



This document provides the operation of LiquidSpring Smart Suspension True Earth Leveling.

True Earth Leveling uses the LiquidSpring Driver Interface (shown right), remapping the functions of the Ride Mode and Ride Height Adjustment buttons along with the eight (8) green LED's.

While in True Earth Leveling mode, SPORT, NORMAL, and COMFORT green LED's will be all on solid or blinking. Only one green LED for SPORT, NORMAL, or COMFORT indicates the system is out of True Earth Leveling mode.

## Activating True Earth Leveling

Vehicle must be stationary, in Park, and no brakes applied.

Press and Hold both RIDE MODE ADJUSTMENT BUTTONS until SPORT, NORMAL, and COMFORT LED's begin blinking. Release buttons.

## Deactivating True Earth Leveling

While SPORT, NORMAL, and COMFORT LED's are either solid or blinking, Press and Hold both RIDE MODE ADJUSTMENT BUTTONS until only one LED is shown for SPORT, NORMAL, or COMFORT, then release buttons. The Ride Height LED's will resume normal operation.

Also, if the vehicle is driven off while in True Earth Leveling Mode, the system will automatically exit the mode and begin normal leveling.

## Operation of True Earth Leveling

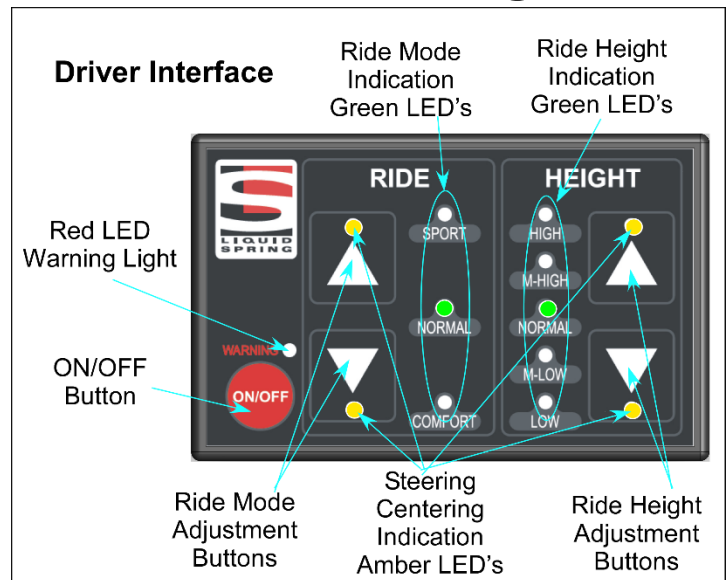
While performing leveling in True Earth Leveling Mode, SPORT, NORMAL, and COMFORT green LED's will flash.

The system will make a number of adjustments to various corners and may take up to 90 seconds to achieve final state. During this time, the system may pause from time to time.

Once True Earth level is achieved, the three LED's will be solid and none of the RIDE HEIGHT green LED's will be lit.

While in True Earth Leveling Mode, the system will not monitor and adjust to any changes in ride height due to temperature changes.

# True Earth Leveling Mode



If True Earth level can not be achieved, SPORT, NORMAL, and COMFORT will be solid and one of the RIDE HEIGHT green LED's will be lit indicating the error as indicated in the following section.

## Error Modes

HIGH: Operator turned the ignition or Driver Interface off.

M-HIGH: Corner overloaded.

NORMAL: The system was unable to achieve a solution within 90 seconds maximum time limit.

M-LOW: No further leveling is possible given the physical limitations of the suspension at each corner.

LOW: The angle of the vehicle is too extreme to attempt True Earth Leveling.

## 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 True Earth Leveling Mode, the pulsing of the valves is suspended until deactivating True 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.