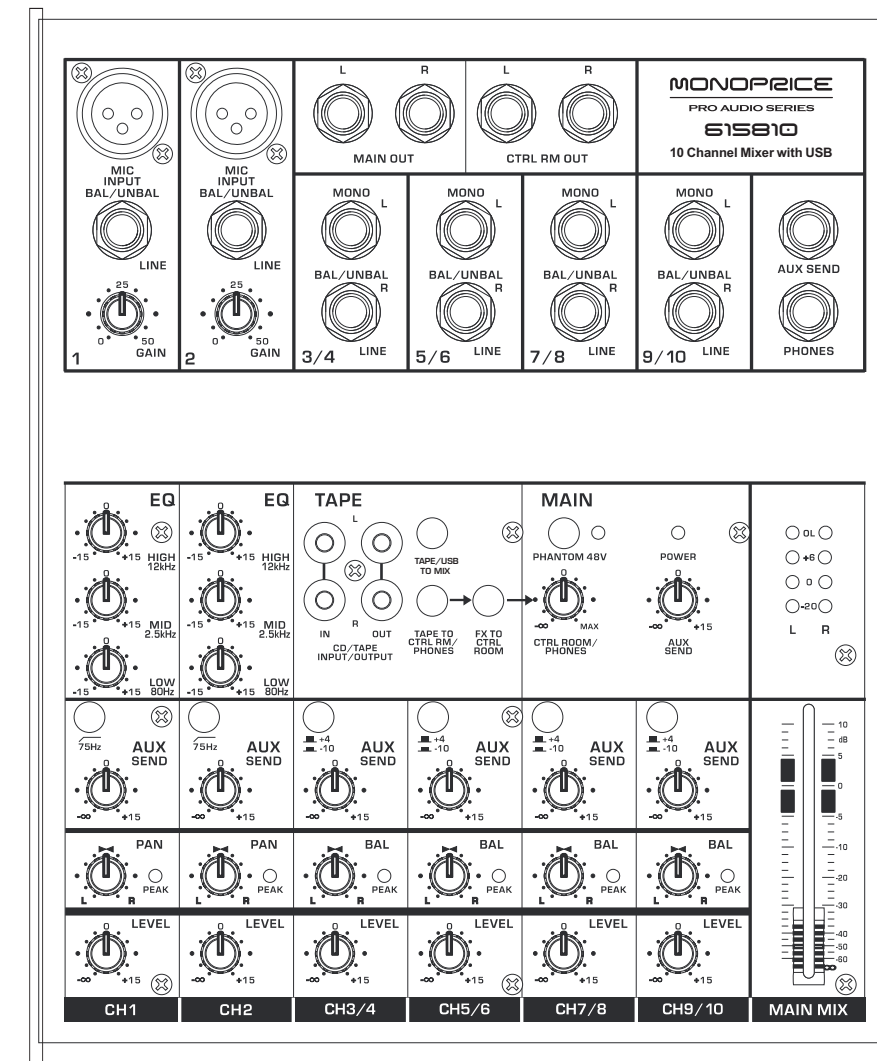


# MONOPRICE

## PRO AUDIO SERIES



### 10 Channel Mixer with USB

**615810**

## Important Safety Instructions



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



AC mains (Alternating Current)



AC mains (Alternating Current)

**ON:** Denotes the product is turned on.

**OFF:** 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 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 be 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 out let 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 instructions 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.

## TECHNICAL SPECIFICATION

Equalization	Mono channels	
	High	±15dB @12 kHz
	Mid	±15dB @2.5 kHz
	Low	±15dB @80 Hz
PEAK Indicator	Channels	Channel1-10: +17dBu
	VU Meters	+19dBu
VU Meters	Main Left and Right (4-segment)	Clip (+19), +6,0, -20 (0 LED=0 dBu)
Impedance	Microphone Input	2.6k Ohms
	Line Input	10k Ohms
	CD/Tape Input	20k Ohms
	Main Outputs	120 Ohms
	Ctrl Room,Aux Sends	120 Ohms
	Tape Output	1K Ohms
	Phones Outputs	120 Ohms
USB section	USB Interface	USB 2.0 full speed compliant
	ADC & DAC	16-Bit Delta-Sigma,44.1kHz Sampling Rates
	Operating system	Windows 2000,XP or higher, Mac OS 9.0.4 or higher, 10.X or higher
Phantom power	Mic Pin2/Pin3 And Pin1(XLR-3-31 type balanced 1=GND,2=HOT, 3=COLD)	+48V
Power supply	Adaptor	AC18V,1000mA
Power Consumption	ALL LOAD	10W
Physical	Dimension (L*W*H)	9.9" x 8.2" x 2.1" (250.5*209*53mm)
	Weight	Net:3.4lbs (1.52kg)

**TECHNICAL SPECIFICATION**

Frequency Response	Mic Input to any Output (Gain @ 0dB, Rated output level)	20Hz -75kHz (0, -1dB)
		20Hz -130kHz (0, -3dB)
Distortion (THD&N)	Mic Input to MAIN Output (Gain@ 0 dB, Rated output level @ 20 Hz-20 kHz bandwidth, A-weighted)	≤0.01%
MIC EIN(Equivalent Input Noise)	Input: Channel INPUT MIC(Rs=150 Ω, Gain @ Max., 20 Hz-20 kHz bandwidth)	-117dBu
CMRR(Common Mode Rejection Ratio)	Mic in to main out (Gain @ Max.,@ 1 kHz)	60dB
Input Gain Control Range (20 Hz-20 kHz bandwidth)	Mono Channel	MIC 0 to 50dB LINE -35 to+15dB
	Stereo Channel	LINE -9 -+5dB
Attenuation(Crosstalk) (20 Hz-20 kHz bandwidth, Line in, 1/4" TRS Main Out,1 kHz relative to 0 dBu, 22 Hz - 22 kHz Filter,Gain @ unity.)	Main Mix knob/fader @ -∞ (A-weighted)	-80dBu
	Channel Level knob/fader@ -∞ (A-weighted)	-82dBu
Rated Output Level	Main, Aux, Control Room output (all knob/fader @ 0 dBu,1 kHz)	0dBu
Maximum Output Level	Main, Aux, Control Room output (all knob/fader @ 0 dBu,1 kHz, 22 Hz - 22 kHz Filter, THD @ 1%)	+22dBu
Maximum Voltage Gain(EQ and PAN/BAL knob @ 0 dB, Other all knob or fader @ max,DFX mute,1 kHz, Rs=600Ω)	Mono Channel MIC INPUT→ MAIN OUT(1/4" TRS Unbalanced)	75dBu
	Mono Channel MIC INPUT→ CTRL RM/PHONES(1/4" TRS Stereo)	85dBu
	Mono Channel MIC INPUT→ AUX SEND OUT(1/4" TRS Unbalanced)	95dBu
	Mono Channel MIC INPUT→ TAPE OUT(RCA)	75dBu
	Mono Channel LINE INPUT→ MAIN OUT(1/4" TRS Unbalanced)	60dBu
	Stereo Channel LINE INPUT→ MAIN OUT(1/4" TRS Unbalanced)	20dBu
	TAPE INPUT→ MAIN OUT(1/4" TRS Unbalanced)	10dBu
	AUX RETURN INPUT→ MAIN OUT(1/4" TRS Unbalanced)	—
Main mix Noise (20 Hz-20 kHz bandwidth, MAIN OUT(all knob/fader @ 0 dBu, 22 Hz - 22 kHz Filter, Gain @ unity)	Main Mix knob/fader @ -∞, Channel Level knob/fader @ -∞, A-weighted	-106dBu
	Main Mix knob/fader @ 0dB, Channel Level knob/fader @ -∞, A-weighted	-93dBu
	Main Mix knob/fader @ 0dB, Channel Level knob/fader @ 0dB, A-weighted	-92dBu
Input HPF	Mono Channel	-7 dBu @75 Hz

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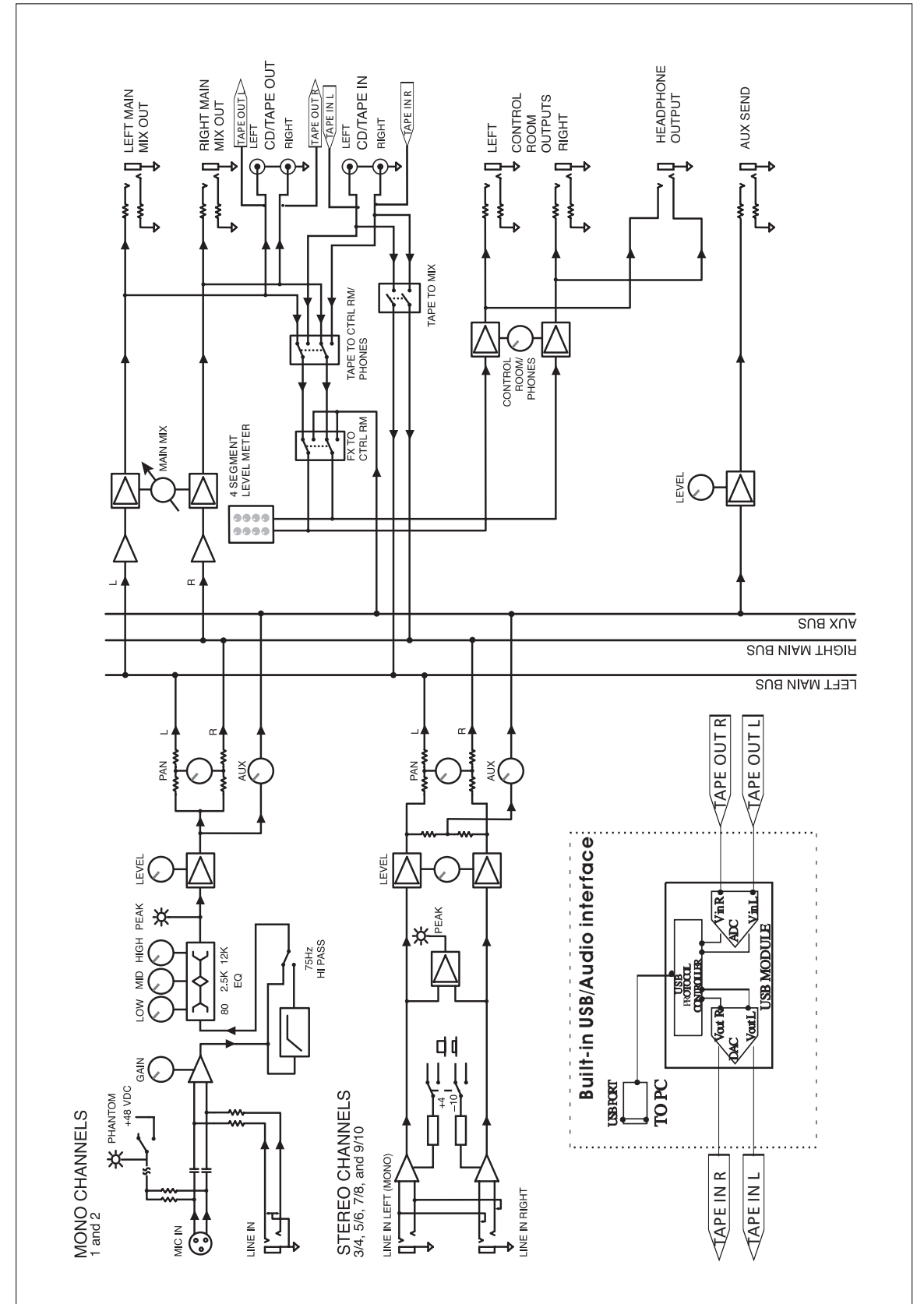
## INTRODUCTION

Thank you for purchasing the 615810 mixing console. There is 3-band EQ on mono channels, built-in stereo USB/Audio interface. This mixer are really ideal for small club gigs. Please read this manual carefully so you can take advantages of all the features of the mixer. Thank you again for making the right choice in purchasing the MONOPRICE mixer.

## FEATURES

- 2 mono inputs with gold plated XLR and Balanced TRS jack
- 4 stereo inputs with Balanced TRS jack
- GAIN control and +48V phantom power for mono inputs
- 3-band EQ on all mono channels plus 75Hz low cut filter
- 1 POST-fader AUX send for effect
- Peak LED in each channel
- 2-Track IN/OUT with discrete switches for routing to Control Room and to Main Mix
- Built-in stereo USB/Audio interface

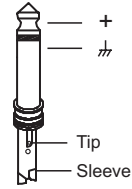
## BLOCK DIAGRAM



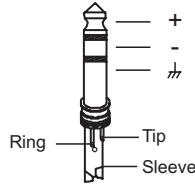
## WIRE CONNECTIONS

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:

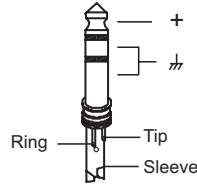
- For 1/4" Phone jack



TS Type Unbalanced

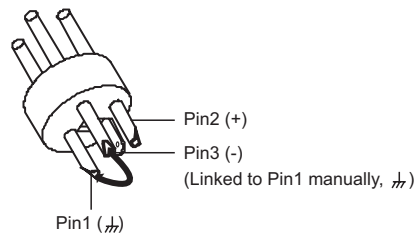


TRS Type Balanced

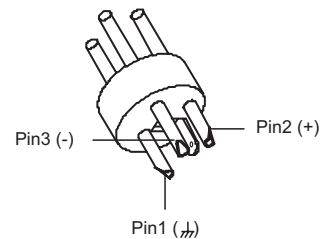


TRS Type Unbalanced

- For XLR Connector



XLR Type Unbalanced

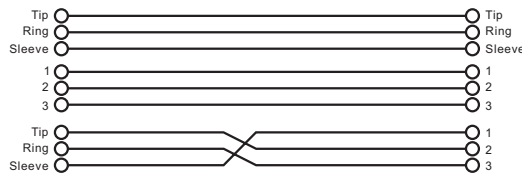
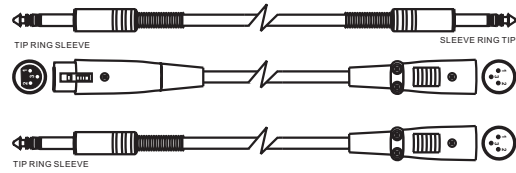


XLR Type Balanced

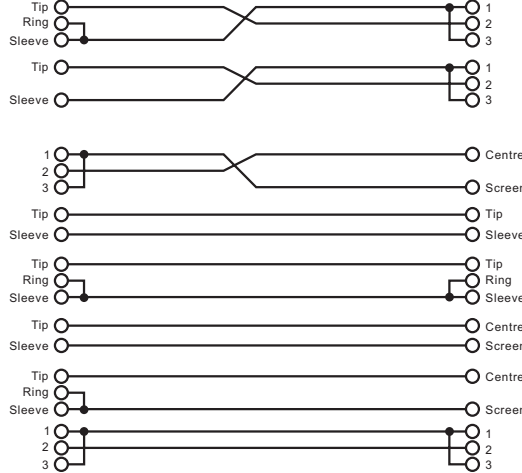
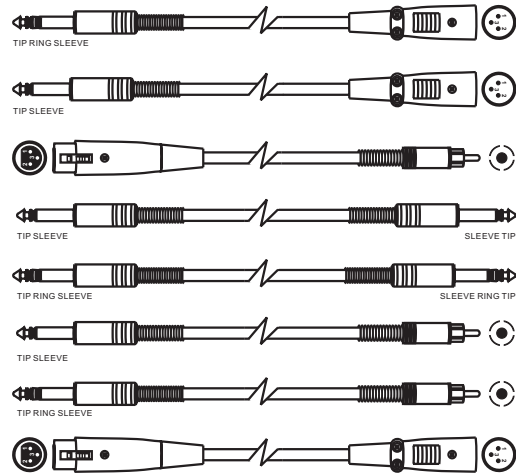
### In-line Connection

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.

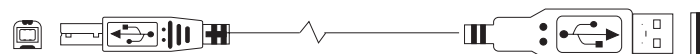
- Balanced



- Unbalanced

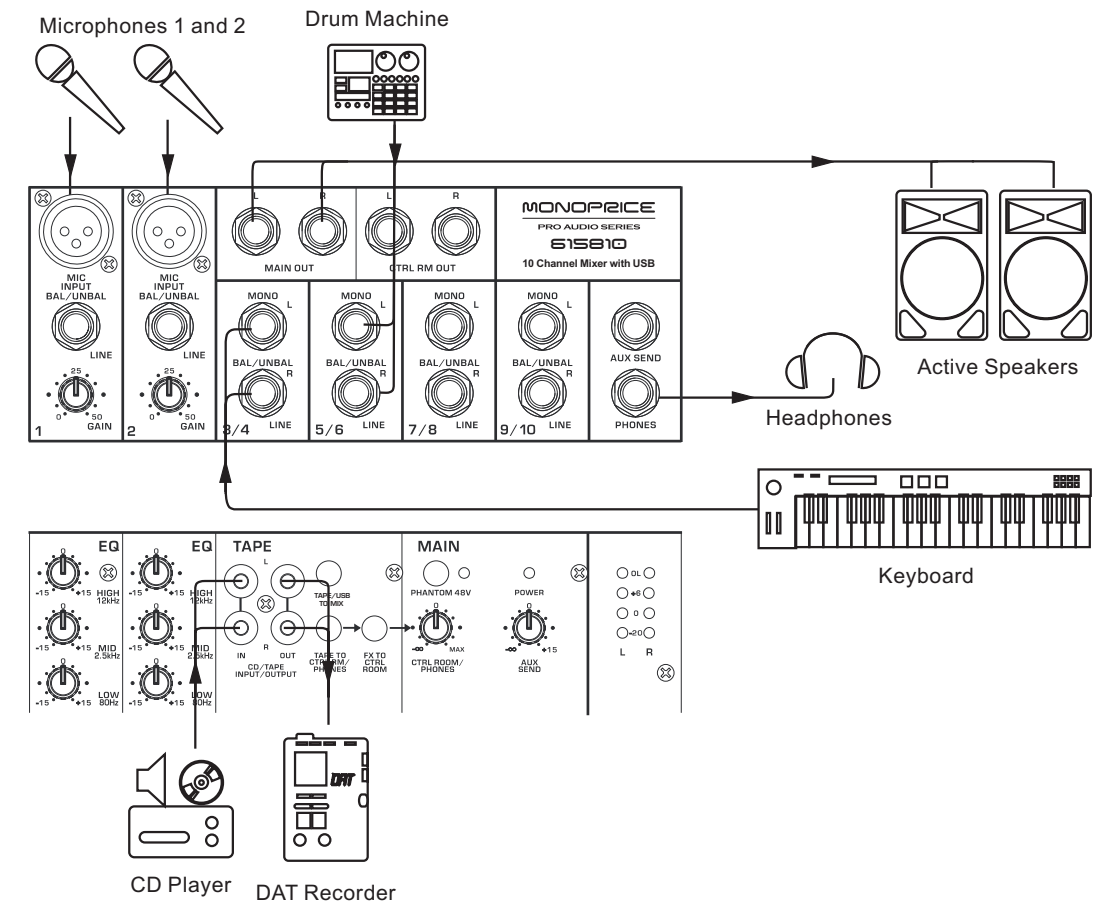


### USB Connection

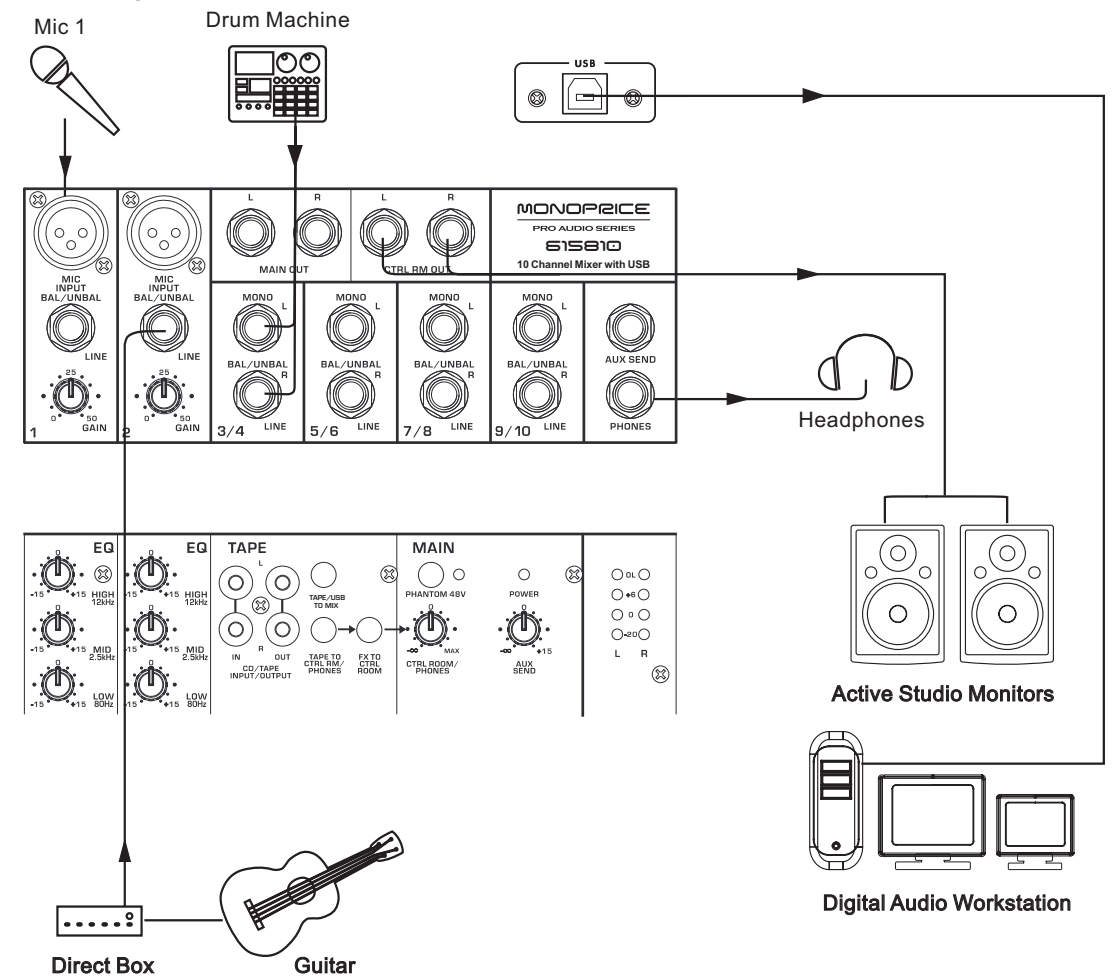


## HOOKUP DIAGRAM

### Small Club Gig



### Computer Set-up



## CONTROL ELEMENTS

### 1- Mono MIC Input

The 615810 is equipped with low-noise microphone preamplifiers with phantom power providing up to 50dB of amplification. You can connect almost any type of microphone. Dynamic microphones do not 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 before engaging phantom power switch. There is also a 1/4" TRS balanced /TS unbalanced LINE IN jack. 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.

### 2- LINE INPUTS

They are organized in stereo pairs and are provided with 1/4" TRS sockets. Use the left input if connecting a mono input signal to the STEREO INPUT, the signal will appear on both sides.

### 3- GAIN CONTROL

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

### EQUALIZATION

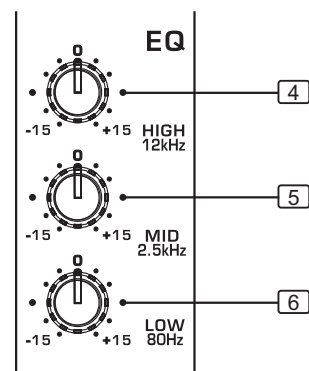
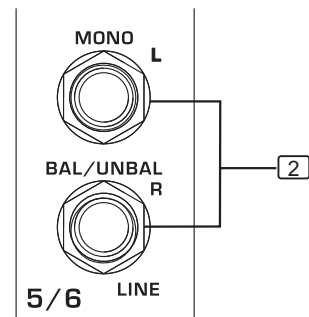
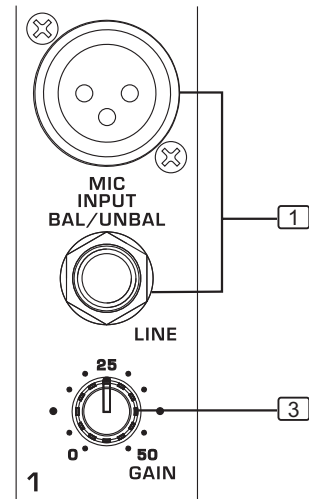
The 615810 has 3-band EQ on all mono channels . All bands provide up to 15 dB boost or cut.

### 4- HIGH

This is the treble control. The gain range goes from -15 dB to +15 dB with a centre frequency of 12 kHz.

### 5- MID

This control provides 15 dB boost or cut at 2.5 kHz. It can affect most fundamental frequencies of all musical instruments and human voice.



## INSTALLATION TIPS

- 1- Speakers should be placed in a position that allows for unobstructed sound projection. In many instances is beneficial for speakers to be elevated on tripod stands to achieve maximum dispersion and reach.
- 2- Use quality cables. Using quality cables will ensure the best possible sound.
- 3- 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.
- 4- Avoid pointing a microphone directly at an amplified speaker doing so, could cause feedback possibly damaging speaker components and your hearing.

**Enjoy the sound!**

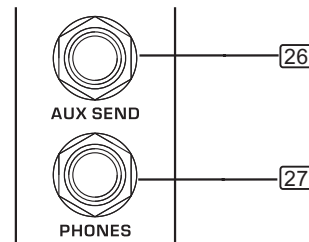
## CONTROL ELEMENTS

### 26- AUX SEND OUT

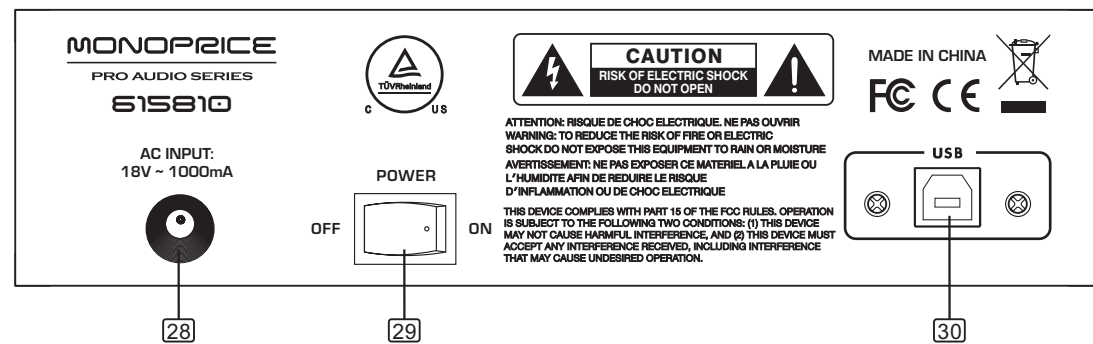
These 1/4" TRS is used to send out the signal from the AUX bus to an external device such as effects equipment. Each channel has an AUX SEND control knob that adjusts how much of that channel's signal appear at the AUX SEND output. This output is affected by the channel LEVEL, but not MAIN MIX control.

### 27- PHONES OUTPUT

This jack is used to send out the mix signal to a pair of headphones, and the signal is the same as the CTRL RM OUTS outputs. The level is controlled by the CTRL ROOM/PHONES knob. You can listen to the Main Mix, the CD/TAPE, or the AUX SEND depending upon the position of the TAPE TO CTRL RM/PHONES switch and FX TO CTRL ROOM switch.



### Rear Panel



### 28- POWER IN

This connection is where you connect the supplied external AC power supply to provide AC power to the mixer. Connect the external power supply to your mixer first, then plug the power supply into a suitable and properly rated AC outlet.

### 29- POWER SWITCH

This switch is used to turn the main power ON and OFF.

### 30- USB PORT

This Type B USB port can be used to connect the computer via Type B to A connector.

## CONTROL ELEMENTS

### 6- LOW

This is the bass control. The gain range goes from -15 dB to +15 dB and the center frequency is 80 Hz.

### 7- 75 Hz Low-Cut Switch

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

### 8- +4/-10 Switch

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 -10dBv is suitable for general devices. If not sure to use which setting, try +4 dBu first, then change it to -10dBv if the volume is too small to be satisfied.

### 9- AUX Send

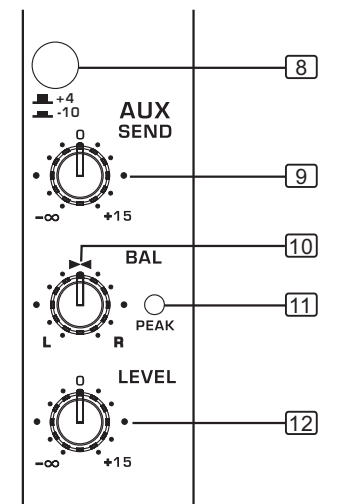
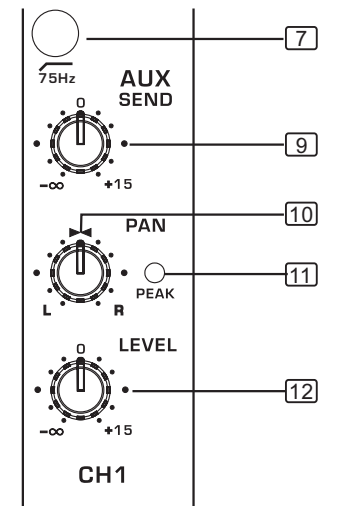
This control is used to feed the mono input of parallel effects devices or the input of a stage monitor amplifier via the AUX SEND output jack. All the channel controls (except PAN or BAL) will affect the AUX signal. The signal is tapped off after the LEVEL control.

### 10- PAN/BAL

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.

### 11- PEAK LED

When this LED blinks, it warns you that you are reaching signal saturation and possible distortion. From this LED you can adjust the correct level, not too strong to cause distortion and not too weak to be lost in noise.



## CONTROL ELEMENTS

### 12- LEVEL

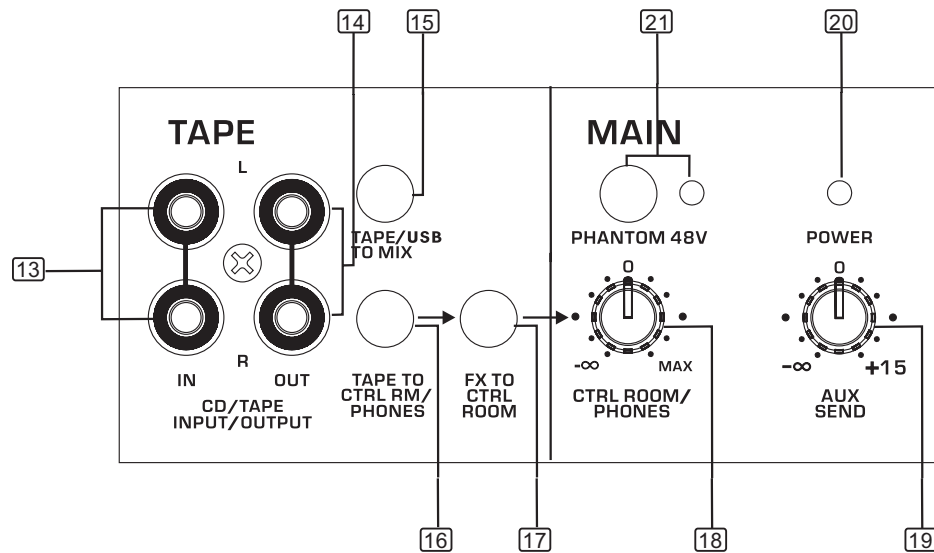
This control will adjust the overall level of this channel. If you set the LEVEL control in max, it's usually a sign that your GAIN is set too low. If set the LEVEL control in min, your GAIN may be too high.

### 13- 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 MIX switch is pushed in, the signal coming from Taper Recorder will assign 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 connect a mono device, you will need a "Y-splitter" RCA adapter.

### 14- TAPE OUTPUTS

These RCA jacks will assign the main out signal to a 2-track recorder. The TAPE OUT level is affected by MAIN MIX control.



### 15- TAPE/USB TO MIX Switch

Connect a CD or Tape Deck to the CD/TAPE inputs, and push down this switch to add the CD/TAPE signal or USB Audio interface signal to the main mix. The volume level is controlled by MAIN MIX control.

### 16- TAPE TO CTRL RM/PHONES Switch

Switch is used to select the signal source for the CONTROL ROOM outputs, PHONES, and METERS. Release this switch, they all receive the main mix signal tapped after the MAIN MIX control. Engage this switch, they all receive the CD/TAPE Input signal. Turn down the CTRL ROOM/PHONES control before engaging.

### 17- FX TO CTRL ROOM Switch

Engage this switch to monitor the aux send signal in the Control Room/Phones outputs.

## CONTROL ELEMENTS

### 18- CTRL ROOM/PHONES Control

This control is used to adjust the signal level going to the CONTROL ROOM/PHONES outputs. And it won't affect the Main Mix output.

### 19- MASTER AUX SEND Control

This knob is used to determine the master AUX SEND levels. The adjustable range is from  $-\infty$  to +15 dB.

### 20- POWER LED

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

### 21- PHANTOM 48V Switch and LED

This +48 VDC Phantom Power switch only applies 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.

### 22- METERS

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

### 23- MAIN MIX

This control sets the level of main mix signals sent to the Main Outputs, Tape Outputs, CONTROL ROOM, PHONES, and LED Display. This is a fader on the mixer.

### 24- MAIN OUT

These 1/4" TRS jacks represent the end of the mixer chain, where your fully mixed stereo signal enters the real world. Connect these outputs to the inputs of your amplifiers, powered speakers, or serial effects processor (graphic equalizer, for example).

### 25- CTRL ROOM OUT

These 1/4" TRS are used to assign the control room signal to the studio monitor speakers. They can also be used to provide another main mix output, or to monitor the CD/TAPE Inputs (when engage the TAPE TO CTRL RM/PHONES switch), or to monitor the aux send signal(it is with FX TO CTRL ROOM switch is engaged)

