

TAKSTAR®

TAKSTAR®



Guangdong Takstar Electronic Co., Ltd.

Add: Longqiao Road, Longxi Boluo Huizhou Guangdong China 516100

Tel: +86 752 6383644

Fax: +86 752 6383952

www.takstar.com

XR-208

PREMIUM 8-INPUT 2-BUS MIXING CONSOLE

USER MANUAL

● **Foreword**

Thanks for purchasing our mixing console XR-208. XR-208 is very easy in operation and suitable for personal recording, live performance, conference, etc. To assure the optimal performance, please read the manual carefully before operation. The pictures on this manual are just for easy explanation and may be different from the actual product.

Installation

(1) . Mains Connection:

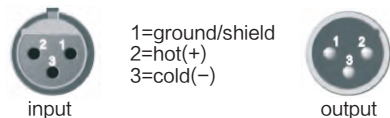
AC POWER IN

Connect the power supply to the 3 pin mains connector on the rear of the console. Use the AC adaptor supplied to connect the console to the mains. The POWER led lights after correct connection

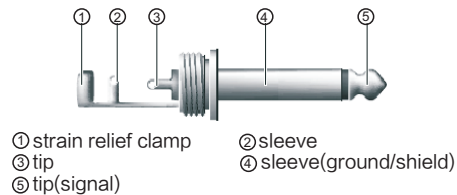
(2) . Audio Connection

You will need a large number of cables for different applications. The illustrations below show how the connectors should be wired. Be sure to use only high-grade cables.

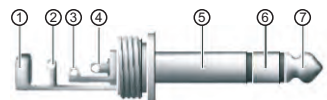
Balanced use with XLR connectors



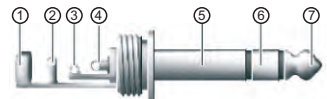
Unbalanced Ø6.3mm TS connector (mono plug)



Balanced Ø6.3mm TRS connector (stereo plug)



Balanced Ø6.3mm TRS headphones connector (stereo plug for headphones connection)



- ① strain relief clamp
- ② sleeve
- ③ ring
- ④ tip
- ⑤ sleeve(ground/shield)
- ⑥ ring cold(-)
- ⑦ tip hot(+)

- ① strain relief clamp
- ② sleeve
- ③ ring
- ④ tip
- ⑤ sleeve(ground/shield)
- ⑥ ring (right signal)
- ⑦ tip (left signal)

(3) . Difference between balanced and unbalanced cable

The best advantage of balanced cable is good performance in anti-noise. Cables at any length will cause interference noise. The longer the cable is, the more noise it will generate. For cables within 2 meters, unbalanced cable is enough. For cables longer than 2 meters, we suggest using balanced cable. If cables are for connecting microphones, we suggest using balanced cables.

Line input	
Impedance	approx. 20kΩ balanced/10k unbalanced
Gain range	+10 to +30dB
Max. input level	+20dBu @ 0dB gain
Frequency response	20Hz-20kHz+0dB/-3dB
S/N ratio	110dB
Total harmonic distortion	0.01%

Special Announcement

- * TAKSTAR reserves the right to update product descriptions and instructions in this manual. Any modification is subject to change without prior notice.
- * For any question of the function, please visit our website www.takstar.com or pay attention to our publications.
- * Specification and outlook are subject to actual product

1009-010-1h

Specification

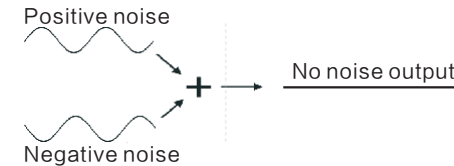
- Stereo inputs
 - Impedance approx. 20kΩ
 - Max. input level +20dBu
 - EQ stereo channels
 - LOW 80Hz/± 15dB
 - MID 2.5kHz/± 15dB
 - HIGH 12kHz/± 15dB
 - Aux sends
 - Impedance approx. 110Ω
 - Max. output level +20dBu
 - S/N ratio 110dB
 - Total harmonic distortion 0.01%
 - Stereo aux returns
 - Impedance approx. 20k balanced/ 10k unbalanced
 - Max. input level +20dBu
 - Main output
 - Impedance approx. 110Ω unbalanced
 - Max. output level +20dBu

- Mono inputs
 - Microphone inputs
 - XLR connector, electronically balanced, discrete input circuit
 - Gain range +10 to +50dB
 - Max. input level +10dBu
 - Impedance approx. 2.2kΩ balanced
 - S/N ratio 110dB
 - Total harmonic distortion 0.01%
 - EQ stereo channels
 - LOW 80Hz/± 15dB
 - MID 2.5kHz/± 15dB
 - HIGH 12kHz/± 15dB



RCA connector is for unbalanced signal. It can connect the CD player or other sound source to the mixing console.

Anti-noise principle of balanced output



Control elements and connectors

This chapter describes the various control elements of your mixing console. All controls, switches and connectors will be discussed in detail.

Mono channels

● Microphone and line inputs

(1) . MIC

Each mono input channel offers a balanced microphone input via the XLR connector (1=ground/shield, 2=hot, 3=cold) and also features switchable +48V phantom power supply for condenser microphones. (Note: Please mute your playback system before you activate the phantom power supply to prevent switch on thumps being directed to your loudspeakers.)

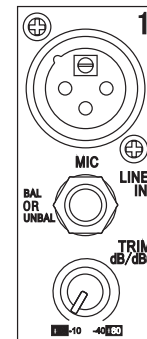
(2) . LINE IN

Each mono input also features a balanced line input on a Ø6.3mm connector. Unbalanced devices(mono jack) can also be connected to these inputs.

(Note: Please remember that you can only use either the microphone or the line input of a channel at any one time . You can never use both simultaneously.)

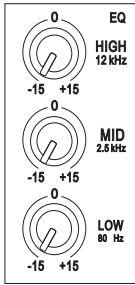
(3) . TRIM

Use the TRIM control to adjust the input gain. This control should always be turned fully counterclockwise whenever you connect or disconnect a signal source to one of the inputs.



● EQ

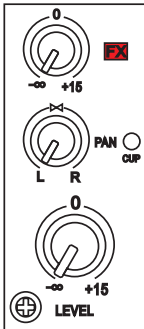
All mono input channels include a 3-band equalizer. All bands provide boost or cut-off up to 15 dB. In the central position, the equalizer is inactive. The circuitry of EQs is based on the technology used in the best known top-of-the-line consoles and providing a warm sound without any unwanted side effects. The result is extremely musical equalizers which, unlike simple equalizers, cause no side effects such as phase shifting or bandwidth limitation.



Frequency Band	Type	Cut-off Frequencies	Max. Boost or Cut-off
HIGH	Upper Band	10kHz	±15dB
MID	Mid Band	2.5kHz	
LOW	Lower Band	100Hz	

● FX sends, panorama and level adjustment

(1) FX



FX sends enable you to feed signals via a variable control from one or more channels and sum these signals to a bus. The bus appears at the console's FX send output and can be fed from there to an external effects device. The return from the effects unit is then brought back into the console on the STEREO AUX RETURN connectors. Each FX send is mono and features up to +15dB gain.

(2) PAN

The PAN control determines the position of the channel signal within the stereo image.

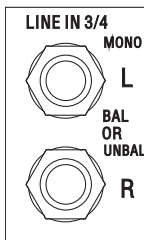
(3) Level

The LEVEL control determines the level of the channel signal in the main mix.

(4) Clip

The CLIP LEDs of the mono channels illuminate when the input signal is driven too high, which could cause distortion. If this happens, use the TRIM control to reduce the preamp level until the LED does not light anymore.

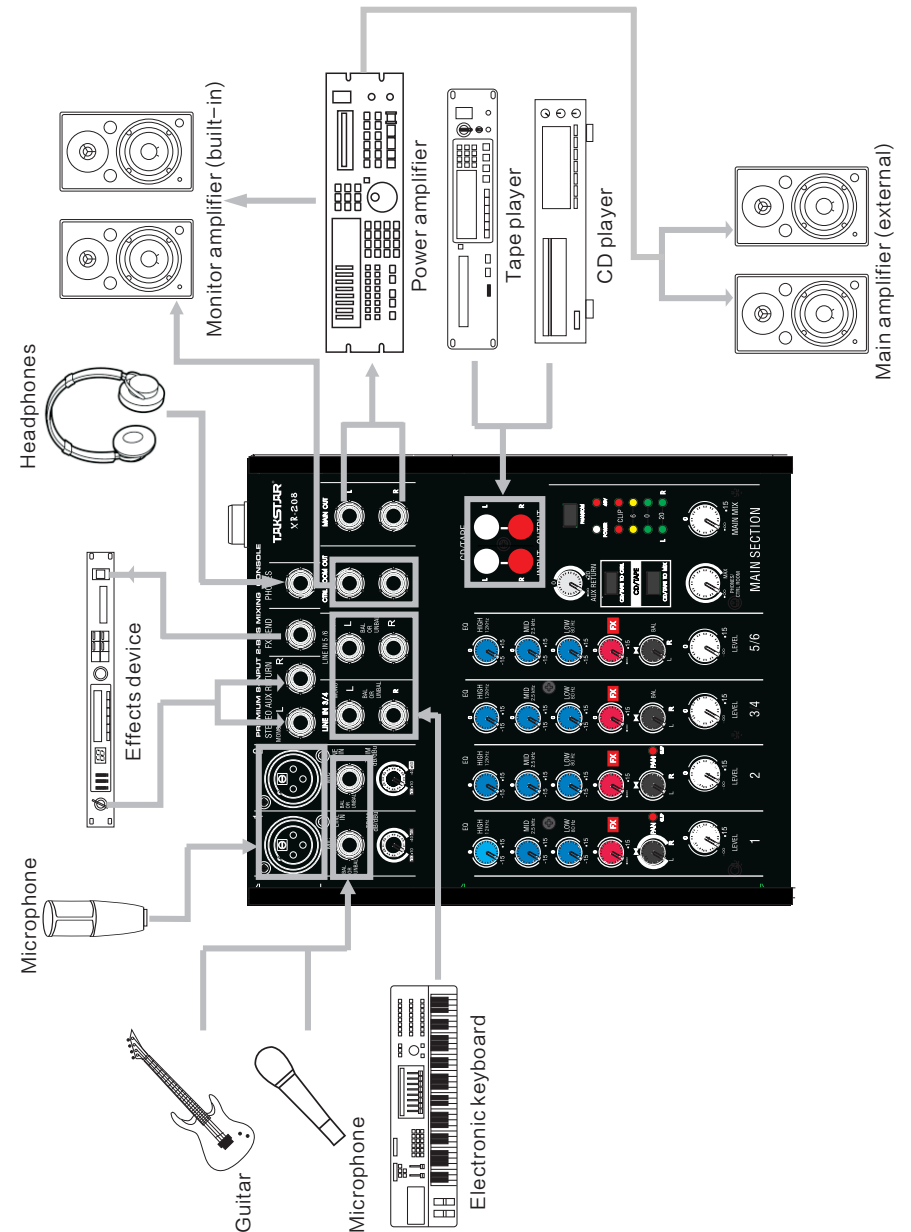
● Stereo channel



(1) Stereo Line Input

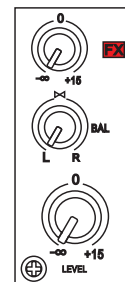
Each stereo channel has two unbalanced line level inputs on Ø6.3mm jacks for left and right channels. If only the jack marked "L" (left) is used and connected with a stereo plug, the channel also operated in stereo.

Connecting sketch map



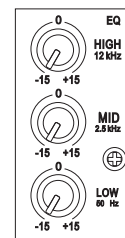
- If the power cable is damaged (for example broken or the core comes out), please get replacement from your local distributor, it may cause fire or electric shock if the damaged cable is used.
- If there's anything abnormal, for example fume abnormal flavor, noise, liquid has been spilled or objects have fallen into the apparatus, please pull out the adaptor from AC socket and ask the distributor for maintenance, or it may cause fire or electric shock if it is continued to be used.
- Do not install near below condition: splashing oil, vapor, stoves or humidifier, unbalanced surface (for example shaking desk or slope), high temperature (for example inside the car with closed window or direct sunshine), high humidity or dusty place.
- Do not put anything on the AC adaptor, or the heat will melt the adaptor housing or cause fire, put the AC adaptor under ventilated environment.
If the apparatus will not be used for a long time, please pull out the AC adaptor from the socket, or it may cause fire.
- Please use the mobile phones away from the apparatus, or it may cause noise.

● FX sends, panorama and level adjustment



please refer to Mono channels (FX sends, panorama and level adjustment)

● Equalizer stereo channels



Please refer to EQ

Connector panel and main section

● Send/return effects path



(1) . STEREO AUX RETURN

The STEREO AUX RETURN connectors are used to bring the output of the external effects device back in to the console. You can instead use these connectors as additional inputs.

(2) . FX SEND

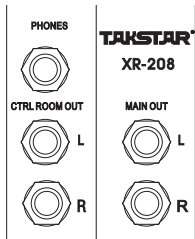
The FX SEND output should be connected to the input of an external effects unit. Use the FX SEND control of the main section to adjust the overall send level.

● AUX RETURN Control



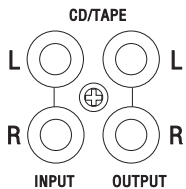
- (1) . The AUX RETURN control determines the volume of the signals comes from external effects device.

● Monitor and main mix



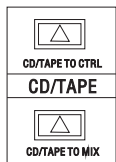
- (1) . PHONES jack
The stereo PHONES jack is for connecting headphones and monitoring .
- (2) . CTRL ROOM OUT jack
The unbalanced CTRL ROOM OUT jacks carry the summed effects and main mix signals, as well as soloed channel signals. The PHONES/CTRL ROOM control adjusts the level of both headphones and main monitor outputs.
- (3) . MAIN OUT
The MAIN OUT connectors are unbalanced mono jacks. The main mix signal appears here at a level of 0dBu. The MAIN MIX rotary control adjusts the volume of these outputs.

● CD/Tape connectors



- (1) . CD/TAPE INPUT
The CD/TAPE INPUTs are used to bring an external signal source (e.g. CD player, tape deck, etc) into the console. They can also be used as a standard stereo line input to connect other signal source.
- (2) . CD/TAPE OUTPUT
The CD/TAPE OUTPUTs are wired in parallel with the MAIN OUT and carry the main mix signal(unbalanced). The output level is adjusted via the high -precision MAIN MIX rotary control.◦

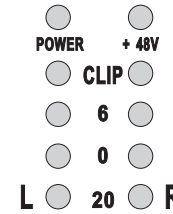
● Signal assignment



- (1) . CD/TAPE TO MIX
When the CD/TAPE TO MIX switch is depressed, the 2 track input is assigned to the main mix providing and additional input for CD, MIDI instruments or other signal sources that do not require any processing.
- (2) . CD/TAPE TO CTRL
Press the CD/TAPE TO CTRL switch if you want to monitor the 2 track input via the CTRL ROOM OUT/PHONES. This provides an easy way to monitor signals coming back from tape to ensure that they are recording correctly.

Note: The CD/TAPE TO MIX and CD/TAPE TO CTRL can not be pressed simultaneously or it will create feedback loop and cause an abnormal signal.

● Phantom power and LED displays



- (1) . PHANTOM switch
The PHANTOM switch is 48V phantom power switch.
Note: Please connect the microphones before you switch on the power supply. In addition, the monitor/loudspeakers should be muted before you activate the phantom power supply.
- (2) . POWER LED
The blue POWER LED lights when the console is powered on.
- (3) . +48V LED
The red +48V LED lights up when phantom power is on.
- (4) . Level indicator
The high-precision 4-segment display accurately displays the relevant signal level.
- (5) . Recording level setting
To correctly set the gains of the channels, first set the LEVEL controls of the input channels to their center positions (0dB). Then use the TRIM controls to increase the input amplification until signal peaks show 0dB on the level meter. When recording to digital recorders, the recorder's peak meter should not exceed 0dB.

Important safety instructions

- Plug power adaptor into AC power socket with the required specification only, or it may cause electric shock or fire.
- To reduce the risk of fire or electric shock, do not expose this appliance to water and moisture.
- To reduce the risk of fire or electric shock, do not put objects filled with liquids or small metal on the apparatus.
- Do not put heavy objects on the power cable (especially when the cable is put under the carpet), or it may damage the power cable and cause fire or electric shock.
- Do not scratch, bend, twist, pull or heat the power cable, or it may damage the power cable and cause fire or electric shock.
- Do not remove the top cover, or it may cause electric shock, if maintenance is needed, please contact your local distributor.
- Do not reassemble the apparatus, or it may cause electric shock.
- If there' s thunder and lightning coming, please turn off the power and pull out the power adaptor asap.
- If there' s sudden thunder and lightning, please do not touch the power adaptor, or it may cause electric shock.