

Wireless Vehicle Leveling System

User Manual



Patent Pending

Hickory, NC 28601

Thank you for purchasing a LevelMatePRO wireless vehicle leveling system. This product was designed for ease of use and utilizes the best possible components and engineering to achieve accuracy you can count on. I believe you will find it to be an extremely useful and time saving tool. LevelMatePRO is proudly Made in the USA.

Important Information about your LevelMatePRO

The LevelMatePRO has an on/off switch which controls power from the battery to the system. When the switch is in the off position the battery is completely disconnected from the system and no power will be drawn from the battery. Turning the unit completely off using the switch is recommended when driving for long distances or when the vehicle is in storage. When the switch is in the on position the LevelMatePRO will operate in an automatic power management mode. When you first switch the unit on it will be connectable from the smartphone or tablet app and will remain that way for a configurable number of hours while the unit is not detecting motion (see Step 16 in the Setup and Installation section). After the configured number of hours with no motion detected the LevelMatePRO will enter a sleep mode to conserve the battery. Once motion is detected, the unit will wake and will be connectable again. So, when you move the vehicle and arrive at a new location you will be able to start the app and use the product to level the vehicle. If you ever try to connect to the LevelMatePRO and are unable to do so, the unit is likely in the sleep mode. You can wake the unit without motion by cycling the on/off switch to the off and then to the on position. When you move the switch to the on position you will hear 2 beeps. This will indicate that the unit is powered on and that the battery is in good condition. If you ever move the switch from the off position to the on position and don't hear 2 beeps this will indicate that the battery needs to be replaced.

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 LevelMatePRO 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 5mm 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 LevelMatePRO

- 1) Remove the 4 screws on the top cover.
- 2) Remove the top cover and set aside.
- **3)** Remove the bags containing the battery and mounting screws from inside and set aside.
- 4) Remove the battery from the packaging and install it with the plus(+) sign up as in figure 1.



Figure 1

5) Reinstall the top cover with the 4 screws you removed in step 1. Be sure to install the arrows on the top cover in the same direction as the arrow printed on the circuit board.

6) Slide the on/off switch to the ON position

You will hear 2 beeps confirming that the unit is on. If you don't hear 2 beeps then slide the on/off switch in the opposite direction. If you still don't hear 2 beeps after trying the on/off switch in both directions then either the battery is installed upside down, the battery has a sticker on the bottom that needs to be removed, or the battery is dead and needs to be replaced with a new one.

7) Go to the appropriate app store and download the app. Download the app on all of the devices you plan to use with the LevelMatePRO. The LevelMatePRO 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 LevelMatePRO installed, your smartphone or tablet will only recognize your LevelMatePRO. So during this step you need to start the app on each smartphone or tablet so the serial number for your LevelMatePRO will be recorded on your devices.

NOTE: You will have 10 minutes from the time you switched the LevelMatePRO on to allow new smartphones or tablets to "learn" your LevelMatePRO. If this time expires, you can restart the 10 minute "learning" window by sliding the LevelMatePRO on/off switch to the OFF and then to the ON position. If you want to add another smartphone or tablet at a later time, simply turn the on/off switch to the OFF and then to the ON position to start a new 10 minute "learning" window.

Start the app on each smartphone or tablet and once the app connects to the LevelMatePRO, 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 LevelMatePRO. Once a smartphone or tablet has connected to the LevelMatePRO it will always remember and only connect to that LevelMatePRO.

8) Install the LevelMatePRO.

The LevelMatePRO must be installed on a wall or other vertical surface on the interior of your vehicle. The top cover of the product must face the side, front or rear of the vehicle when installed.

NOTE: Installing the LevelMatePRO on a side wall or a wall that is parallel to a side wall is recommended for highest possible accuracy.

The arrows on the product label should point upward toward the ceiling of the vehicle. Attempt to install the product as straight as possible both horizontally and vertically. There is no need to install the product perfectly level or perpendicular as the product is designed to compensate for imperfect installation orientation. Using the 2 provided mounting screws, mount the product on a wall or any vertical surface. Again, insure that the arrows on the label are pointing up. If you installed the top cover properly in step 5, the on/off switch should be on the bottom edge of the unit.

NOTE: When installing the LevelMatePRO in a towable vehicle, it is recommended that the unit be mounted as close to the front of the vehicle as possible for the best wireless connection from the driver seat of the tow vehicle.

9) 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 LevelMatePRO 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.

10) Start the app on your smartphone or tablet

11) Select the installation orientation

The app will display the Orientation Select screen (figure 3). Figure 2 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 and you will proceed directly to step 13.

12) Select units of measure

Select the desired units of measure at the bottom of the Orientation Select screen (figure 3).

13) Select the vehicle type

At the bottom of the Orientation Select screen (figure 3), select either the towable or driveable option that corresponds to your vehicle type. Tap the Save button at the bottom of this screen to save your selections.



figure 2













figure 5

figure 6

71 °F LevelMatePRD Wretess Vertice Leveling System Front 0 " 0 "		Virtual Control of Con	
		Select the desired measurement resolution.	
Driver Side	Passenger Side	() .25"	0 1.00"
		O .50"	0 1.25"
		Country based roadside operation.	
0 "	0 "	O Left Side	O Right Side
Rear			
			Save





14) Measure your vehicle and set level

The Settings screen should now be displayed (figure 4 or 5). 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 9 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 LevelMatePRO 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.

NOTE: If you ever uninstall/reinstall your LevelMatePRO in another vehicle or in another location in the same vehicle, you will need to repeat this step after the unit has been reinstalled.

15) 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 6 or 7). 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 option, the round level indicators should be green. These items will be your indication that the LevelMatePRO has properly recorded the current level position. From this point on, each time you start the app to use the LevelMatePRO 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 my tapping the gear icon at the top right of the Leveling screen.

16) Set the advertising time

Navigate to the Orientation Settings screen in the app (figure 3) and tap the yellow arrow in the upper right corner of the screen. This will take you to the Advertising and Display Settings screen (figure 8). Input the number of hours you would like the system to advertise the Bluetooth signal after the LevelMatePRO no longer detects motion. The default and recommended number of hours for this setting is 1, but you may decide that you need the system to remain connectable for longer than that depending on your specific use requirements. The greater the number of hours you use for this setting, the shorter the battery life will be.

NOTE: Anytime you need to activate the LevelMatePRO and make it connectable after it has discontinued advertising the Bluetooth signal, simply slide the on/off switch to the off position and then back to the on position where you should hear 2 beeps. This will be your indication that the system is on and ready to use.

17) Select the display resolution

Using the Advertising and Display Settings screen (figure 8) 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.

18) Select the operating side of the road

Select the side of the road that you drive on so LevelMatePRO 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.

1) Position your vehicle

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

2) Connect to LevelMatePRO

After you have completed installation and configuration of your LevelMatePRO unit and app (at the beginning of this manual), you are ready to begin using the product to level your vehicle. First, insure that the on/off switch is in the ON position.

NOTE: Remember that the LevelMatePRO will sleep after the number of hours you set in step 16 of the Setup and Installation process, so if it has been longer than that since motion was last detected, simply cycle the power by sliding the on/off switch first to the OFF position and then to the ON position where you should hear 2 beeps confirming that the unit is powered on.

To connect to the LevelMatePRO simply start the app within range of your LevelMatePRO 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 LevelMatePRO, 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.

NOTE: If you have configured your system for a driveable vehicle, skip to step 8.

3) The towable leveling screen

Once the app connects with your unit it will display the Leveling screen (figure 9). The towable 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 9.

4) Level your towable 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 (towable vehicles only)

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 your towable 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, simple 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 (towable vehicles only)

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 11). 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.

8) The driveable Leveling screen

The driveable Leveling screen (figure 12) shows the top view of a driveable vehicle. Also displayed are indications for driver side, passenger side, front and

back to give you an indication of the orientation of the display. At each corner of the driveable vehicle display are both a measurement distance and a yellow arrow (only displayed when not in a level position). The measurement distance displayed at each corner is the height required for the wheel that corresponds with that corner of the vehicle. To level the vehicle, simply stack your blocks in front of or behind each wheel to the height indicated for that wheel. Once the blocks are stacked, drive onto all of the stacks of blocks at the same time and the vehicle should reach a level position. Once the vehicle is on all of the blocks, the measurement distance displayed for each wheel should be '0'. If you still have one or more wheels displaying a non-zero distance, make note of the distance for each wheel. Drive off the blocks and adjust them up or down as needed and drive back onto the blocks.

NOTE: Since you can't move a wheel downward, height is added to another wheel by the system. This will not affect the leveling process or results, but it does result in one wheel always showing a '0' distance before the vehicle is leveled.

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.

NOTE: As mentioned in the Setup and Installation instructions, Android users will use the system 'Back' button and there will be no on screen left facing yellow arrows for navigating to the previous screen as there is in the iOS version of the app where the screenshots in this manual were taken from.









figure 12

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.

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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