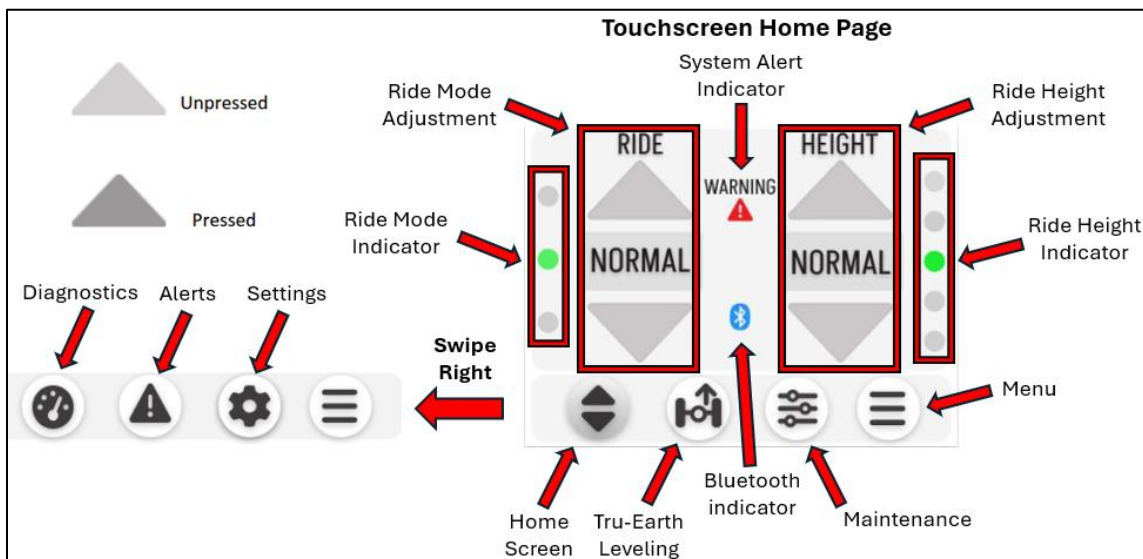













Quick Operating Guide - Touchscreen

This document provides a quick guide to the operation of LiquidSpring **Smart Suspension** systems equipped with a touchscreen. For complete instructions, please refer to *Owner's Manual - Touchscreen* available at www.liquidspring.com.



Adjustment Buttons:

See table for operation of the adjustment buttons. **Ride Heights** can be selected at any speed; however, the system will ignore the selection until speed drops below 10 mph. **Ride Modes** can be adjusted at any speed.

Ride Height Commands:					Ride Mode Commands		
Ride Height Description	Driver Interface Operation	Front Ride Height	Rear Ride Height	Ride Height Display	Ride Mode Description	Driver Interface Operation	Ride Mode Display
All Up (AU)	From RH: P&R UP 2 times. From RU: P&R UP 1 time.	HIGH	HIGH		Sport	From Normal: P&R UP 1 time. From Comfort: P&R UP 2 times.	
Rear Up (RU)	From RH: P&R UP 1 time.	NORMAL	HIGH				
Ride Height (RH)	From AU: P&R DOWN 1 time. From RU: P&R DOWN 1 time. From RD: P&R UP 1 time. From AD: P&R UP 1 time. Auto Select: Speed > 15mph	NORMAL	NORMAL		Normal	From Sport: P&R DOWN 1 time. From Comfort: P&R UP 1 time.	
Rear Down (RD)	From RH: P&R DOWN 1 time. Rear Door Trigger	NORMAL	LOW				
All Down (AD)	From RH: P&R DOWN 2 times. From RD: P&R DOWN 1 time. Side Door Trigger	LOW	LOW		Comfort	From Sport: P&R DOWN 2 times. From Normal: P&R DOWN 1 time.	
Depressurize	Refer to Depressurizing System Section	FULL LOW	FULL LOW				
P&R: Press and Release					P&H: Press and Hold		

Quick Operating Guide - Touchscreen

On/Off Button:

Pressing the **Maintenance** button will reveal the maintenance screen as shown in **Figure 1**.

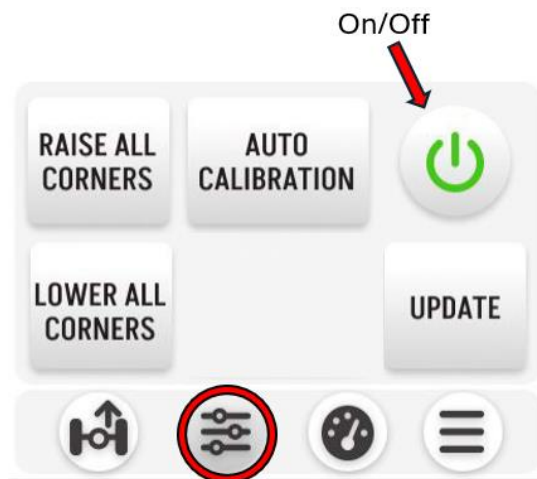


Figure 1. Maintenance Screen

A quick press and release will turn the system and display off. To wake the system, tap anywhere on the screen and press the red **On/Off** button. The system will remember the last commanded state.

Depressurizing System:

Pressing the **Maintenance** button will reveal the maintenance screen as shown in **Figure 1**.

Pressing and holding the **Lower All Corners** button for approximately 2 minutes will depressurize the system. Loud “clicking” should be heard indicating the system has been depressurized.

Pressing the **On/Off** button will shut the system off and prevent the system from repressurizing.

Tru-Earth Leveling™:

For vehicles equipped with Tru-Earth Leveling, Pressing the **Tru-Earth Leveling** button will reveal the Tru-Earth Leveling screen as shown in **Figure 2**.

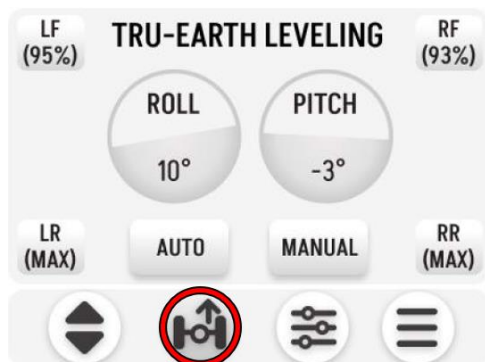


Figure 2. Tru- Earth Leveling Screen

The vehicle must be stationary and in park to initiate Tru-Earth Leveling.

NOTE: Vehicles equipped with generators must shut them off before starting the calibration process.

NOTE: It is advised to steer the wheel straight ahead and avoid touching the steering wheel while the system is leveling.

WARNING: When exiting Tru-Earth Leveling, the system will return to RIDE HEIGHT. Verify vehicle has adequate clearances before initiating or exiting Tru-Earth Leveling.

WARNING: Disconnect anything trailered prior to initiating Tru-Earth Leveling. The vehicle will raise or lower to achieve a level state, which can cause damage to anything trailered.

Selecting **Auto** will initiate Tru-Earth Leveling, it may take up to 90 seconds for the system to achieve its final state.

The Roll and Pitch icons will change color depending on the systems confidence in achieving a level state:

Green: Indicates the vehicle is level.

Yellow: Indicates the system will attempt to achieve a level state.

Red: Indicates at least one of the Roll/Pitch angles are too large for the system to attempt to level the vehicle.

NOTE: Once Tru-Earth Leveling has been achieved, vehicles with generators may resume operation.

For complete instructions on Tru-Earth Leveling functionality, refer to *Owner's Manual-Touchscreen*.

Exiting Tru-Earth Leveling:

The system will automatically exit Tru-Earth Leveling if the vehicle is driven above 2 mph. It is advised not to exceed speeds of 15 mph while the system is equalizing pressure.

Pressing the **Exit** button will manually take the system out of Tru-Earth Leveling. It will take up to 20 seconds for the system to equalize pressure and return to ride height.

NOTE: In some instances, after exiting Tru-Earth Leveling the vehicle may raise and lower excessively while returning to normal ride height. It is advised to move the vehicle to more level ground to allow it to achieve normal ride height in these instances.



Quick Operating Guide - Touchscreen

Bluetooth & System Information:

Pressing the **Settings** button will reveal the settings screen as shown in **Figure 3**.

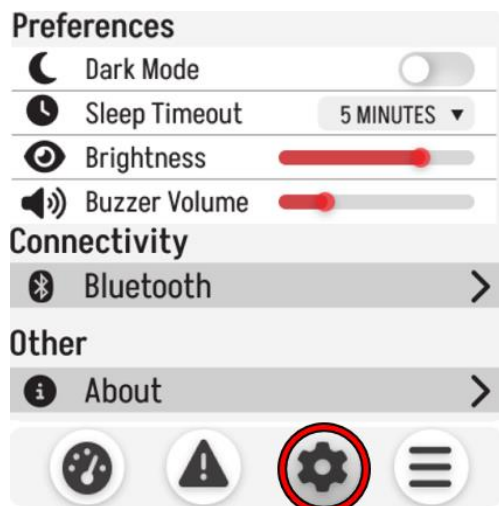


Figure 3. Settings Screen

The **Dark Mode** slider will switch the display between Light & Dark Mode.

Sleep Timeout will adjust how quickly the display goes to sleep. (Note the system will still be running, tapping the screen will turn the display on again).

Brightness adjusts the display's brightness.

Buzzer Volume adjusts the volume of the fault buzzer.

NOTE: The Buzzer feature will be available in the future through a software update, as it is still under development

Selecting **Bluetooth** will bring up the Bluetooth pairing screen as shown in **Figure 4**.

Bluetooth pairing allows the Touchscreen to be paired with the LiquidSpring phone app.

NOTE: The LiquidSpring phone app will be available in the future, as it is still under development.

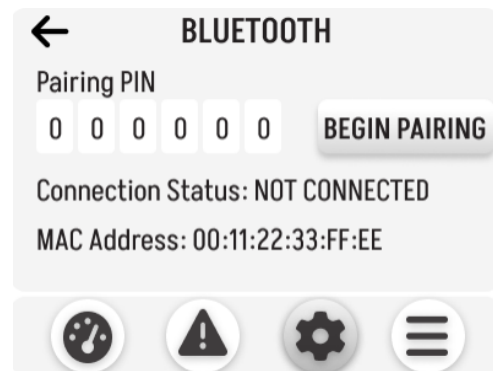


Figure 4. Bluetooth Pairing Screen

Selecting **About** will bring up the device information as shown in **Figure 5**.

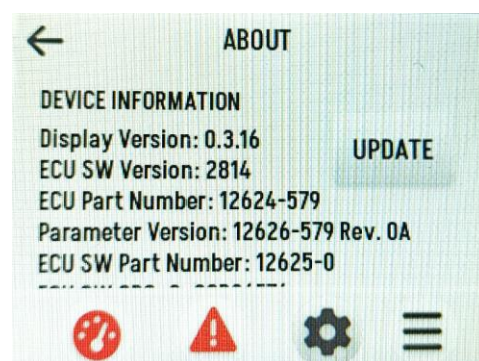


Figure 5. Device Information

System Alert Indicator:

When a system alert is active, the System Alert Indicator, Diagnostics button, and Alert button will turn red as shown in **Figure 6**.

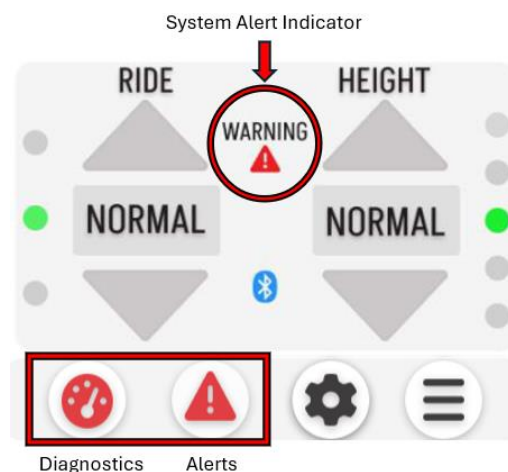


Figure 6. Active Alerts



Quick Operating Guide - Touchscreen

Diagnostics Button:

Pressing the **Diagnostics** button will display the status of the system as shown in **Figure 7**.

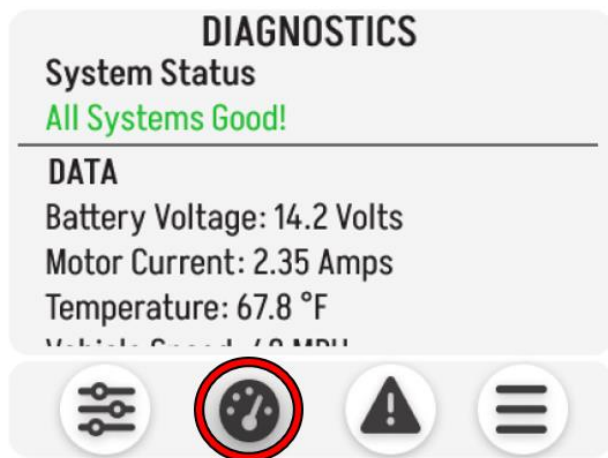


Figure 7. Diagnostics Screen

If there is an active alert, the diagnostics screen will display the components that need attention as shown in **Figure 8**.

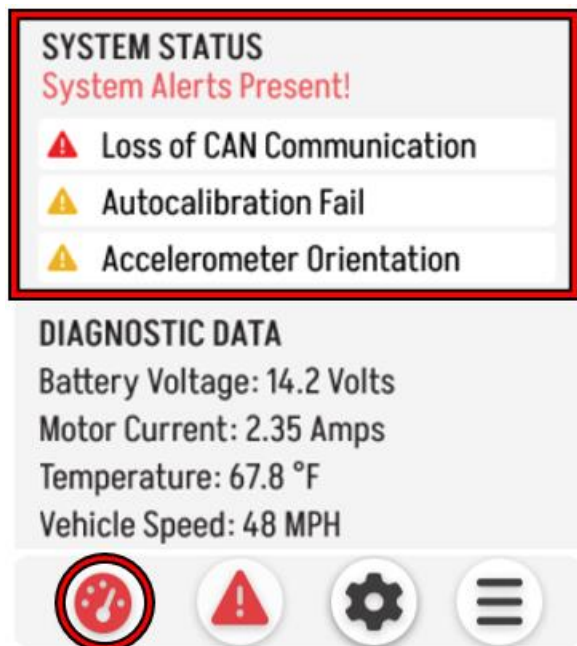


Figure 8. Diagnostics Screen with Active Alert

Clicking on an alert will display the alerts page as shown in **Figure 9**.

Alerts Button:

Pressing the **Alerts** button will display all faults encountered during the current ignition cycle as shown in **Figure 9**.

Items in **Red** are active faults that have not been resolved.

Items in **Yellow** are past faults that have been resolved.

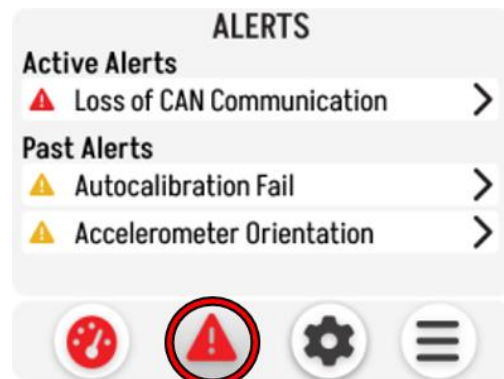


Figure 9. Alerts Screen

Selecting an alert will display a pop-up window that provides an explanation of the error as shown in **Figure 10**.

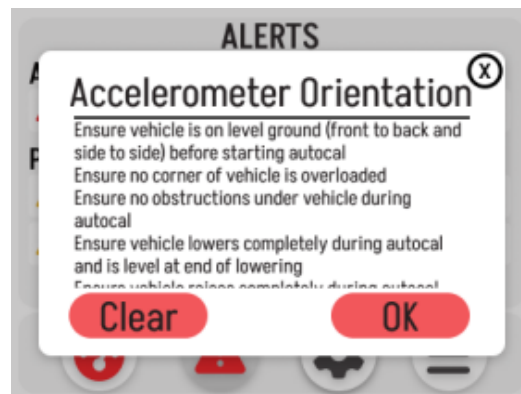


Figure 10. Alert Pop-up

Selecting **OK** will clear the fault message but retain the fault in the listing.

If the fault has been resolved, The **Clear** button will be shown. This button can be pressed to clear the fault message and remove the fault from the listing.

For a list of potential faults, please refer to *Troubleshooting Guide – Touchscreen* available at www.liquidspring.com.



Quick Operating Guide - Touchscreen

Ride Modes:

- **Sport:** More responsive to external conditions / driver input. Good for windy conditions and twisty roads.
- **Normal:** Balance of Sport and Comfort.
- **Comfort:** Less responsive to external conditions / driver input. More plush and relaxed ride.

The system will react aggressively to evasive maneuvers regardless of ride setting.

Ride Heights:

- Solid green lights show the selected position.
- Flashing light indicates current position during change in level to the selected position.
- The system will auto select NORMAL at speeds above 15 mph.
- Driver can select any ride height at speeds below 10 mph.
 - LOW / M-LOW: Use to ease loading, ease trailer connection, or provide additional roof clearance.
 - NORMAL: Pre-determined suspension height for daily driving.
 - HIGH / M-HIGH: Use to provide additional ground clearance when needed.
- If any ride height other than NORMAL is selected at speeds greater than 10 mph, the system will ignore the selection until the speed drops below 10 mph within 2 minutes.
- See table on **Page 1** for all available height modes.

Rear Door Trigger (if equipped):

- Ignition must be ON.
- Touchscreen must display "NORMAL" ride height.
- Open the rear door. "M-LOW" ride height will be displayed.
- Rear of vehicle will lower.
- Close rear door, "NORMAL" ride height will be displayed.
- Rear of vehicle will raise to "NORMAL" ride height.

Side Door Trigger (if equipped):

- Ignition must be ON.
- Touchscreen must display "NORMAL" ride height.
- Open side door. "LOW" ride height will be displayed.
- Front and Rear of vehicle will lower.
- Close side door, "NORMAL" ride height will be displayed.
- Front and Rear of vehicle will raise to "NORMAL" ride height.

Start Up:

The vehicle is equipped with normally closed rate valves. When the ignition is first applied or the driver interface is turned on, the system will pulse the rate valves to equalize the pressure for up to 20 seconds. If in Tru-Earth Leveling Mode, the pulsing of the valves is suspended until deactivating Tru-Earth Leveling. It is normal to experience some vibration, noise, and vehicle movement during this time. It is recommended to allow the vehicle to complete the pulsing and subsequent leveling before operating the vehicle.