



VLS User Manual



Limited Warranty

The warranty obligations of LogicBlue Technology (“LogicBlue”) for this product are limited to the terms set forth below.

What is Covered

This limited warranty covers defects in the materials and workmanship in this product.

What is not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by LogicBlue to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product.

Without limiting any other exclusion herein, LogicBlue does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

How Long this Coverage Lasts

The limited warranty for LogicBlue products is 1 year from the original date of purchase. Proof of purchase from the customer will be required for all warranty claims.

Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

What LogicBlue Will Do

LogicBlue will, at its sole option, will repair or replace and product determined to be defective with regard to materials or workmanship.



As with all electronic devices, they are susceptible to damage by static electricity discharge. Before removing the cover of this product be sure to discharge the static electricity in your body by touching a piece of grounded metal.



FCC STATEMENT

1. 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following

measures:

- Reorient or relocate the VLS unit.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC Statement

This device complies with Industry Canada licence-exempt RSS standard(s).

Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme audio CNR d'Industrie Canada applicable audio appareils radio exempts de licence. L'exploitation est autorisée audio deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

COFETEL La operación de este equipo está sujeta a las siguientes dos condiciones:

- (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
- (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Setup and Install the VLS

1) Insure that 12v DC power is currently supplied to the RV

2) Put the VLS in “learn” mode

The VLS has a security feature that records the unique serial number of the device to your smartphone or tablet so that when you are in close proximity to other vehicles with VLS installed, your smartphone or tablet will only recognize your VLS. So during this step you need to start the app on each smartphone or tablet so the serial number for your VLS will be recorded on your devices.

To put the VLS in “learn” mode, press and hold the button on the front of the VLS until you hear a long beep (approximately 3 seconds).

NOTE: You will have 10 minutes from the time you put the VLS in “learn” mode to allow new smartphones or tablets to “learn” your VLS. If this time expires, you can restart the 10 minute “learn” window using the same method described above to put the VLS in “learn” mode.

3) Go to the appropriate app store and download the app.

Download the app on all of the devices you plan to use with the VLS.

Start the app on each smartphone or tablet and once the app connects to the VLS, minimize the app and start the app on the next smartphone or tablet. Continue this process until each smartphone or tablet has connected to the VLS. Once a smartphone or tablet has connected to the VLS it will always remember and only connect to that VLS.

4) Level the vehicle.

Level the vehicle using your normal leveling method. Take time during this process to insure that the vehicle is perfectly level as your VLS will record this position and use it as a reference each time you level the vehicle.

NOTE: If your vehicle has power slideout rooms, the vehicle should be leveled with the slides out during this step of the setup process.

5) Start the app on your smartphone or tablet

6) Select the installation orientation

The app will display the Orientation Select screen (figure 2). Figure 1 gives a graphic example of mounting locations within the vehicle and the corresponding orientation assignment. Tap on the selection that corresponds to the orientation of your installation.

NOTE: If you have already setup another smartphone or tablet and selected the installation orientation, the Orientation Select screen will not be displayed.

7) Select units of measure

Select the desired units of measure at the bottom of the Orientation Select screen (figure 2).

8) Select the vehicle type

At the bottom of the Orientation Select screen (figure 2), select either the towable or 5th wheel option that corresponds to your vehicle type. Tap the Save button at the bottom of this screen to save your selections.

9) Measure your vehicle and set level

The Settings screen should now be displayed (figure 3 or 4). Measure the length and width of your vehicle as indicated by the front and side view vehicle illustrations on this screen. Enter the length and width measurements in the appropriate locations on this screen. Tap the Save button at the bottom right of this screen to save the vehicle measurements. If you have power slideout rooms and you leveled in step 4 with them out, put the slides in and then step outside of the vehicle before proceeding. Next, tap the Set Level button at the bottom left of this screen. The Set Level button records the current angle data from the VLS device and will be used as a reference each time the system calculates and displays leveling data.

NOTE: For fifth wheel installations, the length measurement should be taken from the center of the rear wheel to the center of the landing gear leg and NOT to the king pin or hitch pin.

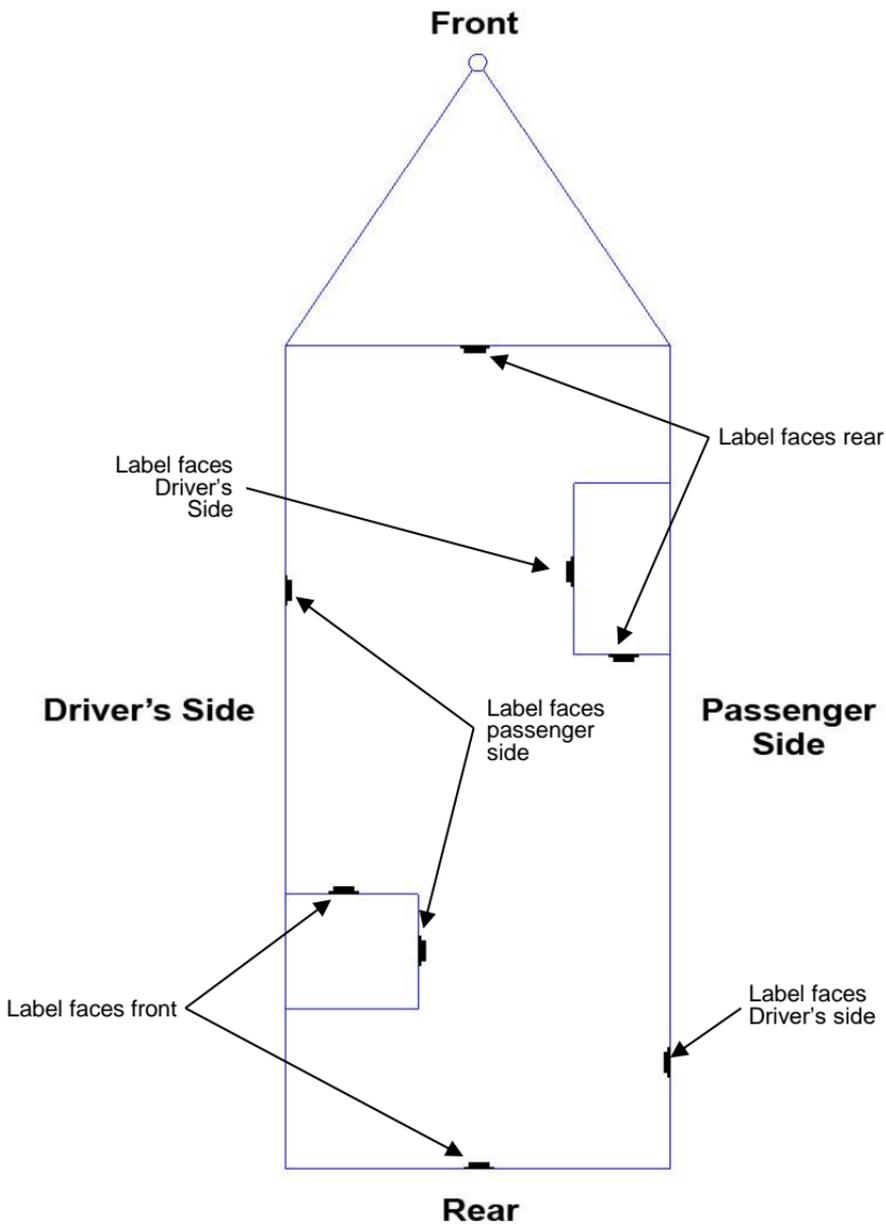


figure 1



Choose the direction that the housing label of the LevelMatePRO faces, when installed.

- Label Faces Driver Side
- Label Faces Passenger Side
- Label Faces Front
- Label Faces Rear

Choose the desired measurement units.

- Use Inches
- Use Centimeters

Choose the type of vehicle.

- Travel Trailer
- Fifth Wheel
- Driveable

Save

figure 2



96 Inches

Enter the width of the trailer from outside to outside of the tires

198 Inches

Enter the length of trailer from center of rear wheel to jack

Set Level **Save**

figure 3



96 Inches

Enter the width of the trailer from outside to outside of the tires

198 Inches

Enter the length of trailer from center of rear wheel to jack

Set Level **Save**

figure 4

71 °F



Passenger Side

Driver Side

0"

0"

Save Hitch Position **Recall Hitch Position**

figure 5

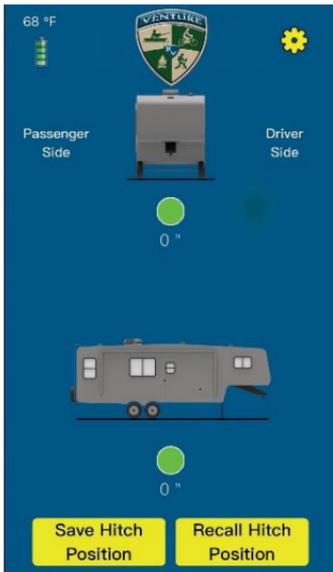


figure 6

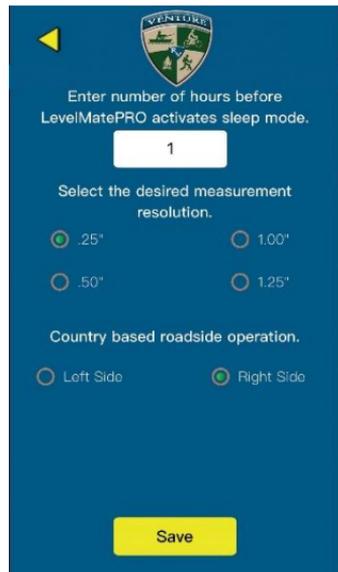


figure 7

10) Confirm setup is complete

After completing the Set Level task above, tap the yellow arrow at the top left of the Settings screen to go back to the Leveling screen (figure 5 or 6). *Note that on Android smartphones and tablets there will be no yellow arrows at the top left of the settings screens and you should use the back button instead.* Once at the Leveling screen check to insure that there are no up or down arrows displayed and the height requirement dimensions are all displaying '0'. If you selected the towable or 5th wheel option, the round level indicators should be green. These items will be your indication that the VLS has properly recorded the current level position. From this point on, each time you start the app to use the VLS the Leveling screen will be displayed instead of the Orientation Select or Settings screen. Anytime you need to return to the Settings screens you can do so by tapping the gear icon at the top right of the Leveling screen.

11) Set the advertising time

This step is not required for the permanently installed and powered VLS version that came with your RV. This setting will have no effect on the operation of this unit.

12) Select the display resolution

Using the Advertising and Display Settings screen (figure 7) select the display resolution you would like to use. The default display resolution is .25" but you can select one of the other resolutions if desired. The higher the resolution you select, the more stable the distance measurements will be but accuracy will be sacrificed. In general, if you use blocks or boards under your tires to level your vehicle you would set the display resolution to match the thinnest block or board you carry with you for leveling. In other words, if the thinnest block or board you have is .50" then select .50" for the display resolution.

NOTE: For towable vehicles, the display resolution for front-to-back leveling and the Recall Hitch Position function will remain at .25" no matter which display resolution you select. The reason for this is that the jack that controls front-to-back leveling adjustment is infinitely adjustable and changing from .25" would be an unnecessary sacrifice of accuracy.

13) Select the operating side of the road

Select the side of the road that you drive on so VLS can establish a baseline for which side is the driver and passenger on your vehicle. Once you have set the advertising time, selected the display resolution and selected the operating side of the road, tap Save to save your selections.

Using the VLS

1) **Position your vehicle**

Move your vehicle to the location where you would like to begin leveling.

2) **Connect to VLS**

After you have completed installation and configuration of your VLS unit and app (at the beginning of this manual), you are ready to begin using the product to level your vehicle.

To connect to the VLS simply start the app within range of your VLS unit (approximately 50'). This can be done from inside your vehicle and should not interfere with any other Bluetooth® connections you may have active including the hands-free Bluetooth® phone connection in many vehicles today. If you do have other Bluetooth® connections that interfere with the connection of your VLS, consult the user manuals of your phone and/or those devices to see if there are any device connection restrictions that are causing the connection issue.

3) **The towable or 5th wheel leveling screen**

Once the app connects with your unit it will display the Leveling screen (figure 8 or 9). The towable or fifth wheel leveling screen consists of 2 main sections related to leveling your vehicle. The top section shows a front view of a trailer and is used for leveling the vehicle from side-to-side. The bottom section shows a side view of a trailer and is used for leveling the vehicle from front-to-back. Each leveling section contains a measurement distance, a yellow arrow (when not in a level position) and a level indicator as noted in figure 8.

4) **Level vehicle from side-to-side**

As noted above, when leveling your vehicle from side-to-side you will be using the top section of the Leveling screen. When the vehicle is not in a level position, there will be a yellow arrow pointing upward on one side of the trailer graphic front view. This indicates which side of the vehicle needs to be raised to achieve a level position from side-to-side. The displayed measurement indicates how much height will be required on the side where the arrow is displayed. Stack your leveling blocks to the height indicated by the displayed measurement and place the blocks in the front or rear of the tire(s) on the side indicated by the arrow. Then move your vehicle so that the tires are on top of the blocks and

check the level indicator displayed over the measurement distance. If you have achieved a level position, the level indicator will be green and the displayed measurement distance will be '0' as in figure 10. If the level indicator is red and the displayed measurement distance is not '0', then note the measurement distance and move the vehicle tire(s) off the blocks and add or remove blocks equaling the measurement distance that was displayed when the tire(s) were on the blocks. Once again, move the vehicle tire(s) onto the blocks and check the level indicator and measurement distance to insure that the vehicle is now level from side-to-side.

NOTE: The reason adding blocks for a second leveling attempt (as mentioned above) may be required would be due to soft ground that allows the blocks to sink slightly into the ground or that the location the blocks were placed was slightly different than where the initial height requirement measurement was taken. To avoid issues with the blocks being positioned at a slightly different location than where the initial height requirement measurement was taken, simply make a note of the height required at the desired parking location. Then move your vehicle a foot or two from that position so you can place the blocks at the same location as the initial height requirement measurement was taken.

5) Save your hitch position

If the vehicle you are leveling is a trailer, you will need to disconnect it from your tow vehicle before leveling it from front-to-back. Release your hitch from the tow vehicle and extend the jack on the trailer until the hitch is just above the ball or hitch plate (in the case of a 5th wheel hitch). At the bottom left of the Leveling screen, tap on the Save Hitch Position button. This will record the current position of the trailer hitch. This saved position can be used to return the hitch to the current position when you are ready to reattach the trailer to the tow vehicle.

6) Level vehicle from front-to-back

Once your vehicle is level from side-to-side you are ready to begin leveling from front-to-back. For this step you will be using the bottom section of the Leveling screen. Similar to the side-to-side leveling step, when the vehicle is not in a level position there will be a yellow arrow pointing up or down near the front of the trailer graphic side view as shown in figure 10. This indicates whether the front of the vehicle needs to be lowered (arrow pointing down) or raised (arrow pointing up) to achieve a level position from front-to-back. If the vehicle you are leveling is a trailer, simply raise or lower the tongue of the trailer as indicated by the up or

down arrow in the bottom section of the Leveling screen. Level position for the front-to-back will be indicated in the same manner as the side-to-side leveling process. The level indicator will be green and the displayed measurement distance will be '0'.

7) Recall your hitch position

If the vehicle you are leveling is a trailer, you can recall the hitch position you saved in step 5 to aid in returning your tongue to the position it was in when you removed it from the tow vehicle hitch. Tap on the Recall Hitch position button at the lower right of the Leveling screen. The Recall Hitch Position screen will be displayed (figure 10). The Recall Hitch Position screen shows a side view of the trailer, a yellow arrow pointing up or down, and a position indicator similar to the level indicators on the Leveling screen. A measurement distance is also displayed which represents the amount of distance the tongue needs to be moved up or down (as indicated by the yellow arrow) to return to the previously saved hitch position. Moving the trailer tongue in the direction indicated by the yellow arrow will cause the displayed measurement distance to be reduced. The tongue will be at the saved hitch position when the displayed distance measurement is '0' and the position indicator is green. A Hitch Position Save Date is also displayed at the bottom of the Recall Hitch Position screen. This indicates when the currently saved hitch position was recorded.

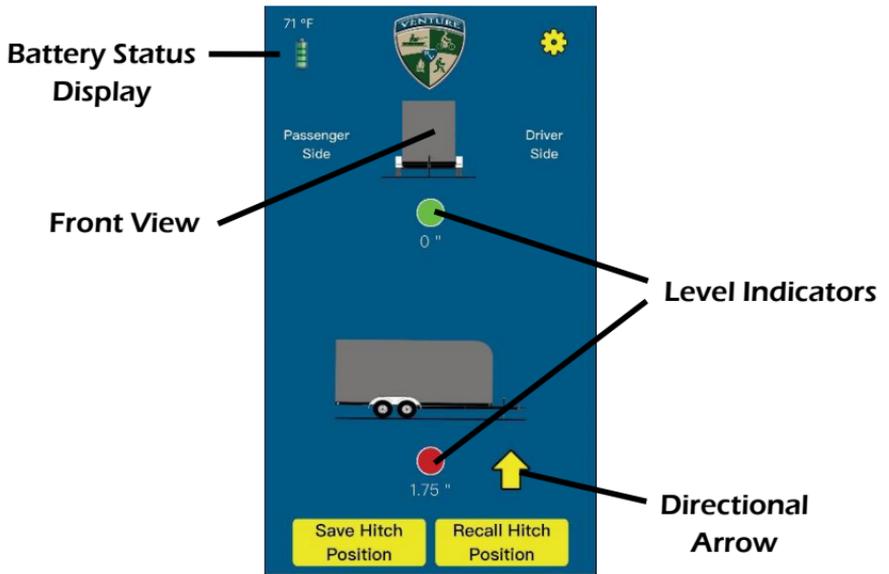


figure 8

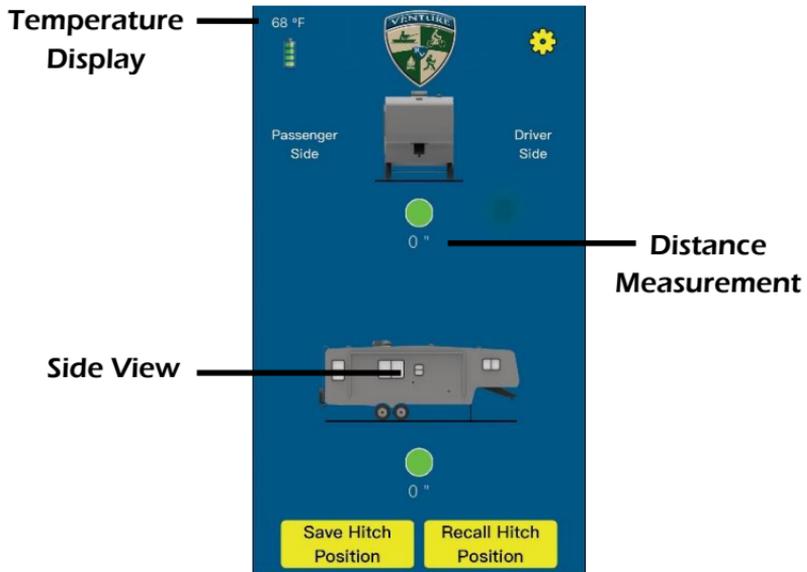


figure 9



**Hitch Position
Save Date**

Last Hitch Position Saved: 12/9/2017

figure 10

About LogicBlue Technology

Formed in 2014 by two former coworkers, LogicBlue Technology began with plans to develop unique, patented products to fill spaces within industries where technical advantages weren't being realized. Being campers ourselves, we saw a need for technical products to simplify RV setup and increase safety and convenience. Overcoming a lot of technical challenges and other hurdles we finally made it to the marketplace with our first product in May 2016, the LevelMatePRO. The Venture VLS is an OEM version of the same product which we manufacture and support.

LogicBlue Technology is a testament to what can be done with good ideas, hard work and a never-give-up attitude. We love what we do and it is our passion to bring products to consumers that are useful, user friendly and work reliably and accurately. We are especially proud to say that all of our products are Made In The USA employing American workers.

Aside from our products, our customer support is something we place a very high value and priority on. We believe that prompt customer support is something that every company should be able to provide and to that end you will find that we are accessible and ready to help with any questions you might have about our products. Please contact us any time and let us show you how customer support should be done!

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