



RDL[®]
Radio Design Labs

SPECIALISTS IN PRACTICAL PRECISION ENGINEERING™

PT™ SERIES Model PT-AMG2 Audio Monitor / Generator

- Portable Audio Generator and Monitor
- Mic and Line Level Audio Tone Metering
- Selectable Mic / Line Level Input
- Selectable Mic / Line Level Output
- Precision Stable Audio Reference Level
- Balanced and Unbalanced Inputs / Outputs
- Operation from 9 V Batteries or 24Vdc
- Connectorized Inputs and Outputs
- +4 dBu or +6 dBu Reference Level
- Portable or Bench Operation

APPLICATION: The PT-AMG2 is the ideal choice in applications requiring both a stable audio signal source and precision metering for analog audio system verification, alignment and testing. This portable audio instrument is comprised of a precision audio oscillator, precision level meter and a monitor speaker.

The oscillator section features two outputs. The balanced output is front-panel switch selectable MIC or LINE level (professional standard). The unbalanced output operates at -10 dBV (consumer standard). The 700 Hz oscillator is in the midrange passband of any audio system, yet is easily distinguished from 400 Hz or 1 kHz tones without producing listening fatigue associated with 1 kHz oscillators. The oscillator features output stability suited to accurate bench top audio testing. The unique PT-AMG2 output network produces the equivalent output level into low impedance (200 Ohms) and higher impedance (>1000 Ohms) mic preamps. This is ideal for 50 dB mic-to-line gain setup of any RDL module or other industry mic preamp.

The audio metering circuit features two inputs. The balanced input is front-panel switch selectable for MIC or LINE input (professional standard). The unbalanced input operates at -10 dBV (consumer standard). Either input may be used to feed the metering circuit, which is referenced to the input being used. For balanced +4 dBu inputs, the meter **0 dB** = +4 dBu. For unbalanced inputs, the meter **0 dB** = -10 dBV. The meter provides LED backlit indications readable in light or dark ambient environments. Indications are -20 dB, -10 dB, -3 dB, -1 dB, 0 dB, +1 dB, +3 dB, +10 dB. These increments permit coarse level indication and adjustment, and final level setting to within ½ dB of operating level. When it is desirable to listen to the input signal, the front-panel volume knob can be turned up to the desired listening level. The **IN PHASE** LED illuminates when the oscillator output and metering input are in phase (0 dB level or greater) making the PT-AMG2 ideal for checking system and cable phase.

Because both the input and output sections may be switch selected to MIC or LINE level, the PT-AMG2 is ideal for adjusting gain in any combination: Mic to Line, Line to Mic, Mic Level Unity Gain, Line Level Unity Gain, Consumer to Pro, Pro to Consumer. The input and output line level reference is factory set to +4 dBu, but can be set to +6 dBu using a switch located in the battery compartment. When either front-panel level switch is set to MIC, the associated XLR is referenced to -46 dBu, 50 dB below +4. A common, temperature stable precise reference is used for both the oscillator output and metering circuits.

The PT-AMG2 operates either from two internal 9 volt batteries or from an external 12 Vdc to 30 Vdc supply. When operated from the two internal 9 volt batteries, the **LOW BATTERY** LED glows steadily when less than one hour operating time remains. The **POWER ON** LED is illuminated when the PT-AMG2 is operating from internal or external power.

The precise output stability, rugged construction and versatility make the PT-AMG2 the ideal portable or bench top instrument for audio equipment level adjustment. It may be used in conjunction with an RDL PT-ASG1 when a remote oscillator is needed. Test leads and a bench top stand are included. An optional carrying case (PT-IC1) and AC power adapter (North America; PS-24AS, Continental; PS-24AX) are available. The PT-AMG2 is an indispensable instrument for both the audio alignment bench and the field tool kit.



PT™ SERIES

Model PT-AMG2

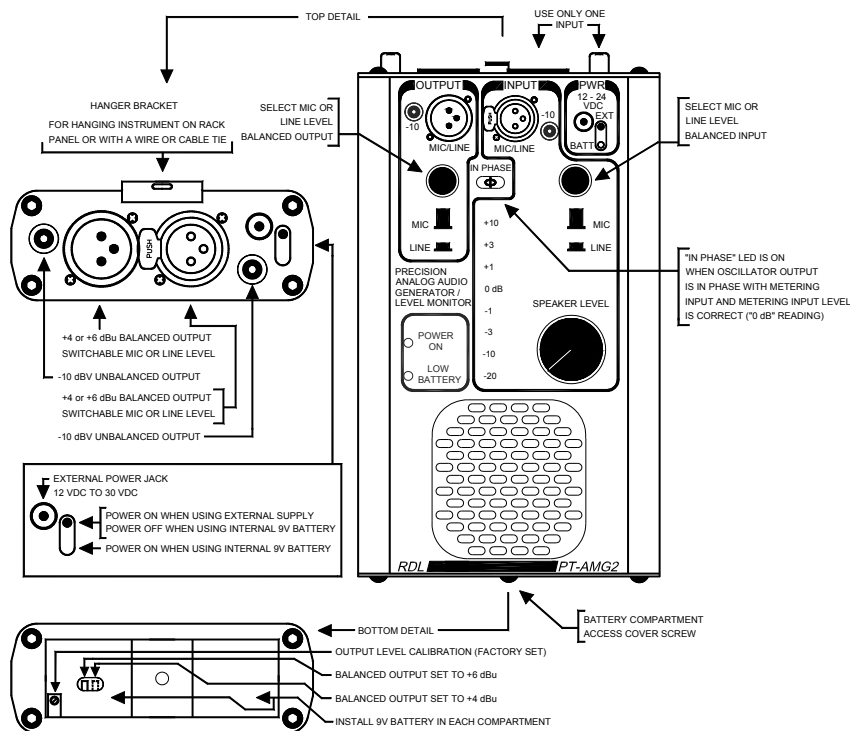
Audio Monitor / Generator

Installation/Operation



EN55103-1 E1-E5; EN55103-2 E1-E4

Typical Performance reflects product at publication time exclusive of EMC data, if any, supplied with product. Specifications are subject to change without notice.



TYPICAL PERFORMANCE

Outputs (2):	XLR (front-panel switch selectable Mic or Line Level), Phono (consumer level)
Balanced Output Level (Selectable):	
Line:	+4 dBu (+6 dBu switch selectable, 2.5 kΩ load)
Mic:	-46 dBu (2.5 kΩ load, 50 dB below +4 dBu)
Unbalanced Output Level:	-10 dBV
Oscillator Frequency:	700 Hz nominal
Output Stability:	Better than 0.01 dB
Inputs (2):	XLR (front-panel switch selectable Mic or Line Level), Phono (consumer level)
Balanced Input Level (Selectable):	
Line:	+4 dBu (+6 dBu switch selectable)
Mic:	-46 dBu MIC (50 dB below +4 dBu)
Unbalanced Input Level:	-10 dBV
LED Indicators (11):	-20, -10, -3, -1, 0, +1, +3, +10 (level, dB ref. input selector) IN PHASE (input signal in phase with oscillator +4°/-16°) POWER ON (battery or external) BATTERY LOW
Power Requirement:	9 V Internal (2), 12 to 30 Vdc External @ 45 mA
Dimensions:	Height: 6.35 in. 16.13 cm Width: 3.80 in. 9.65 cm Length: 1.39 in. 2.53 cm

EMC:

