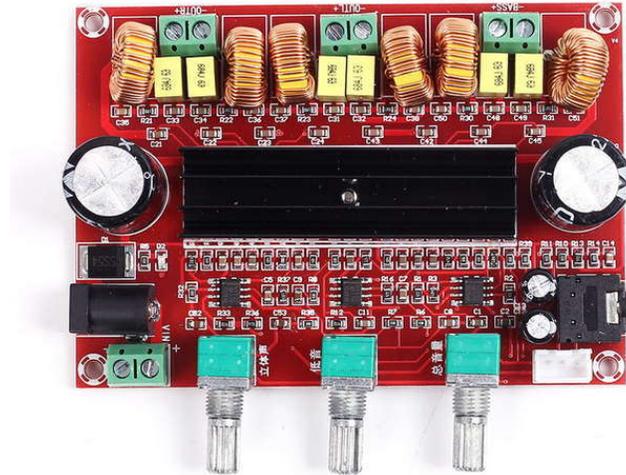


TPA3116D2 Digital Subwoofer Amplifier Board DC12V-24V 2x50W 100W XH-M139 2.1 Channel Digital Power Amplifier for DIY Audio



### 1. Description:

This product is a built-in TPA3116D2 chip with the power of 2\*50W+100W channel digital power amplifier board.

### 2. Parameters:

Parameter	Value
Chip	TPA3116D2*2
Supply voltage	Recommendation DC24V (range 12-26V)
Output power	50W*2 , 100W*1 bass-heavy channel
Output load	4-8 Ohm
Frequency Response	14-100KHz
Signal to noise ratio	100DB
Vocal tract number	3(Left+Right+bass-heavy channel)
Switching frequency	1.2MHz
Net weight	136g
Appearance size	100*70*30mm

### 3. Features:

- 1>. Dual element configuration.
- 2>. Powerful dual core.
- 3>. Dual front stage operational amplifier.
- 4>. Array element configuration is perfect.

### 4. Digital power amplifier:

The analog power amplifier circuits are class A, class B or class AB power amplifier. The amplifier tube operates in the linear region when the power amplifier works normally.

After overload, the power amplifier works in the saturation region, and harmonic distortion occurs. The distortion degree increases exponentially, and the sound quality rapidly goes bad.

The digital amplifier is always in the saturation region and the cut-off area during the power amplification. As long as the amplifier tube is not damaged, the distortion will not increase rapidly.

### 5. Function:

- 1>. Dual configuration: Power input mode can use DC plug, can also use the terminal power supply. In addition, the audio input is also equipped with two input terminals, 35 audio head or 3P plug can be used.
- 2>. Filter induction array: Inductance coil has limited effect on communication, It can form a high pass or low pass filter with resistors or capacitors, The phase shifting circuit, the vibration adjusting circuit and the six inductors form the array, and the effect is outstanding.
- 3>. MB Series: The superior, safe, environmentally friendly Flame retardancy is fully compatible with surface mount technology. Large terminals are selected to meet the high power requirements.

### 6. Application:

- 1>. Connected mobile phone computer
- 2>. Home Theater
- 3>. DIY audio

### 7. Using Attention:

Please do not connect the power and the speaker freely. Please refer to the data provided by the product description for reasonable collocation. Otherwise, the function board will be damaged.

### 8. Warm tips:

Power amplifiers can be noisy in some cases. Here are some common reasons

- 1>. Hardware problem:

The power supply is unstable, or the power supply module generates interference.

The influence of switching power supply as power supply.

Using transformer power supply, do not do shielding isolation.

There are electromagnetic interference in the use of the environment.

The audio input device itself has problems.

#### HOW TO SOLVE:

Power and power amplifier should maintain a certain distance. To avoid electromagnetic interference, it is best to use high quality power supply, power supply will be stable.

If you use transformers and other power supplies, it is best to use iron cover to prevent electromagnetic interference.

- 2>. Software problem:

Interference of Audio driver settings

Interference of Player effects

**HOW TO SOLVE:**

When the power amplifier is connected to the computer or mobile phone, the relevant special effects software or sound card driver special effects can be set off. Using special effects to ensure that the output of the power amplifier is not affected

