

9. DC Outputs and Inputs

This test measures the DC accuracy of the DC outputs and inputs of the lock-in.

Setup

We will use the digital voltmeter (DVM) to measure the DC outputs of the lock-in. Then we will use one of the outputs to generate a voltage to measure on the DC inputs.

Connect a 50 Ω termination to the A input.

Procedure

- 1) {PRESET} (Turn the lock-in off and on with the [Setup] key pressed)
- 2) For the CH1 and CH2 outputs, repeat steps 2a through 2e.
 - a) Connect the CH1 (or CH2) output to the DVM. Set the DVM to 19.999 V range.
 - b) Press
[Channel 1 (or 2) Offset On/Off]
Turn the offset on.
 - c) For each of the offsets in the table below, repeat steps 2d and 2e.

Offsets (%)

-100.00
-50.00
0.00
50.00
100.00

- d) Press
[Channel 1 (or 2) Offset Modify]
Show the offset in the Reference display.
Use the knob to set the offset to the value in the table.
- e) Record the DVM reading.
- 3) For each Aux Output (1, 2, 3 and 4), repeat steps 3a through 3e.
 - a) Press
[Aux Out]
Display the correct Aux Output level on the Reference display.
 - b) Connect the selected Aux Output (on the rear panel) to the DVM.