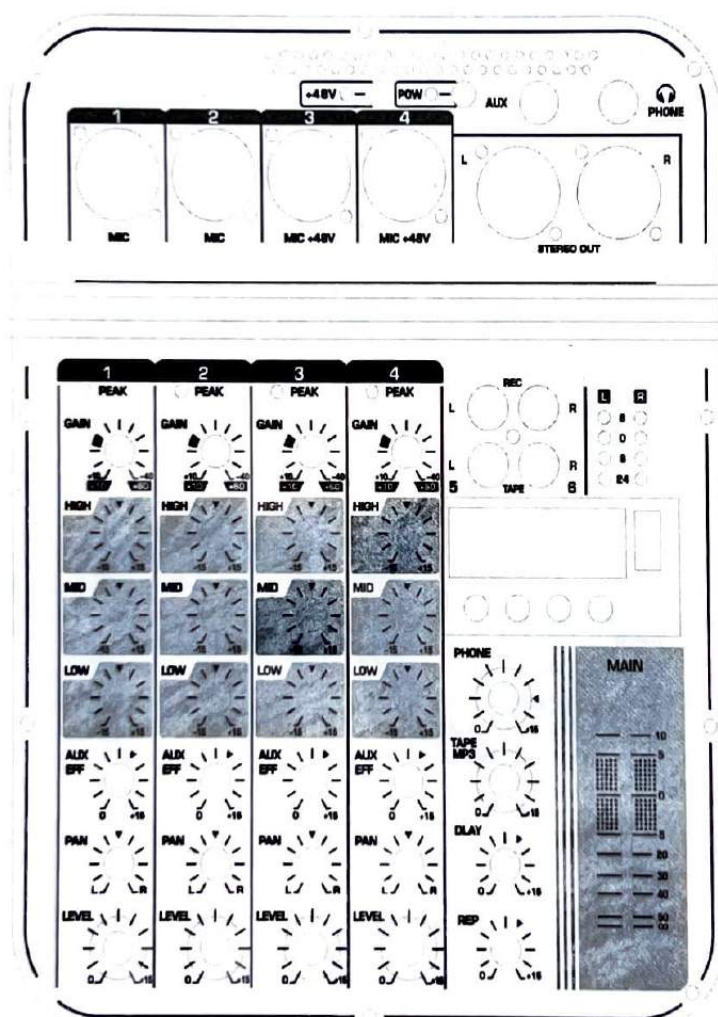


# PROFESSIONAL MIXER

**PROFESSIONAL 6 channel mixing console  
and Aux paths plus effects processor**



**User's Manual**

## SAFETY INSTRUCTIONS

**CAUTION:** To reduce the risk of electrical shock, 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 SAFETY INSTRUCTIONS:

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 ventilation. 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 walked 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
- the appliance has been dropped, or the enclosure damaged.

#### **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 6-12-channel mixing console and Aux paths plus effects processor

- ▲ 6-12-channel mixing console with two stereo channels and a separate stereo tape channel
- ▲ Separate input JACK controls for mix and line inputs on all mono channels
- ▲ XLR mic connectors on all mono channels
- ▲ Low-noise, discrete mic preamplifiers on all microphone inputs
- ▲ Dedicated inserts on all mono channels
- ▲ 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 3-band EQ on all seven channels
- ▲ AUX and effects paths as well as separate gain controls on all channels
- ▲ High-grade-sealed faders and potentiometers made by Taiwan
- ▲ Insert option for external effects devices
- ▲ AUX Send and EFF Send controls in the main section for optimal level adjustment
- ▲ Headphones output with dedicated volume 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 7-channel mixing console that sets new standards. Our prime goal when developing 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 features 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 on high-temperature devices such as radiators, etc to avoid overheating.


### 1.2 Control elements


#### 1.2.1 Interface panel


 Use this balanced XLR jack to connect a microphone to the machine (applies to channels 1 through 5)

 **The phantom power required for condenser mics can be activated with switch .**

 The **INSERT** jack allows you to insert, for example, a compressor or equalizer in the mono channels.

 Channels 1 through 5 feature an additional **LINE** input on a balanced 1/4" jack.

 These are the two balanced **LINE** inputs on 1/4 jacks for the left and right sides of the stereo channels, which can be used in parallel to the microphone inputs.

 The **TAPE IN** jacks (on stereo RCA) allow for the connection of play-back devices such as CD players, etc.

- 6** Use the **TAPE OUT** jacks to connect, for example, a tape deck for recording applications.
- 7** Use the **PHONES** jack to connect a commercially available pair of headphones.
- 8** These are the balanced 1/4" jack **MAIN OUTPUTS** of your machine that can be used to drive, e.g. a power amplifier.
- 9** Connect the **EFF SEND** connector to the input of an external effects device.
- 10** The **AUX SEND** connector provides the monitor signal of your machine, for example, to control a monitor amplifier or active monitor speaker.

### 1.2.2 Front panel

- 11** The **GAIN MIC** control determines the channels input gain, both for a microphone connected via the **XLR** jack and for other signal sources connected to the 1/4" jack.
- 12** Use the **PAN** control to adjust the signal's position on the stereo basis.
- 13** Your machine comes with a 3-band equalizer. the **HI** control governs the high frequency range, the **MID** control can be used to boost/cut the midrange frequencies, and the **LOW** control allows you to raise or lower the gain of the bass range.
- 14** Use the **AUX** control to determine the channel volume sent to the **AUX** mix bus. When set fully to the left, the channel volume in the **AUX** mix is zero.
- 15** The **CHANNEL** fader adjusts the volume of the corresponding channel
- 16** The **EFF** control adjusts the effects volume for the corresponding channel.

### 1.2.3 Main section

- 17** Use this switch to activate the phantom power required for condenser microphones.
- 18** The **LEVEL DISPLAY** reads the output level of your machine. Make sure that the two Clip **LED** swont light up.
- 19** This is used for adjusting frequency of echo repeat. Since too much echo repeat may cause a howl. Please adjust frequency properly.
- 20** This is used for adjusting the time interval of echo repeat. The middle position position (5) may be most effective
- 21** The **PHONES** control governs the headphones volume.
- 22** The **AUX SEND** control adjusts the volume level of the **AUX** signal provided at connector **10**.
- 23** The **EFF SEND** control allows you to adjust the level that is sent to an external effects device via connector **9**. Thus, you can drive all types of effects devices without any risk of distortion.
- 24** Use the **MASTER** fader to set the overall volume level of your machine.

## 2. WIRING

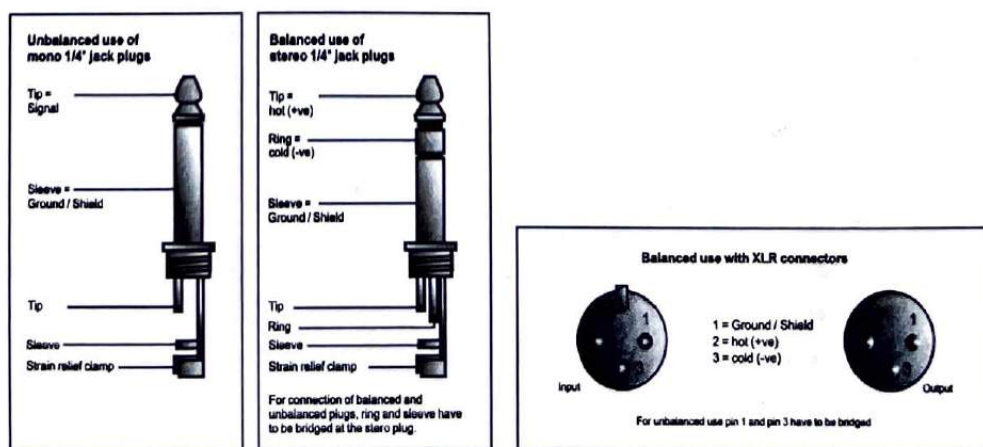


Fig. 2.1: Various connector types



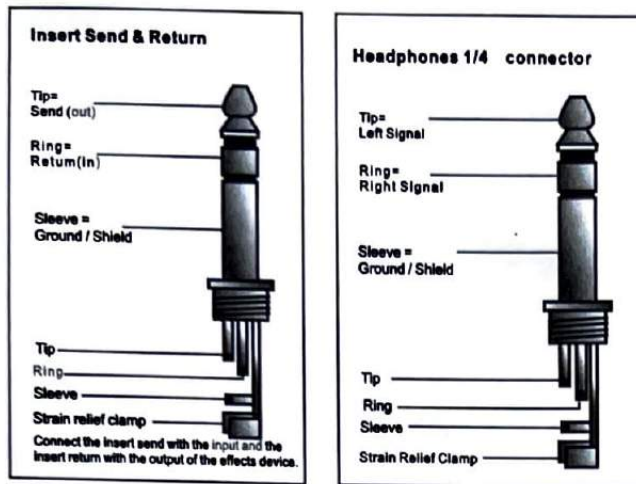
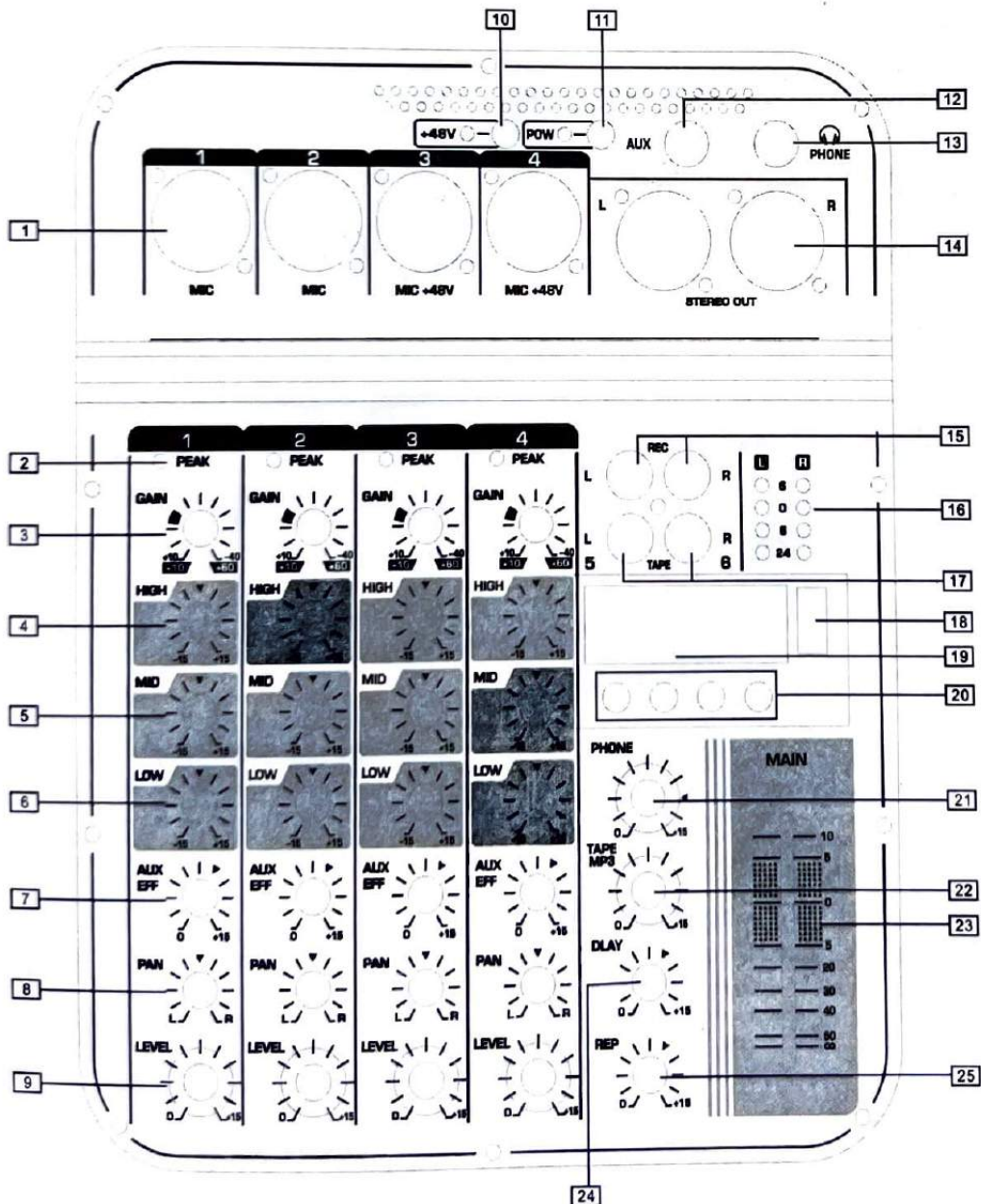


Fig. 2.2: Wiring diagram of insert cable and headphones plug



### 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 Studioteknik 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 workmanship 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 within 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 workmanship. 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 parts.

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

### INPUT CHANNELS 1 through 5

|                    |   |
|--------------------|---|
| Mic input          | electronically balanced, discrete input configuration |
| Frequency response | 10 Hz to 200kHz                                       |
| Gain range         | +14 dB to +60 dB                                      |
| SNR                | 120 dB E.I.N.   |
| Line input         | electronically balanced                               |
| Frequency response | 10 Hz to 130 kHz                                      |
| Gain range         | -6 dB to +38 dB                                       |
| SNR                | 95 dB E.I.N.  |

### STEREO CHANNELS

|                    |   |
|--------------------|---|
| Frequency response | 10 Hz to 70 kHz                         |
| Gain range         | Line: -8 to +15 dB / Mic: +13 to +60 dB |
| SNR                | Line: 96 dB / Mic: 104 dB E.I.N.        |

### EQUUSLIZATION

|     |                   |
|-----|-------------------|
| LOW | 50 Hz, +/- 15 dB  |
| MID | 700 Hz, +/- 15dB  |
| HI  | 10 kHz, +/- 15 dB |

### MAIN MIX

|               |                                       |
|---------------|---------------------------------------|
| Main Outputs  | +28 dBu balanced / +22 dBu unbalanced |
| AUX Send      | +22 dBu unbalanced                    |
| EFF Send      | +22 dBu unbalanced                    |
| Tape Out      | +22 dBu unbalanced                    |
| Phones Output | +15 dBu / 150                         |

### PHYSICAL

USA/Canada 120 V~, 60 Hz,  
U.K./Australia 240 V~, 50 Hz  
Europe 230 V~, 50 Hz,  
Japan 100 V~, 50 - 60 Hz,  
China 220 V~, 50 - 60 Hz,

### Dimensions(H X W X D)mm

|           |                |
|-----------|----------------|
| 4 channel | 305 X 240 X 50 |
| 7 channel | 420 X 195 X 50 |

### Weight

|           |        |
|-----------|--------|
| 4 channel | 3.2 kg |
| 7 channel | 3.6 kg |