



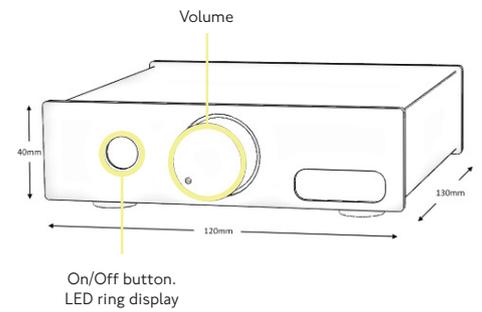
 **BANTAM**  
*gold*

**Temple Audio Bantam Gold**  
25W Stereo Digital Amplifier  
Made in England

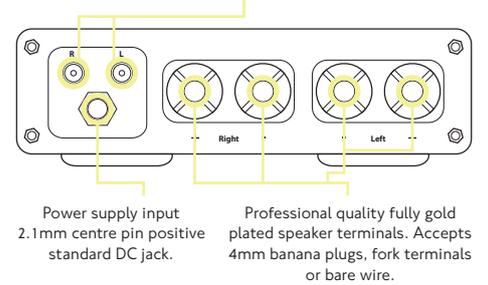
# Detailed Overview

## Electrical Specifications

Channels	2	
Maximum RMS Power	25W per channel	4 $\Omega$ load
Total Harmonic Distortion	0.007%	10 Watts, 6 $\Omega$ load
Output Stage configuration	Bridge Tied load (balanced)	
Power at less than 0.1% distortion	23W	4 $\Omega$ load
Signal to Noise Ratio	101dB	A weighted
Damping Factor	>13	8 $\Omega$ load
Output Impedance	0.6 $\Omega$ s	
Frequency Response (+/- 1dB)	15Hz - 25kHz	4 - 8 $\Omega$ load
Voltage gain (Low gain setting)	x10	
Maximum input for full scale output (Low gain)	1V RMS	
Voltage gain (High gain setting)	x80	
Maximum input for full scale output (High gain)	125mV RMS	
Input Impedance	12.5K $\Omega$ to 33K $\Omega$	
Power Efficiency	>90%	8 $\Omega$ s
Idle power draw	1.9W	120mA
Stand by power draw	0.075W	5mA
Crosstalk	-90dB	
DC Offset	Within +/- 3mV	
Power supply input voltage range	9V - 18V DC	
Power supply current requirement	>2A	



Professional gold plated Neutrik Branded RCA/Phono connectors



- Shielded professional audio cable used internally.  
All connections 'soldered over' for reliable low impedance connection.
- Gold plated military spec PCB. PCB Assembly and testing carried out in house at Temple Audio.
- Precision machined enclosure from aircraft grade aluminium. CNC machining operations carried out in house at Temple Audio.

The Bantam Gold comes with a 15V 3A power supply made by Powerpax UK.

The power supply is suitable for worldwide use.

We supply Australasian, British, European or US mains plugs as standard depending on the destination country.



The Bantam Gold is one of the most advanced Class-D Amplifiers available.

At the heart of the Bantam Gold is the ADAU1592 audio amplification chip from Analog Devices. This IC generates a differential PDM pulse train from the analog input.

Noise shaping is achieved using a proprietary 5th order delta sigma spread spectrum technique running at 12.88Mhz. Master clock signal is generated using an external precision crystal oscillator with a tolerance of  $\pm 5$  ppm.

Three separate voltage rails are supplied to the low power circuitry of the chip using very low noise linear regulators arranged in a double regulated configuration.

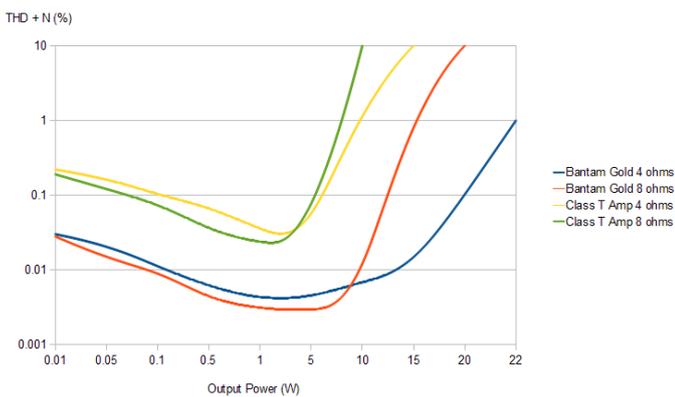
A 4500uF capacitor buffer comprised of NP0 ceramic, low impedance tantalum and Nichicon Low impedance electrolytic capacitors provides transient power to the high power circuitry.

A proprietary output stage unique to Temple Audio forms the high power audio signal from the pulse train in the most linear way possible. Far outperforming rival technologies in efficiency, linearity and frequency response.

The DC offset is automatically calibrated on power up to within 5mV. No need for manual recalibration when changing to a different power supply.

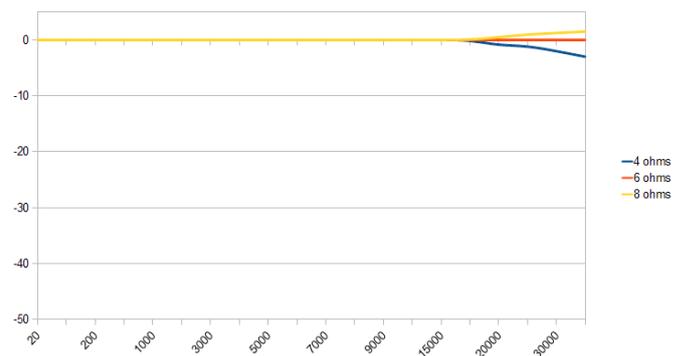
Self Protection features include automatic Over Temperature, Over Current and Short Circuit protection. When a fault is detected the amplifier automatically shuts down and will Automatically recover when the fault is cleared.

## THD Versus power

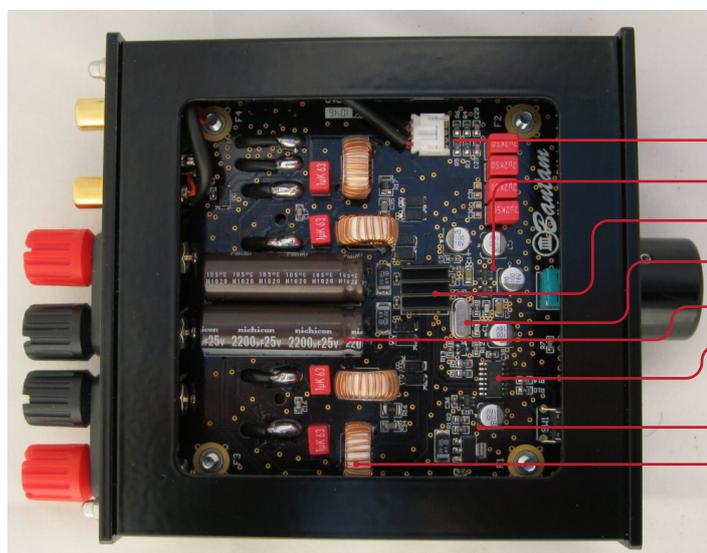


- Total harmonic distortion + N. This is a measure of how accurately the Amplifier reproduces the sound.
- Lower distortion is better.
- For comparison we have included a typical Class T amplifier as well as 4 and 8  $\Omega$  speakers.

## Output Signal versus Frequency



- Frequency response from 20Hz to 35kHz. A flatter more level line is better.
- 4, 6 and 8  $\Omega$  speakers shown for comparison



- Input filter
- Analog power supplies 2
- Main Processing IC ADAU1592
- Precision external clock
- Power Supply Capacitor Buffer
- Supervisory Microprocessor
- Digital power supply 1
- Proprietary Temple Audio Output Stage

# Buying Information

## Variations

Standard finishes:

Powder Coated Black.

*A tough black powder coat finish that is highly durable and resistant.*

Anodised Silver.

*A cosmetic aqua blasted surface preparation with a tough clear anodised finish.*



## Custom Finishes

At customers or dealers request we can produce a wide variety of colours in both powder coat or anodising.



**Bypassed volume pot:**

A bypassed volume pot version is available where the volume is not adjustable. By comparison to the Standard Bantam Gold the volume is fixed at maximum. This is intended for users who already have another volume control in the system and do not want a second one. When the volume pot is removed the Bantam Gold has no moving parts. As such it is incredibly durable.

## Warranty Information

The Bantam Gold comes with a 3 year manufacturers warranty. Should any defect in materials or workmanship be discovered in the 3 year period, Temple Audio will repair or replace the unit without any charge for parts or manual labour.

The warranty does not cover damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature or external causes.

The warranty does not cover damage caused by unauthorised servicing or modification of the unit.

## Company Information

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Cheshire  
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United Kingdom

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A family Business. Registered in England.  
Email: [sales@templeaudio.net](mailto:sales@templeaudio.net)  
Telephone: 07717 536254

## Ordering Information

To order a Bantam Gold visit our web store [www.templeaudio.net](http://www.templeaudio.net). Or contact your local HiFi dealer and ask them to consider stocking the Temple Audio Bantam Gold.

## Truly made in England.

The Bantam Gold is made entirely in the UK.

All raw materials are purchased from stockists in the UK.

Circuit Boards are printed in the UK and assembled in house at Temple Audio  
All machining processes are carried out either in house at Temple Audio or at trusted engineering companies around Manchester

Final manufacturing assembly and testing is carried out in house at Temple Audio