



Leanometer L20 – Instructions for use

Thank you for purchasing a Leanometer L20. It has been carefully designed and developed to provide riders with valuable information in a safe and clear way. Please take a few minutes to read through these instructions.

In the box

Leanometer L20 main unit
Quick release mounting platform
Top-yoke mount
1-1/8" handlebar mount
1" bar adaptor
7/8" bar adaptor
6mm spacer
12mm spacer
1.5V N cell battery
3M dual lock
USB cable

Fitting the mount to your bike

Important - Stay Safe!

Ride safely at all times. Pay attention to the road and your surroundings. Inattention can lead to an accident.

DO NOT focus on the Leanometer while cornering and do not allow yourself to be distracted. Read the display only when safe to do so.

DO NOT operate the Leanometer controls when the vehicle is in motion. Removing your hands from the handlebars during operations can be hazardous.

Leanometer L20 requires no wiring. It should be mounted on the bike yoke or bars, parallel to the direction of travel and as near the centre line as practical. The quick-release mount allows the unit to be taken with you when leaving the bike. Ensure that the unit fully snaps in when replacing it.

First select and assemble whichever combination of mount and spacers best suits your bike. It is very important that the L20 is level: use the Spirit Level display (see later) with your weight on the bike and the bike balanced on level ground to achieve this.

The quick-release platform should be mounted firmly. If you use dual-lock with the top-yoke mount, ensure you use at least two sections with the grain running at right angles to prevent rocking, and consider the use of tie-wraps instead initially, so that you can make adjustments.

Take care that the unit will not snag or be hit by clutch, brake or throttle cables.

We do not recommend mounting on a part of the bike that will shake excessively or resonate, such as a mirror or GPS mount.

For extra information and examples on installation see www.leanometer.com.

If you have more than one bike you can transfer your Leanometer between them easily by purchasing additional mounting kits. Contact sales@leanometer.com.

Inserting the battery

Remove the rubber hatch on the underside of the L20 and insert a 1.5V N cell Alkaline battery. It is important to ensure it is fitted the correct way around. Push the negative (-) end of the battery down into the spring of the battery holder. As the spring is pushed in, gently push the positive (+) end of the battery into position. Replace the rubber hatch.

A new battery should give approximately 100 hours of use. When the battery is nearly empty the battery symbol on the display will flash.

Quick release

Slide the unit onto the quick release platform until a click is felt. To remove, lightly push down on the tab at the rear of the platform.

Basic operation

To turn the unit on, hold down the centre button for 1.5 seconds. The unit comes on in Ride mode with SafeDisplay, and is ready to ride.

During cornering, braking or acceleration the display reads “- -”.

Between manoeuvres, the display shows the maximum lean angle,

cornering, braking and acceleration forces detected while the display was blank.

And that's it! To turn the unit off, hold down the centre button for 1.5 seconds.

Important - do not operate the buttons while riding.

Auto off

The unit will turn off automatically if no movement is detected for five minutes in Ride mode, or if no button is pressed for five minutes in Data mode.

Advanced features

Modes

Press the centre button briefly to switch between Ride mode and Data mode.

Ride mode (R is displayed)

Note: we recommend you read the explanations at www.leanometer.com for full definitions of Frame Lean and Cornering g. In summary, Frame Lean is the lean angle of the bike's frame from the vertical, and cornering g is the force generated by the bike during the turn.

Ride mode uses the SafeDisplay feature to display your maximum braking, acceleration, lateral G and lean angle once your manoeuvre is completed.

The top fan shows the maximum lateral G measured in 0.1G steps; the digits show the frame lean angle at that moment. The eight-segment bar graphs shows braking (left) and acceleration (right) forces up to 1G.

The captured values only reset when you have had a reasonable amount of time to read them. If you make a big turn, straighten for a second or two only, then make a small turn (to avoid a parked car for instance) SafeDisplay will keep the values from the big turn until you have more time to read them.

While you are riding, the unit also captures corner summaries - braking into corner, maximum cornering force and lean angle at that moment, and maximum acceleration out of corner.

Summaries of the most recent 25 corners over 0.2 lateral G are retained for review in Data mode.

Separate trip-maximum and overall-maximum corner summaries are also retained for review in Data mode.

Data mode (D is displayed)

In Data mode the corner summaries recorded in Ride mode are displayed. The trip maximum, overall maximum, and the most recent 25 corner summaries with lateral G over 0.2G can be reviewed.

Use the left and right buttons to step forwards and backwards through the trip maximum, overall maximum and the last 25 corners. When the trip maximum is displayed, the bottom of the display will show "TRIP". When the overall maximum is displayed, you will see "MAX". When you change to a corner summary, the corner number (01 to 25) will be displayed briefly before the corner summary is shown.

To clear the trip maximum corner summary, hold the right button for 1.5 seconds while "TRIP" is displayed. To clear the trip maximum and overall maximum summaries, hold the right button for 1.5

seconds while “MAX” is displayed. To clear the 25 recent corner summaries, hold the right button for 1.5 seconds while any one of the corner summaries is displayed

Datalogging

Your leanometer can record up to 25 outings and up to five hours of riding. Hold the right button for 1.5 seconds in Ride mode to begin recording. “L” will flash while recording is taking place. Press the right or centre buttons briefly to stop recording. If you record for more than five hours, the oldest data will be lost.

When not recording, “L” will be displayed if there is recorded data available for download. Connect your leanometer to a PC with the USB cable provided and run the leanData software (free download from www.leanometer.com) to download and view data, and clear the logging in your leanometer.

Spirit Level mode

We recommend you use the Spirit Level mode to help mount your unit correctly. In Ride mode, hold the left button for 1.5 seconds and the display will change to “SL”. The left and right bar displays now show forward/back tilt of the unit, and the Frame Offset fan now shows left-right tilt. Try to get the unit mounted so that, with your weight on the bike and the bike balanced upright on level ground, there are no forward/back tilt segments showing, and the fan element is in the centre.

Firmware updates

Your Leanometer L20 has a USB port for connection to a computer. From time to time we will release updated firmware with improvements or new features. You can download these releases from www.leanometer.com and use the cable provided to update your unit.

