

LASER PANASONIC HL-G108 SERIES QUICK START

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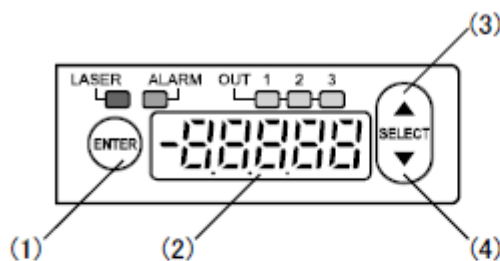
V.2.0 – 201409

While reading the User Manual

http://www.audiomatica.net/pub/Panasonic_HL-G1_Manual.pdf

is advisable, 152 pages might discourage busy people. What follows is a survival note; the device, in its default factory settings, is useless for loudspeaker measurements. Below User Interface buttons and display are shown.

■ Panel Configuration



(1) [ENTER] Key

Used to enter items.

(2) Digital Display

Displays measurement values, set values, and system errors.

(3) [UP] Key

Used to select items.

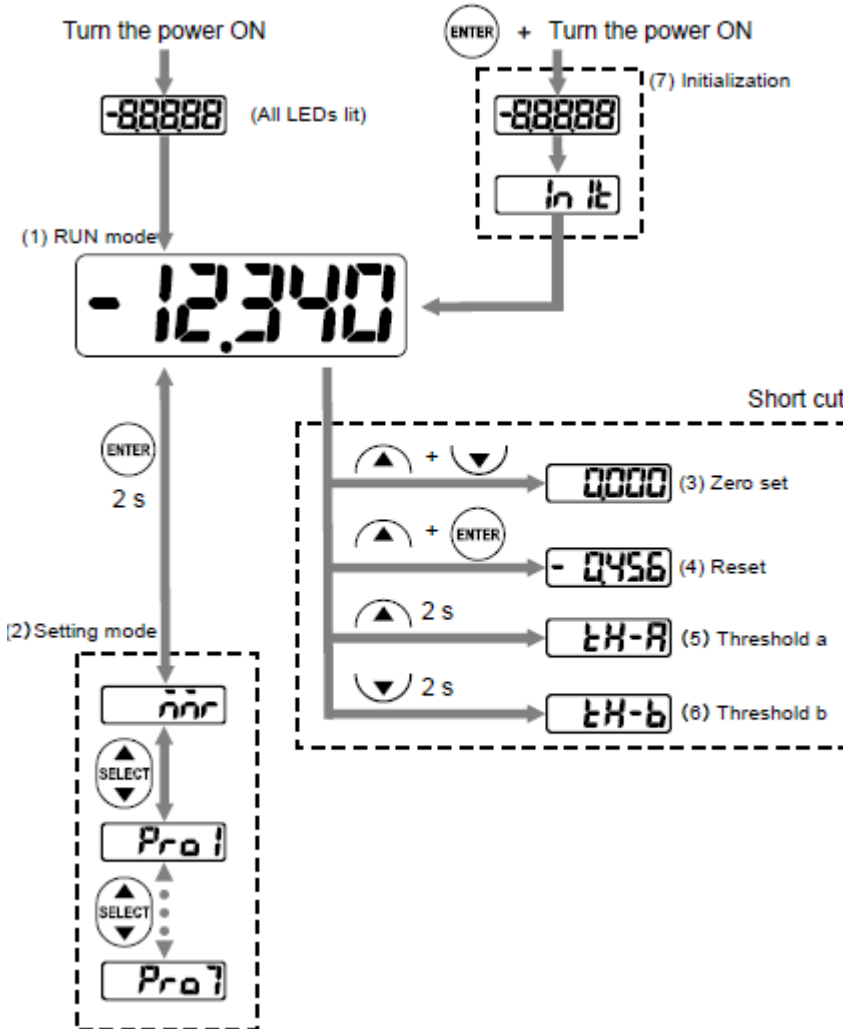
(4) [DOWN] Key

Used to select items.

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Powering the device while holding down the Enter button resets the device to default factory settings. It is highly advisable to reset the device before reprogramming it.

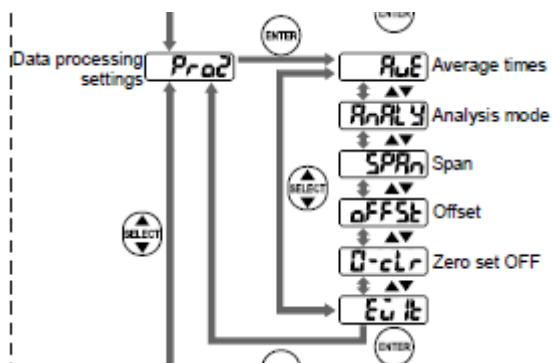
From this situation there are only two key parameters that **have to** be changed. Holding down the Enter button (2 sec), settings mode is entered.



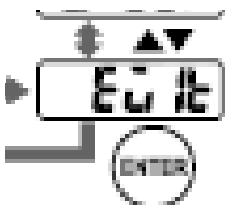
Holding down the Enter button (2 sec) again, from whatever menu, settings mode is exited.

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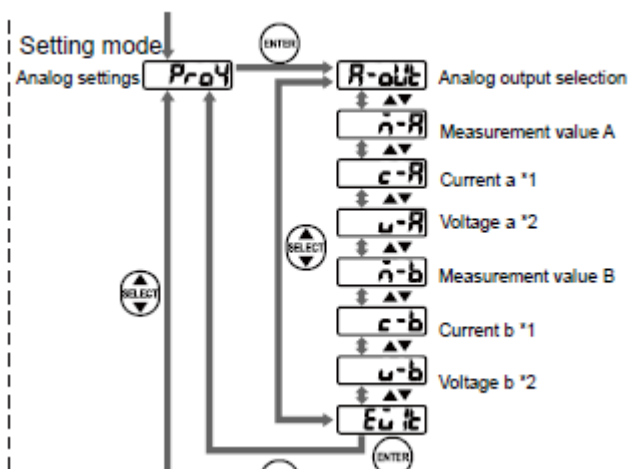
The first parameter that has to be changed is the **Average times**, the first parameter in **Prog2**. The default is 1024, set it to 1.



To go back from one sub menu to another exit should be selected. Unfortunately this is how the word exit is managed by the display which is not immediately clear.



The second parameter is the **Analog output selection**, again the first parameter, in **Prog4**. Default is I-Out which means current output. Set it to V-Out.



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Having done this you should be ready to make a measurement on a loudspeaker.



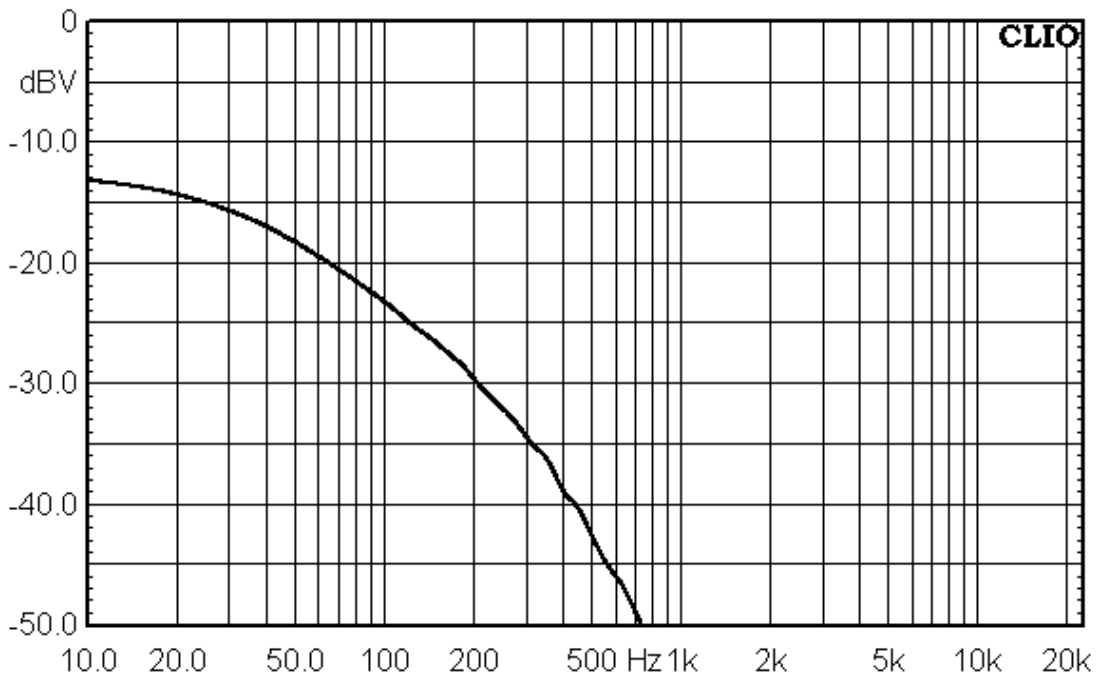
Adjust the distance from the laser to the dust cup to make the laser display indicate around 0mm (it is not critical). Perform a sinusoidal measurement with around 2VRMS at speaker terminals connecting the laser output to CLIO input.

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Microsoft

Sinusoidal

11-Sep-14 11:37:41 AM

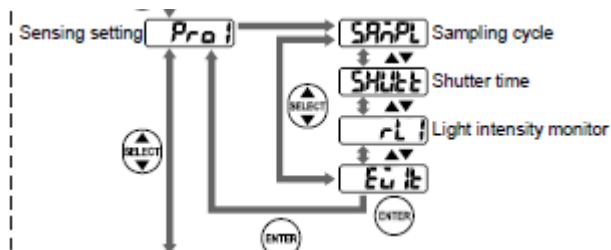


CH A dBV 1/6 Octave Unsmoothed 48kHz DelayCHA [ms] 0.000 DelayCHB [ms] 0.0

File:

You should obtain a graph similar to above which indicates the cone displacement vs. frequency and should be very close to a second order low pass filter with the same Q as the QTS of the loudspeaker.

As a last refinement you can increase the bandwidth of the laser to 2.5kHz (from the default 2kHz) changing from **Prog1** the **Sampling cycle** to 200uS.



Finally it should be noticed that the laser numeric display indicates the distance from the device. When the coil of the loudspeaker *comes outside* the distance from laser is reduced and negative numbers are displayed; note that such a movement is conventionally considered positive with respect to the loudspeaker.