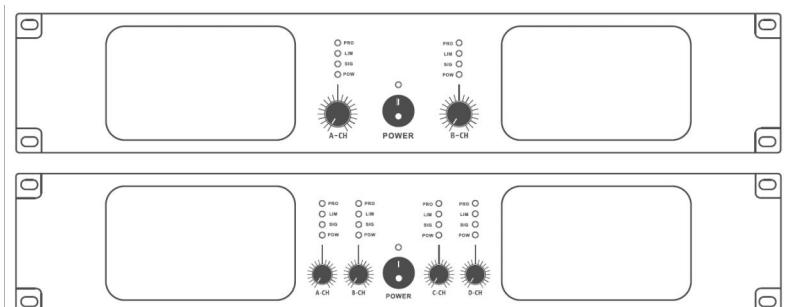


# User Manual



**2 Channhels Pro Sound Amplifier**  
**4 Channhels Pro Sound Amplifier**

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## Safety Instructions

- Please read this manual carefully before use.
- Pay attention to the safety warnings appearing in this manual.
- It is recommended that you keep this manual for future reference.
- The safety symbols and warnings shown in this manual are to prevent personal injury and property damage caused by improper operation. Please read this manual carefully before using this product. Be sure to understand the various safety symbols and warnings to complete them. Everyone is aware of the potential danger.

When installing this unit

- Please use it within the specified voltage range of this machine. Using a higher voltage may cause electric shock or fire.
- Never cut, twist, damage or replace the power cord at will. When using this unit, please avoid getting close to the electric heater to avoid causing fire or property damage.
- Never place heavy objects on the machine to avoid damage to the equipment, electric shock or fire.
- Because the 70 V/100 V output terminal of this machine can cause harm to the human body, these connectors must not be touched to avoid electric shock. After the product installation and debugging is completed, please confirm that the high-voltage part has been installed with terminal protection covers, and when these terminals are connected to external wires, they must be installed and connected under the guidance of professionals.
- Please install the machine on a place that can bear the weight of the machine or on a stable table. Do not install or set up in an unstable place (such as a shaky table or uneven surface) to avoid personal injury when the machine falls. injury or property damage.
- Never insert or remove the plug with wet hands to avoid electric shock accidents.
- When pulling out the plug, please make sure to pull out the plug body instead of pulling directly on the power cord.
- When moving the machine, be sure to unplug the power plug first. If the machine and plug are moved together, it may cause a fire or electric shock.
- Do not cover the ventilation openings on the machine to prevent the internal temperature of the machine from being too high and causing a fire.
- Never insert or remove the plug with wet hands to avoid electric shock accidents.
- When pulling out the plug, please make sure to pull out the plug body instead of pulling directly on the power cord.
- When moving the machine, be sure to pull out the power plug first. If the machine and plug are moved together, it may  
May cause fire or electric shock.
- Do not cover the ventilation openings on the machine to prevent the internal temperature of the machine from being too high and causing a fire.

## Notes

- If you find any of the following abnormal conditions during use, please turn off the power immediately, pull out the plug quickly and contact your nearest dealer. Do not continue to use the machine until the problem is solved, as it may cause fire or electric shock.
- If you notice smoke or a strange smell coming from the unit.
- If water or metal objects fall into the unit.
- If the unit is dropped or the casing is damaged.
- If the wire is damaged (the wire core is exposed, the wire is broken, etc.).
- If a fault is found (no sound).
- Because the machine contains high-voltage parts, to avoid fire or electric shock, the casing of this machine must not be opened. If you have any problems, please notify your nearest dealer.
- Never place cups, bowls, vases, or other objects containing liquids on the unit. If liquid is accidentally spilled into the machine, it may cause fire or electric shock.
- Never expose the unit to rain or any humid or water-prone place. It may cause electric shock or fire.
- Never put metal objects or flammable objects, nor coins, into the ventilation openings on the machine cover, as this may cause fire or electric shock.
- Please do not place heavy objects on the machine to avoid personal injury or property damage caused by the machine slipping.
- Please do not continue to use the machine when the sound is distorted. This indicates a malfunction and may cause high temperature and fire inside the machine.
- If the machine needs to be cleaned due to long-term accumulation of dust, please notify your dealer to clean the machine regularly to avoid damage to the machine or fire.
- The product is Class I equipment, and the power supply of the equipment must be connected to a power socket with a grounding device to ensure that the equipment is fully grounded.
- This product uses the power plug or appliance input socket as the disconnection device from the grid power supply. For safety reasons, it must be disconnected when necessary.
- If the panel of this machine is upgraded without further notice, please refer to the actual product for specific conditions.

## Product Description

### Features

This series is a high-performance, high-power professional amplifier that can meet the diverse needs of the audio field. It has the following characteristics:

Strong power and strong driving ability;

The heat sink is electrically suspended, and the power crystal is directly pressed against the heat sink, eliminating the thermal resistance transfer of the traditional insulating mica sheet, so that the power tube can quickly release the accumulated heat and achieve heat dissipation without temperature difference with the heat sink;

The fan cooling method adopts forced air cooling, which is more efficient;

The power supply adopts Class AB power supply, which is efficient and has good sound quality;

The unique power-on output gradually increases function, which is more in line with the human ear hearing effect;

Recoverable power overload protector;

Power supply startup surge current limiter;

The sound is high-definition, low noise, and low distortion;

The sound frequency bandwidth is wide, and the hearing sense is accurate;

### Protection Function Overview

This series of amplifiers has perfect protection functions, which can prevent damage to the amplifier and speakers due to short circuit, output DC and overheating;

1> Short circuit protection: When the output load is short-circuited, the machine will automatically cut off the output, thereby effectively protecting the machine;.

2> Output DC protection: When the machine fails and the output signal contains DC components, the machine will automatically cut off the output to avoid damage to the speakers by DC components;

3> Overtemperature protection (double protection of radiator and transformer overtemperature): When the radiator temperature reaches 60 degrees (or the transformer temperature reaches 65 degrees), the fan accelerates cooling;

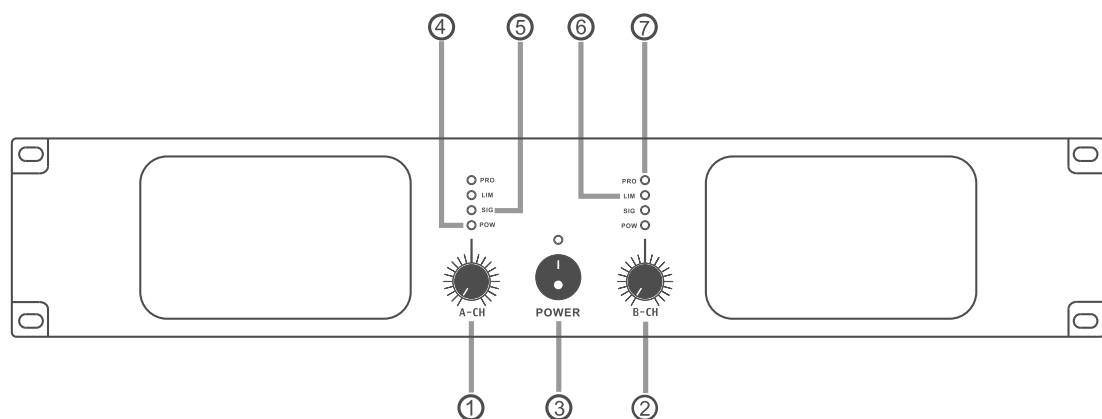
When the radiator temperature reaches 100 degrees (or the transformer temperature reaches 96 degrees), the internal temperature sensor of the amplifier activates the protection circuit and compresses the power output to 1/20 to prevent the machine temperature from causing harm to the human body and protect the amplifier from damage.

4> New technology (output gradual increase function): When the machine is turned on for the first time or the output is restored due to a fault, the output signal will gradually increase from small to large, thereby avoiding the damage to the human ear caused by sudden sound changes, which is completely in line with the human ear effect.

## Names and functions

### Front Panel:

Note: 2-channel 4-channels panel have the same functions



#### 1. Channel A volume

Turn left to decrease volume, right to increase volume

#### 2. Channel B volume

Turn left to decrease volume, right to increase volume

#### 3. Power switch

Press (I) to turn on, press (O) to turn off

4. POW operation indicator, green light is on when normal

5. SIG or dB level indicator, flashes when there is sound  
6. LIM limit indicator

Yellow light is on when close to clipping distortion

7. PRO protection indicator

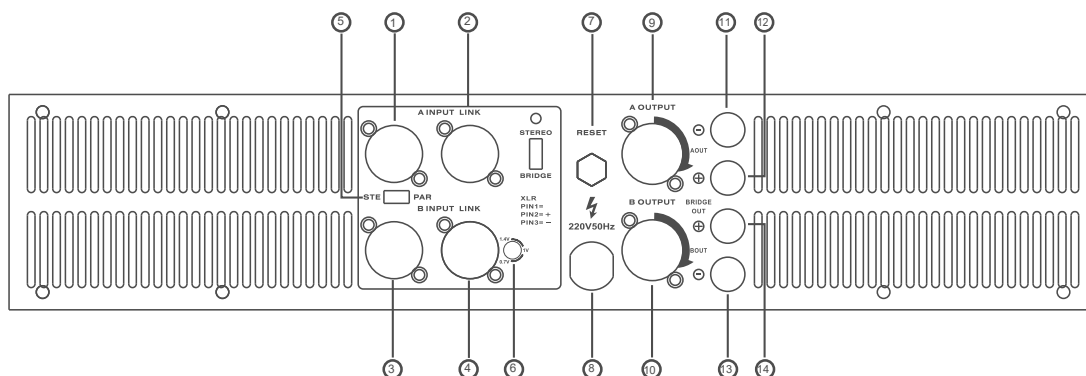
Red light is on when there is a fault, and it is normal when it is turned on

1> The signal indicator flashes, indicating that the channel has signal output;

2> The peak indicator flashes, indicating that the input level is too high and the volume should be turned down.

## Rear Panel:

Note: 2-channel 4-channels panel have the same functions



### 1. A I N P U T

A channel front signal input

### 2. A L I N K

A channel front signal output

### 3. B I N P U T

B channel front signal input

### 4. B L I N K

B channel front signal output

### 5. A B channel S T E / P R

Pull left for stereo, right for mono

### 6. A B channel sensitivity knob

Signal sensitivity 0.7 V - 1.4 V adjustable

7. R E S T E  
Overload reset switch, press after a few minutes after tripping

### 8. Power line

Input voltage 200V - 240V

### 9. A O U T P U T

Power amplifier output of C channel

### 10. B I N P U T

Preamplifier signal input of D channel

### 11. A - O U T

Negative power amplifier output of A channel

### 12. A channel + O U T

Positive power amplifier output of A channel

### 13. B - O U T

Negative power amplifier output of B channel

### 14. B channel + O U T

Positive power amplifier output of B channel

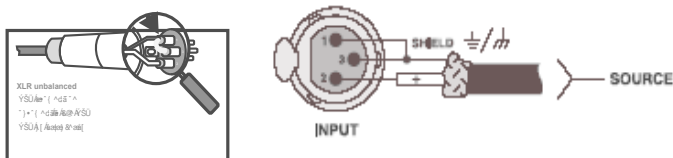
## Function settings and signal line connection


## 1&gt;Mode selection and signal line

Balanced input connection pin diagram:



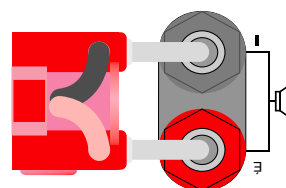
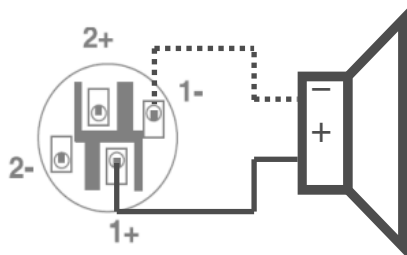
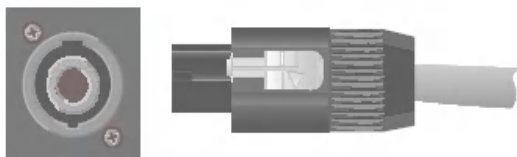
Unbalanced input connection pin diagram:



 All input and output sockets and output terminals are on the rear panel of the product. Please have professionals perform the wiring and be sure to turn off the power when wiring. The manufacturer will not be held responsible for any damage to the machine or personal injury caused by incorrect operation.

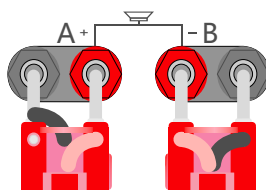
### Output Interface

- The "1+" of the SPEAKON socket or the red terminal ("+" end) of the binding post is connected to the positive pole of the speaker, and the "1-" or black terminal ("-") end of the SPEAKON socket is connected to the negative pole of the speaker (see the figure below);
- Only loads that are compatible with the power and load impedance of the amplifier can be connected to the output interface of this amplifier;
- When bridging the output, the rear panel toggle mode selection switch must be placed in the bridging position BRIDGE to avoid abnormal sound;



Stereo/parallel connection

SPEAKON socket bridge connection method Note: Bridge connection only supports 8Ω





# Technical Parameters

## Specifications--2 Channels

Model	TCI-P2300	TCI-P2400	TCI-P2500	TCI-P2600	TCI-P2800	TCI-P21000	TCI-P21200	TCI-P21600
Rated Power@8Ohm	2*300W	2*400W	2*500W	2*600W	2*800W	2*1000W	2*1200W	2*1600W
Output Mode	4-8 ohms( $\Omega$ )							
Intermodulation distortion 60HZ/7HZ 4: 1	<0.04%							
Damping coefficient	Single channel operation, 8 $\Omega$ load 400HZ ( $\geq 300$ )							
Frequency Response	20-20KHZ $\leq \pm 0.1$ dB							
THD	<0.5% at 1kHz							
S/N 8 $\Omega$ load A-weighted	>100dB	>90dB	>90dB	>90dB	>90dB	>90dB	>90dB	>90dB
Conversion rate	>Single channel operation, 8 $\Omega$ load 10HZ square wave ( $\geq 40$ V/us)							
Input sensitivity	<3 dB, from level without signal to be loaded fully							
Input impedance	Normal operating conditions, 1HZ 20Kohms balanced input, 10Kohms							
Input interface	XLR female socket							
Output interface	OhmXLR							
Protection mode	Short circuit, overheating, overload, undervoltage, output DC							
Min load impedance single channel operation	>4 $\Omega$							
Ambient temperature	Working temperature: -10 C -40 C, storage temperature: -25 C -80 C							
Power Supply	185-240V 50/60HZ							
Power Consumption	1100W	1200W	1500W	1800W	2300W	2900W	3300W	4200W
Dimension	485×410×89mm			485×440×89mm				
Packing Size	550×500×189mm			550×580×189mm				
N.W	10kg	11kg	12kg	13kg	15kg	17kg	18kg	20kg
G.W	12kg	13kg	14kg	15kg	17kg	19kg	20kg	22kg

## Specifications--4 Channels

Model	TCI-P4300	TCI-P4400	TCI-P4500	TCI-P4600	TCI-P4800	TCI-P41000	TCI-P41200	TCI-P41600
Rated Power@8Ohm	4*300W	4*400W	4*500W	4*600W	4*800W	4*1000W	4*1200W	4*1600W
Output Mode	4-8 ohms( $\Omega$ )							
Intermodulation distortion 60HZ/7HZ 4: 1	<0.04%							
Damping coefficient	Single channel operation, 8 $\Omega$ load 400HZ ( $\geq 300$ )							
Frequency Response	20-20KHZ $\leq \pm 0.1$ dB							
THD	<0.05% at 1kHz							
S/N 8 $\Omega$ load A-weighted	>94dB	>93dB	>92dB	>92dB	>90dB	>90dB	>89dB	>88dB
Conversion rate	>Single channel operation, 8 $\Omega$ load 10HZ square wave ( $\geq 40$ V/us)							
Input sensitivity	<3 dB, from level without signal to be loaded fully							
Input impedance	Normal operating conditions, 1HZ 20Kohms balanced input, 10Kohms							
Input interface	XLR female socket							
Output interface	OhmXLR							
Protection mode	Short circuit, overheating, overload, undervoltage, output DC							
Min load impedance single channel operation	>4 $\Omega$							
Ambient temperature	Working temperature: -10 C -40 C, storage temperature: -25 C -80 C							
Power Supply	185-240V 50/60HZ							
Power Consumption	1700W	2050W	2600W	3000W	3950W	4750W	5700W	7500W
Dimension	485×410×89mm			485×440×89mm				
Packing Size	550×500×189mm			550×580×189mm				
N.W	11kg	12kg	13kg	14kg	16kg	19kg	21kg	24kg
G.W	13kg	14kg	15kg	16kg	18kg	21kg	23kg	26kg



**CAUTION:** Do not open the equipment cover arbitrarily, so as not to electric shock. Please contact the professionals to maintain if necessary.