

LHS Upgrade Guide

Landing Height System

(NORSEE Certified Edition)

Upgrading LHS-100-X to LHS-200-B

Pins

The 200-B model comes with a 4-pin Quick-Disconnect connector. Existing installation of the 100-B/100-G units use the same 4-pin connector.

Most existing installations for the LHS-100 Series use 3 wires (Red, Yellow, Blue), with the last wire (Green) not used or used only for Audio ground reference to the Audio Panel.

The new 200-B model is a single-ended Audio output on the same Blue wire and does not offer an Audio ground reference (Audio LO).

Installations that require an Audio LO ground reference, can connect the Audio Panel Audio LO to the LHS ground wire (Yellow).

The 200-B model 4th wire (Green) is now designated for the GPS RS232 input. Installations that do not require GPS input, or no GPS source available for output, can leave this wire unconnected.

LHS-200-B can be swapped directly with the 100-B model without adding the GPS wire and keep the GPS System disabled within the unit WiFi setup.

The 4-pin 200-B Connector Table

Color	Function
RED	Power. 12V/24V Systems. 150mA
YELLOW	Unit Ground
BLUE	Audio HI Output (Single Ended)
GREEN	GPS RS232 Input

Note on 100-X units, the **GREEN** wire is Audio LO.

On some Audio Panels, the Audio LO signal is isolated, and the Audio Panel requires a ground reference; for this situation, connect the Audio Panel Audio LO to LHS ground wire. It's best to test the Audio Panel with the Audio HI only, as both the LHS and Audio Panel share the same ground reference.

Once the new unit is installed, check Audio level. If Audio seems to be lower than the previously installed 100-X model, this indicates the Audio Panel does require an Audio LO to be connected and the GREEN wire on the previous installation was being used. Connect that previously used Audio LO wire to LHS Ground wire (Yellow)

Setup

The upgraded model uses a new board. The LHS unit needs to be set up again before first flight. See the following procedure to set up the LHS unit:

It's best to take the airplane to the ramp and do it outside hangar, so it is not set up with clean/shiny hangar flooring.

- 1) Measure the actual vertical height from the glass to the ground.
- 2) Power on the Master and go to WiFi. On the main page (before setting it up) see what the sensor is reading.
- 3) The bottom of the wing is not perpendicular to the ground, as there might be a slight difference between what the unit is seeing and the actual vertical measured height. Unit could be installed at an angle.
- 4) If the difference between the reading and measured vertical height is within 3" (inches + or -), input the number the LHS unit is showing on the first page. (The 2nd smaller number, that is in INCHES). Note that the big number is truncated to an internal value. Use the smaller number.
- 5) If the difference between the reading and measured is > 3 " (inches + or -), input the measured vertical height. The unit will triangulate and save that installed angle.