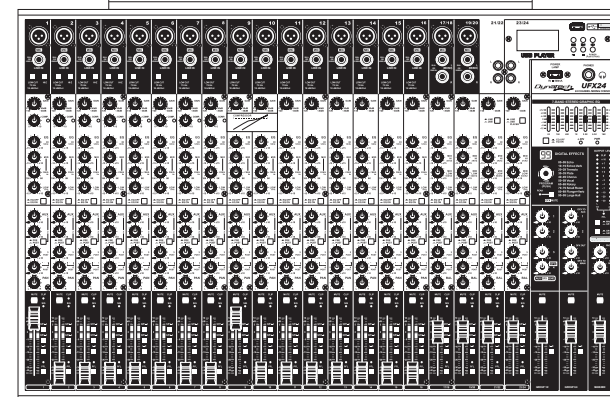
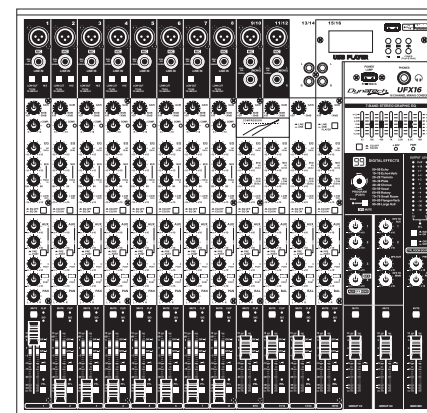


*Dynatech*

# UFX16/24 MIXING CONSOLE

User's Manual



---

**INDEX**

---

<b>01 SAFETY RELATED SYMBOLS .....</b>	<b>1</b>
<b>02 WARNING .....</b>	<b>1</b>
<b>03 IMPORTANT SAFETY INSTRUCTION .....</b>	<b>2</b>
<b>04 INTRODUCTION .....</b>	<b>3</b>
<b>05 READY TO START .....</b>	<b>3</b>
<b>04 FEATURES .....</b>	<b>4</b>
<b>05 CONTROL ELEMENTS .....</b>	<b>5</b>
<b>06 INSTALLATION &amp; CONNECTION .....</b>	<b>17</b>
<b>06 PRESET LIST .....</b>	<b>20</b>
<b>07 BLOCK DIAGRAM .....</b>	<b>21</b>
<b>08 TECHNICAL SPECIFICATION .....</b>	<b>22</b>

## SAFETY RELATED SYMBOLS



The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions.



The symbol is used in the service documentation to indicate that specific component shall be only replaced by the component specified in that Documentation for safety reasons.



Protective grounding terminal.



Alternating current /voltage.



Hazardous live terminal .

ON: Denotes the apparatus turns on.

OFF: Denotes the apparatus turns off, because of using the single pole switch, be sure to unplug the AC power to prevent any electric shock before you proceed your service.

**WARNING:** Describes precautions that should be observed to prevent the danger of injury or death to the user.



Disposing of this product should not be placed in municipal waste and should be separate collection.

**CAUTION:** Describes precautions that should be observed to prevent danger of the apparatus.

## WARNING

### • Power Supply

Ensure the source voltage matches the voltage of the power supply before turning ON the apparatus.

Unplug this apparatus during lightning storms or when unused for long periods of time.

### • External Connection

The external wiring connected to the output hazardous live terminals requires installation by an instructed person, or the use of ready-made leads or cords.

### • Do not Remove any Cover

There are maybe some areas with high voltages inside, to reduce the risk of electric shock, do not remove any cover if the power supply is connected.

The cover should be removed by the qualified personnel only.

No user serviceable parts inside.

### • Fuse

To prevent a fire, make sure to use fuses with specified standard (current, voltage, type). Do not use a different fuse or short circuit the fuse holder.

Before replacing the fuse, turn OFF the apparatus and disconnected the power source.

### • Protective Grounding

Make sure to connect the protective grounding to prevent any electric shock before turning ON the apparatus.

Never cut off the internal or external protective grounding wire or disconnect the wiring of protective grounding terminal.

### • Operating Conditions

This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on this apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Do not use this apparatus near water. Install in accordance with the manufacture-r's instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not block any ventilation openings.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

### IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Follow all instructions.
- Keep these instructions.
- Heed all warnings.
- Only use attachments/accessories specified by the manufacturer.

#### • Power Cord and Plug

Do not defeat the safety purpose of the polarized or grounding type plug.

A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

#### • Cleaning

When the apparatus needs a cleaning, you can blow off dust from the apparatus with

a blower or clean with rag etc.

Don't use solvents such as benzol, alcohol, or other fluids with very strong volatility and flammability for cleaning the apparatus body. Clean only with dry cloth.

#### • Servicing

Refer all servicing to qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so .

Servicing is required when the apparatus has been damaged in any way ,such as power supply cord or plug is damaged , liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture , does not operate normally, or has been dropped.

The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.

Impedances		
Microphone input	1.8K $\Omega$	
All other input	10K $\Omega$ or greater	
Tape out	1K $\Omega$	
All other out	120 $\Omega$	
DSP section		
A/D and D/A converters	24bit	
Type of effects	Echo ,Echo+Verb , Tremolo , Plate , Chorus ,Vocal	
	Rotary , Small Room , Flange + Verb , Large Hall	
Controls	100 position preset selector(10 preseter * 10 variation)	
	Mute switch & Foot-switching with LED indicator	
FOOT-SW	TIP:FX	SLEEV:GND
Main mix section		
Max. MAIN MIX output	+ 26dBu XLR balanced (+ 20dBu un-balanced)	
AUX range	OFF to + 10dB	
Fader range	OFF to + 10dB	
PHONES/CONTROL-ROOM range	OFF to + 10dB	
Hum & Noise	< -80dB @ 20Hz~22KHz A-weighted、1 channel & MAIN level:0dB,the other :minimum	
Crosstalk	< -80dB @0dB 20Hz~22KHz A-weighted、MAIN level:0dB, the other :minimum,	
Power supply		
	UFX 16	UFX 24
Main voltage	100-240V~ 50/60Hz	100-240V~ 50/60Hz
Fuse	T1.25A AC250V	T1.6A AC250V
Rated power consumption	30W	40W

## TECHNICAL SPECIFICATIONS

MODEL :	UFX16/24 mixing console	
Mono channels		
Microphone input	XLR with balanced	
Frequency response	10Hz to 55KHz, +/-3dB	
Distortion(THD+N)	<0.03% at +0dB ,22Hz~22KHz A-weighted	
Gain range	0dB to 50dB	
Max. Input	+21 dB	
LOW CUT	75Hz	
SNR	<-100dBr A-weighted	
Phantom power	+48V with switch control	
Line input	1/4' TRS with balanced	
Frequency response	10Hz to 55KHz, +/-3dB	
Distortion(THD+N)	<0.03% at +0dB ,22Hz~22KHz A-weighted	
Sensitivity range	+20dB~ -30dB	
COMPRESSOR	GAIN:0~9dB	
	THRESHOLD:20dB---> ↓ 5dB	
Stereo input channels		
Mic input	XLR with balanced	
Line input	1/4' TRS with balanced	
Frequency response	10Hz to 55KHz, +/-3dB	
Distortion(THD+N)	<0.03% at +0dB ,22Hz~22KHz A-weighted	
Sensitivity range	+20dBu~ -30dBu	
SNR	<-100dBr A-weighted	
RCA input channels		
RCA input	RCA with un-balanced	
Frequency response	10Hz to 55KHz, +/-3dB	
Distortion(THD+N)	<0.03% at +0dB ,22Hz~22KHz A-weighted	
Sensitivity range	+20dBu~ -30dBu	
SNR	<-100dBr A-weighted	
Channels EQ		
	mono channel	stereo channel
High	+/-15dB @12KHz	+/-15dB @12KHz
Mid	+/-15dB @100KHz -8KHz	+/-15dB @3KHz or +/-15dB @500Hz
Low	+/-15dB @80Hz	+/-15dB @80Hz

## INTRODUCTION

Thank you choosing for purchasing UFX16/24 Mixing Console. This is a professional compact mixer to give you great quality and better reliability than ever before you will get the smooth, accurate more natural and open sound from this apparatus, and it is really ideal for gigs ,recording and fixed PA installations.

UFX16/24 Mixing Console is packed with features that can not be found in other consoles of its size: 8/16 mono which can provided with ultra low noise microphone pre amplifiers and Phantom Power at +48 Volt; 4 stereo input channels; 3-band EQ with sweepable MID on mono inputs;4-band EQ on stereo inputs, 4 auxiliary control, highly accurate 12-segment bar graph meters and 2-track inputs assignable to main mix, control room/phone output etc...

This unit is very easy to operate but we advise you to go through each section of this manual carefully. In this way you will get the best out of your UFX16/24 Mixing Console.

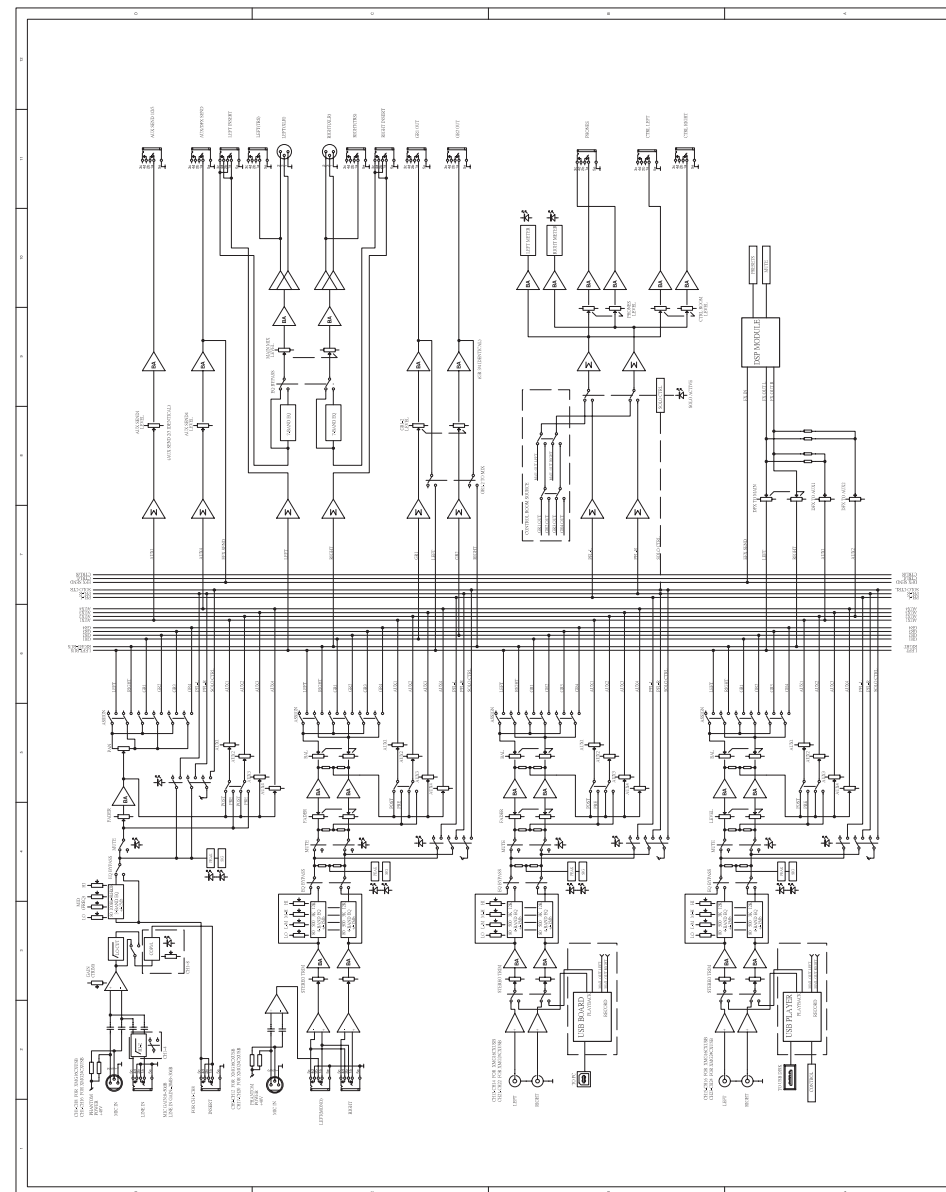
## READY TO START

- 1) Please check the AC voltage available in your country before connecting your mixer to the AC socket.
- 2) Be sure that the main power switch is turned off before connecting the mixer to the AC socket. Also, you should make sure that all input and output controls are turned down. This will avoid damage to your speakers and avoid excessive noise.
- 3) Always turn on the mixer before the power amplifier; turn off the mixer after the power amplifier.
- 4) Before connecting and disconnecting the unit from the power source always turn off the unit.
- 5) Do not use solvents to clean your mixer. A dry and clean cloth will be OK.

## FEATURES

- Ultra-low noise discrete MIC Preamps with +48V Phantom Power.
- 8/16 MIC Input Channels with XLRs and balanced Line Inputs.
- 8 Compressors control and 8 Insert I/O.
- Low Cut for each MIC Input.
- 2 Stereo Input Channels with mono XLRs Input and TRS Jacks; 2 Stereo Input Channels with RCA Jacks.
- 3-band EQ with sweepable MID and Peak LEDs on each Mono channels. 4-band EQ and Peak LEDs on Stereo channels.
- AUX 1 & AUX 2 Send POST/PRE per channel for monitoring or external effects. AUX 3 & DFX Send POST Fader for internal effects or monitoring.
- PFL/Mute function for each channels, 60mm Fader for level control.
- GR1/2, GR3/4 and Main L-R bus assign for each channel.
- Balanced XLR & TRS outputs for Main Mix.
- Built in 24-bit DSP effect with 100 presets.
- Assembled MP3 player.
- Internal switch-mode power supply for maximum flexibility 100-240V.
- With USB port, record from MAIN OUT and play to CH15/16 for UFX16 & CH23/24 for UFX24.

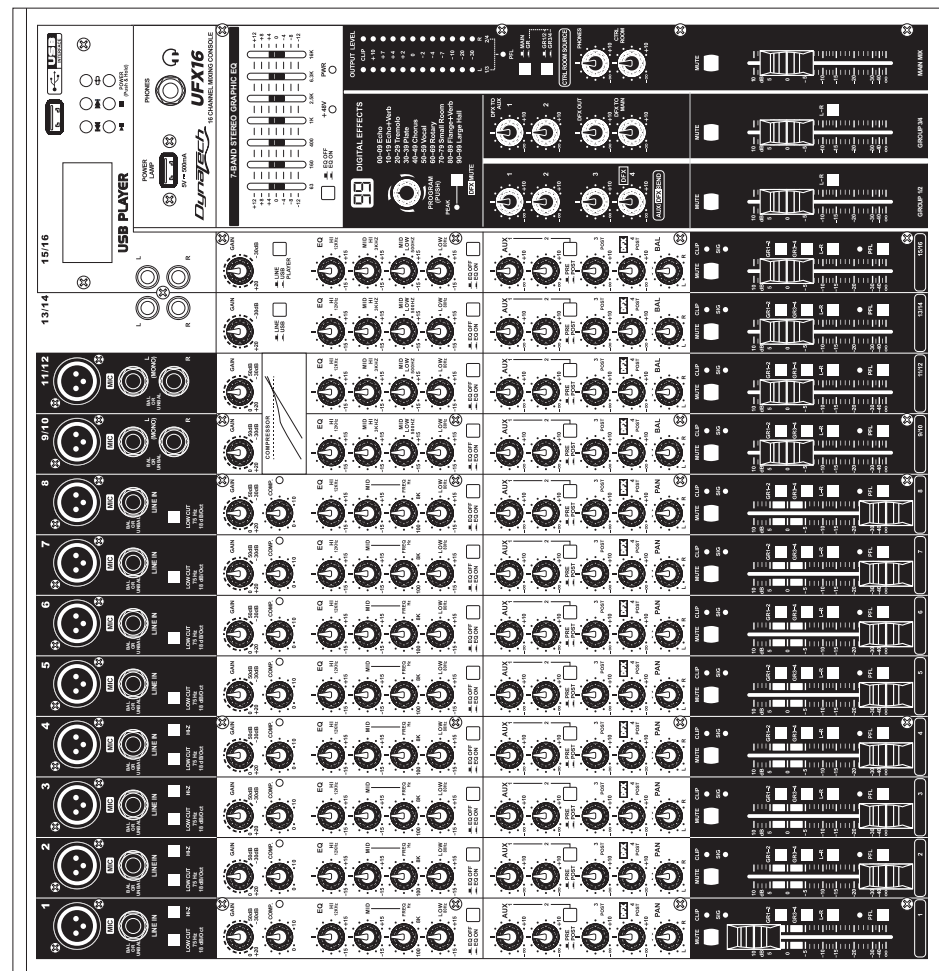
## BLOCK DIAGRAM



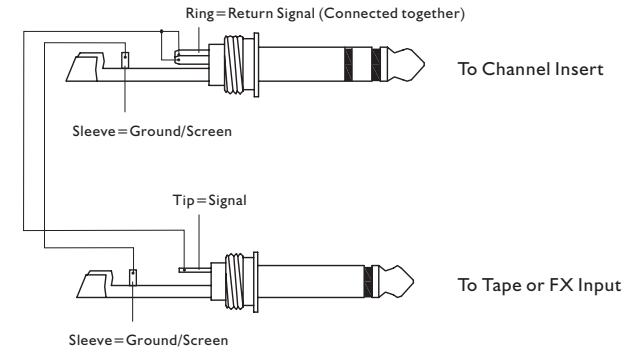
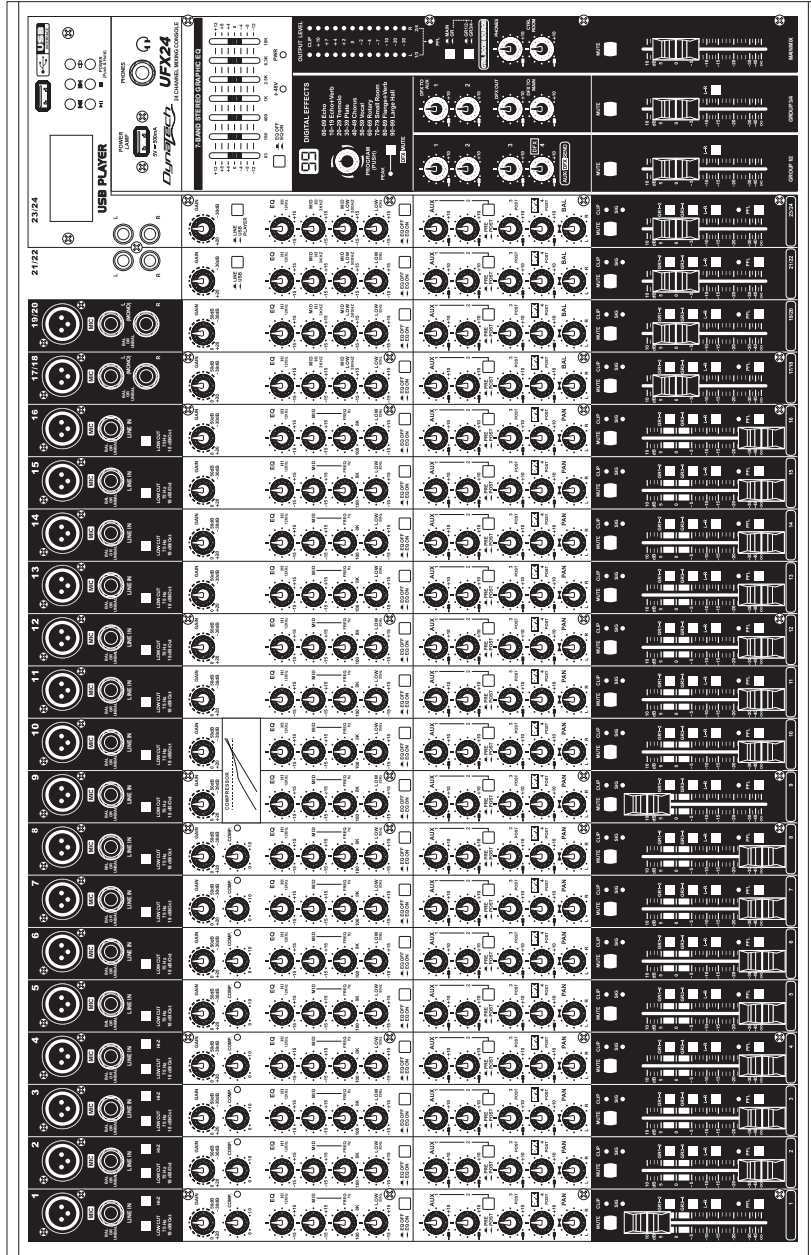
## PRESET LIST

No.	Preset	Description	Parameter
00~09	Echo	Reproduce the sound in input on the output after a lapse of time or delay.	Delay Time : 145~205ms
10~19	Echo+Verb	Echo with Room effect.	Delay Time : 208~650ms Decay time : 1.7~2.1s
20~29	Tremolo	Amplitude modulation of the signal.	Rate : 0.6 Hz~5 Hz
30~39	Plate	Simulate the transducers sound like classic bright vocal plate.	Decay time:0.9s~3.6s
40~49	Chorus	Recreate the illusion of more than one instrument from a single instrument sound.	Rate : 0.92Hz ~1.72Hz
50~59	Vocal	Simulate a small space with slight decay time.	Rev. decay time: 0.8~0.9s Pre-delay: 0~45ms
60~69	Rotary	Simulate the sound effect achieved by rotating horn speakers and a bass cylinder.	Modulation depth : 20%~80%
70~79	Small Room	Simulate a bright studio room.	Decay time : 0.7~2.1s Pre-delay : 20~45ms
80~89	Flanger+Verb	Simulate to play with another person carrying out same the notes on the same instrument and reverb.	Decay time : 1.5~2.9s Rate : 0.8Hz ~2.52Hz
90~99	Large Hall	Simulate a large acoustic space of the sound. Decay time : 3.6~5.4s	Pre-delay : 23~55ms

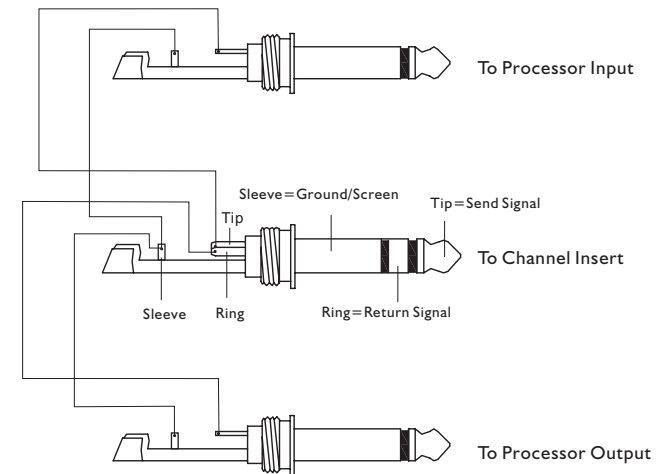
## CONTROL ELEMENTS





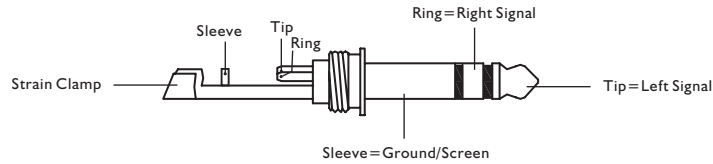


**'Tapped' Connection Direct Output Lead**  
(Enables the Insert to be used as a Direct Output while maintaining the channel signal flow)

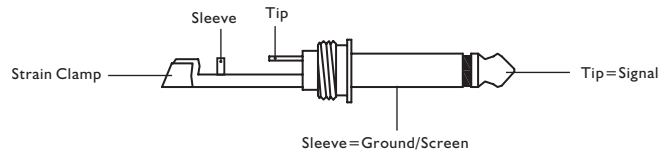


**Y-Stereo lead for insert Connection**  
(To be used when the processor does not employ a single jack connection for the In/Out Connections)

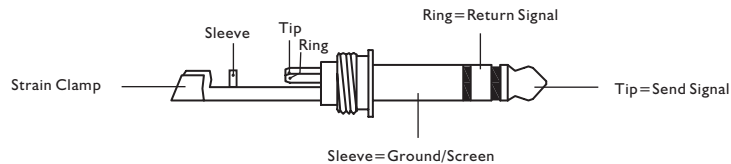




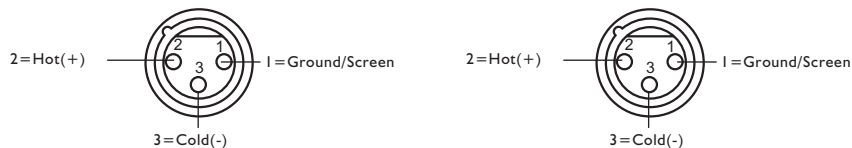
**1/4" Stereo (TRS) Jack Plug**



**1/4" Mono (TS) Jack Plug**



**1/4" Stereo (TRS) Jack Plug**



Use for Balanced Mic Inputs  
(For unbalanced use, connect pin 1 to 3)

**3-pin XLR Male Plug**  
(seen from soldering side)

Use for Main output  
(For unbalanced use, leave pin 3 unconnected)

**3-pin XLR Line Socket**  
(seen from soldering side)

The following features will be applied to both UFX16 & UFX24. In case where different features need to be described for each other, the unit UFX16 will be described first, followed by the unit UFX24 feature in brackets.

### 1. MIC INPUT JACKS (CH 1 to 11/12 for UFX16 or CH 1 to 19/20 for UFX24)

These are balanced XLR-type microphone input jacks

### 2. LINE INPUT JACKS (CH 1 to 8 for UFX16 or CH 1 to 16 for UFX24)

These are balanced TRS phone-jack line inputs. You can connect either balanced or unbalanced phone plugs to these jacks.

### 3. LINE INPUT JACKS (CH 9/10 to 11/12 for UFX16 or CH 17/18 to 19/20 for UFX24)

They are organized in stereo pair and provided with 1/4" TRS sockets. 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 channel, the output signal will appear on both sides.

### 4. LOW CUT

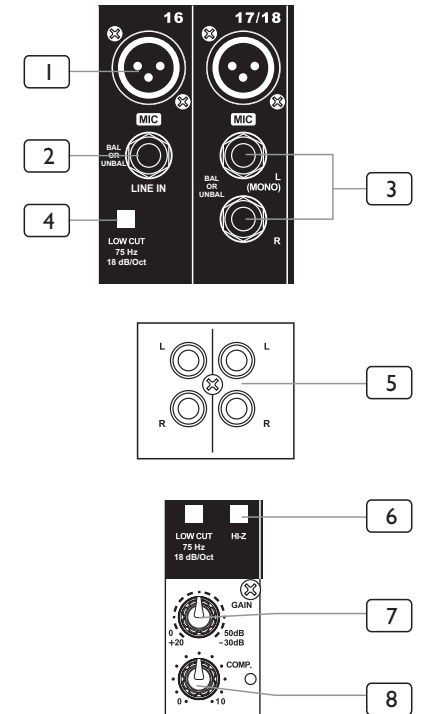
By pressing this button you will activate a 75Hz low frequency filter with a slope of 18dB per octave. You can use this facility to reduce the hum noise infected by the mains power supply, or the stage rumble while using a microphone.

### 5. RCA INPUT JACKS (CH 13/14 to 15/16 for UFX16 or CH 21/22 to 23/24 for UFX24)

They are organized in stereo pair and provided with RCA sockets. It is used to connect the stereo device, plug both the left input and the right input.

### 6. HI-Z

To change to a high impedance input, push the appropriate hi-z switch.



## 7. GAIN CONTROL

Adjusts the input signal level. To achieve the best balance between S / N and dynamic range, adjust the level so that the peak LED indicator lights occasionally only on the highest input transients. For each channel the MIC input adjustment range of the Gain is 0 to 50dB and the sensitivity of line input is +20 to -30dB.

## 8. COMP CONTROL

Adjust the amount of compression applied to the channel. Turn the knob to the right to increase the compression ratio and the output gain will automatically adjusted. The result is smoother, more even dynamics because louder signals are attenuated which the overall level is boosted.

## 9. LINE/USB

By pressing this button, it will switch to the USB mode, then the USB signal can be sent to this channel; by releasing this button, the LINE IN inputs signal will send to the line input channels.

## 10. LINE/USB PLAYER

by pressing this button, it will switch to the USB PLAYER mode, then the signal of USB PLAYER module sent to this channel;

## 11. EQUALISER CONTROLS

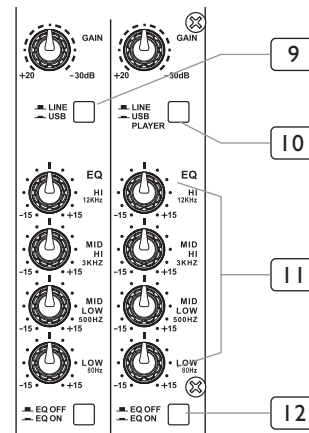
There are 3-band EQ with sweepable MID on all mono input channel 1-8/1-16: HI, MID and LOW band. There are 4-band fixed frequency EQ on the stereo channel 9-16/17-24: HI, HI- MID, MID-LOW and LOW band. All bands provide up to 15 dB of boost or cut.

### HI

If you turn this control up, you will boost all the frequencies above 12 kHz (shelving filter). You will add transparency to vocals and guitar and also make cymbals crispier. Turn the control down to cut all frequencies above 12 kHz In such way, you can reduce sibilances of human voice or reduce the hiss of a Tape player.

### MID

This is a peaking filter and it will boost/cut frequencies from 100 Hz to 8 kHz depending on the position of the MID freq control. This control will affect especially upper male and lower female vocal ranges and also the harmonics of most musical instruments.



## INSTALLATION AND CONNECTION

Ok, you have got to this point and you are now in the position to successfully operate your UFX16/24 Mixing Console. However, we advise you to read carefully the following section to be the real master of your own mixer. Not paying enough attention to the input signal level, to the routing of the signal and the assignment of the signal will result in unwanted distortion, a corrupted signal or no sound at all. So you should follow these procedures for every single channel:

- Before connecting mics or instruments, make sure that the power of all your systems components including the mixer is turned off. Also, make sure that all input and output controls of your mixer are turned down. This will avoid damage to your speakers and avoid excessive noise.
- Properly connect all external devices such as mics, power amplifiers, speakers, effect processor etc.
- Now, turn on the power of any peripheral devices, then power up the mixer.  
Note: the power amplifier or powered monitors shall be turned on after the mixer and turned off before the mixer.
- Set the output level of your mixer or the connected power amplifier at no more than 75%.
- Set the CONTROL ROOM/PHONE level at no more than 50%.
- Position HI, MID and LOW EQ controls on middle position.
- Position panoramic (PAN/BAL) control on center position.
- While speaking into the mic (or playing the instrument ), adjust the channel Level control so that the PEAK LED will blink occasionally, in this way you will maintain good headroom and idea dynamic range.
- You can shape the tone of each channel by adjusting the equalizer controls as desired.
- Now repeat the same sequence for all input channels. The main LED could move up into the red section, in this case yo can adjust the overall output level through the MAIN MIX control.

## Some Final Tips on Wiring Configuration

You can connect unbalanced equipment to balanced inputs and outputs. Simply follow these schematics.

## 8- DISPLAY:

All MP3 player information are monitored via this sexy & magic display.

### NOTE: basic interface instruction

When the player isn't connected to a USB memory equipment, the interface is as follows:



When the player is searching for USB tracks, the interface is as follows:



When the player is in pause state, the interface is as follows:



When the player is in use, the interface is as follows:



## HI-MID

This control gives you up to 15 dB boost or cut at 3 kHz. It is useful for controlling voice. It can accurately polish your performance via adjusting this knob.

## MID-LOW

This control gives you up to 15 dB boost or cut at 500 Hz.

## LOW

If you turn this control up, you will boost all frequencies below 80 Hz. You will give more punch to bass drum and bass guitar and make the vocalist more "macho". Turn it down, you will cut all the frequencies below 80 Hz. In this way, you can avoid low frequency vibrations and resonance thus preserving the life of your woofers.

## 12. EQ SWITCH

This switch allows the user to use the EQ Section in signal path. Of course it can be used to make A/B comparisons between equalized signal and not equalized signal. It also can be used to apply equalization at a certain point of the show, excluding it when it's not necessary.

## 13. AUX SEND CONTROLS

These four controls are used to adjust the level of the respective signal sent to AUX bus and their adjustable range is from  $-\infty$  to +10 dB.

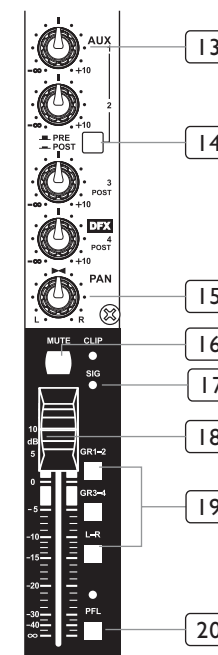
## 14. PRE/POST

AUX1 and AUX2 can be switched to PRE/POST-FADER via the PRE/POST button, so, generally, they can be used for monitor application and effects & sound processors input. AUX3 and AUX4 are configured as POST-Faders.

## 15. PAN / BAL CONTROL.

The PAN control determines the stereo positioning of the channel signal on the stereo L and R buses.

The BAL control knob sets the balance between left and right channels. Signal input through the stereo L/R bus.



## 16. MUTE

Each channel is equipped with the MUTE button, pressing this button is equal to turning the fader down, which can mute the corresponding channel output except for the PRE AUX sends, channel INSERT send and PFL, and the MUTE LED will illuminate.

## 17. SIG/CLIP

Indicate that the channel's incoming audio signal is within an optimal range.

## 18. CHANNEL LEVEL

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

## 19. GR1-2/GR3-4/L-R

Each channel provides three push-buttons: GR1-2, GR3-4, L-R. The three buttons can be considered as signal assignment switches. Pressing the GR1-2 will assign the channel signal to GROUP 1-2, you can depend on the PAN switch to adjust the amount of channel signal sent to the GR1 versus GR2, when turns the PAN to completely left, then the signal can be only controlled by GROUP 1 and viceversa. In the same way, pressing the GR3-4 or L-R will assign the channel signal to GROUP 3-4 or MAIN MIX L-R, and will also be affected by PAN.

## 20. PFL

Each channel is equipped with the PFL button, pressing this button which the corresponding signal send will be routed to CTRL ROOM/ PHONES outputs and METER display.

## 21. GROUPS LEVEL

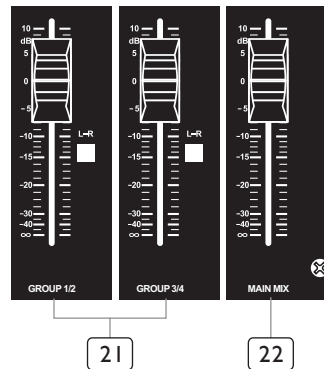
These faders are used to control the levels of the signal sent to the GROUPS OUT, the adjustable range goes from  $-\infty$  to +10 dB. Any channel that is assigned to the groups, not muted and not turned down will be assigned to the GROUPS OUT.

## 22. MAIN MIX LEVEL

This fader is used to set the amount of signal sent to the main mix output.

## 23. DIGITAL EFFECTS

It displays the selected preset.



## 50. USB PORT

This USB port is used to connect the unit to PC with a transmission line. When it is in RECORD mode, it can connect with the MAIN MIX output; in the PLAYBACK mode, it can connect with stereo channel 13/14 for UFX16 (CH23/24 for UFX24).

## 51. USB PLAYER

The signal for module playback can be assigned to CH15/16 for UFX16 (CH23/24 for UFX24) routing.

The file system of USB memory for USB players is FAT16 and FAT32, and these players can only decode Mp3. It has 7 rank subordinate folders at most.

### 1- USB PORT

For connecting with USB memory.

### 2- PRE

In pause state, press this key, it will go to previous track and keep in pause state. In play state, press this key, it will go to the previous track & start playing.

### 3- NEXT

In pause state, press this key, it will go to next track and keep in pause state. In play state, press this key, it will go to the next track and start playing.

### 4- RPT

Press this key, the player will change between the following four modes:

REP ALL means to repeat all tracks in the memory, mark on the screen is

REP1 means to repeat one track, the mark on the screen is

Play in order means to play the tracks according to the order, the mark on the screen is blank.

Random play means to play the tracks at random, the mark on the screen is A.

### 5- PLAY/PAUSE

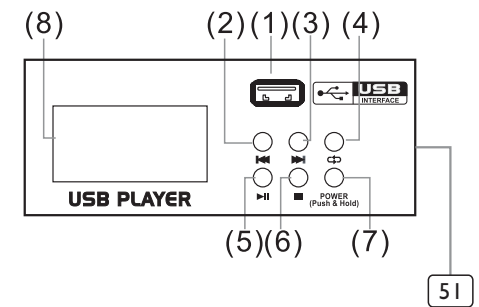
In play state, press PLAY/PAUSE key to pause the player. In pause state, press PLAY/PAUSE key to start playing.

### 6- STOP

In play state, press this key to stop playing and all the songs in USB memory will appear on the display; In stop state, press STOP/ PRE/ NEXT keys again to go to first song and the player will keep in pause state, then press PLAY/PAUSE key to play the song.

### 7- POWER(Push & Hold)

When the unit is off, press this key and hold for about 2 or 3 seconds to turn on the power supply of player. Repeat the above operation, you can turn off the power supply of the player.



#### 44. GROUP OUT

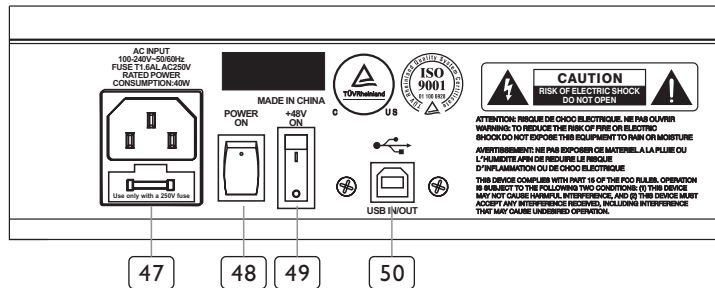
These 1/4" TRS jack are used to send out the signal from the GROUP 1/4 mix bus to external devices.

#### 45. AUX SENDS

These 1/4" phone sockets are used to send out the signal from the AUX bus to external devices such as effects.

#### 46. INSERT

This is where you connect external sound processors such as compressor-limiter, equalizers, etc..



#### 47. AC Inlet with FUSE Holder

Use it to connect your mixer to the main AC with the supplied AC cord. Please check the voltage available in your country and how the voltage for your mixer is configured before attempting to connect your mixer to the main AC.

#### 48. POWER Switch

This switch is used to turn the main power on and off.

#### 49. +48 Volt Phantom Power Switch

It is available only to the XLR MIC sockets. Never plug in a microphone when phantom power is already on. Before turning phantom power on, make sure that all faders are totally down. In this way, you will protect your stage monitors and main loudspeakers.

#### 24. PROGRAM(PUSH)

Adjust this knob to select the right effect you wish to perform. There are totally 100 options for you: Echo, Vocal, Plate and versatile two-effect combination. When you are satisfied the right preset, please push this knob to store this preset you want.

#### 25. DFX/MUTE

Disables the internal effects processor; in this case the red "PEAK" LED will be lit permanently.

#### 26. DFX TO AUX SEND 1/2

The both rotary knobs assign the DFX signals to their respective AUX SEND outputs.

#### 27. AUX SEND CONTROLS

These four controls are used to determine the master AUX SEND levels, which can be varied from  $-\infty$  to +10 dB. When the external effect units which have no input gain control were connected to mixer, you can get a further +10 dB gain available from these Aux Send outputs. As to the AUX4, it can also provide the lovable level adjustment for the internal effect signal.

#### 28.DFX OUT

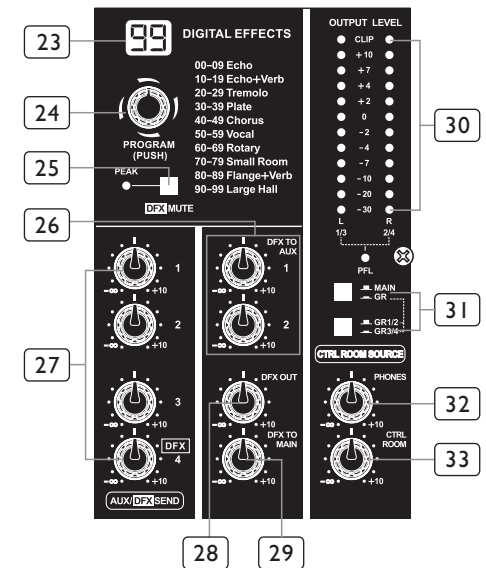
These control is used to determine the internal DSP module levels and DFX sends output, which can be varied from  $-\infty$  to +10dB

#### 29. DFX TO MAIN

This control is used to assign the signal from FX to MAIN MIX output.

#### 30. OUTPUT LEVEL

This stereo 12 segments LED meter will be indicate the level of overall output signal.



### 31. MAIN/GR

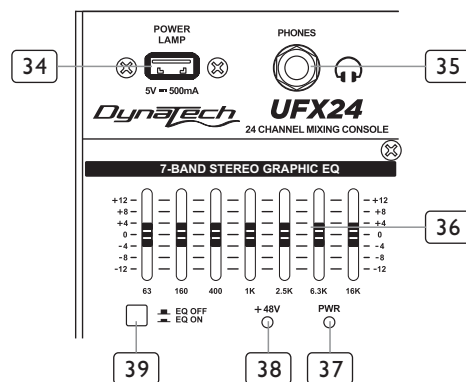
If you release the MAIN/GR button, the signal will be come from the MAIN MIX output, it will not be affected by pressing both GR1/2 and GR3/4 button. When you push down the MAIN GR button and press both GR1/2 and GR3/4 at the same time, the signal will be come from the GR3/4 output. When you release the GR1/2 and GR3/4, the signal will be come from the GR1/2 output.

### 32. PHONES CONTROL

This control is used to adjust the signal present at the Phones output, which can be varied from  $-\infty$  to  $+10$  dB.

### 33. CONTROL ROOM CONTROL

This control is used to adjust the signal present at the control room output, which can be varied from  $-\infty$  to  $+10$  dB.



### 34. POWER LAMP socket

This lovable LAMP is very convenient for your operation, it is located in the top right corner of the front panel, and provides the 5V socket that can drive standard USB-type lamp.

### 35. PHONES

This socket will be used to send out the mix signal to a pair of headphones.

### 36. STEREO GRAPHIC EQ

Each one of these faders will boost or attenuate ( $\pm 12$  dB) the selected frequency at a preset bandwidth. When all the faders are in the center position, the output of the equalizer is flat response.

### 37. PWR LED

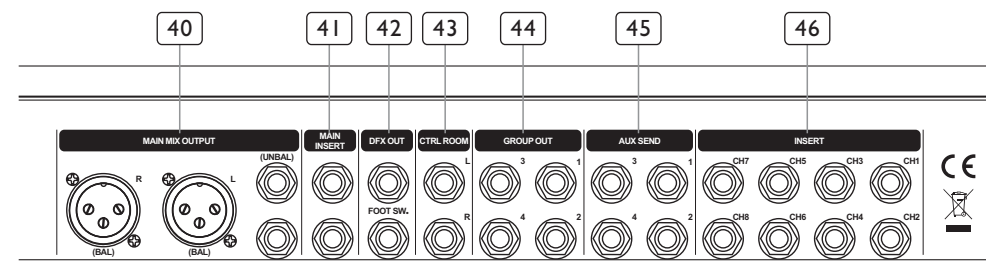
This LED indicates when the power is on in your mixer.

### 38. +48V LED

This LED indicates when the phantom power is switched on.

### 39. EQ Switch

Engage this button to add the stereo graphic EQ to the main mix output circuit. It can be used to modify the frequency "contour" of a sound. If you release the button, the stereo graphic EQ will be bypassed.



### 40.MAIN MIX OUTPUT

These stereo outputs are supplied with both the XLR and 1/4" phone jacks and it is controlled by the Main Mix Level.

### 41.MAIN INSERT

These two 1/4" phone jacks are stereo insert points and used to connect processors such as compressors, equalisers etc.. When insert a external processor into the jack, the Main stereo signal will be taken out after the main bus and returned into the MAIN MIX output before the MAIN MIX fader.

### 42. DFX OUT

This 1/4" sockets are used to send the signal from DFX mix buses to external devices. FOOTSW.

This socket is used to connect external footswitch for your convenient operation, it has the same function as DFX MUTE button.

### 43. CTRL-ROOM

These 1/4" phone sockets will be used to send the signal to studio monitor speakers or to a second set of PA.