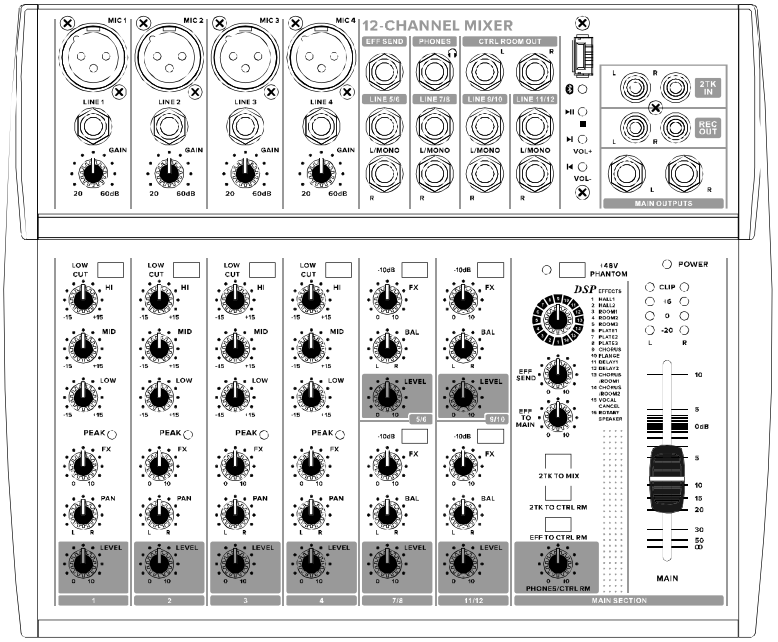
PROFESSIONAL AUDIO

Professional Portable Mixing Console



OPERATING INSTRUCTIONS

SAFETY INSTRUCTIONS

CAUTION: To reduce the risk of ElectricaLshock, do not remove the cover (or back). No user serviceable parts inside; refer servicing to qualified personnel.

WARNING: To reduce the risk of fire or electrical shock, do not expose this appliance to rain or moisture.

This sYmbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to the important operating and maintenance instructions in the accompanying literature. Read the manual.

DETAILED SAFETYINSTRUCTIONS:
All the safety and operation instructions shOuld be read before the appliance is operated.

RetAin Instructions:
The safety and operating instructions should be retained for future reference.

Heed Warnings:
All warnings on the appliance and in the operating instructions should be adhered to.

Follow instructions:
All operation and user instructions should be followed.

Water and Moisture:
The appliance should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool etc.).

Ventilation:
The appliance should be situated so that its location or position does not interfere with its proper ventilaton. For example, the appliance should not be situated on a bed, sofa rug, or similar surface that may block the ventilation openings:or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

Heat:
The appliance should be situated away from heat sources such as radiators, heat registers, stoves or other appliances (including amplifiers) that produce heat.

Power Source:
The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

Grounding or Polarization:
Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

Power-Cord Protection:
Power supply cords should be routed so that they are not likely to be walded on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles and the point where they exit from the appliance.

Cleaning:
The appliance should be cleaned only as recommended by the manufacturer.

Non-use Periods:
The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

Object and Liquid Entry:
Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

Damage Requiring Service:
The appliance should be serviced by qualified service personnel when:
-the power supply cord or the plug has been damaged;or
-objects have fallen, or liquid has been spilled into the appliance or
-the appliance has been exposed to rain; or
-the appliance does not appear to operate normally or exhibits a marked change in performance;
or

Servicing:
The user should not attempt to service the appliance beyond that which is described in the Operating Instructions. All other servicing should be referred to qualified service personnel.

Professional 12 channel mixing console with USB jack

▲ 12 channel mixing console with two stereo channels and a separate stereo tapep channel

▲ Separate input JACK controls for mic and line inputs on all mono channels

▲ XLR mic connectors on all mono channels

▲ Low-noise discrete mic preamplifiers on all microphone inputs

▲ Balanced 1/4" stereo jacks and balance controls on all stereo channels

▲ Separate stereo tape channel with 1/4" and RCA jacks

▲ Stereo output for recording applications

▲ English musical active EQ

▲ High-grade-sealed faders and potentiometers made by taiwan

▲ Headphones output with dedicated volime control

▲ Built-in +48V phantom power for condenser mics

▲ Extremely rugged construction ensures long life even under the most demanding conditions

1. INTRODUCTION

Congratulations! With the machine you have purchased a state-of-the-art 5-channel mixing console that sets new standards. Our prime goal when develping the machine was to design a console that can be used for a great variety of applications. And to give you maximum flexibility.

In combination with its comprehensive range of featrues and pro-level connections, the machine will be your perfect tool for any kind of application: broadcasting, video dubbing or giving the sound of your band its finishing touch.

1.1 Before you begin

Your machine was carefully packed in the factory and the packaging is designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage, which may have occurred during transit.

☞ **If the unit is damaged, please do not return it to our company, but notify your dealer and the shipping company immediately, otherwise claims for damage or replacement may not be granted. Shipping claims must be made by the consignee.**

Be sure that there is enough space around the unit for cooling and please do not place the machine 2 on

1.2 Control elements

[1] ***MIC*** Use this balanced ***XLR*** jack to connecta microphone to the machine.
☞ **The phantom power required for condenser mies can be activated with switch** ***PHANTOM***

[2] Channels 1 feature an addditional ***LINEI*** input on a balanced 1/4" jack.

[3] Use the ***GAIN*** control to adjust the Input gain. This control should always be turned fully counterclock wise When ever you connect or disconnect a signal source to one of the Inputs.

[4] In addition, the mono channels are equipped with a steep***LOW CUT*** filter (slope at 18 dB/oct,-3 dB at 75 Hz) designed to eliminateunwanted low-frequency signal components.

[5] [6] [7] The upper (***HIGH***) and the lower band (***LOW***) are shelving filters that Increaseor decrease all frequencies above or below their cut-off frequency. The cut-off frequencies of the upper and lower band are 12 kHz and 80 Hz respectively.The ***MID*** band Is configured as a peak filter with a center Frequency of 2.5 kHz

[8] The ***PK*** LED's of the mono channels illuminate when the input signal is driven too high, which could cause distortion. If this happens, use the GAIN control to reduce the preamp level until the LED does not light anymore.

9 ***EFF*** 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 sent 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 channels. Each FX send is mono and features up to +10 dB gain.

10 The ***PAN*** control determines the position of the channel signal within the stereo image. This control features a constant-power characteristic, which means the signal is always maintained at a constant Level, irrespective of position in the stereo panorama.

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

12 ***LINE IN*** Each stereo channel has two balanced line level inputs on 1/4" jacks for left (L/MONO) and right (R) channels. If you use only the (L/MONO) jack , same sound is output from both Left and right speakers .

13 The ***EFF SEND*** connector outputs the signal you picked up from the individual channels using the EFF SEND controls. You can connect this to the input of an external effects device in order to process the EFF bus' master signal. Once an effects mix is created, the processed signal can then be routed from the effects device outputs back into a stereo input.

14 ***PHONES/CTRL ROOM OUT***
The stereo PHONES connector (at the top of the connector panel) is where headphones are connected. The unbalanced CTRL ROOM OUT connectors carry the summed effects and main mix signals as well as soloed channel signals. The PHONES/CONTROL ROOM control in the main section adjusts the level Of both headphones and main monitor outputs.

15 The unbalanced ***CTRL ROOM OUT*** jacks carry the summed effects and main mix signals, as well As soloed channel signals. The PHONES/CTRL RM control adjusts the level of both headphones and main monitor Outputs.

16 ***USB*** Jack
■▶II play/pause switch. Long press this key until the indicator flashes. Then turn on the phone bluetooth, search until the phone shows the bluetooth link of the mixer, join the link until the connection is successful.
VOL+▶I Vol+/Next Press once to key is play song skip to next song. Press and hold it volume up.
VOL-I◀ Vol-/Prev Press once to key is play song skip to prev song. Press and hold it volume down.

17 The ***-10dB*** switch which selects between +4 dBu and -10 dBV. At -10 dBV (home-recording level), the input is more sensitive (requires less level to drive it) than at +4 dBu(studio level).

18 ***REC OUT*** These connectors are wired in parallel with the MAIN OUT and carry the main mix signal (unbalanced). Connect the 2-TRACK OUTPUT to the inputs of your recording device. The output level is adjusted via the high-precision MAIN MIX fader or rotary control .

19 ***2TK RET*** The 2-TRACK INPUTS are used to bring an external signal source (e.g. CD player,tape deck, Etc.) into the console.

20 21 The ***MAIN OUT*** connectors are unbalanced mono jacks. The main mix signal appears here at a Level of 0 dBu. The MAIN MIX fader adjusts the volume of these outputs.

22 The red ***+48V*** LED lights up when phantom power is on. The ***PHANTOM*** switch activates the phantom power supply on the XLR connectors of all mono channels.

23 ***EFF SELECT*** – Selects the internal effects processor will apply to the various channels. Each channel can send different levels of audio to the processor by adjusting their ***EFF*** SEND knobs. See the EFFECTS section for an explanation of the available effects.

24 ***Level indicator*** The high-precision 4-segment display accurately displays the relevant signal level.

25 The ***EFF SEND*** control adjusts the volume level of the ***EFF*** signal provided at connector ***EFF SEND*** JACK.

26 The ***EFF TO MAIN*** control feeds the effects signal into the main mix. If the control is turned all the way counterclockwise, no effects signal is present in the sum signal of the mixing console.

27 When the ***2TK TO MIX*** switch is depressed, the 2-track input is assigned to the main mix providing an additional input for tape machines, MIDI instruments or other signal sources that do not require any Processing.

28 Press the ***2TK TO CTRL RM*** switch if you want to monitor the 2-track input via the CTRL ROOM OUT. This provides an easy way to monitor signals coming back from tape to ensure that they are recording Correctly.

29 If you want to monitor only the effects signal in your headphones or monitor speaker(s), press the ***EFF TO CTRL*** switch. Now the signal of the effects processor can be monitored alone, and the main mix and/or CD/tape signal is no longerpresent on the phone and control room outputs.

30 Use the ***MAIN*** fader to set the overall volume level of your machine.

31 The ***PHONES/CTRL RM*** control adjusts the level of both headphones and CTRL ROOM outputs.

2. WIRING

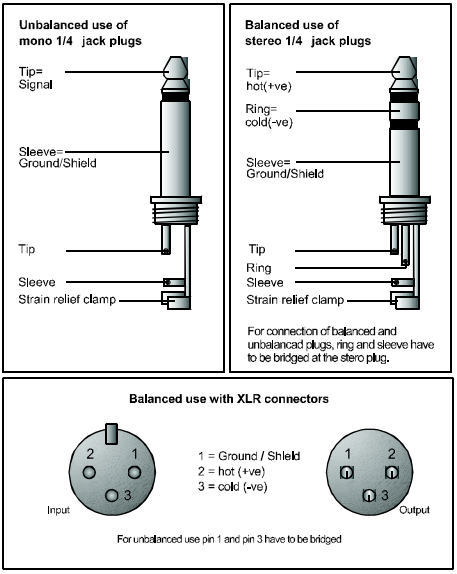


Fig. 2.1: Various connector types

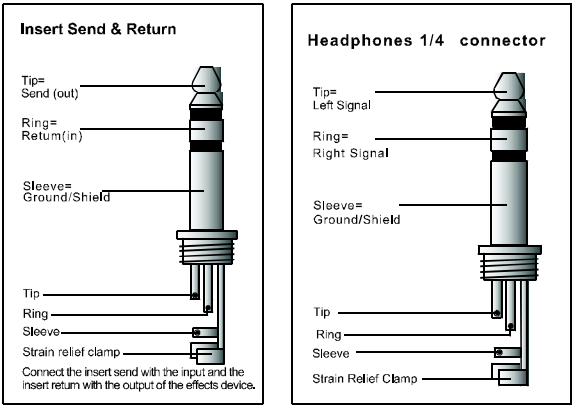


Fig. 2.2: Wiring diagram of insert cable and headphones plug

3. WARRANTY

1 WARRANTY CARD/ONLINE REGISTRATION

To be protected by the extended warranty, the buyer must complete and return the enclosed warranty card within 14 days of the date of purchase to our company Spezielle Studiotechnik GmbH, in accordance with the conditions stipulated in 3. Failure to return the card in due time(date as per postmark)will void any extended warranty claims.

2 WARRANTY

1. warrants the mechanical and electronic components of this product to be free of defects in material and wordmanship for a period of one (1) year from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects whthin the specified warranty period that are not due to normal wear and tear and/or improper handling by the user, our company shall, at its sole discretion, either repair or replace the product.

2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.

3. Warranty claims other than those indicated above are expressly excluded.

3 WARRANTY REGULATIONS

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer s invoice. Any product deemed eligible for repair or replacement by BEHRINGER under the terms of this warranty will be repaired or replaced within 30 days of receipt of the product at our company.

2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or worlmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, our company shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user.

This also applies to defects caused by normal wear and tear, in
particular, of faders, potentiometers, keys/buttons and similar

4. Damages/defects caused by the following conditions are not covered by this warranty:

▲ misuse, neglect or failure to operate the unit in compliance with the instructions given in our company user or service manuals.

▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.

▲ damages/defects caused by force majeure or any other condition that is beyond the control of our company.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

6. If an inspection of the product by our company shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer s expense. our company will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, our company will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

4 OTHER WARRANTY RIGHTS AND NATIONAL LAW

1. This warranty does not exclude or limit the buyer s statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.

2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

4. SPECIFICATIONS

FEATURE:

(1) 12 standard inputs

(2) 4 balanced MIC/LINE inputs

(3) 3 band frequency equalizer for mono inputs

(4) 1 phantom power

(5) 4 stereo input

(6) 2TK input & REC output

(7) tow level LED indicate display

(8) Internal professional DSP digital effect processor

TECHNICAL DATA:

Common mode rejection: ———————— -80dBu
S/N Ratio: ———————————————〉-82dB
Frequency response: ——— +/-0.5dB 20Hz-20KHz
THD:———————— lass than <0.03%@1KHz

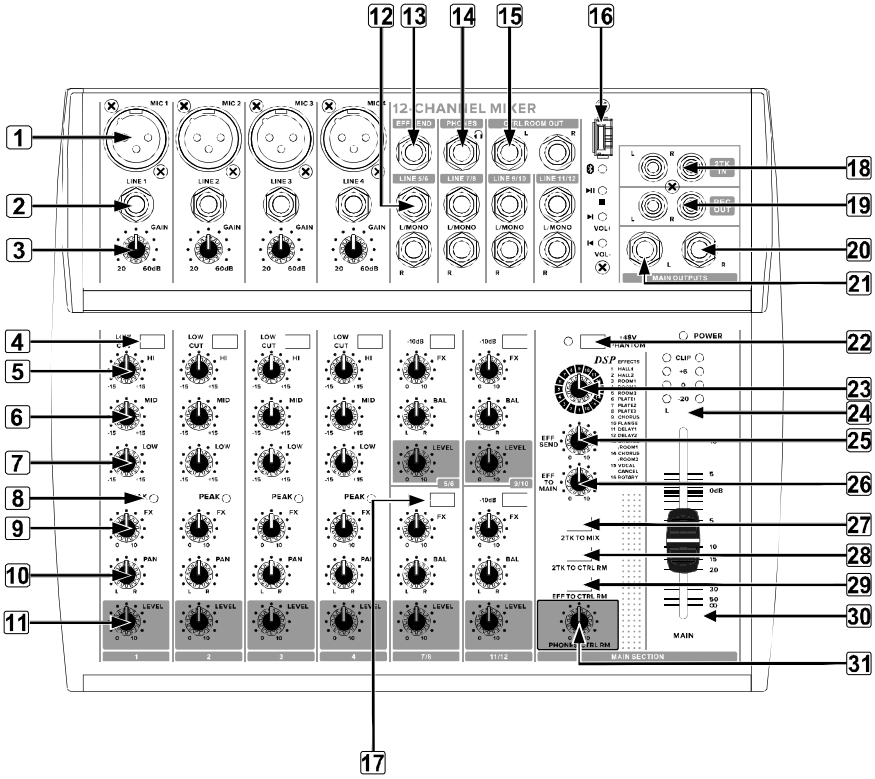
INPUT LEVEL:

MIC input:———————————————— +60dBu
LINE input:———————————————— +30dB
stereo input:————————————————+20dBu
headphones output(200Ω):———————— 300mW

arametric EQ:

HIGH:————————————12KHz，+/-15dB
LOW:————————————80Hz，+/-15dB

5. FRONT & REAR PANEL



6. DSP DIGITAL REVERB EFFECT ENGINE

Hall 1	Bright hall reverb for drums. guitars. and vocals.
Hall 2	Warm hall for acoustic guitars, pianos, and vocals.
Room 1	Hardwood studio for acoustic instruments.
Room 2	Ambience for acoustic mixes and synth sounds.
Room 3	Warm room for guitars and rhythm instruments.
Plate 1	Classic plate reverb for lead vocals and instruments.
Plate 2	Sizzling bright plate reverb for vocals and drums.
Plate 3	Short vintage plate reverb for snares and guitars.
Chorus	Stereo chorus for guitars and pianos.
Flange	Stereo flanger for jet wash effects.
Delay 1	125ms slapback delay for vocals and guitars.
Delay 2	190ms delay for percussive arpeggios.
Chorus/Room 1	Chorus with reverb for guitars, synths, and pianos.
Chorus/Room 2	Auto-wah guitar effect with reverb for lead instruments.
Vocal Cancel	Removes lead vocals from many stereo recordings.
Rotary Speaker	Rotary speaker emulation for organs and guitars.

Warning Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

PROFESSIONAL AUDIO

Professional Portable Mixing Console