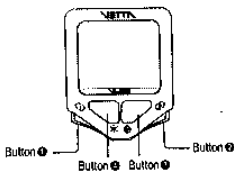
Button ❸　• Has no function in Initial Setup

OPERATING MODE

Button ❶　• Scrolls through Lower Screen Modes
　　　　　• Scrolls through Freeze Frame display screens
　　　　　• Hold 2 seconds in SPD/TMP Mode to display Maximum and
　　　　　　Minimum Temperature
　　　　　• Hold 2 seconds in SPD/CAD* Mode to display Average and
　　　　　　Maximum Cadence (*T2X model only)

Button ❷　• Scrolls through Upper Screen Modes
　　　　　• Press and hold 2 seconds in any Upper/Lower Screen Mode
　　　　　　to activate Freeze Frame memory

5

OPERATING MODE

Button ❸　• Starts/stops RT/TT timers and Stopwatch
　　　　　• Reset RT/TT timers and other ride data to zero
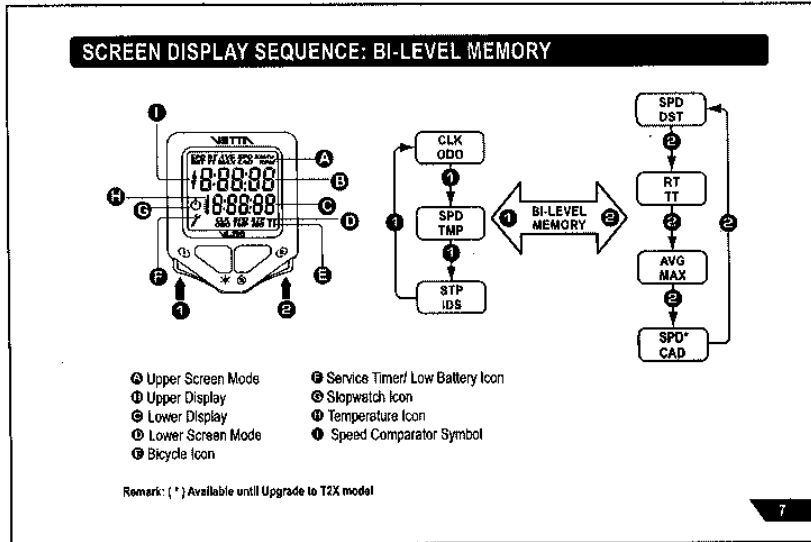　　　　　• Exits NOM Setup and advances to NOM System Check and
　　　　　　SPD/DST Mode

Button ❹　• Turn on the NiteLite for 3 seconds

Button ❶ & ❷ (simultaneously for 2 seconds with RT/TT Timers are off) :
　　　　　• Hold both in the SPD/DST Mode to enter NOM Setup

For T2X model only
Button ❷ & ❹ (simultaneously for 2 seconds with RT/TT Timers are off) :
　• Hold both in the SPD/DST Mode to enter ID Learning Setup Mode

Button ❸　Button ❹
Button ❶　Button ❷

6

4

SCREEN DISPLAY SEQUENCE: BI-LEVEL MEMORY

- Ⓐ Upper Screen Mode
- Ⓑ Upper Display
- Ⓒ Lower Display
- Ⓓ Lower Screen Mode
- Ⓔ Bicycle Icon
- Ⓕ Service Timer/ Low Battery Icon
- Ⓖ Stopwatch Icon
- Ⓗ Temperature Icon
- Ⓘ Speed Comparator Symbol

Remark: (*) Available until Upgrade to T2X model

7

HOW TO RECOGNIZE YOUR INTEGRATED T2X TORPEDO (T2X MODEL ONLY)

1. For VL110 T2X or Upgrade to T2X models, your computer can ONLY recognize the Integrated T2X Torpedo after it goes through the ID Learning procedure.

2. If your Integrated T2X Torpedo is purchased as a complete set with the VL110 series computer, your computer has been programmed to recognize the Torpedo in the factory.

3. If a new Integrated T2X Torpedo or Integrated T2X Active Mount is purchased for replacement, please follow the ID Learning Procedure.

4. If a complete set of Integrated T2X Mounting Kit is purchased for your 2ⁿᵈ bike, please make sure you had chosen Bike II in the NOM Setup Mode (see page 11, Section of Dual Bike Setup in NOM Setup), and follow the ID Learning Procedure.

8

ID LEARNING PROCEDURE

Step 1: Install the computer on the Integrated T2X Active Mount.

Step 2: After the screen display "Id NEEd", press & hold the Torpedo's button for 3 seconds.The Light Ring Indicator of the Torpedo will turn on for 2 seconds in red.

Step 3: During the process, the computer will display "Id LEArn" for 3 seconds.

Step 4: When done successfully, the computer will display "Id donE" and gives 2 short beeps. The computer will go back to the screen last displayed.

FAILURE

If the computer always displays "Id NEEd", you should check the alignments and spacings between the magnets and Torpedo and make sure that the Head Unit is completely snapped into position. If these checks do not solve the problem, talk to an authorized Vetta's Retailer or connect to www. vetta.com.

Important To re-activate the ID Learning Procedure, press & hold ❷ & ❹ simultaneously for 2 seconds with RT/TT timers are off.

Display: id NEEd

*Display: id LEArn*

Display: id donE

9

SETUP & PROGRAMMING

INITIAL SETUP

The computer will automatically go into the Initial Setup Mode after
1. New battery replacement, or
2. All Clear Total Reset

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 (see page 11, Section of NOM Setup for Basic Setting)

Important To change any values or correct any unit errors made during Initial Setup, you must re-enter the NOM Setup by pressing ❶ and ❷ simultaneously for 2 seconds in the SPD/DST Mode with the RT/TT timers deactivated.

SYSTEM CHECK

* After the last setting, the computer will automatically advance to System Check.

* System Check displays all value and unit settings chosen during Setup in sequence.

* Each screen in System Check appears for 5 seconds and blink.

NOM SETUP

After completed the Initial Setup, riders can change any values or correct any errors by re-entering the NOM Setup.

10

HOW TO ENTER THE NOM SETUP MODE?
1. Make sure RT/TT timers are off (press ❷ in the RT/TT Mode and ⏱ will disappear)
2. Advance to the SPD/DST Mode by using ❷.
3. Press & hold ❶ & ❷ to enter the NOM Setup Mode.

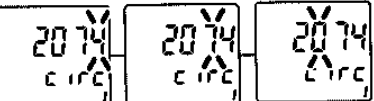**Important** Press ❷ at any time to exit NOM Setup Mode and advance to System Check.

SETUP: DUAL BIKE

1. Press ❷ to toggle between Bike 1 or Bike 2
2. Press ❶ to select and advance to the next Setup Mode.

SETUP: WHEEL CIRCUMFERENCE

1. When the far right digit begins to flash, press ❷
   to scroll to the desired number. (see page 12,
   Section of WHEEL SIZE CALCULATION)
2. Press ❶ to select this no. and advance to next
   flashing digit.
3. Repeat for each digit until the final digit.
4. Press ❶ and advance to the next Setup Mode.

11

WHEEL SIZE CALCULATION

Find your tire size and record the corresponding circumference measurement from the following chart lists.

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

If your wheel size in not on the chart, or if you want a more precise calibration, wheel circumference may be calculated as follows:

Step1: Measure the distance from the centre of the front wheel axle the ground in millimetres. (1 inch =25.4 mm)

Step2: Multiply this distance by 6.2832(2π) and enter the result as the wheel size setting into the computer.

OR... 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 millimeters and enter the result into the computer.

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SETUP: SERVICE TIMER

Step 1:   Service Timer Interval (in hour)
Service Timer will be disabled when Service Timer Interval is set to "0000"
1. When the lower far right digit begins to flash, press ❷ to scroll to the desired number.
2. Press ❶ to select this no. and advance to next flashing digit.
3. Repeat for each digit until the final digit.
4. Press ❶ and advance to the Accumulated RT Reset Mode. (see Step 2)

Important In the Initial Setup, the Accumulated RT Reset Mode doesn't exist, press ❶ will advance to the next Speed Units Setup Mode.

Step 2:   Accumulated Ride Time (in hour)
To stop the Service Timer icon from flashing, reset the Accumulated RT to Zero.
When the upper digits begins to flash, press & hold ❷ to reset Accumulated RT to Zero.

OR press ❶ repeatedly to reserve the digits, and advance to the next Setup mode.

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SETUP: SPEED UNITS

1. Press ❷ to toggle between KM/hr or Mile/hr
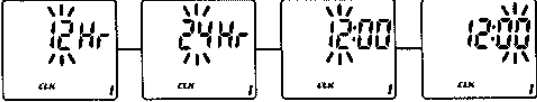2. Press ❶ to select and advance to the next Setup Mode.

SETUP: TEMPERATURE UNITS

1. Press ❷ to toggle between °C or °F
2. Press ❶ to select and advance to the next Setup Mode.

SETUP: CLOCK

1. Press ❷ to toggle between 12hr or 24hr format, PM icon will appear only in the 12hr format.
2. Press ❶ to select and advance to "hh:mm" setup.
3. When the far right digits begin to flash, press ❷ to scroll to the desired number.
4. Press ❶ to select this no. and advance to next flashing digit
5. Repeat for each digit until the final digit
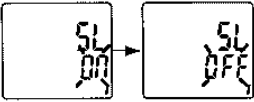6. Press ❶ and advance to the next Setup Mode.

14

SETUP: ODOMETER

1. When the far right digit begins to flash, press ❷ to scroll to the desired number
2. Press ❶ to select this no. and advance to next flashing digit
3. Repeat for each digit until the final digit
4. Press ❶ and advance to the next Setup Mode.

SETUP: SMARTLITE ON/OFF

1. Press ❷ to toggle between ON or OFF
2. Press ❶ to select. If set to ON, the computer will advance to the next Setup Mode.
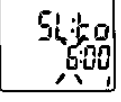3. If OFF, it will exit the Setup mode and advance to System Check.

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SETUP: SMARTLITE INTERVAL - FROM

1. Press ❷ to scroll from 1:00 PM to 11:00 PM
2. Press ❶ to select and advance to the next Setup Mode.

SETUP: SMARTLITE INTERVAL - TO

1. Press ❷ to scroll from 1:00 AM to 11:00 AM
2. Press ❶ to select and exit the Setup Mode and advance to System Check

EXIT

Press ❸ at any time during the NOM Setup, and exit to System Check

Important If no buttons are pressed for approximately 5 minutes during Setup, the computer will automatically enter Sleep Mode and then return to the screen last displayed when reactivated.

16

SYSTEM CHECK

* After the last setting, the computer will automatically advance to System Check.

* System Check displays all value and unit settings chosen during Setup in sequence.

* Each screen in System Check appears for 5 seconds and blink.

* Press ❷ at any time to exit System Check and advances to the SPD/DST Mode.

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PRIMARY SCREEN MODES

IMPORTANT: For VL110 T2X or Upgrade to T2X models, your computer can ONLY recognize the transmitter Tornado after it goes through the ID Learning procedure (see page 8, Section of HOW TO RECOGNIZE YOUR INTEGRATED T2X TORPEDO).

UPPER SCREEN MODES

UPPER/ LOWER DISPLAYS	DEFINITIONS
SPD	CURRENT SPEED (km/hr or mile/hr)
DST	CURRENT TRIP DISTANCE (km or mile)

HOW TO OPERATE?
* Starts automatically when the wheels turn and TT timer is running (see page 19, Section of RT/TT Mode).
* Stops automatically when the wheels stop.

HOW TO RESET TRIP DISTANCE TO ZERO?
* Press ❷ for 2 seconds in any Primary Screen Mode except STP/IDS, with the RT/TT timers turned off.

Important DST will automatically reset after the maximum trip distance (999.9) is achieved.

18

UPPER/LOWER DISPLAYS	DEFINITIONS
RT	ACTUAL RIDE TIME IN THE TRIP
TT	TOTAL ELAPSED TRIP TIME FORM START TO FINISH

HOW TO START THE TIMERS? ☺
* If the timers have been reset to "0:00:00", they will start automatically when the wheel rotates. (see HOW TO RESET THE TIMERS TO "0:00:00" below)
* If RT/TT timers had been stopped manually, and both of the RT/TT timers were not reset to zero, they must be restarted manually by pressing ❷ in RT/TT Mode.

Important. TT timer must be active in order for the RT timer to accumulate Ride Time and for computer to calculate current ride.
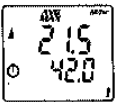
HOW TO STOP?
* When the wheels stop, RT timer will pause, but TT timer will keep running to record the total elapsed trip time.
* OR stop both of the RT/TT timers manually by pressing ❷ in RT/TT Mode at the end of ride.

HOW TO RESET THE TIMERS TO "0:00:00"?
* Press ❷ for 2 seconds in any Primary Screen Mode except STP/IDS, with the RT/TT timers turned off.

☑ **Tip:**
If the bike is in motion and Button ❷ is held down in the RT/TT Mode with the timers deactivated, the ride timers reset to 0:00:00. When Button ❷ is released, both RT and TT will start with the next wheel input. This is a good way to begin timing a race or training ride with a rolling start.

19
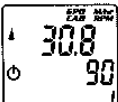
UPPER/LOWER DISPLAYS	DEFINITIONS
AVG	AVERAGE SPEED (km/hr or mile/hr)
MAX	MAXIMUM SPEED (km/hr or mile/hr)

HOW TO OPERATE?
* Starts automatically when the wheels turn and TT timer is running (see page 19, Section of RT/TT Mode).
* Updated for every 0.1 miles or Km traveled.
* Stops automatically when the wheels stop.

HOW TO RESET TO ZERO?
* Press ❷ for 2 seconds in any Primary Screen Mode except STP/IDS, with the RT/TT timers turned off.

UPPER/LOWER DISPLAYS	DEFINITIONS
SPD*	CURRENT SPEED (km/hr or mile/hr)
CAD*	PEDAL CADENCE IN REVOLUTIONS PER MINUTE (rpm)
	*Available until Upgrade to T2X model

HOW TO OPERATE?
* Starts automatically when the wheels turn and TT timer is running (see page 19, Section of RT/TT Mode).
* Stops automatically when the wheels stop.

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11

SECONDARY MODE
1. Press & hold ❶ to read Average & Maximum Cadence (see page 23, Section of AVG CAD/MAX CAD Secondary Screen Mode)
2. Press ❶ to exit.

LOWER SCREEN MODES

UPPER/ LOWER DISPLAYS   DEFINITIONS

CLK	*CURRENT TIME*
ODO	*ODOMETER, CUMULATIVE DISTANCE (km or miles)*

HOW TO CHANGE THE CLOCK?
* See page 14, Section of CLOCK Setup.

HOW DOES THE ODOMETER WORK?
* Automatically accumulate the trip distance when the wheels rotate and TT timer is running.

HOW TO RESET THE ODOMETER?
1. ALL CLEAR TOTAL RESET by press & hold ❶,❷ & ❸ for 2 seconds in any mode, then release the buttons.
2. OR new battery replacement.
3. OR the ride distance exceeds the maximum limit, after which the Odometer will automatically reset to zero.

Important Odometer reading can be reinstalled by user.

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UPPER/ LOWER DISPLAYS   DEFINITIONS

SPD	*CURRENT SPEED*
TMP	*CURRENT TEMPERATURE(°C or °F)*

HOW TO OPERATE?
* The Temperature will be automatically updated once per minute.

HOW TO READ MAXIMUM & MINIMUM TEMPERATURE?
1. Press & hold ❶ to read MAX TMP/MIN TMP (see page 24, Section of MAX TMP/MIN TMP Secondary Mode)
2. Press ❶ to exit.

Important 1. Below zero readings are indicated by a minus sign (-).
2. The temperature reading can sometimes vary due to the computer head unit being heated by direct sunlight; which can heat the case hotter than the actual air temperature.

UPPER/ LOWER DISPLAYS   DEFINITIONS

STP	*INDEPENDENT STOPWATCH OPERATES IN CONJUNCTION WITH THE RT/TT TIMES*
IDS	*INTERMEDIATE DISTANCE TRACKS AN INTERMEDIATE DISTANCE WITHIN A LONGER RIDE (km or miles)*

22

HOW TO START THE STOPWATCH? ⏱
* Press ❷ to start.

HOW TO STOP?
* Press ❷ to stop and freeze data for review.

HOW TO RESET THE STOPWATCH & INTERMEDIATE DISTANCE TO ZERO?
* Press ❷ for 2 seconds.

Important IDS does not affect overall Trip Distance or current ride data, but it operates the same as the DST function.

SECONDARY SCREEN MODES

Important Flashing screen indicates the computer is displaying data in a Secondary Screen Mode.

UPPER/LOWER DISPLAYS	DEFINITIONS
AVG CAD*	AVERAGE CADENCE (rpm)
MAX CAD*	MAXIMUM CADENCE (rpm)
	*Available until Upgrade to T2X mode

HOW TO ENTER THE AVG CAD/MAX CAD SECONDARY SCREEN MODE?
* Press & hold ❶ from SPD/CAD Mode.

HOW TO EXIT?
* Press ❶ and exit to SPD/CAD Mode.

23

HOW TO RESET TO ZERO?
* Press ❷ for 2 seconds in any Primary Screen Mode except STP/IDS, with the RT/TT timers turned off.

UPPER/LOWER DISPLAYS	DEFINITIONS
MAX TMP	MAXIMUM TEMPERATURE (°C or °F)
MIN TMP	MINIMUM TEMPERATURE (°C or °F)

HOW TO ENTER THE MAX TMP/MIN TMP SECONDARY SCREEN MODE?
* Press & hold ❶ from SPD/TMP Mode.

HOW TO EXIT?
* Press ❶ and exit to SPD/TMP Mode.

HOW TO RESET?
* Press ❷ for 2 seconds in any Primary Screen Mode except STP/IDS, with the RT/TT timers turned off.

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13

OTHER FEATURES

SLEEP MODE

4:21 PM

* To conserve battery life, the VL110 computer is programmed to enter a Sleep Mode after receiving no input from **buttons, wheel motion, cadence*** for 5 minutes. (* T2X model only)
* The screen displays only the time of day.
* All VL110 bicycle computers will wake up by either of input signal from **wheel/crank*** motion or any button is pressed. (* T2X model only)

AUTO FIRE UP

* Auto Start up & Awake without wasting extra battery run time of the computers.
* All VL110 bicycle computers will exit Sleep Mode automatically when they receive inputs from the **buttons or wheel/crank*** motion. (* T2X model only)
* If the RT/TT timers read zero (0:00:00), the computer automatically starts as soon as it receives input from the **wheels/crank*** motion. (* T2X model only)
* If you did not stop the RT/TT timers manually before the computer enter the Sleep Mode, the RT timer will automatically re-start as soon as it receives input from the wheels.

Important Any time the RT/TT timers are stopped manually and they are not reset to zero, they must be restarted manually by pushing ❸ in the RT/TT Mode.

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SMART LITE

SmartLite will activate the NiteLite for 3 seconds between the user-defined period when any button is pressed. (see page 15, Section of SmartLite Setup)

DUAL BIKE MEMORY(I / II)

4:20
3877

* VL110 can be calibrated for two bicycles. It will store separate **Torpedo ID***, Wheel Size, Service Timer, Odometer, as well as different formats selected for Time, Speed and Distance. (* T2X model only)
* The current bike number (I or II) is always displayed in the lower right corner of the screen.
* To switch the computer quickly from Bike I to Bike II, go to the first screen in the NOM Setup Mode. (see page 11, Section of Dual Bike Setup)

SERVICE TIMER (⚲)

30.8
14.3

* Service Timer allows the rider to preset an exact number of riding hours during Setup
* Slow, flashing Wrench icon when service time limit has been reached.
* Rapid blinking Wrench icon indicates both low battery power in the Head Unit and expiration of the preset service time interval.
* To stop the Wrench icon from flashing (see page 13, Section of Service Timer Setup)

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SPEED COMPARATOR (▲▼)

* The Speed Comparator symbols indicate whether current Speed is above or below Current Average Speed.
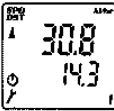* A positive (▲) or negative (▼) symbol appears in the upper left apart of the screen in all primary screen modes.
* The Speed Comparator symbols do not appear if Current Speed and Average Speed are the same.

LOW BATTERY WARNING (⌇)

FOR HD/WL MODELS:
* Stay-on Wrench icon indicates low battery power in the Head Unit.
* Rapid blinking Wrench icon indicates both low battery power in the Head Unit and expiration of the preset service time interval.
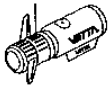
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UPPER/LOWER DISPLAYS DEFINITIONS

LO HEAD	Low Battery of Head Unit
LO SENS	Low Battery of Torpedo
LO ALL	Low Battery of Head Unit and Torpedo

FOR T2X MODEL:
* Illuminate and stay "on" Wrench icon indicates low battery power in the Head Unit or Torpedo.
* Rapid blinking Wrench icon indicates both low battery power (either the Head Unit, Torpedo or both) and expiration of the preset service time interval.
* Low Battery Warning Messages will flip between the normal display for every 5 minutes.

Light Ring Indicator

Low Battery Indicator of Torpedo
* The Light Ring Indicator will blink in Red for 5 minutes when the wheels turn.

Important Replace the battery as soon as practical.

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FREEZE FRAME MEMORY

* 3 primary screens (SPD/DST, RT/TT, AVG/MAX) will be frozen for review at any point during a race or training ride.

SPD/DST
❷
SPD/DST
❶
RT/TT
❶
AVG/MAX
❷
SPD/DST

HOW TO SAVE?
1. Press & hold ❷ in any Primary Screen Mode.
2. The screen will flash to indicate it has been frozen.
3. Press ❶ to read & advance through the frozen screens.
4. Press ❷ to exit.

HOW TO READ FROM THE HEAD UNIT?
At the end of ride, stop the RT/TT timers,
The last set will be frozen in their Primary & Secondary Screen Modes until they are cleared by RIDE DATA RESET (see page 30, Section of RIDE DATA RESET)

The last 2ⁿᵈ set can be reviewed by
1. Press & hold ❷ in any Primary Screen Mode.
2. The screen will flash to indicate it has entered in the Freeze Frame Memory.
3. Press ❶ to read & advance through the frozen screens.
4. Press ❷ to exit.

RIDE DATA DISPLAYED IN FREEZE FRAME SCREEN

Current Speed	Total Time
Total Distance	Average Speed
Ride Time	Maximum Speed

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RESET

RIDE DATA RESET

1. Clear the current ride data (DST, RT, TT, AVG & MAX SPD, AVG & MAX CAD*, MAX & MIN TMP, STP, IDS) to Zero. (*T2X model only)
2. Press ❸ for 2 seconds in any Primary Screen Mode except STP/IDS, with the RT/TT timers turned off.

STOPWATCH AND INTERMEDIATE DISTANCE RESET

1. Press ❸ in STP/IDS Mode to stop the Stopwatch.
2. Press ❸ again for 2 seconds to reset the Stopwatch and Intermediate Distance to zero.

ALL CLEAR TOTAL RESET

1. Clear all settings entered in the Initial Setup or NOM Setup
2. Clear the current ride data to Zero from the screen.
3. Press & hold ❶, ❷ & ❸ for 2 seconds in any mode, and then release the buttons.

Important 1. When the computer is cleared, the master screen will appear and show all LCD segments for 3 seconds.
2. The computer will then automatically enter Initial Setup Mode to be reprogrammed.

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TROUBLE SHOOTING

* **Current speed-reading is erratic or does not appear.**
  Check the alignment of the spoke magnet and sensor, and the distance between the two components. Realign the magnet and sensor with the spacer. Check to be sure RT and TT are activated.

* **Current speed-reading is erratic or does not appear. (VL110 HD)**
  Inspect the wiring for any breaks or kinks. Replace the mounting bracket and sensor as needed.

* **Incorrect data appears on screen during operation.**
  Accuracy of the Setup data may be a problem (wheel circumference setting, bike #, etc.). Review data in System Check mode and revise as needed.

* **Data display is extremely slow.**
  Computer LCD does not operate well in extremely low temperatures. Operating range is: 0°C to 49°C or 32°F to 120°F. Return computer to warmer climate.

* **Screen is dark and display characters look "strange".**
  Computer screens are adversely affected if 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 interference or a weak battery.
  Replace the battery.

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* **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.

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TECHNICAL SPECIFICATIONS

Current Speed (SPD)	0.0~120.0 KM/hr; 0.0~75.0 Mi/hr; +/-0.1 KM/hr or Mi/hr. Updated once per second.	Effective Transmission Distance	Head Unit to Transmitter: VL110 WL: 28 inches (0.7 m) VL110 T2X: 59 inches (1.5 m)
Average Speed (AVG)	0.0~120.0 KM/hr; 0.0~75.0 Mi/hr; +/-0.1 KM/hr or Mi/hr. Updated once every 0.1 Miles or Km	Ride/Total Time (RT/TT)	Limit: 9:59:59 (10 hours) displayed in h/min/sec. After 9.59:59, display restarts at "0:00:00".
Maximum Speed (MAX)	Limit: 120.0 KM/hr; 75.0 Mi/hr.	Cadence (T2X model only)	Range: 15-255 RPM; +/-1 RPM.
Odometer (ODO)	0~99999 km or miles.	Operating Temperature	Range: 0°C~49°C or 32°F~120°F; +/- 1°C or °F.
Trip Distance (DST)	0.0~999.9 km or miles; +/-0.1 km or mile.		
Temperature Measure (TMP)	Range: 0°C~49°C or 32°F~120°F; +/-1°C or °F.	Battery Type	Head Unit: CR2450, 3-Volt battery WL Wireless Speed Transmitter: A23, 12-Volt battery Integrated T2X Torpedo: CR123A, 3-Volt battery
Clock (CLK)	12 or 24 hr format, hours and minutes displayed.		
Service Timer	Limit: 1~1999 hrs. max; +/-1 hr.	Battery Run Time (1 hour training/ day,7 darys/week)	Head Unit: VL110 HD: 30 months VL110 WL: 20 months VL110 T2X: 18 months WL Wireless Speed Transmitter: 6 months Integrated T2X Torpedo: 24 months
Stopwatch (STP)	Limit: 9:59:59 (10 hrs.); +/-1.0 seconds.		
Intermediate Distance (IDS)	Range: 999.9 km or miles.		

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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 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.

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.

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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.

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CUSTOMER SERVICE CENTERS

Acumen Inc.
101A Executive Dr., Suite 100, Sterling, VA 20166, USA.

Acumen Europe BV
Splijtbakweg 117, 1333 HJ, Almere, The Netherlands.

E-Mail: customerservice@vetta.com
Website: www.vetta.com

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

This device complies with Part 15 of the FCC Rules.   Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.