# the t.mix



# MIX.FX SERIES

# **USER'S MANUAL**

**MIX.FX SERIES MIXER** 





NOTE		



# **SAFETY RELATED SYMBOLS**









This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.



This symbol, wherever used, alerts you to important operating and maintenance instructions.

Please read.



**Protective Ground Terminal** 



ON: Denotes the product is turned on.

Denotes the product is turned off.

#### WARNING

Describes precautions that should be observed to prevent the possibility of death or injury to the user.

#### **CAUTION**



Describes precautions that should be observed to prevent damage to the product.

Disposing of this product should not be placed in municipal waste but rather in a separate collection.

# **WARNING**

# **Power Supply**

Ensure that the mains source voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user. Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

#### **External Connection**

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

#### **Do Not Remove Any Covers**

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed. Covers should be removed by qualified service personnel only.

No user serviceable parts inside.

# Fuse

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

#### **Protective Ground**

Before turning the unit ON, make sure that it is connected to Ground. This is to prevent the risk of electric shock.

Never cut internal or external Ground wires. Likewise, never remove Ground wiring from the Protective Ground Terminal.

#### **Operating Conditions**

Always install in accordance with the manufacturer's instructions.

To avoid the risk of electric shock and damage, do not subject this product to any liquid/rain or moisture.

Do not use this product when in close proximity to water.

Do not install this product near any direct heat source. Do not block areas of ventilation. Failure to do so could result in fire.

Keep product away from naked flames.

#### **IMPORTANT SAFETY INSTRUCTIONS**

Read these instructions

Follow all instructions

Keep these instructions. Do not discard.

Heed all warnings.

Only use attachments / accessories specified by the manufacturer.

#### **Power Cord and Plug**

Do not tamper with the power cord or plug. These are designed for your safety.

Do not remove Ground connections!

If the plug does not fit your AC outlet seek advice from a qualified electrician.

Protect the power cord and plug from any physical stress to avoid risk of electric shock.

Do not place heavy objects on the power cord. This could cause electric shock or fire.

#### Cleaning

When required, either blow off dust from the product or use a dry cloth.

Do not use any solvents such as Benzol or Alcohol. For safety, keep product clean and free from dust.

# Servicing

Refer all servicing to qualified service personnel only. Do not perform any servicing other than those instruct -ions contained within the User's Manual

# **PORTABLE CART WARNING**



Carts and stands - The component should be used only with a cart or stand that is recommended by the manufacturer. A component and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the component and cart combination to overturn.



# **TABLE OF CONTENTS**

1. INTRODUCTION	1
2. FEATURES	1
3. USEFUL DATA	1
4. CONTROL ELEMENTS	3
5. INSTALLATION TIPS	11
6. WIRE CONNECTIONS	12
7. BLOCK DIAGRAM	13
8. TECHNICAL SPECIFICATION	15
9. GUARANTEE	17
10 NOTE	18



# **GUARANTEE**

**T.MIX** guarantees the normal operation of the product against any defect of manufacture and/or vice of material, by the term of (12) months, counted as of the date of purchase on the part of the user, committing itself to repair or to change, to its election, without position some, any piece or component that will fail in normal conditions of use within the mentioned period. This guarantee is valid if the original buyer will have to present /display this certificate properly sealed and signed by the selling house, accompanied by the corresponding invoice of purchase where it consisted the model and serial number of the acquired equipment.

The guarantee does not cover:

- -Damages caused by the illegal use of the product, repair and/or nonauthorized modification conducted by people by **T.MIX**.
- -Damages caused by the connection of the equipment to other equipment different from the specified ones in the manual of use, or by bad connection to these last ones.
- -Damages caused by electrical storms, blows and / or incorrect transport.
- -Damages caused by excesses or falls of tension in the network or by connection to networks with a tension different from the required one by the unit.
- -Damages caused by the presence of sand, acid of batteries, water, or any strange element inside the equipment.
- -Deteriorations produced by the course of the time, use and/or normal wear of the unit.
- -Alteraion or absence of the serial number of factory of the equipment.

The repairs could only be carried out the authorized technical service by **T.MIX**, that will inform about the term and other details into the repairs to take place according to this guarantee.

**T.MIX**, will repair this unit in counted a term nongreater to 30 days as of the date of entrance of the unit to the Technical Service. In those cases in that due to the particularity of the spare part, outside necessary their import, the repair time and the viability of the same one will be subject to the effective norms for the import of parts, in which case one will inquire to the user about the term and possibility into repair.

With the object of its correct operation, and of the validity of this one guarantee, this product will have to be installed and to be used according to the instructions that are detailed in the manual associate or the package of the product.

This unit will be able to appear for its repair, next to the invoice of purchase (or any other comprobante where the date of purchase consists), to its authorized distributer **T.MIX** or an authorized technical center on watch by **T.MIX**.

#### **Exclusion of damages:**

THE RESPONSIBILITY OF TOPP PRO BY ANY DEFECTIVE PRODUCT IS LIMITED THE REPAIR OR THE REPLACEMENT OF HE HIMSELF, TO TOPP OPTION PRO. IF WE CHOSE TO REPLACE THE PRODUCT, THE REPLACEMENT CAN BE A RECONDITIONATED UNIT. TOPP PRO WILL NOT BE RESPONSIBLE BY THE DAMAGES BASED ON THE LOST, INCONVENIENCE, LOSS OF USE, BENEFITS, LOST SAVINGS, BY THE DAMAGE TO OTHER EQUIPMENT OR OTHER ARTICLES IN THE USE SITE, OR BY ANY OTHER DAMAGE IF HE IS FORTUITOUS, CONSEQUENT OR OF ANOTHER TYPE, ALTHOUGH TOPP PRO HAS BEEN NOTICED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow to exclusion or the limitation to the fortuitous or consequent damages, so the aforesaid limitation can not be applied to you.

This guarantee gives specific legal rights him, you can also have other right that varies of state to state.

17





# **TECHNICAL SPECIFICATION**

AC Power Requirements	Power Consumption	40 Watts
	U.S.	120 VAC, 60 Hz
	Europe	240 VAC, 50 Hz
	Japan	100 VAC, 50/60 Hz
	Korea	220 VAC, 60 Hz
	AC Connector	3-pin IEC 250 VAC
Physical	Dimensions (H x W x D)	
	MIX 1204FX	96 x 292 x 360 mm (3.8" x 11.5" x 14.2")
	MIX 1622FX	96 x 348 x 384 mm (3.8" x 13.7" x 15.1")
	Weight	
	MIX 1204FX	4.0 Kg (8.8 lb)
	MIX 1622FX	4.4 Kg (9.8 lb)



# **INTRODUCTION**

Thank you for purchasing the MIX.FX series mixing console. The MIX.FX mixing console is packed with some features that can not be found in other consoles of its size: 4 mono (these are provided with ultra low noise microphone preamplifiers and phantom power at +48V) and 2 stereo input channels (4 channels for MIX 1622FX), and each of them is provided with warm, natural EQ; 2-Track inputs assignable to Main mix, Phones/Control Room outputs etc. Besides, the 24-bit effect processor with 256 effects.

Please read this manual carefully so you can take advantages of all the features of the MIX.FX series. Thank you again for making the right choice in purchasing the T.MIX MUSIC GEAR.

# **FEATURES**

- 4 mono inputs with gold plated XLR and Balanced TRS jack
- 2 (4 for MIX 1622FX) stereo inputs with Balanced TRS jack
- GAIN control and +48V phantom power for mono inputs
- 3-band EQ (plus 75Hz low cut filter) on all mono channels (For MIX 1204FX)
   3-band EQ with sweepable MID (plus 75Hz low cut filter) on all mono channels and 4-band EQ on stereo channels (For MIX 1622FX)
- 2 AUX sends: AUX1 with PRE/POST-fader switch for monitoring, AUX2 POST-fader for effect sends can be changed in PRE-fader for monitoring
- Each input channel features MUTE/ALT3-4, SOLO switches and OL LED (MIX 1204FX)
- MUTE, SUB1-2 and L-R assign switches, SOLO switches and OL LED (MIX 1622FX)
- 2-Track IN/OUT with discrete switches for routing to Control Room and to Main Mix
- Two different ways of SOLO PFL/AFL for a better control over signal path
- Balanced XLR & TRS jack output
- 24-bits internal DSP with 256 effects (16 presets by 16 variations), DSP MUTE and Peak LED

# **USEFUL DATA**

Please write your serial number here for future reference.

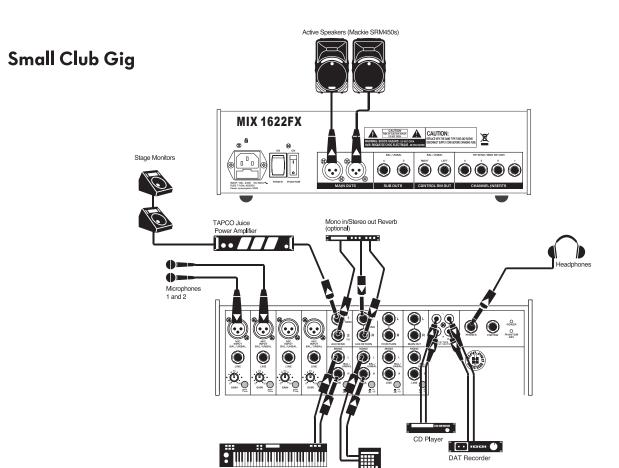
Serial	lumber:
Data o	Purchase:

Pur	chas	sed	at
	VII.	<b></b>	u

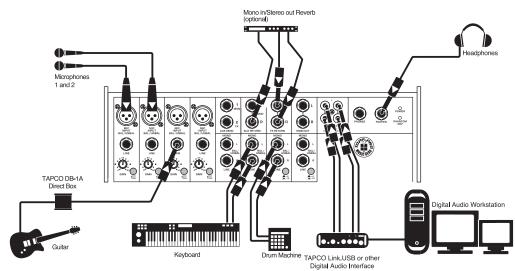
2



# **TECHNICAL SPECIFICATION**



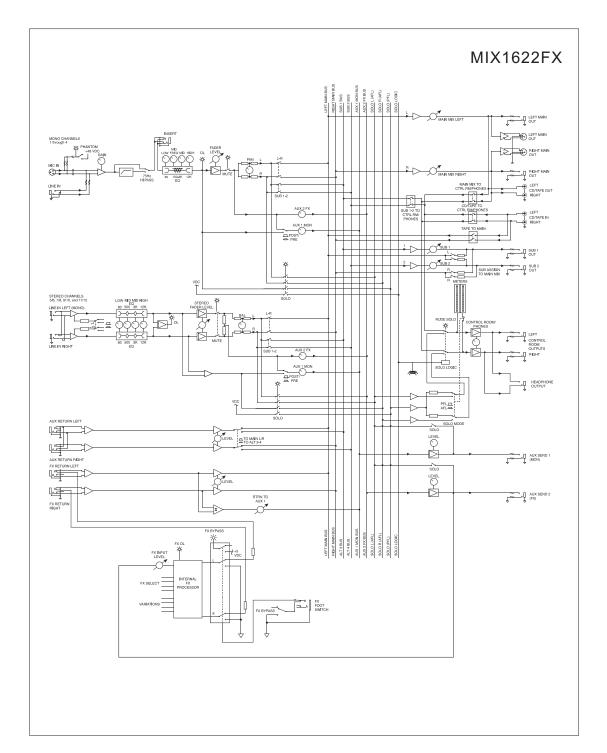




Model Number	MIX.FX	Series Mixer	
Frequency Response	Mic Input to any Output (Trim at 0 dB)		
	+0, -1 dB	10 Hz to 150 kHz	
	-3 dB	10 Hz to 200 kHz	
Distortion	THD and SMPTE IMD	20 Hz to 20 kHz	
	Mic Input to Main Output	<0.005% @+4 dBu output	
Noise	20 Hz to 20 kHz BW (150 Ohm source impedance)		
	Equivalent Input Noise (EIN)	-129 dBu	
	Residual Output Noise		
	Main, Ctrl Room, Phones	-105 dBu	
CMRR	Mic In	60 dB@1 kHz, Gain@ aximum	
Crosstalk	Adjacent Inputs or Input to Output	-90 dB@1 kHz	
	Input Gain Conrol Range	0 dB to +50 dB	
	Phantom Power	+48 VDC	
Equalization	MIX 1204FX High	+/-15 dB@12 kHz	
	Mid	+/-12 dB@2.5 kHz	
	Low	+/-15 dB@80 Hz	
	MIX 1622FX (Mono Channels)		
	High	+/-15 dB@12 kHz	
	Mid	+/-15 dB, sweepable from 100 Hz to 8 KHz	
	Low	+/-15 dB@80 Hz	
	MIX 1622FX (Stereo Channels)		
	High	+/-15 dB@12 kHz	
	Mid	+/-15 dB@3 KHz	
	Mid	+/-15 dB@500 Hz	
	Low	+/-15 dB@80 Hz	
Mixer Rated Output	Main, Aux, Control Room	+4 dBu	
ou culput	Maximum Rated Output	+22 dBu	
Maximum Input Levels	Mic Input	+12 dBu, Gain @+10 dB	
	Line Input	+30 dBu, Gain @+10 dB	
	Tape Input and Aux Return	+22 dBu	
Input Impedance	Mic Input	2.6 k $\Omega$ , balanced	
	Line Input	20 k $\Omega$ , balanced	
	Stereo Aux Returns	20 k $\Omega$ , balanced	
	CD/Tape In	<b>24</b> k $\Omega$ , unbalanced	
Output Impedance	Main	240 $\Omega$ , balanced; 120 $\Omega$ , unbalanced	
	Ctrl Room, Aux Sends	<b>120</b> Ω	
	Tape Output	1 kΩ	
	Phones Output	<b>25</b> Ω	
VU Meters	Main Left and Right (MIX 1204FX)	Clip (+18), +10, +5, +2, 0, -2, -5, -20	
A O MICICI 2	Main Left and Right (MIX 1622FX)	Clip (+18), +10, +7, +4, +2, 0, -2, -4, -7, -10, -20, -3(	

2

# **BLOCK DIAGRAM**





# **CONTROL ELEMENTS**

## Mono MIC Input

1

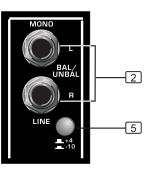
The MIX. FX series is equipped with 4 low-noise mic preamplifiers with optional phantom power providing up to 50 dB of amplification. You can connect almost any type of microphone. Dynamic microphones don't need phantom power. Use phantom power only with condenser microphones but make sure that the phantom power switch is disengaged before connecting the microphone. Phantom power will not damage your dynamic microphones but it may damage tube or ribbon microphones so make sure to read the microphone instructions manual before engaging phantom power switch. There are also equipped with 1/4" TRS balanced and TS unbalanced LINE IN plug, you can connect with line-level instruments, such as synthesizers, keyboards, drum machines or effect devices. NOTE: Never try to connect a line-level signal to the XLR MIC input when the phantom power is engaged, doing this you may seriously damage your equipment.

#### STEREO LINE INPUTS

2

They are organized in stereo pair and provided with 1/4" TRS jacks. It is used to connect the stereo device, plug both the left input and the right input. Using the left input if connect a mono input signal to the STEREO INPUT, the signal will appear on both sides.

# MIC INPUT BAL/UNBAL LINE 25 GAIN 75H2



#### GAIN CONTROL 3

This GAIN control is used to control the input sensitivity of the MIC and LINE inputs. The adjustable range goes from 0 dB to 50 dB.

## 75 Hz Low-Cut Switch 4

By pressing this button you will activate a 75 Hz low frequency filter that cuts the bass frequency below 75 Hz. You can use this switch to reduce the hum noise caused by the mains power supply, or the stage rumble while using a microphone.

# +4/-10 Switch 5

These switches are used to select the input sensitivity of the line inputs on the stereo channels. +4 dBu is suitable for professional audio devices and -10 dBv is suitable for general devices. If not sure to use which setting, try +4 dBu first, then change it to -10 dBv if the volume is too small to be satisfied.

# **EQUALIZATION**

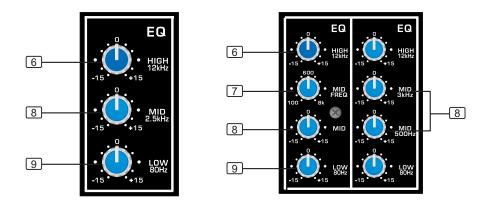
The MIX 1204FX is equipped with 3-band EQ on all the channels while the MIX 1622FX has 3-band EQ with sweepable MID on all mono channels and 4-band EQ on stereo channels. All bands provide up to 15 dB boost or cut.



# **CONTROL ELEMENTS**

# HIGH 6

This is the treble control. You can use it to get rid of high frequency of the human voice. The gain range goes from -15 dB to +15 dB with a centre frequency of 12 kHz.



# MID FREQ (Only for Mono Channels of MIX 1622FX)

It can change the center frequency for the MID EQ filter. From this knob you can more accurately select the band of frequency that you want to boost or cut. The ranges goes from 100 Hz to 8 kHz.

7

#### MID EQ 8

This control provides 15 dB boost or cut at 2.5 kHz on the MIX 1204FX. The MIX 1622FX has one sweepable MID EQ controls on the mono channels and two discrete MID EQ on the stereo channels with center frequencies at 3 kHz and 500 Hz, it can affect most fundamental frequencies of all musical instruments and human voice.

#### LOW EQ 9

This is the bass control. It is used to boost male voice, kick-drum or bass guitar. Your system will sound much bigger than what it is. The gain range goes from -15 dB to +15 dB with a center frequency of 80 Hz.

## AUX Send Controls 10

These two controls are used to adjust the level of signal sent to AUX bus 1&2, and this adjustment doesn't effect the main mix output signal at all.

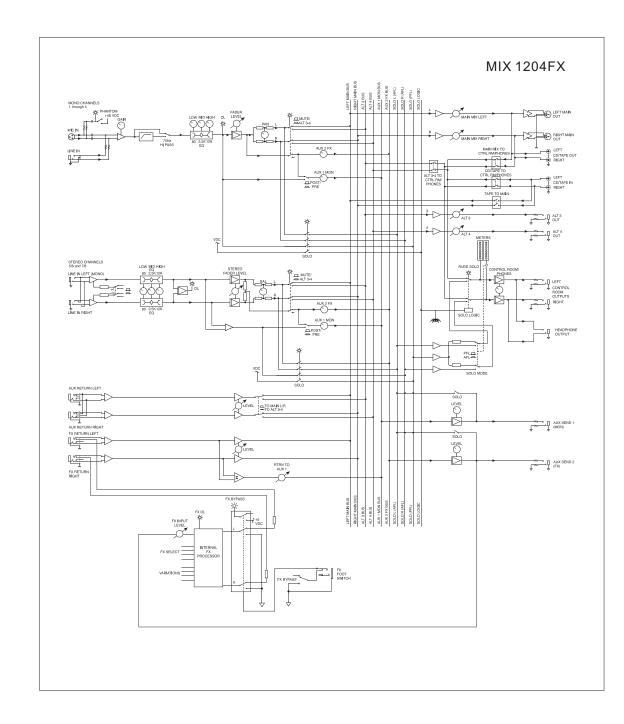
AUX SEND1 (MON) can be configured as PRE/POST fader via the PRE switch. Up for POST fader, the signal is sent out after the channel fader and will be affected by the channel fader. Down for PRE fader, the signal is sent out before the channel fader and will not be affected by the channel fader. AUX 2 (FX) is configured as POST fader.

#### PAN/BAL 11

Abbreviation of PANORAMA control for mono channels, for the stereo channels, always says, BALANCE control. You can adjust the stereo image of the signal via this control. For mono MIC/LINE channels, keep PAN control in centre position and your signal will be positioned in the middle of stage that is to say the mono signal appears equally in both sides. Turn this control fully counterclockwise and the signal will be present only on the left speaker and vice-versa. For stereo channels, by rotating the BAL control, you can attenuate the signal of left or right. It means if turn the control to left, the right channel will be attenuated; if turned to right, the left channel will be attenuated.

# MIX.FX SERIES

# **BLOCK DIAGRAM**



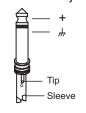


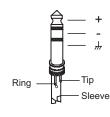


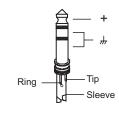
# WIRE CONNECTIONS

Either the 1/4" TRS phone jack or XLR connector can be wired in balanced and unbalanced modes, which will be determined by the actual application status, please wire your system as the following wiring examples:

• For 1/4" Phone jack





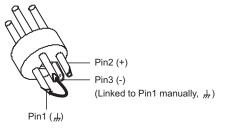


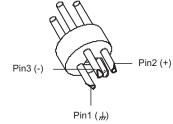
TS Type Unbalanced

TRS Type Balanced

TRS Type Unbalanced

• For XLR Connector





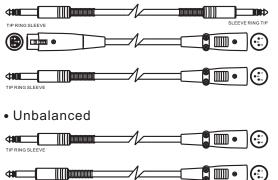
XLR Type Unbalanced

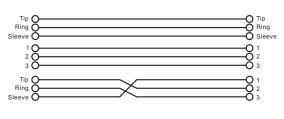
XLR Type Balanced

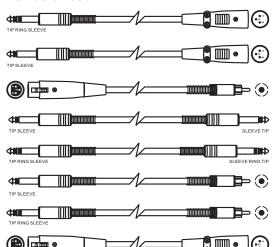
#### In-line Connection

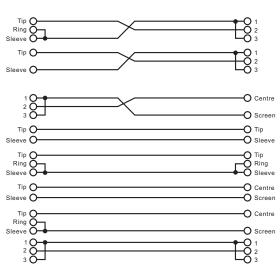
For these applications the unit provides 1/4" TRS and XLR connectors to easily interface with most professional audio devices. Follow the configuration examples below for your particular connection.

Balanced









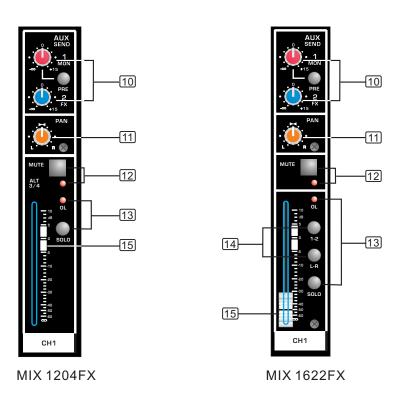
# MIX.FX SERIES

# **CONTROL ELEMENTS**

# MUTE/ALT3-4 SWITCH (For MIX 1204FX) MUTE SWITCH (For MIX 1622FX)

12

Each channel is equipped with the MUTE/ALT3-4 (in MIX 1204FX) or MUTE switch (in MIX 1622FX). Pressing this switch is equal to turning the fader down, which can mute the corresponding channel output except for SOLO (in PFL mode), the MUTE LED will illuminate. In MIX1204FX, the MUTE/ALT3-4 switch can also be used for signal routing.



#### SOLO SWITCH & OL LED

[13]

When pressing this switch, the OL LED will illuminate and the SOLO signal will replace other signals and reach to the CONTROL ROOM/PHONES. Usually use the SOLO function to preview each channel before they are get into the mix. You can solo more than one channel at a time. And the soloed channels are sent to the CONTROL ROOM, PHONES, and LED display. Engaging the SOLO switch, all CONTROL ROOM SOURCE selections MAIN MIX, CD/TAPE, ALT3-4 (MIX 1204FX) and SUB1-2 (MIX 1622FX) will be muted.

# 1-2 & L-R Switches (only for MIX 1622FX)

Each channel provides two assignment switches: 1-2, and L-R.

Pressing the 1-2 will assign the channel signal to SUB1-2, you can depend on the PAN/BAL control to adjust the amount of channel signal sent to the SUB1 versus SUB2, when turns the PAN/BAL to completely left, then the signal can be only controlled by SUB1 and viceversa. In the same way, pressing the L-R will assign the channel signal to MAIN MIX L-R. This switch must be engaged in to get the channel's signal through to main outs.

#### Fader 15

This control will adjust the overall level of this channel and set the amount of signal sent to the main output.



4

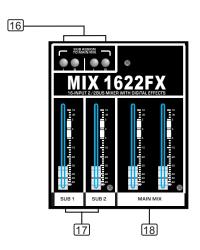
# **CONTROL ELEMENTS**

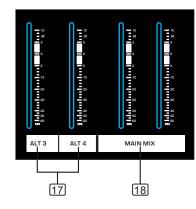
# SUB ASSIGN TO MAIN MIX Switches (only for MIX 1622FX)

[16]

Through these switches, you can operate the SUB1-2 faders as a master control for assigning the SUB 1-2 to MAIN MIX.

Engage the LEFT switch to send the corresponding sub signal to MAIN MIX L, and the RIGHT switch for MAIN MIX R. When engaging the both switches, the signal will be sent to L/R of MAIN MIX.





# ALT3-4 Master Faders (MIX 1204FX) SUB1-2 Master Faders (MIX 1622FX)

17

These faders are used to control the levels of signal that send to the ALT3-4OUT /SUB 1-2 OUT. The range goes from  $-\infty$  to +10 dB. By pushing in the MUTE/ ALT3-4 switch (for MIX 1204FX) & SUB 1-2 ASSIGN switch (for MIX 1622FX), the signals will appear at the ALT3-4/SUB1-2 OUTS.

#### MAIN MIX Faders

These two faders set the level of main mix signals sent to the Main Outputs, Tape Outputs, CONTROL ROOM, PHONES, and LED display.

18

Note: When connecting a speaker to the speaker output jacks on rear panel, please pay more attention to the level setting for avoiding damaging the speaker. Generally, the faders will be positioned between 0 dB (**U**) and the +5 dB.

#### MASTER AUX SEND Controls

Both knobs are used to determine the master AUX SEND levels. The adjustable range is from  $-\infty$  to +15 dB. When the external effect unit connected to mixer has no input gain control, you can get a further +15 dB gain available from these AUX SEND outputs.

#### MASTER AUX SEND SOLO Switches

20

From these two switches you can monitor the aux send signals in the CONTROL ROOM and PHONES outputs.

#### AUX/FX RETURN Level Controls

21

These two controls adjust the amount of the AUX /FX Return signal that added to the L/R main mix buses just before the MAIN MIX fader.

# MIX.FX SERIES

# **CONTROL ELEMENTS**

#### **XLR MAIN OUTS**

47

These two outputs are supplied with the XLR connectors. Connect these to the inputs of your main power amplifier, powered speaker, or serial effects processor.

# ALT3-4 OUTS (Only for MIX 1204FX) SUB OUTS (Only for MIX 1622FX)

48

These 1/4" jacks are unbalanced outputs. The signal level to the ALT3-4 OUTPUT/SUB OUT is adjusted by ALT3-4/SUB1-2 knob on the front panel.

#### **CONTROL RM OUT**

49

These 1/4" TRS jacks are used to send the control room signal to the studio monitor speakers or a second set of PA. They can also be used to provide another main mix output, or to monitor the CD/TAPE Inputs (when CD/TAPE switch pushed in), or to monitor the ALT3-4(MIX 1204FX only) or SUB1-2 output (MIX 1622FX only).

#### CHANNEL INSERTS1-4 (Only for MIX 1622FX)

50

Insert sockets are provided for all mono MIC channels. It can allow you patch external processing devices into signal path via a TRS connector, the signal will be taken out after the input gain control, and sent to an external processor such as a compressor-limiter, then returned into the same channel immediately before the EQ section.

# MIX.FX SERIES

# **INSTALLATION TIPS**

5

- 1- Speakers should be placed in a position that allows for unobstructe sound projection. In many instances is beneficial for speakers to be elevated on tripod stands to achieve maximum dispersion and reach.
- 2- Use professional advice or service when hanging and installing speakers. Please take precautions to secure them to prevent them from falling and hurting someone. Care should be taken as to not damage the cabinet or its components. Please comply with all pertinent Regulations.
- 3- Use quality cables. Using quality cables will ensure the best possible sound.
- 4- For best results match the speakers to a good amplifier that matches the wattage and impedance of your speakers. Proper amplification power results in good quality audio and longer component life. Check out the power requirement for your cabinet.
- 5- Avoid pointing a microphone directly at an amplified speaker doing so, could cause feedback possibly damaging speaker components and your hearing.

**Enjoy the sound!** 



4

# **CONTROL ELEMENTS**

#### **PHONES Jack**

40

This socket will send out the mix signal to a pair of headphones, and the signal is the same as the CTRL RM OUTS outputs. The level controlled by the CTRL ROOM/PHONES knob. You can listen to the Main Mix, the CD/TAPE, or the ALT3-4 (MIX 1204FX) or SUB1-2 (MIX 1622FX) depending on these CONTROL ROOM SOURCE select switches.

#### **FOOT Switch**

41

This 1/4" TS jack can be used to connect an external footswitch for engaging the internal FX BYPASS function. If the LED which next to the FX BYPASS switch lights up, it means the bypass function is engaged.

#### **POWER LED**

42

This LED lights up when the power switch is turned on.

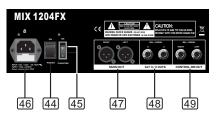
#### **PHANTOM 48V Switch and LED**

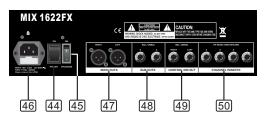
43

This +48VDC Phantom Power switch only apply to the XLR microphone inputs. Never connect microphones when the phantom power is on already. The LED near to this switch will light up when the phantom power is switched on.

**NOTE**: Turn down all output levels before operating this switch to avoid the possibility of "pop" in your speakers. Do not use phantom power with tube or ribbon microphones, as this may cause damage.

#### **Rear Panel**





#### **POWER ON/OFF Switch**

44

This switch is used to turn the main power ON or OFF. When powered on the power LED on the front panel lights up.

# **PHANTOM ON Switch**

15

This switch will apply +48VDC Phantom Power only to the four XLR microphone inputs. Never connect microphones when the phantom power is on already.

**NOTE**: Turn down all output levels before operating this switch to avoid the possibility of "pop" in your speakers. Do not use phantom power with tube or ribbon microphones, as this may cause damage.

# AC Inlet with Fuse Holder

46

Use it to connect your mixer to the main AC with the supplied AC cord. Please check the available voltage in your country and voltage required for your M. FX model before attempting to connect your MIX.FX Series mixer to the main AC.

# MIX.FX SFRIFS

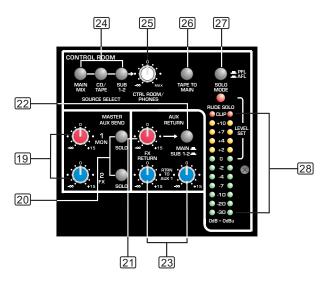
# **CONTROL ELEMENTS**

If you not plug any signal into FX RETURN inputs, the FX Return signal comes from the internal effects module; If you plug an external effects processor into FX RETURN inputs, the internal effects is disconnected and only the external effects signal is routed through the FX RETURN level control.

# MAIN/ALT3-4 Switch (MIX 1204FX) MAIN/SUB1-2 Switch (MIX 1622FX)



AUX RETURN is equipped with the MAIN/ALT3-4 (MIX 1204FX) or MAIN/SUB1-2 (M IX 1622FX) switch. Release the switch to send the stereo signal from AUX RETURN to MAIN MIX buses; and engage this switch the stereo signal will be sent to ALT 3-4 or SUB1-2 buses.



#### RTRN TO AUX1 Level Control

23

This control will route the signal that is present at the FX RETURN jacks to AUX1 output so that the effects can be heard in the monitor mix.

#### **CONTROL ROOM SOURCE Switches**

24

You can choose to monitor any combination of MAIN MIX, CD/TAPE, and ALT3-4 (MIX 12 04FX)/SUB1-2 (MIX 1622FX) via these switches. The corresponding stereo signals will be delivered to the CONTROL ROOM/PHONES and LED display.

#### **CTRL ROOM/PHONES Knob**

25

This control is used to adjust the output level of CTRL ROOM/PHONES.

#### **TAPE TO MAIN Switch**

26

You can connect a CD or Tape Deck to the CD/TAPE inputs and press this switch to send the CD/TAPE signal to the main mix. Also, you can use the MAIN MIX controls to adjust the volume level.





# **CONTROL ELEMENTS**

# SOLO MODE (PFL/AFL) & RUDE SOLO LED



By pushing down this button will made the selected signal of CONTROL ROOM SOURCE replace by the SOLO signal, going into the CONTROL ROOM OUTPUTS, PHONES and the RIGHT LED DISPLAY (LEFT and RIGHT LED DISPLAY when in AFL SOLO MODE). The audible SOLO levels are controlled by the CTRL ROOM/PHONES knob.

The button provides two modes: up for PFL (Pre-Fader-Listen) mode, down for AFL (After-Fader-Listen) mode. In either mode, SOLO will not be affected by a channel's MUTE/ALT

NOTE: Be caution when switching from AFL to PFL mode. If you have the channel fader turned down too much below the unity gain while in AFL mode, switch to PFL mode will cause a sudden and startling increase in volume level.

When the solo mode is engaged, the SOLO LED will light up. (In PFL Solo mode ,the RUDE SOLO LED is green, while in AFL Solo mode, the LED is red.)

#### **OUTPUT LEVEL LED DISPLAY**



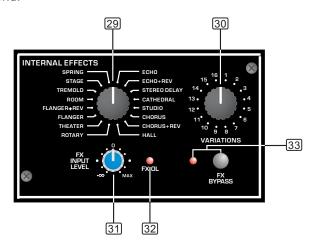
These stereo LED meter will indicate the level of the overall output signal.

#### INTERNAL EFFECTS SECTION

#### **Internal Effects Selector**



Adjust this knob to select the right effect you wish to perform. There are totally 16 options for you: SPRING, STAGE, TREMOLO and two-effect combinations. When you are satisfied with the right preset, please push this knob to store it. When changing effects, the effects output mutes for a second.



#### **VARIATIONS**

Since you have selected the preferable effect, the next step, please go with the fine consideration, there are also total 16 variations for each preset, and each variation may be managed by several different factors.

#### **FX INPUT LEVEL Control**

This control is used to adjust the signal level coming into the internal effects processor. Adjust the FX INPUT LEVEL knob until you can hardly see the FX OL LED blink.

#### **FX OL LED**

This LED lights up when the signal is too strong for the digital effects processor. Turn down the FX INPUT LEVEL knob when you see the FX OL LED blink frequently.

# **CONTROL ELEMENTS**

#### **FX BYPASS & LED**

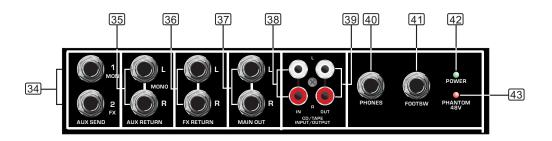
33

34

Engaging this switch in to bypass the internal effects processor and its output will not come into main mix or stage monitors. When use this function, the LED next to the BYPASS switch will illuminate.

#### **AUX SEND OUT**

These 1/4" TRS are used to send out the signal from the AUX bus to external device such as effects equipment, they also can be used as monitoring outputs by connecting a power amplifier and monitor speaker. Each channel has an AUX SEND 1 MON and AUX SEND 2 FX control that adjusts how much of that channel's signal appear at each of these outputs.



# **STEREO AUX RETURN Inputs**

[35]

Use these stereo 1/4" jacks to return the signal of an effect unit to main mix. (Note: In MIX 1622FX, if you engage the MAIN/SUB1-2 switch, the signal is routed to Sub 1-2 bus), the level controlled by Master AUX RETURN knob. Only use the left input if connect a mono input signal to the AUX RETURN inputs, the signal will appear on both sides.

## **STEREO FX RETURN Inputs**

Connect these inputs with the output of an external effects device. If you plugging a 1/4" jack into these inputs, it will disconnect the internal effects processor. However, if you plug into just the left input ,the right internal effects is still connected, and vice versa. The signal is routed to main mix, the level controlled by FX RETURN knob.

#### 1/4" MAIN OUT Jacks (Only for MIX 1622FX)

These 1/4" TRS jacks are used to connect with the inputs of an external amplifiers or active speakers. It has the same signal that appears at the XLR MAIN OUTS on the rear panel.

#### **CD/TAPE INPUTS**

Use the Tape Input if you wish to listen to your mixer from a Taper Recorder or DAT. When the TAPE TO MAIN switch is pushed in, you can assign the signal coming from Taper Recorder to main mix; when the CD/TAPE switch which on the front panel is engaged in the signal can also be assigned to the CONTROL ROOM/PHONES outputs. If you connecting a mono device, you will need a "Y-splitter" RCA adapter.

#### **TAPE OUTPUTS**

These RCA sockets will route the main out signal into a tape recorder or DAT. The TAPE OUT level is affected by MAIN MIX faders.