Quick Setup Guide

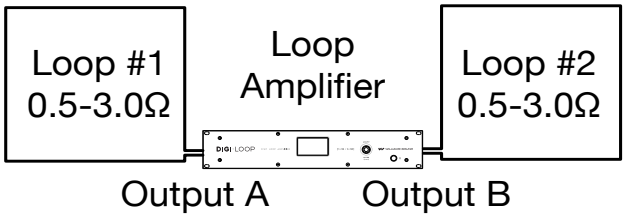
LOOP SYSTEMS

WILLIAMS SOUND®
HELPING PEOPLE HEAR

This guide assumes:

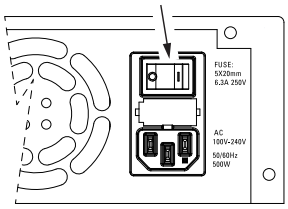
1. The loop was designed and installed correctly.
2. You have, and know how to use, a field strength meter (and earphones).

1. Connect all loop wires to the amplifier.

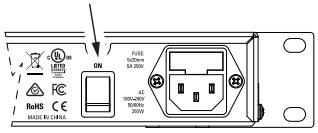


2. Power on the amplifier.

Power Switch 210 models

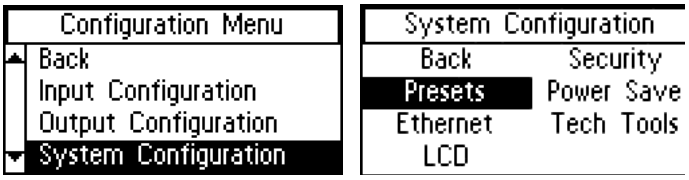


Power Switch
107/207 models

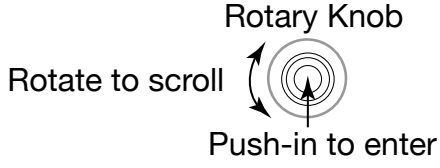


3. Load factory preset loop configuration.

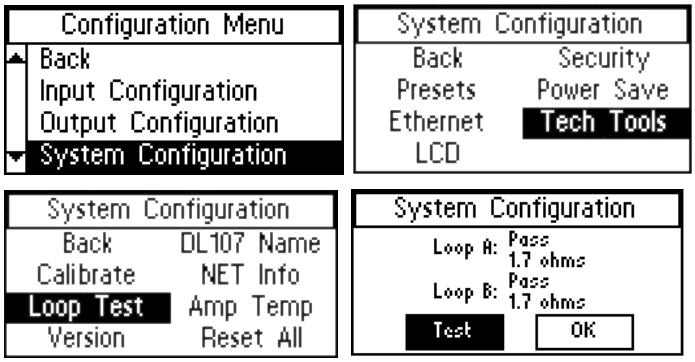
Use the control knob to navigate to System Configuration - Presets - Load Preset. Select the loop configuration you have (i.e. Speaker/Loop for single loop on PLA DL210, Single Loop, Dual Loop, or Phased Array on other models). This loads the factory preset loop configuration.



4. Perform a Loop Test.



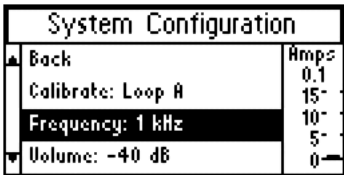
Use the control knob on the front of the amplifier to navigate to System Configuration - Tech Tools - Loop Test. Perform the Loop Test. If the loop test fails, go back and fix the issue with the loop wire. The loop test will indicate what the problem is (i.e. shorted, open, or incorrect impedance).



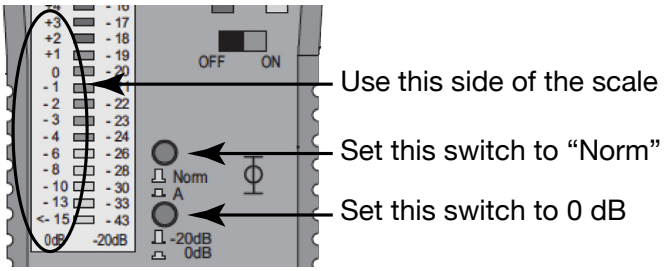
5. Calibrate the amp's VU Meter to the Master Loop. A field strength meter is needed to perform this step.

Use the rotary knob to navigate to System Configuration - Tech Tools - Calibrate.

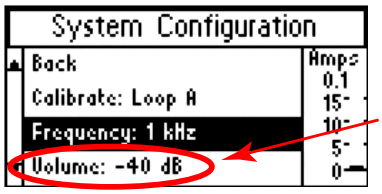
Start with Loop A. Set the test tone frequency to 1 kHz. The test tone will now be running through the loop.



The target for the field-strength meter is to read 0 dB at 400 mA/m. (On the Williams Sound meter, the NORM/A switch should be set to "NORM" (off), and the -20/0 dB switch should be set to 0 dB (on). Use the left side of the scale for readings).



In the center of the loop, about 5 feet above the floor, measure the field strength with the meter. It will most likely read less than 0 dB. Go back to the amplifier and adjust the "Volume" level up. Go back to the loop, and with the field strength meter, measure the field strength again.



Adjust output level until field strength meter reads 0 dB

Keep repeating this procedure - adjusting level, measuring field-strength - until the level on the field-strength meter reads 0 dB. The amplifier's field strength is now calibrated for Loop A.

6. If this is a Dual-Loop System: Repeat Step 5 for Loop B. If this is a phased-array system, skip to Step 7.

The amplifier field strength is now calibrated for both loops. Skip to step 8.

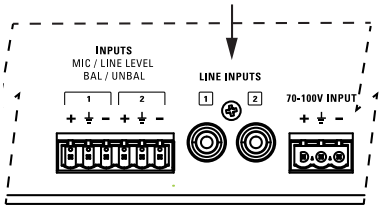
7. If this is a Phased-Array System: Adjust the current in the Slave Loop (B) until it matches the current of the Master Loop (A).

In the calibration window, use the rotary knob to select Loop B. Now adjust the "Offset" until the field strength meter reads 0 dB.

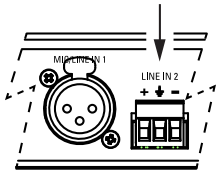
8. Play audio through the loop.

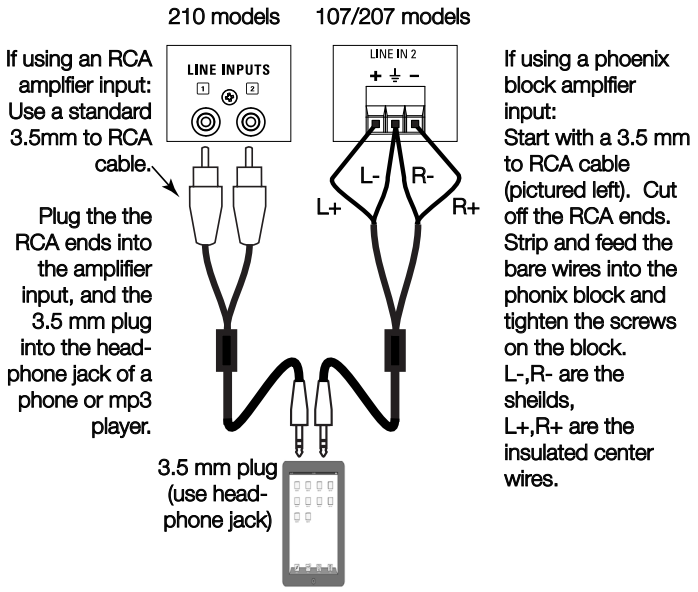
The easiest way to do this is use a 3.5 mm to RCA audio cable and use a phone or mp3 player as the source. If connecting to a 107/207 you'll need to cut off the RCA ends and feed the bare ends into the phoenix connector as shown. Connect this to the Line Input on the rear of the amplifier.

Line level input (RCA jacks)
210 models



Line level input (phoenix block)
107/207 models





Now- in order to use this source, the correct input configuration must be chosen first. Using the rotary nob, navigate to System Configuration - Input Configuration. Select what type of input you are using (e.g., Line, -10 dBU, etc.). Next, select "Trim" and adjust the level until the audio pulses peak around 0 dB on the field strength meter.

9. Optimize the system.

At this point the system should be producing audio, but it has not been optimized for best performance. It also has not been fully calibrated per IEC Specification 60118-4, which is required by the ADA.

Refer to the User Manual for full instructions on how to optimize the system for best performance, and to commission the system to the IEC 60118-4 Specification. Optimization will produce better results and happier customers when done correctly.

*After optimization, the **output** levels of the loop amplifier **should never be adjusted**, as these have now been calbrated to the loop(s). Adjust **input** type and level to compensate for low (or high) input levels.*

Williams Sound highly recommends that this equipment be installed by a ***Qualified Installer*** (a person who has taken an **Advanced Loop Class).** We recommend the **Williams Sound Advanced Loop Class,** because it includes specific information about Williams Sound Loop Amplifiers in the designing, installing and commissioning of loop systems.

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