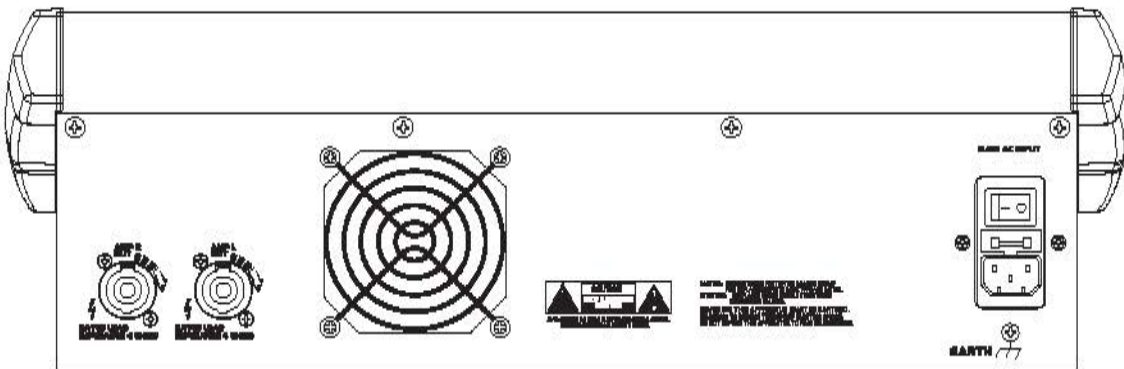
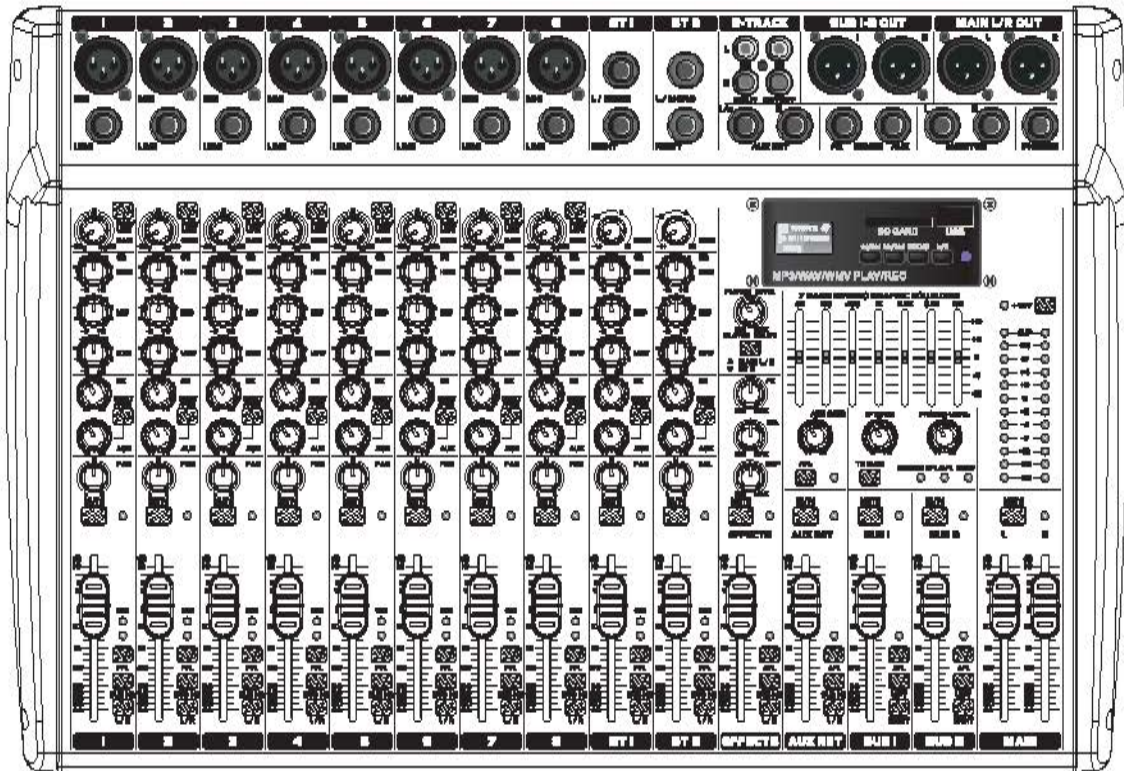


# SWAMP

INDUSTRIES

M206 M210 M210 P



**USER'S MANUAL**

## **Limited One Year Warranty**

For this product, we guarantee that there are no defects either in the materials or in the craftsmanship for a period of one year from the purchasing date of the original buyer.

To ensure the high level of performance and reliability for which this equipment has been designed and manufactured please read this manual before use. In the event of a failure, notify and return the defective unit to us as soon as possible, or to our authorized agent, for repair under warranty subject to the following conditions:

## **Conditions of Warranty**

1. This device has been installed and operated in accordance with the instructions in this manual.
2. This device has not been subject to misuse either intended or accidental, neglect, or alteration other than as described in this manual, or as approved by us.
3. Any necessary adjustment, alteration or repair has been carried out by us or our authorized agent.
4. The content of the warranty does not include the wear and tear of the faders.
5. The defective unit is to be returned carriage prepaid to us or our authorized agent with proof of purchase.
6. Units to be returned should be well-packed to avoid transit damage.

In certain territories, the terms may vary. Check with our agent for any additional warranty that may apply.

## Important Safety instructions

**PRECAUTIONS:** Please read the following instructions before proceeding.



**Read instructions:** Read and retain these safety and operating instructions for future reference. Adhere to all warnings printed here and on the console. Follow the operating instructions printed in this User Guide.

**Do not remove cover:** Operate the console with its underside cover correctly fitted. Disconnect mains power by unplugging the power cord if the cover needs to be removed for setting internal options. Refer this work to competent technical personnel.

**Power Sources:** Connect the console to a mains power outlet only of the type described in this User Guide and marked on the rear panel. Use the power cord with sealed mains plug appropriate for your local mains supply as provided with the console. If the provided plug does not fit into your outlet consult your service agent for assistance.

**Power cord routing:** Route the power cord so that it is not likely to be walked on, stretched or pinched by items placed upon or against it.

**Grounding:** Do not defeat the grounding and polarization means of the power cord plug. Do not remove or tamper with the ground connection in the power cord.



**Water and moisture:** Do not expose the device to rain or dampness, use it in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.

**Ventilation:** Do not obstruct the rear and top ventilation openings, or position the console where the air flow is impeded. If the console is to be operated in a flight case, plinth or other furniture, ensure that it is constructed to allow adequate ventilation.

**Heat and vibration:** Do not locate the console in a place subject to excessive heat or direct sunlight to prevent fire hazard. Locate the console away from any equipment generating heat and excessive vibration.

**Servicing:** Switch off the equipment and unplug the power cord immediately if it is exposed to moisture, spilled liquid, objects fallen into the openings, the power cord or plug become damaged, during lightening storms, or if smoke, odour or noise is noticed. Refer servicing to qualified technical personnel only.

**Installation:** Install the console in accordance with the instructions printed in this User Guide. Do not connect the output of power amplifiers directly to the console. Use audio connectors and plugs only for their intended purpose.

## General Precautions

**Damage:** To prevent damage to the controls and cosmetics avoid placing heavy objects on the control surface, scratching the surface with sharp objects, or rough handling and vibration.

**Environment:** Protect from excessive dirt, dust, heat and vibration when operating and storing. Avoid tobacco ash, smoke, drinks spillage, and exposure to rain and moisture. If the console becomes wet, switch off and remove mains power immediately. Allow to dry out thoroughly before using again.

**Cleaning:** Avoid the use of chemicals, abrasives or solvents. The control panel is best cleaned with a soft brush and dry lint-free cloth. The faders, switches and potentiometers are lubricated for life. The use of electrical lubricants on these parts is not recommended. The fader and potentiometer knobs may be removed for cleaning with a warm soapy solution. Rinse and allow to dry fully before refitting them.

**Lifting:** To avoid injury to yourself or damage to the equipment take care when lifting, moving or carrying the console.

**Transporting:** The console may be transported as a free-standing unit or mounted in a purpose built flight case. We recommend that the console is surrounded by shock absorbent foam to protect it from damage during transit. Always use adequate packing if you need to ship the unit. Protect the controls to avoid damage when moving the console.

**Hearing:** To avoid damage to your hearing do not operate any sound system at excessively high volume. This also applies to any close-to-ear monitoring such as headphone and IEM transducers. Continued exposure to high volume sound can cause frequency selective or wide range hearing loss.



### Important Mains plug wiring instructions

The console is supplied with a moulded mains plug fitted to the AC mains power lead. Follow the instructions below if the mains plug has to be replaced. The wires in the mains lead are coloured in accordance with the following code:

TERMINAL		WIRE COLOR	
		European	USA/Canada
L	LIVE	BROWN	BLACK
N	NEUTRAL	BLUE	WHITE
E	EARTH GND	GREEN & YELLOW	GREEN

The wire which is colored Green and Yellow/Green must be connected to the terminal in the plug which is marked with the letter E or with the Earth symbol. This appliance must be earthed.

The wire which is colored Blue/White must be connected to the terminal in the plug which is marked with the letter N.

The wire which is colored Brown/Black must be connected to the terminal in the plug which is marked with the letter L.

Ensure that these color codes are followed carefully in the event of the plug being changed.

## Introduction

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Welcome the latest generation of the popular powered mixing consoles. We have tried to keep this user guide brief and to the point. Please read it fully before starting. Included is information on installing, connecting and operating the console, panel drawings, system block diagram and technical specification. For further information on the basic principles of audio system engineering, please refer to one of the specialist publications and resources available from bookshops, audio equipment dealers and the internet.

Whilst we believe the information in this guide to be reliable we do not assume responsibility for inaccuracies. We also reserve the right to make changes in the interest of further product development.

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## **Introducing the mixer**

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This is a an analogue mixing console with powerful power amplifier designed for professional audio applications. Whether out on the road touring, in a small meeting room, a bar or earning it's keep in rental stock, the mixer provides the perfect solution to provide simple and convenient connections, and quickly form a sound amplifying system. Engineered to the same exacting standards as our top of the range consoles it ensures the highest reliability and finest sonic performance.

### **The Range:**

6 CH: 4 mono mic/line, 2 stereo

8 CH: 6 mono mic/line, 2 stereo

10 CH: 8 mono mic/line, 2 stereo

### **Introducing brief functions:**

- 6, 8, 10 channel frame
- LR main mix
- 2 Aux sends
- Recording
- 2 group stereo channel inputs
- Responsive 3 band EQ
- Individual phantom power
- Channel and master meters
- Per channel pre/post fader aux switching
- Mutes on all fader masters
- 60mm dust protected faders
- 2-Track monitoring and replay to LR
- Headphones and local monitor outputs
- Dedicated stereo, peak-retaining monitor meters
- Electronically balanced XLR outputs with +26dBu drive capability
- Preamp +34dBu maximum input capability for mic or line
- Ultra low noise mix head amp design
- MP3 player/recorder with concise human-machine interactive interface
- MP3 player can directly output to the main channel or send to each output via ST2 stereo channel
- 7-band graphic EQ
- Digital effect processor
- Built-in strong power amplifier with complete protection function.
- Internal power supply(power mixer type)
- Metal jacks, gold-plated XLRs, sealed pots and switches
- External power adapter power supply(mixing console type)

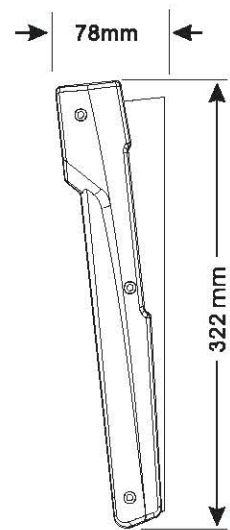
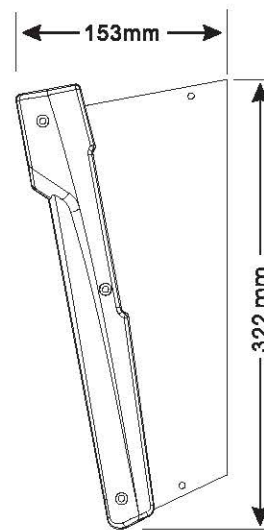
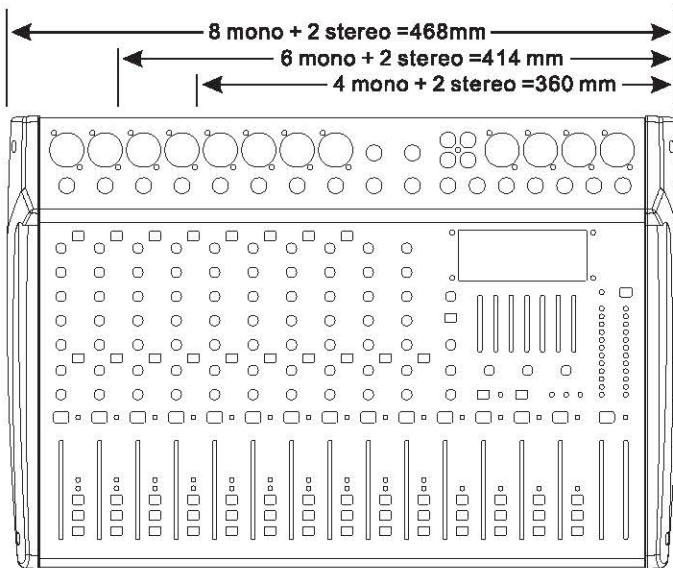
## Installing the console

This mixer has a space saving, compact chassis design. Plastic side this series mixers are equipped with a handle type, metal plate also can choose distribution can be installed in a standard cabinet. This is convenient both in saving the occupied space, and in reducing the size, complexity and weight of flight casing for on-the-road use. The control surface has a 10 degree slope for optimum visibility during operation.

**Free Standing** The console has rubber feet fitted for free standing operation on a flat surface. Make sure the surface is well supported, stable and big enough for the console to sit securely on all its feet. Allow enough space behind the console for access to its connectors.

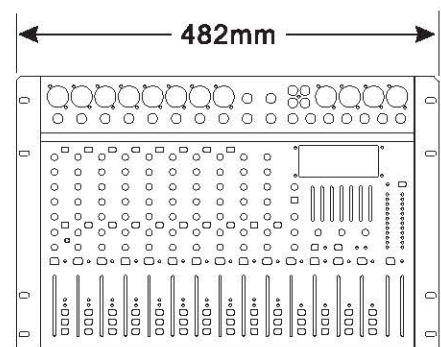
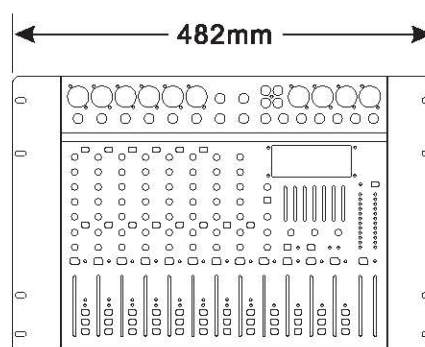
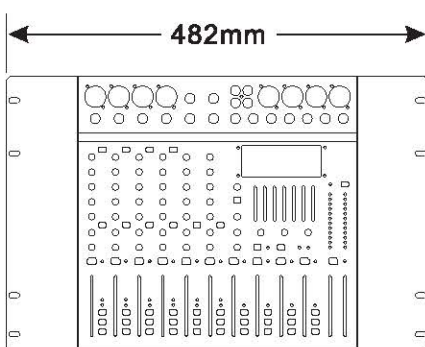
**Flight Casing** The console is shaped for easy flight casing. Make sure it is supported on all sides using suitably thick, shock absorbent foam intended for this purpose. Ensure no part of the case or its lid touches the controls or connectors. If you include a rear "doghouse" to house the connections make sure the cables can be supported in a way that prevents putting stress on the console connectors. To prevent transit damage through inadequate protection, we recommend you have the flight case supplied or approved by a professional, specialist equipment case manufacturer.

Do not obstruct the ventilation openings on the top and rear surfaces. Ensure adequate air flow around these surfaces. To avoid audible hum, buzz or other performance degradation, do not place equipment that radiates strong electromagnetic fields such as mains power supplies, amplifiers and computers next to or directly underneath the console.



Power mixer type

Mixing console type



## Connecting Power

Read and understand the Important Safety Instructions printed at the start of this guide, and the warnings printed on the rear of the console. Check that your local mains supply voltage is the same as that marked on the rear of the power unit. Check that the correct mains lead with moulded plug has been supplied. Make sure that the IEC mains plug is pressed fully into the panel socket on the unit before switching on.



### Grounding

The connection to ground in an audio system is important for two reasons:

1. **SAFETY:** To protect the operator from high voltage electric shock, and
2. **AUDIO PERFORMANCE :** To minimize the effect of ground (earth) loops which result in audible hum and buzz, and to shield the audio signals from interference.

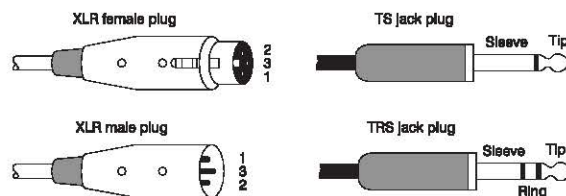
For safety it is important that all equipment grounds are connected to mains ground so that exposed metal parts are prevented from carrying high voltage which can injure or even kill the operator. Do not disconnect the ground connection in the mains lead. It is recommended that the system engineer check the continuity of the safety ground from all points in the system including microphone bodies, turntable chassis, equipment cases, rack metalwork and so on.

### Switching the console on and off

It is good practice to turn power amplifiers off before switching the console and any other connected equipment on or off. This prevents any unexpected clicks or thumps when the equipment is powered up.

## Audio Connections

This mixer uses professional grade 3 pin XLR and 1/4" TRS (3 pole) jack sockets. To ensure best performance, we recommend that you use high quality audio cables and connectors, and take time to check for reliable and accurate cable assembly. It is well known that most audio system problems are due to faulty or sub standard interconnecting leads. The following plugs may be used to connect audio to the console:



### Dealing with Ground Loops, Buzz and Interference

For optimum performance all audio signals should be referenced to a solid, noise-free ground (earth) point, frequently referred to as the "star point" or "clean earth".

A ground loop is created when potential differences exist between grounds at different points in the system, and the signal has more than one path to ground. In most cases ground loops do not result in audible problems. Should you experience hum or buzz caused by a ground loop, check first that each piece of equipment has its own separate path to ground. If so, operate ground lift switches on connected equipment in accordance with the instruction manuals. Alternatively disconnect the cable screen at the destination end only. This breaks the offending loop while keeping the signal shielding down the length of cable.

**WARNING:** For operator safety, do not remove the ground (earth) connection in the power lead of the console or connected equipment.

To avoid interference pickup keep audio cables away from mains power units and cables, lighting cables, thyristor dimmer units, computer equipment and mobile phones. Where this cannot be avoided, cross the cables at right angles to minimize interference.



## The MONO input channel



### MIC/LINE IN XLR AND TRS JACKS

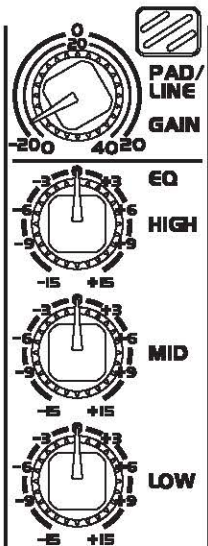
These jacks are used for microphone or line level signals. If you use XLR jack, it can give a massive headroom for the channel's pre-amp with +34dBu maximum input power. Two inputs are both balanced, but they can handle unbalanced signals when required. MIC XLR jack feeds microphones requiring phantom power such as condensers via 6k8 ohm resistors to provide +48V DC power to pins 2 and 3.

**Warning:** When +48V phantom power is selected, do not connect the unbalanced sources or cables to the XLR input. To avoid loud clicking sound, always turn the channel off by pressing MUTE when switching on or off the +48V power, and when plugging or unplugging cables.

### GAIN

Adjusts the input sensitivity to match the connected source to the internal 0dBu operating level of the channel. It provides a variable range of 40dB, from +0 to +40dB gain (MIC), or from -20 to +20dB (LINE, PADDED MIC). In co-ordination with the monitor system and the main level meters, adjust the gain knob for a metering average of "0" for the channel with loudest moment lighting "+6".

Important instructions for the channel's level setting: Use PFL to set the gain control and to determine the correct level of the signals going through each channel. The main LR meters provide high-definition display for the channel's signal level. Use the fader to balance each signal in the mix. To ensure optimum gain structure, we do not recommend the way of mixing by setting the fader to "0" position and using gain control to mix.



### PAD/LINE INPUT SELECTION

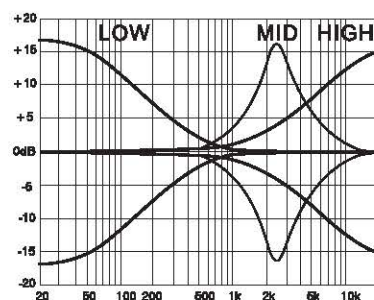
With this switch pressed down, the signals from XLR input socket will be attenuated by 20dB in order to suit the high-level input signals. And the signals from the JACK socket cannot be connected to the channel unless this switch is pressed down.

### EQ

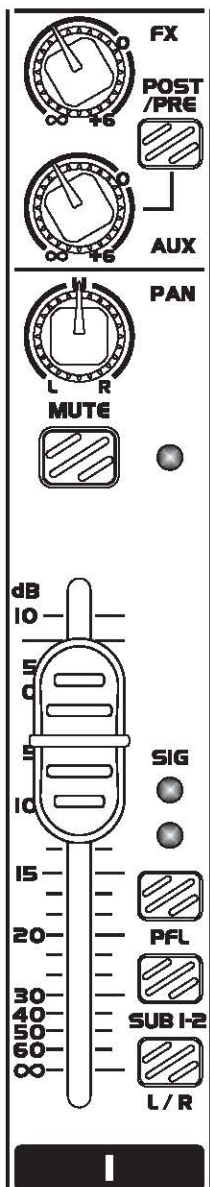
A responsive 3-band EQ (equalizer) provides independent controls for 3 frequency bands. The HIGH and LOW bands are shelving filters, which affect respectively the high frequencies above 12 KHz and the low frequencies below 80 Hz. The MID band is a bell shaped peak/dip filter, which affect the frequencies centering near 2.5KHz.

All frequency bands can increase or decrease up to 15dB, and have a center detent position of 0dB. The overlapping frequency range allows you to deal with the challenging sound source problems with ease when using frequency band combinations.

Before using EQ, check that you are using the best type and placement of microphone. At the beginning, set the EQ as flat, and operate only as really needed to boost or cut. When dealing with problem frequencies, attenuate the frequencies where possible rather than boosting the frequencies.



## The MONO input channel



### AUX SENDS

These rotary controls adjust how much channel signal will be mixed to the aux out. Each of the two auxes has its own control knob, which adjusts the gain from a closed zero to +6dB. The unity gain 0dB is marked at the 3 o'clock position. FX send is post-fader. AUX is controlled by a switch, which can be selected pre-fader or post-fader.

Pre-fader AUX SENDS will not be affected by the movement of the channel faders. They are generally used to send signals to stage monitor. AUX SENDS may also be used in some special applications, such as recording, zone feeds, clean feeds and aux subs or center speakers.

### POST/PRE

When you press down the button, the pre-fade channel signal will be sent to the related aux bus. When you loosen the button, the post-fade signal will be sent. AUX SENDS are controlled by the POST/PRE switch.

### PAN

Positions the channel signal between L/R in the stereo mix.

### MUTE

Press this button to shut off the channel signal. This will affect the signals sent to LR and SUB 1-2 mix, and post-fader aux sends. When the channel is muted, the red indicator lights. When the phantom power is turned on, and a device is plugged or unplugged, the channel is normally set muted.

### SIG INDICATOR

When the channel's pre-fade signal reaches -20dB, the indicator lights.

### PFL MONITOR

Press down PFL button to monitor the pre-fade signals of the channel, without affecting the main output signals. The mixer's PFL/AFL active red indicator turns bright, and the monitor LR level meters show the amplitude of the channel's signal level. The yellow indicator of the PFL switch lights to show this channel's PFL has been chosen.

### SUB 1-2/ L/R

When you need to mix a channel's signal to SUB 1-2 or/and L/R buses, you can do this merely by pressing down this switch. Surely, if it's not pressed down, the channel signal will not be distributed to these two groups of buses.

### FADER

A high-quality 60-mm smooth travel fader with protective dust cover controls the channel volume of the main LR mix and SUB 1-2 mix, and the signals of the post-fader AUX SENDS. The fader provides a biggest boost from the normal working level 0dB upward to +10dB.

## The STEREO input channel



### STEREO LINE INPUT

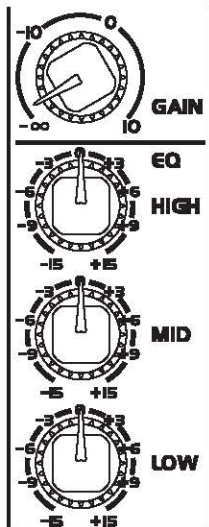
Left input signal can be input in parallel connection via the right input jack to feed signals to the left and right of the stereo channel. Simply put, the left and right channels will both have signal outputs if only the left channel jack has been plugged. This can be used for plugging in a mono sound source device.

### ST1/ST2(MP3)

This console has two groups of stereo input channels. In the ST2 channel, the output signal from an MP3 player can be sent to various outputs through this channel.

### GAIN CONTROL

Adjusts input sensitivity to match the connected sound source. The internal operating level of the channel is 0dBu. In co-ordination with the monitor system and the main level meters, adjust the gain knob for a metering average of "0" for the channel with loudest moment lighting "+6".



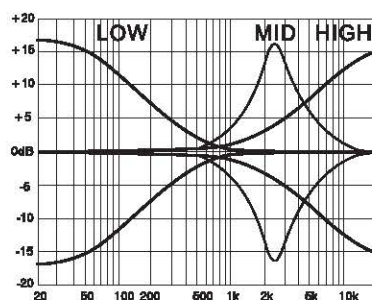
Important instructions for the channel's level setting: Use PFL to set the gain control and to determine the correct level of the signals going through each channel. The main LR meters provide high-definition display for the channel's signal level. Use the fader to balance each signal in the mix. To ensure optimum gain structure, we do not recommend the way of mixing by setting the fader to "0" position and using gain control to mix

### EQ

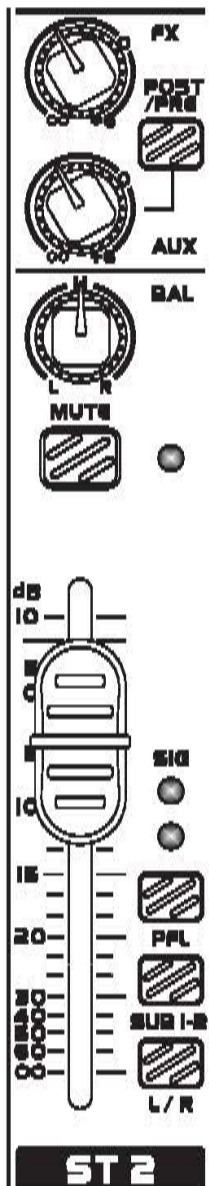
A responsive 3-band EQ (equalizer) provides independent controls for 3 frequency bands. The HIGH and LOW bands are shelving filters, which affect respectively the high frequencies above 12 KHz and the low frequencies below 80 Hz. The MID band is a bell shaped peak/dip filter, which affect the frequencies centering near 2.5KHz.

All frequency bands can increase or decrease up to 15dB, and have a center detent position of 0dB. The overlapping frequency range allows you to deal with the challenging sound source problems with ease when using frequency band combinations.

Before using EQ, check that you are using the best type and placement of microphone. At the beginning, set the EQ as flat, and operate only as really needed to boost or cut. When dealing with problem frequencies, attenuate the frequencies where possible rather than boosting the frequencies.



## The STEREO input channel



### AUX SENDS

These rotary controls adjust how much channel signal will be mixed to the aux out. Each of the two auxes has its own control knob, which adjusts the gain from fully off to +6dB. The unity gain 0dB is marked at the 3 o'clock position. FX send is post-fader. AUX is controlled by a switch, which can be selected pre-fader or post-fader.

Pre-fader AUX SENDS will not be affected by the movement of the channel faders. They are commonly used to send signals to stage monitor. AUX SENDS may also be used in some special applications, such as recording, zone feeds, clean feeds and aux subs or center speakers.

### POST/PRE

When you press down the button, the pre-fader channel signals will be sent to the related aux bus. When you loosen the button, the post-fader signals will be sent. AUX SENDS are controlled by the POST/PRE switch.

### BAL

Balances the signal level between the left and right of the stereo channel.

### MUTE

Press this button to shut off the channel signal. This will affect the signals sent to LR and SUB 1-2 mix, and post-fader aux sends. When the channel is muted, the red indicator lights. When a device is plugged or unplugged, the channel is normally set muted.

### SIG INDICATOR

When the channel pre-fade signal reaches -20dB, the indicator lights.

### PFL MONITOR

Press down PFL button to monitor the pre-fade signal of the channel, without affecting the main output signal. The mixer's PFL/AFL active red indicator turns bright, and the monitor LR level meters show the amplitude of the channel's signal level. The yellow indicator of the PFL switch lights to show this channel's PFL has been chosen.

### SUB 1-2/ L/R

When you need to mix a channel's signal to SUB 1-2 or/and L/R buses, you can do this merely by pressing down this switch. Surely, if it's not pressed down, the channel signal will not be distributed to these two groups of buses.

### FADER

A high-quality 60-mm smooth travel fader with protective dust cover controls the channel volume of the main LR mix and SUB 1-2 mix, and the signals of the post-fader AUX SENDS. The fader provides a biggest boost from the normal working level 0dB upward to +10dB.

## Effects & Mp3 player/recorder



### PLAYER LEVEL

Adjusts the main volume of the playing MP3 player.

### PLAYER ROUTE

When the key is up, the MP3 playing signal will go directly to the main channel L/R outputs. When it's down, the signal is sent to the ST2 channel processing. At this time, the ST2 channel input jack cannot be occupied. Thus, the output signal from the MP3 player can go into the ST2 channel for processing and be re-directed to various output ends.

For more detailed information on the player, please refer to the descriptions on the next page.

### EFFECTS SENDS SIGNAL MAIN CONTROL (FX)

Adjusts the total volume of the effect sends bus signals sent to the console's internal effects processor and output.

### DELAY TIME SPAN OF THE EFFECTS PROCESSOR (DELAY)

Adjusts the length of the time span between each echo in the effector to simulate the reverb effects of spaces of different sizes.

### REPEATS

Adjusts the times and depth of the echoes of the effector.

### MUTE

Press this button to shut off the effects channel signal. This will affect the signals sent to LR and SUB 1-2 mix, and the post-fader aux sends. When the channel is muted, the red indicator lights.

### SIG INDICATOR

When the channel's pre-fade signal reaches -20dB, the indicator lights.

### AFL MONITOR

Press down AFL button to monitor the post-fade signal of the effector channel. The mixer's PFL/AFL active red indicator turns bright, and the monitor LR level meters show the channel signal. The yellow indicator lights to show this channel's AFL has been chosen.

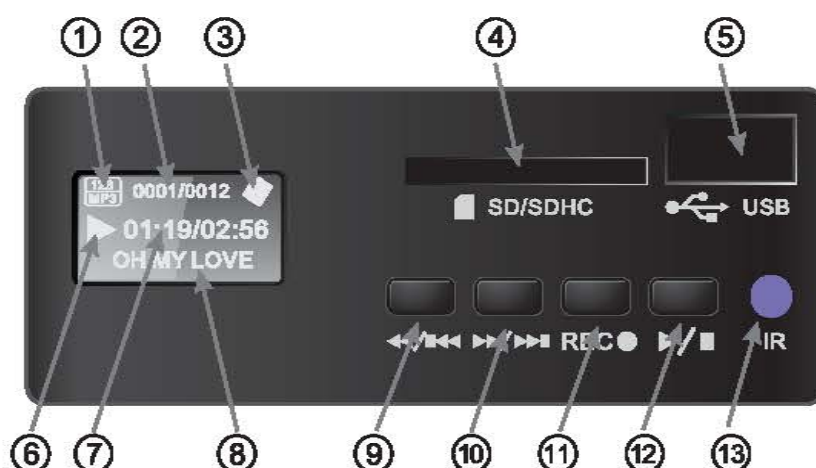
### SUB 1-2/ L/R

When you need to mix a channel's signal to SUB 1-2 or/and L/R buses, you can do this merely by pressing down this switch. Surely, if it's not pressed down, the channel signal will not be distributed to these two groups of buses.

### FADER

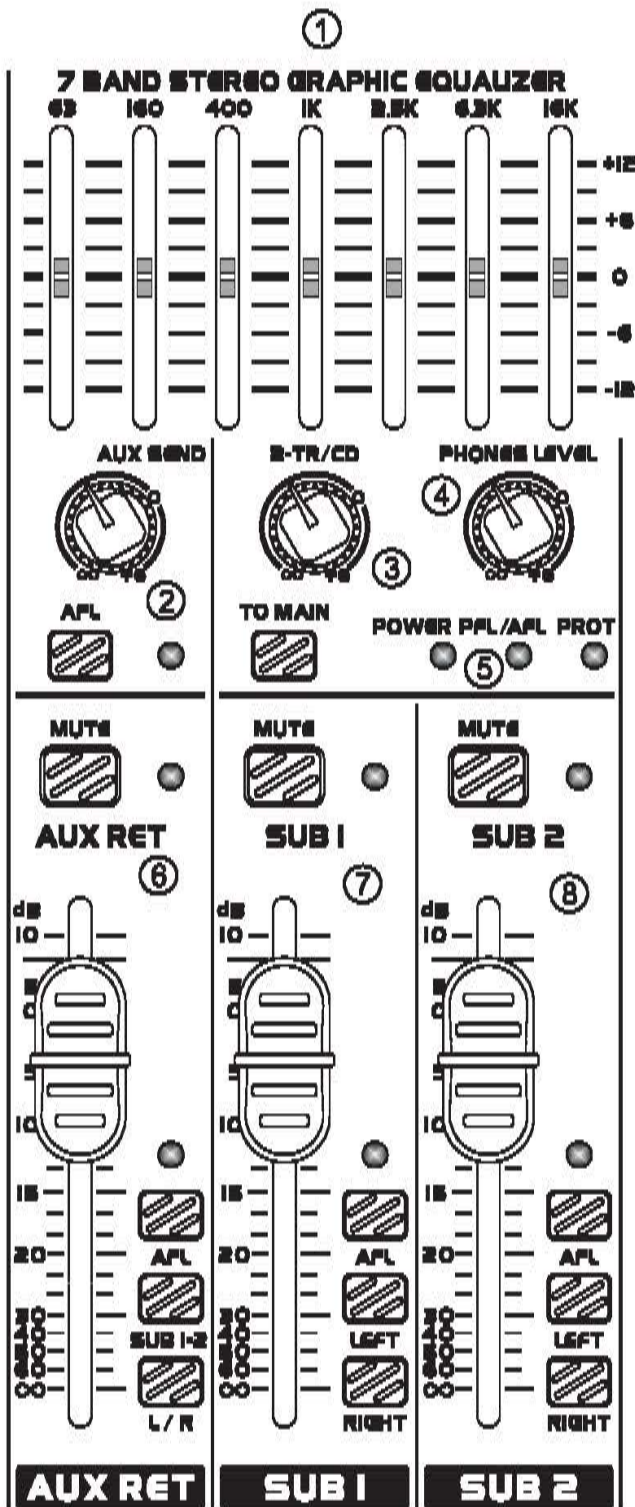
A high-quality 60-mm smooth travel fader with protective dust cover controls the volume of the main LR mix and SUB 1-2 mix.

## MP3 player/recorder operating instructions



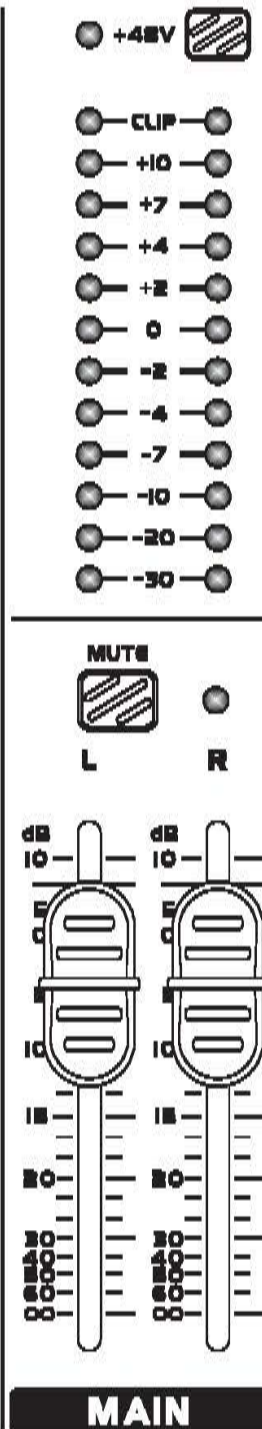
1. The audio format and bit rate of the current track;
2. The current track sequence/the total number of tracks in the current audio category.
3. The type of the current memory unit;
4. SD card insert; SD card is the first choice when both SD card and USB ports are both inserted with memory units at the same time.
5. USB insert;
6. The current working condition;
7. The current track play/record time and the total time;
8. The song name of the current track;
9. Backward/Last One selection key;
10. Fast forward/Next One selection key;
11. Record key. This MP3 player/recorder can record the audio signal output from the console main channel, and store it on the current memory unit in WAV format.
  - a: With the key pressed once slightly, the MP3 player/recorder enters the recording condition. At this time the screen displays the condition of recording, the current record time, the total balance record time, the current record track sequence and the total record track number.
  - b: During the recording process, press this key twice within 1 second so that the recording is paused. To continue recording, press the PLAY key.
  - c: During the recording process, long press this key for over 3 seconds to stop the recording, and the recording file is automatically named and saved in the current memory unit. This process takes several seconds. After completion, MP3 player/recorder is at stop condition. Press PLAY key to play back the track just recorded, or press Last One/Next One to select other tracks.
- Note: During the recording process, the output signal level from the main channel cannot be too big. Too big a record signal input can cause digital distortion. Unlike analogue distortion, even a little bit of digital distortion will cause an unpleasant feeling in hearing. We recommend at any time the record signal level be not over 0dB.
12. PLAY key. MP3 player/recorder is at the stop condition after switch-on. Press the PLAY key to start playing. When you play, touch it slightly to pause, and re-touch it slightly again to continue playing.
13. IR remote control signal receiving port. Use the remote control to realize more functions such as direct selection of tracks by numbers, the size of the volume, and various EQ mode selections.

## Equalizer/AUX return/SUB/2-Track/Phones



- ① **7-band Graphic Equalizer**  
Its adjustment range covers the entire audio scope. It modifies and embellishes the sound coloration, lifts the sound quality and timbre, restrains the sound feed-back, and improves the indoor amplification.
- ② **AUX SEND**  
Adjusts the volume from the output jack of the AUX SEND channel in order to match the external devices. The key on the lower left corner of the knob is a post-fader monitor key, which can monitor this output signals when pressed down.
- ③ **2-TR/CD Level**  
Adjusts the volume of a 2-track device or CD replay. The key on the lower left can add it to the main channel L/R when pressed down.
- ④ **PHONES LEVEL**  
Adjusts the volume of the monitor headphone. Use a proper volume to avoid the damage to your hearing.
- ⑤ **Working Condition Indicator**  
PW: Power Indicator. It lights to show working starts  
PFL/AFL: Monitoring condition indicator. When the light turns on, the console is under the monitoring condition, with the main level meters showing the signal level of the monitor channel, and the channel signal is monitored from the headphone monitor output.  
PROT: Built-in power amplifier protection condition indicator. If it lights long, it shows that the power amplifier is under protection. Cut off the main power and contact the dealer.
- ⑥ **AUX RET CONTROL SECTION**  
The MUTE, AFL, and signal distribution descriptions of this section are the same as those of the effects channel. Please refer to it.
- ⑦ **SUB 1-2 CONTROL SECTION**  
The MUTE and AFL are the same as those of the effects channel. Please refer to it.
- ⑧ **LEFT/RIGHT keys** are the ones to control SUB 1-2 output signals, which can be combined to the main channel L/R output.

## Main mix & Meter



### +48V Phantom Power Switch

+48VDC switch supplies power to the channel's XLR Input, providing power for the microphone requiring phantom power or DI-BOX. The power currents are restrictive, providing power to the XLR socket's pin 2 and pin 3 of the mono input channel via 6k8 ohm resistors.

**Warning:** When selecting phantom power, do not connect unbalanced sources or cables to the input. To avoid big clicking sound, mute the channel when turning on or off the +48V power.

### Main Level Meters

In normal condition, it shows the output level of the main mix signals. When any channel's PFL/AFL button is pressed down, it switches to show the signal level of that channel.

### Main Mix Control Section

**MUTE:** Press the MUTE button, the red indicator lights and the main output is shut off.

**FADER:** Adjusts the output level of the main mix, providing a normal boost from 0dB to +10dB.



## Main output sections



### 2-TRACK IN and OUT

RCA input and output connects popular recording and playing equipment, such as CD, MiniDisc, computer and cassette player. The rated line level is -2dBu. 2-track sends are normally post-fader and after LR mix, regardless of how the setting of mode switching is. 2-track returns can be used for monitoring mono or stereo recording, or serve as a simple input of replay content and background music.

### SUB 1-2 OUT

Sub-group output is digital balanced XLR jack. The output signals are generally used for zone amplification, monitoring, recording or subwoofers and so on.

### L OUT/R OUT

The console's main mix output is digital balanced XLR jack. L and R output usually sends signals to the indoor PA (public address) system for live sound mixing, or to a 2-track recorder for studio mixing.

### AUX RET(URN)

Unbalanced TRS input jack connects output from external devices. It is normally used for return input from the effects processor, and can serve as a group of source inputs.

### EFFECT AUX SENDS OUTPUT (FX SEND)

Unbalanced TRS jack outputs AUX SEND FX signals. FX signals are sent to the internal effects processor via this socket. If it is occupied, FX signals will be sent to the external device, and will not be sent to the console's internal effects processor.

### AUX SENDS OUTPUT (AUX SEND)

Unbalanced TRS jack outputs AUX SEND AUX signals, which is for sending to monitor, effects devices such as echo and delay, and special mixing requirements.

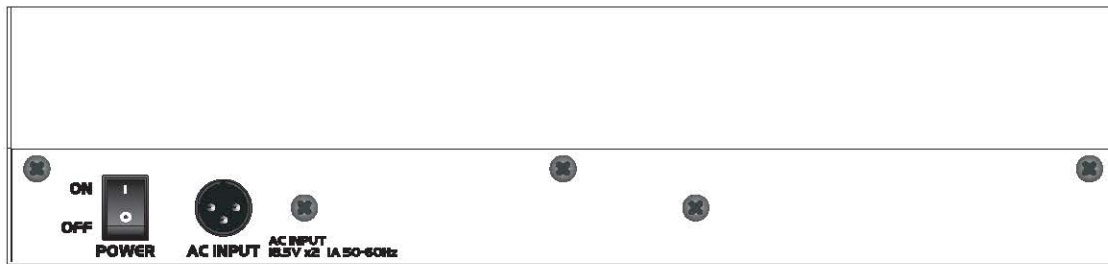
### MONITOR OUT

Unbalanced TRS output is post-level and post monitor-signal. These jacks are used for sending signals to the local speakers or other monitor systems.

### PHONES

Unbalanced TRS jack. You can insert a headset, listening on a local monitor output. We recommend that you use closed headphones of 30 to 600 ohm impedance. Please note: Adjust the volume to avoid hearing damage

### Mixing console type

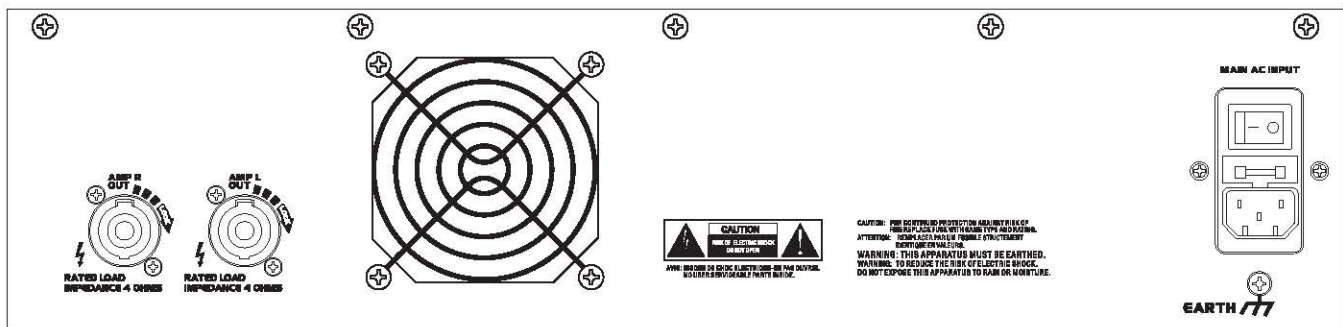


#### Power Connection and Power Switch

The pure mixer varieties use external power adaptor for power supply. Before connecting the power, make sure the power voltage of the power adaptor equipped with this console is in conformity with the local electrical voltage. When the power switch of this console is at "off" position, all devices after this console should be at "off" position.

After you plug the power adaptor properly to the power input socket of this console, you should screw the nut going with the plug tightly and firmly. Only use the power adaptors equipped or approved by our company.

### Power mixer type



#### Mains Receptacle

This is an integrated receptacle containing a power switch and a built-in fuse. Before power connection, check carefully that your local power supply voltage is consistent with the one marked on the mains unit of this console, and examine that a mains cable is supplied with an appropriate plug. In the meantime, before switching on, make sure that the IEC mains plug has been inserted into the mains receptacle on the rear panel of this console.

#### Radiating Fan Openings

Do not obstruct these two ventilation openings and other vents around the console's body, or position the console where the air flow is impeded. If the console is to be operated in a flight case, plinth or other furniture, ensure that it is constructed to allow adequate ventilation. Do not let any objects enter these two ventilation outlets. This will leave the cooling fan unable to work normally, damaging the console or even causing fire.

#### SPEAKON OUTPUT

The console is equipped with professional SPEAKON high-grade connector to provide safety electric and mechanic connections and comply with all safety regulations. It allows the use of four cables with a maximum diameter of 2.5 square millimeters. The pin distribution diagram is shown on the rear panel. We recommend you use high quality audio specialized cable, and the load impedance of the connected speaker is not less than 4 ohm.

#### Grounding Bolt

The equipment must be grounded (earthed). For safety, all equipment must be grounded. This point is important so as to prevent the external metal parts carrying high voltage currents. These high voltage currents can hurt or even kill the operator. Do not cut off the grounding connection of the mains lead.

## SPECIFICATIONS

Maximum input level	MIC +24dBu Line +24dBu Other Line +20dbu
Maximum output level	XLR +26dBu TRS +20dBu
Master meters	12 segment -30dB to CLIP
Channel meters	1 LED signal indication
Frequency response	20Hz to 30KHz 0.5dB
CMRR (MIC 1kHz)	>75dB
THD+N	<0.01% (Channel to mix out)
Crosstalk at 1kHz	Fader shutoff >85dB Mute shutoff >85dB Inter channel >82dB
Noise, rms 22Hz to 22KHz	EIN -122dBu Residual output noise <-90dBu L/R main mix noise <-82dBu Aux mix noise <-82dBu
MONO EQ	LF, shelving, +/-15dB, 12KHz HM, peak/dip, +/-15dB, 2.5KHz LF, shelving, +/-15dB, 80Hz
Stereo EQ	LF, shelving, +/-15dB, 12KHz HM, peak/dip, +/-15dB, 2.5KHz LF, shelving, +/-15dB, 80Hz
Mono channel	XLR balanced, pin 2 hot, 2K ohm, Sensitivity -60 to +14 dBu TRS balanced, tip hot, 10K ohm, Sensitivity -40 to+14 dBu XLR, phantom +48V
Stereo channel	TRS unbalanced, tip hot, 10K ohm, Sensitivity -40 to +14 dBu
2-track return	RCA, unbalanced, 4K ohm, -2 dBu
2-track send	RCA, unbalanced, <75 ohm, -2 dBu
L/R output	XLR balanced, pin 2 hot, <75 ohm, +4 dBu, Max.+22 dBu
SUB 1-2 output	XLR balanced, pin 2 hot, <75 ohm, +4 dBu, Max.+22 dBu
FX/AUX output	TRS unbalanced, tip hot, <75 ohm, -2 dBu, Max. +18 dBu
Headphones	TRS, tip L, ring R, 30 to 600 ohm headphones recommended
Max. Power input power	Mixing console type 6/8/10 CHANNEL 40watts Power mixer type 6/8 channel 600watts, 10 channel 1000watts
Dimensions	6 CHANNEL 8 CHANNEL 10 CHANNEL
Width(plastic plate type)	360mm 414mm 468mm
Width(metal plate type)	482mm 482mm 482mm
Depth	322mm 322mm 322mm
Height(mixing console type)	78mm 78mm 78mm
Height(power mixer type)	153mm 153mm 153mm

