

Product Specification

Features

- 200 W Output Power
- Digital (class D) amplifier
- 94 dB Dynamic Range
- 90 % power efficiency
- Avoids quality losses due to audio compression
- 128 times digital interpolation filter stage and analog filter stage
- Range of up to 300 ft (line of sight)
- Avoids reception errors by employing ½ rate forward error correction
- Mute Function
- No switch-on/ switch-off plops
- Short-circuit Safe Output
- Only one supply voltage required
- Power-Down Feature

Applications

- Wireless home theater systems
- Wireless hi-fi stereo speaker systems

General Description

The Model 1200 receiver/ amplifier will receive a digital audio signal that is being transmitted in the 2.4 GHz range by either the Model 1000 or Model 2000 transmitter. The recovered audio signal will pass a digital as well as an analog filter stage to eliminate out-of-band components and is amplified to the maximum output power of 200 W to drive a speaker unit.

By receiving the signal in a digital format, noise and quality losses that are inherent with conventional analog systems are avoided.

The Model 1200 receiver/ amplifier will apply forward error correction to the received signal in order to maximize reception robustness.

The amplifier is a digital (class D) amplifier. The typical power efficiency is 90 %.

The Model 1200 receiver/ amplifier will enter a Power-Down Mode if no valid signal is received. It will return to active mode when a valid signal is detected.

Reference Data (Preliminary)

PARAMETER	CONDITIONS	MIN.	TYP.	MAX.	UNIT
OVERALL PERFORMANCE					
Dynamic range	A-weighted	89	94		dB
Output power	THD = 10%, 8 Ω , $V_P = 60$ V		200		W
	THD = 0.5%, 8 Ω , $V_P = 60$ V		150		W
Non-repetitive peak output current				tbf	A
Repetitive peak output current				tbf	A
Total harmonic distortion	$P_O = 1$ W		0.1	0.3	%
Low frequency roll-off			tbf		Hz
High frequency roll-off			tbf		kHz
Noise output voltage	RS = 0, Note 1		140	280	μ V
	RS = 10 k Ω , Note 1		140		μ V
Supply voltage ripple rejection			66		dB
Reception range	line of sight, Note 2			200	ft
	through obstructions, Note 2			60	ft
	line of sight, Note 3			100	m
	through obstructions, Note 3			30	m
DC POWER CHARACTERISTICS					
DC supply voltage		30	50	60	V
Power consumption	Peak output power			4	A
	Quiescent current		230		mA
	Power-down mode		165		mA

Notes:

- 1) Noise output voltage measured in a bandwidth of 20 Hz to 20 kHz
- 2) When used in conjunction with a Model 1000 or Model 2000 transmitter, American model
- 3) When used in conjunction with a Model 1000 or Model 2000 transmitter, European model

Contacting Amphony Support

For contact details and Local Sales Representatives, visit the Amphony web site at:

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