



The TTG1 was created to deliver a standard 2-tone (700 and 1900 Hz) audio source for testing Ham radio transmitter, amplifier and modulation settings. It is an excellent low distortion oscillator to analyze SSB and AM transmitter performance for Intermodulation distortion (IMD) products, harmonic splatter, and excessive audio compression and modulation qualities. This type of testing is used as a measure of transmitter linearity. Linearity affects both SSB fidelity and the amount of SSB splatter which may cause adjacent channel interference.

The TTG1 operates on a 9V battery. The line level out (150mV – 3V) may be connected directly to the microphone connector of most transceivers. Transmitter linearity may be

checked by examination the 2-tone envelope on an oscilloscope or station monitor. For more precise measurements, IMD can be measured with a spectrum analyzer. The TTG1 makes an ideal companion to the SMT and SMT-Pro station monitors as it proves a repeatable modulation source for viewing the trapezoid display.

In addition to the line level output, the TTG1 also has an amplified low distortion 8 ohm output to drive an external speaker. By placing the speaker near the transceiver microphone, the entire modulation chain can be measured. This also allows you to make measurements without the bother of wiring a microphone connector. Also provided directly from the front panel, are screwdriver calibration adjustments for the two tone frequencies and amplitude balance.

TTG1 frequencies are 700 Hz and are 1900 Hz, which display results in 3rd order products of 3100 Hz and 5th order products of 4300 Hz. The amplitude of these unwanted outputs usually increases as the transmitter output is increased.

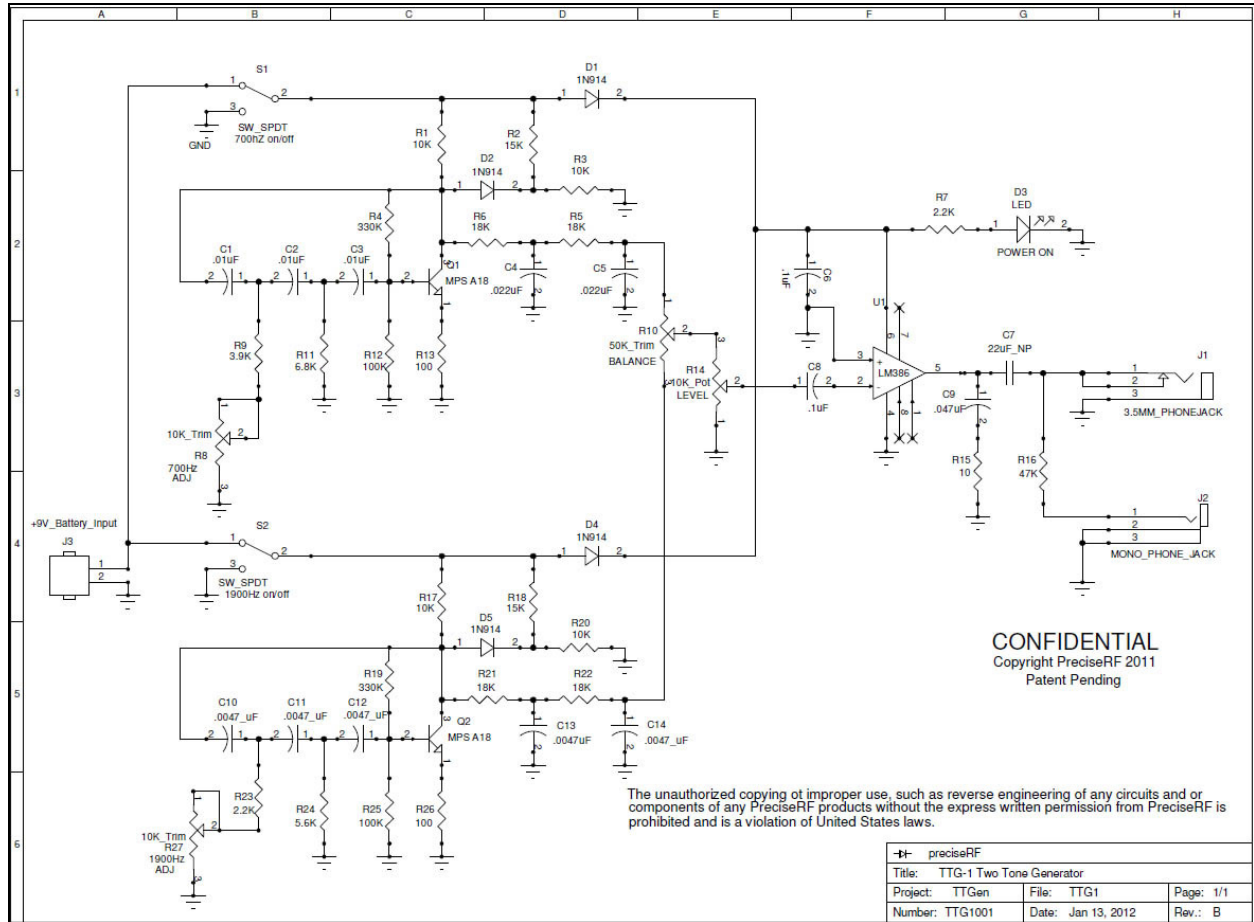


Specifications	
Two tone frequencies:	700Hz 1900Hz
Wave shape:	Sine wave
THD distortion:	Less than 1%
IM Distortion:	-30db or less
Output level (line):	Adjustable 150 mV – 3V P-P
Output impedance (line):	47K
Output Level (speaker):	Adjustable 100mW – 2 Watt
Output impedance (speaker):	8ohms
Amplitude balance range:	+/- 20dB
Frequency adjustment range:	+/- 50Hz 700Hz +/- 75Hz 1900Hz
Frequency stability:	Drift less than 1% after 30 minutes warm up
Power requirements:	10mA 9 volt DC Duracell MN1604 6LR61 or equivalent
Physical:	1 lbs 4 x 3 x 1.2 in
Application:	Transceiver and Amplifier IMD and distortion testing



Each TTG1 comes completely assembled in a premium shielded die cast aluminum alloy A380 housing. Each housing is blue baked enamel per Federal Standard 595 #25109 over primer wash per DOD-P-#25109 over primer wash per DOD-P-15328

PreciseRF warrants its products to be free from defects in material and workmanship for one (1) year from the date of purchase. If you need support or service for your PreciseRF product, whether the product is under warranty or otherwise, please contact PreciseRF and arrange for a return or repair authorization. To order, or for more information and application support check:



All products are calibrated and tested to meet or exceed published specifications. The optional NIST calibration certificate is provided for users needing a calibration reference showing the actual performance achieved. This calibration is done using NIST traceable instruments. Some test and measurement equipment was calibrated at the PreciseRF laboratory using NIST traceable instruments. The item calibrated may be used as a calibration reference only, and shall not be used as a NIST calibration standard. This certificate shall not be reproduced without the express written permission from the calibration facility.

PreciseRF warrants its products to be free from defects in material and workmanship for one (1) year from the date of purchase. If you need support or service for your PreciseRF product, whether the product is under warranty or otherwise, please contact PreciseRF and arrange for a return or repair authorization. Manufactures Suggested Retail Price (MSRP). Prices and specifications subject to change without notice.

