

Power Output	2 x 15 watts RMS into 4 ohms/2 x 8 watts RMS into 8 ohms
Frequency Response	20-20,000 Hz
Total Harmonic Distortion (THD)	<0.4% @ 1W per channel
Minimum Impedance	4 ohms
Signal-to-noise Ratio (SNR)	103 dB, A weighted
Minimum Input Impedance	10K ohms
Input Sensitivity	680 mV
Channel Separation	95 dB
Efficiency	>90%
Dynamic Range	>100 dB
Headphone Power Output	150 mW into 16 ohms
Case Dimensions	3.8" W x 1.25" H x 4.75" D (96.8mm W x 31.8mm H x 120.7mm D)
Overall Dimensions	3.82" W x 1.44" H x 5.16" D (97mm W x 36.6mm H x 131.1mm D)

## **CAUTION**

### CAUTION

For indoor use only. Your 50-20805 should not be exposed to any outdoor elements including dust, water, moisture, humidity or temperatures outside normal living conditions. There are no user serviceable parts inside your amplifier, therefore do not open your 50-20805 or it will void your warranty. For optimum life of your 50-20805 place it in a location that is open and where air can fully circulate. Use a clean cloth to dust your 50-20805. Your amplifier comes with a compatible power supply. If an inappropriate power supply is used and the unit is damaged the warranty will be voided.

## **QUESTIONS / PROBLEMS**

#### QUESTIONS / PROBLEMS

Consult this Owner's Manual for set-up and operation. Should you have questions or issues not found in the manual please contact your place of purchase.



50-20805

# **OWNER'S MANUAL**

# 30 WATT CLASS D STEREO AMPLIFIER WITH HEADPHONE AMPLIFIER



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## INTRODUCTION

#### INTRODUCTION

Thank you for purchasing the 50-20805 Class D Mini Amplifier. The 50-20805 uses a Texas Instruments TPA3116D2. The amplifier includes thermal and short-circuit protection. The TPA3116D2 is known for it's efficient and clean sound stage. Also built-in the 50-20805 is a Texas Instruments headphone amplifier using the TPA6110A2 Stereo Headphone Audio Amplifier. The TPA6110A2 is capable of delivering 150mW of continuous RMS power per channel into  $16\Omega$  loads. THD+N when driving a  $16\Omega$  load from 5 V is 0.03% at 1kHz, and less than 1% across the audio band of 20Hz to 20kHz.

## **OPERATION**

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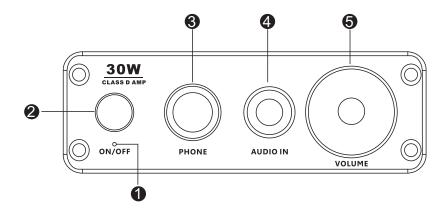
Please read the following instructions prior to powering on and connecting your 50-20805 to speakers. Should you have any questions at any time during the installation of your amplifier please contact your place of purchase.

## **SPECIAL NOTE**

#### SPECIAL NOTE

Insert the Power Supply cable into your amplifier before plugging into AC Power. Also, prior to powering your amplifier on, please turn the Volume Control Knob all the way to the LEFT. Powering your amplifier on at higher volume may damage your speakers.

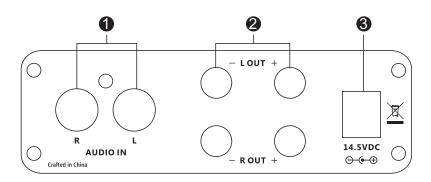
# FRONT PANEL



1. Power LED: Indicates the unit is receiving power and is fully operational.

- 2. Power On/Off Button: Press the power switch IN to power the unit ON Press the power switch again (OUT) to power the unit OFF.
- 3. Headphone Jack: Your 50-20805 doubles as a headphone amplifier that will work with any headphones. The '4" stereo jack allows connection of standard home and studio style headphones. You may need to purchase an adapter that will allow 3.5 mm style headphones to be used. When headphones are plugged into the headphone jack the speaker outputs are disabled.
- **4. 3.5** mm Audio Input: The unit features a convenient front mounted 3.5 mm stereo input for quick connection of iPods, MP3 players, and other portable audio devices. When a device is plugged into the 3.5 mm audio input the rear mounted RCA input jacks are disabled. This allows you to permanently connect a device to the rear RCA audio inputs and switch to a portable device by plugging into the front 3.5 mm input.
- 5. Volume Control Knob: This knob controls the volume level of sound.

### **REAR PANEL**



- RCA-Type Audio Inputs: RCA-type line level input for permanent connection of larger devices such as CD players, PCs, and DVD Players. When a device is plugged into the front 3.5 mm input, the RCA input jacks are disabled.
- 2. Speaker Outputs: The speaker output connections utilize high current binding posts that will accept standard banana plug connectors (sold separately). The connectors are color coded for easy polarity identification. If you do not have banana plugs available, the binding posts can be unscrewed and wire can be inserted into the posts and will accept 12AWG to 20AWG wire speaker wire.
- 3. Power Connection: The 50-20805 operates on 14.5VDC and should use the power supply that has been included.

## **CONNECTING SPEAKERS**

#### **CONNECTING SPEAKERS**

The 50-20805 features binding posts for more convenient speaker connection. These binding posts will accept bare wire, 3/8" spade terminals, or standard banana plugs.

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