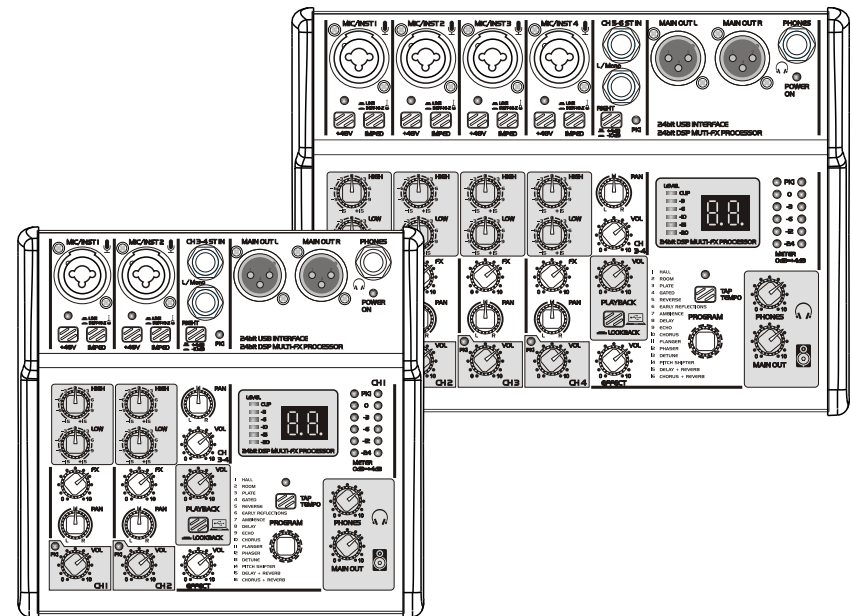# User Manual

FOR MIXING CONSOLES

The company continues to strive to improve product performance, specifications described in this user manual are subject to change without notice. We strive to ensure that the information provided by the user manual is accurate, but there is no responsibility for any errors, omissions or differences between the user manual and the product.

We greatly appreciate your purchase of this small mixer with USB2.0 audio interface and 24bit DSP multi-FX processor. It is superior in performance,robust, reliable, and provides a cost-effective choice for podcasts,singers, composers, and audio professionals in small tuning situations.

We would sincerely offer our after-sales services that you need for this product. Before use, carefully read this user manual and keep it for your random reference. Thanks again for your patronage.

These compact, firm and portable small mixer are fun and practical. They can be connected to many kinds of audio appliances, and they are used in a wide range of applications.The style brings up much fun and easy use to your work, life, leisure and etc., for you between music and your computer.

What you need is only a USB cord to connect it to your computer. It can record fast your sound or your singing sound, or the sound you want to record. And you can share and transmit them real-time through the internet. The portable design can also mark down your creational inspiration any time anywhere. It is one of the necessities which is always handy for music lovers, creators, singers and network broadcasters. Just plug in to use. It is needless to install a 24bit sound card with a special driving program. It is comparable with the Windows XP+ and OS X systems, and also comparable with the audio editing and making softwares supporting the Core Audio or WDM standard, the music player and the professional audio analyzing and testing softwares, and the ones of interactive social programs, network Karaoke and chatting on the internet. It can record and replay at the same time to do a dual work.

Built in 24 bit multi digital effect processor, up to 16 kinds of effects.And the sub parameters of 16 kinds of effects can be adjusted carefully. To meet the requirements of your vocal or musical instruments.

The specially designed A-type microphone pre-amplifier has extremely low noise, distortion and a very high dynamic range, built in with 48V phantom power, which can be connected with a condenser microphone. The product has an input resistance shifting switch to match high-impedance input equipment such as an electric guitar. This mike/guitar preamplifier can provide an original, true and warm sound reappearance.

1, To set up your personal professional recording studio.
Your sound can be recorded through these USB sound cards on your MAC or Windows computers. Plugging in microphones, music instruments or sound sources, you may record your creational inspiration, or the sound that you want to record, through the connections between these USB sound cards and your computer in combination of your record software.By combining the software and hardware, you will find that you can easily take the professional audio studio with you at any time. The fun of this is great. The USB sound cards can be comparable with many audio editing and making softwares that support Core Audio or WDM standard.

2, On the internet, you can use these USB sound cards to play on-the-net Karaoke singing,interact real-time lively with friends, play net live shows or performances, or publicize and share your works. The USB sound cards have the lowest transmitting delay property, and has great comparability with many social interactive softwares on the internet. They can transmit out your sound wholly in a fast speed, pulling close the distance between you and your friends or fans. The fast-speed USB sound cards will record your audio equipment such as microphones, guitars, keyboards, etc. In the meantime, it will guarantee the purity of sound and a wide frequency range.

The 24bit transformer in a studio-room grade will restore the quality of the sound to the greatest extent. No matter you are a singer, a radio host, or a YY anchor, or you only do recording or playing of instruments at home, they can satisfy your requirements in the field of digital audio.

3, High-quality digital music player.
When you use the computer to play music, watch movies, play games, see the internet videos, you will also want better audio effects and listening feelings. The sound-replaying performance of these USB sound cards, as compared with the sound cards equipped by the original computers, have a better signal-to-noise ratio, a wider frequency response and a higher dynamic range. Meanwhile, it has a more convenient control and output monitoring method. The 24bit DAC and high-quality mixing line in high sampling precision offers you a more good-listening, and more impacting audio effect.

4, To perform the tests and analysis of acoustic parameters in the sound space.
Connecting the USB sound cards to your computer, plugging in a microphone in conformity with the testing standard, combining the testing and analyzing software of audio sprectrum in your computer, you can fast perform the acoustic testing of the sound space to analyze, and help you effectively correct the acoustic parameters in the space, raising the sound replay effects of the space.

The warranty period of one year.
This product is guaranteed for no material or workmanship defects within one year's period from the purchase date of the original buyer. To ensure the high-level performance of the property and reliability in the design and manufacture of this appliance, please read the user's manual before operation.
In case of malfunction, please inform immediately and return the machine with defects to us, or our authorized agent, and go reparing according to the following conditions

Within the warranty period:
Warranty conditions
The device must be installed and operated according to the instructions of this manual.
The device hasn't gone through any intentional or unintentional mistaken uses,neglects or alterations which are described in this manual, or authorized by us. Any necessary adjustment, correction or repairing should be carried out by us or any authorized agent of this device.
Please attach the purchase proof with freight prepaid when you return the defective machine to us or our authorized agent. The machine returned should be packed well and avoid possible damages on the way of transit.
In some area, these stipulations may vary. Concerning with any possibly adoptive additional warranty clauses, please contact our sales agent.

NOTICE

To avoid the possibility of malfunction/ damage to the product, damage to data, or damage to other property, follow the notices below.

Handling and maintenance

●Do not use the device in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the device, TV, or radio may generate noise.

●Do not expose the device to excessive dust or vibration, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day), in order to prevent the possibility of panel disfiguration, unstable operation, or damage to the internal components.

●Do not place vinyl, plastic or rubber objects on the device, since this might discolor the panel.

●When cleaning the device, use a dry and soft cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical impregnated wiping cloths.

● Condensation can occur in the device due to rapid, drastic changes in ambient temperature-when the device is moved from one location to another, or air conditioning is turned on or off, for example. Using the device while condensation is present can cause damage. If there is reason to believe that condensation might have occurred, leave the device for several hours without turning on the power until the condensation has completely dried out.

● Avoid setting all equalizer controls and faders to their maximum. Depending on the condition of the connected devices, doing so may cause feedback and may damage the speakers.

● Do not apply oil, grease, or contact cleaner to the faders. Doing so may cause problems with electrical contact or knob motion.

● When turning on the AC power in your audio system, always turn on the power amplifier LAST, to avoid speaker damage. When turning the power off, the power amplifier should be turned off FIRST for the same reason.

Notice for the use of the USB2.0 and the audio property setup of the computer:

When connecting the computer to the USB 2.0 connector, make sure to observe the following points. Failing to do so risks freezing the computer and corrupting or losing the data. If the computer or the mixer freezes, restart the application software or the computer OS, or don't connect the mixer and then on again.

Use an AB type USB cable. USB 3.0 cable cannot be used.

Before connecting the computer to the USB 2.0 terminal, exit from any power-saving mode of the computer (such as suspend, sleep, standby).

There is no need to install any specialized driving program for this USB2.0 audio port.

Just plug in to use. For the first use, the computer will find a new hardware. Please follow the operations to complete all installations as instructed by the computer until the recognition of ending by the computer. Then, the USB2.0 external sound card is ready to use.

The USB2.0 external sound card is named as USB AUDIO 24BIT. It is comparable with Windows XP+ and MAC OSX operation systems. After recognition of the external sound card by the computer, you choose as the current audio input and output device in the audio device properties. If it cannot be set up automatically, you are required to enter the computer's audio device properties, and then choose the "USB AUDIO 24BIT" in the drawdown list of the input and output audio device.

To secure better sound effects, we recommend you to set up the input and output volume to the maximun in the audio properties of the computer system.

Schematic diagram of equipment connection
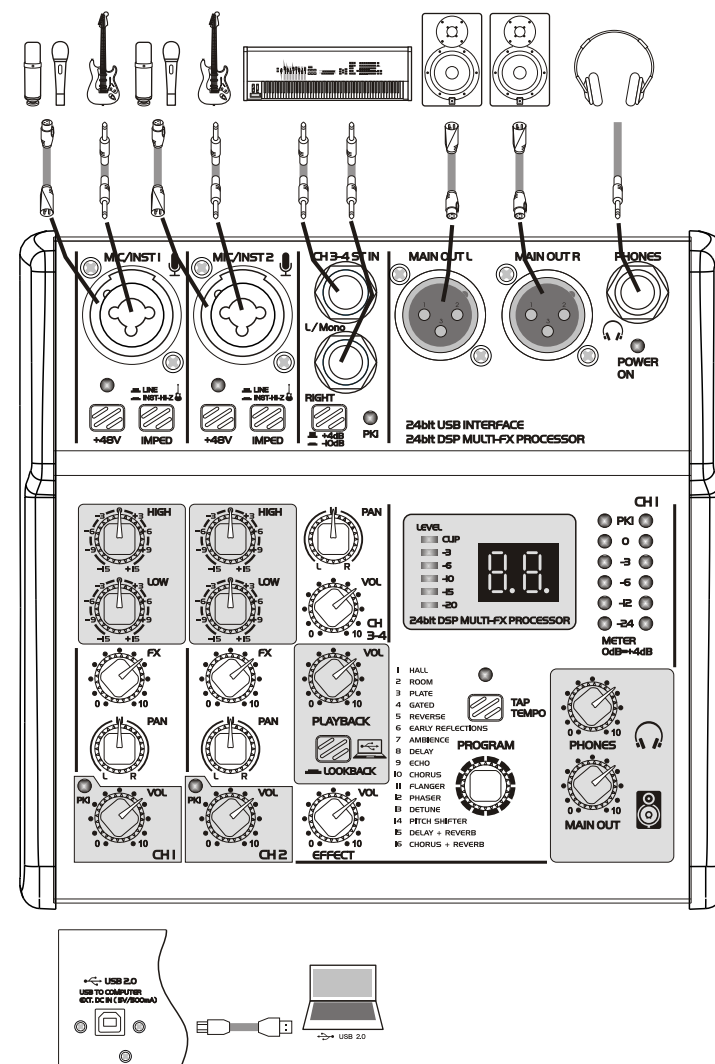
Front panel function
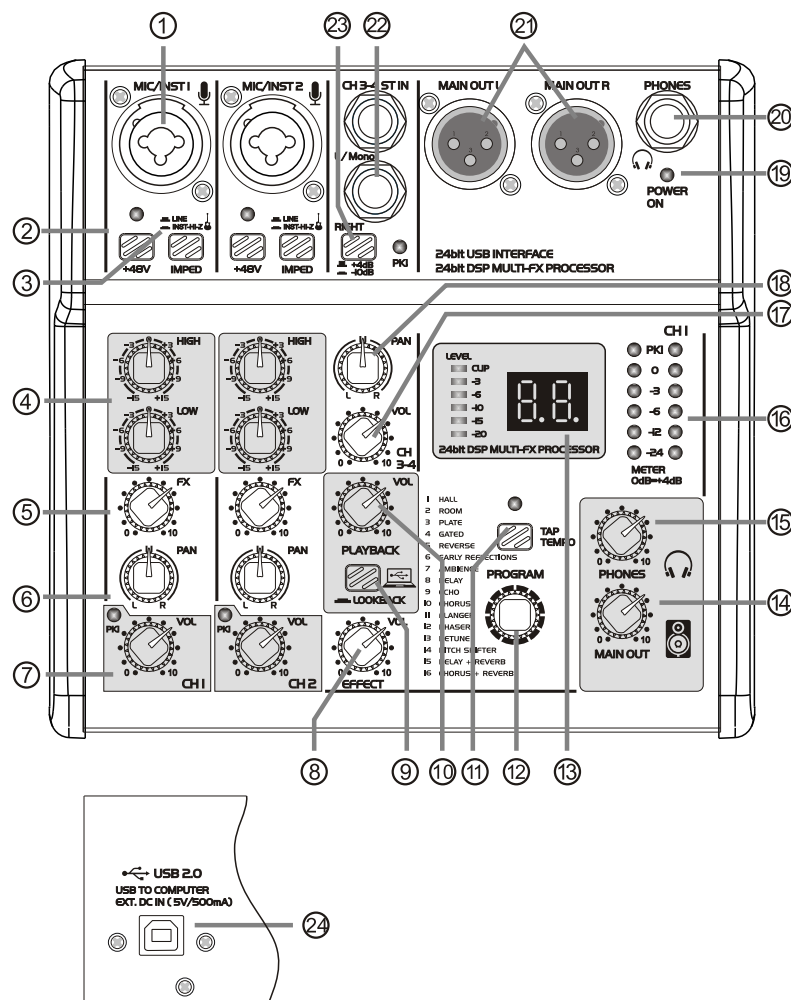
Front panel function

1, Mike/Line/Guitar input jacks of MIC channel
The jacks are used to connect microphones or other audio devices in support of cannon plugs and 6.35 plugs.

2, +48V phantom switch / LED
When this switch is turned on , the +48V LED lights and DC +48 V phantom power is supplied to the XLR plug on MIC input jack .

NOTICE
Be sure to leave this switch off if you do not need phantom power. Follow the important precautions below, in order to prevent noise and possible damage to external devices as well as the mixer if you turn this switch on .Be sure to leave this switch off when you connect a device that does not support phantom power to channel . Make sure to turn this switch off when connecting/disconnecting a cable to/from channel . Slide the knob on channel to minimum before turning this switch on /off .

3,Guitar/Line input shifter
The switch is used to shift the connections to different sound sources of the input channels.Switched up, the input channel can be connected directly with a high-impedance audio device such an electric guitar or a bass. Switched down, it can be connected to a low-impedance sound device.

Warning!
In operation of the switch, all level output control (such as channel volume knobs, monitor output knobs and earphone knobs) should be set up to the minimun position. Because this operation will cause a sudden impact sound, which can damage the external devices, and the hearing of the personnel on site.

4, Mic input CH 2 band EQ
This is a high quality, sensitive, 2 segment equalizer that adjusts the overall tone of the channel. The adjustment waveform of the high and low bass equalizer is the shape of the broom, which affects the frequency of 12KHz and the sound below 80Hz;

5, DSP FX send knob
Adjust the size of the signal sent to the digital effect processor. The signal transmitting point is located after the volume knob of the channel;

6, PAN knob
Positions the channel signal between L/R in the stereo mix;

7, MIC input volume knob / peak LED:
Adjust the volume of the sound input from the microphone or other source connected to channel .When the peak light flashes, indicating that the input signal is too high, please turn the volume knob to the left to reduce the volume. In normal use, please avoid the peak light for a long time;

8, DSP output volume knob :
Adjust the digital effect processor output to the listener output, headphone, USB recording volume;

9, USB audio loopback button:
When this button is pressed, the audio signal from the computer through the USB interface can be input into the computer through the USB interface, and then sent to the monitor output and headphone output. If the key is played, the audio signal reproduced from the computer via the USB interface is only transmitted to the monitor output and headphone output.

10, USB audio signal total volume knob:
Adjust the audio signal level from the computer via the USB interface;

11, 12, 13 digital effect processor control components, see the instructions on the use of filters:

14, Monitor output volume knob;
15, Phones output volume knob;
16, Monitor output level meter;
17, The stereo input channel volume knob;
18, The stereo input channel balance knob;
19, power indicator light;
20, 6.35mm specification for stereo headphone output interrupts;

Front panel function

21, MONITOR output jacks:
XLR balanced output interrupt for the connection of active speakers, power amplifiers or other audio devices.

22, 6.35mm-spec stereo line input jack:

23, The stereo line input signal sensitivity selection button, bounce to +4dB, press 10dB;

24, USB 2.0 terminal
For connecting to a computer using the included USB 2.0cable. When connected to a computer, the computer supplies power to the mixer and audio data can be sent between the mixer and computer.

NOTICE!
Please do not connect any device to USB 2.0 terminal other than personal computers, tablet devices or 5V DC output power supplies.

NOTICE!
Please read the safety precautions for the USB power adapter or USB mobile battery that you are using.Use a USB power adapter or USB mobile battery that can supply power via a USB micro B plug based on the follow-ing USB standards:
Output voltage: 4.8 V to 5.2 V
Output current: 0.5 A or greater
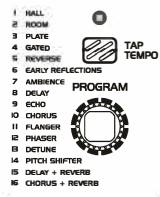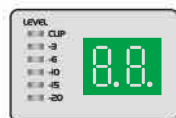
24-BIT MULTI-EFFECTS PROCESSOR
Here you can find a list of all presets stored in the multi-effects processor. This built-in effects module produces high-grade standard effects such as reverb, chorus, flanger, delay and various combination effects. These effect presets are designed to be added to dry signals. Of course, a signal has to be fed into the effects processor via the FX control in the channel strip for both application, and to adjust the proportion through the effects channel knob. The effects processor has 16 types of effects in total with each type being adjusted with two layers of sub-parameters. These functions are controlled throung the PROGRAM encoder and TAP switch.

LEVEL
The LED level meter on the effects module should display the level fed to the effects processor. Take care to ensure that the clip LED only lights up at peak levels. If it is lit constantly, you are overloading the effects process or and this could cause unpleasant distortion.

PROGRAM
You can select the effect presets by turning the PROGRAM control. The display flashes the number of the current preset. To confirm the selected preset, press slightly the encoder; the flashing stops to show that the selected effect type has been confirmed. When the effect type is set, that is when the display does not flash, press slightly the encoder, the decimal point on the lower right corner of the display will light up to show that you enter the first layer sub-parameters interface. By turning the encoder at this time, you can promptly change the selected effect type s specific parameters. The adjustments made will promptly be reflected on the sound performance. In 5 seconds after no adjustment is made, it will automatically return to the main effects types interface.

TAP SWITCH
Sets the adjustments of the second layer parameters of the effects processor. When pressed, the two decimal points on the display both light up. When you set the relative parameters related to time, by pressing continuously the time interval for more than two times, the effects processor will consider that this is the time parameters you want to set, and adjust accordingly. The adjustment made will promptly be reflected on the sound performance. In 5 seconds after no adjustment is made, it will automatically return to the interface of the main effects types.

TAP LED is the action following the TAP switch to show relevant contents. The types and adjustment parameters of the effects processor are referred to in the chart on the next page.

DSP effect processor

No.	Effect	PROGRAM	Min. Value	Max. Value	TAP	Min. Value	Max. Value	TAP LED
01	HALL	Reverb time	01 (approx. 1.0 sec.)	10 (approx. 8.0 sec.)	Brilliance	OFF	ON	off/on lighting
02	ROOM	Reverb time	01 (approx. 0.5 sec.)	10 (approx. 4.0 sec.)	Brilliance	OFF	ON	off/on lighting
03	PLATE	Reverb time	01 (approx. 0.5 sec.)	10 (approx. 5.0 sec.)	Brilliance	OFF	ON	off/on lighting
04	GATED	Reverb time	01 (approx. 0.1 sec.)	10 (approx. 1.0 sec.)	Brilliance	OFF	ON	off/on lighting
05	REVERSE	Reverb time	01 (approx. 0.1 sec.)	10 (approx. 1.0 sec.)	Brilliance	OFF	ON	off/on lighting
06	EARLY REFLECTIONS	Room size	01 (small)	10 (extra large)	Brilliance	OFF	ON	off/on lighting
07	AMBIENCE	Area size	01 (small)	10 (extra large)	Brilliance	OFF	ON	off/on lighting
08	DELAY	No. of repetitions	01 (min. feedback)	20 (max. feedback)	Time Interval (BPM)	07 (72 BPM)	60 (600 BPM)	blinks BPM Tempo
09	ECHO	No. of repetitions	01 (min. feedback)	40 (max. feedback)	Time Interval (BPM)	07 (72 BPM)	60 (600 BPM)	blinks BPM Tempo
10	CHORUS	Intensity (Depth)	01 (1%)	99 (99%)	Tempo (LFO-Speed)	02 (24 BPM)	48 (480 BPM)	blinks mod speed
11	FLANGER	Intensity (Depth)	01 (1%)	99 (99%)	Tempo (LFO-Speed)	02 (24 BPM)	48 (480 BPM)	blinks mod speed
12	PHASER	Intensity (Depth)	01 (1%)	99 (99%)	Tempo (LFO-Speed)	02 (24 BPM)	48 (480 BPM)	blinks mod speed
13	DETUNE	Detune-Spreading	01 (1%)	99 (99%)	2nd voice delay	05 (short,.5 ms)	50 (long, 50 ms)	off/on lighting
14	PITCH SHIFT	Semitone Steps	-12 (1 octave down)	12 (1 octave up)	Detune	OFF (0%)	ON (25%)	off/on lighting
15	DELAY + REV	Ratio	−9 (90%DLY,10%REV)	9 (10%DLY,90%REV)	DLY time (BPM)	11 (116 BPM)	60 (600 BPM)	blinks BPM Tempo
16	DELAY + REV	Ratio	−9 (90%CH,10%REV)	9 (10%CH,90%REV)	Reverb time	12 (short, 1.2 s)	24 (long, 2.4 s)	off/on lighting

General Specifications

Input Channels	Mono (MIC/LINE): 2(4) ;
	Stereo (LINE): 1;
	USB PLAYBACK: 1;
Output Channels	MAIN L/R OUT: 1;
	PHONES: 1 ;
Bus	Stereo: 1
Input Channel Function	
CH1/2 MIC/LINE	**GAIN,** -14~+40 dB;
	2 band EQ, 80Hz/12KHz,±15dB;
	+48V, Phantom Power,LED;
	IMPEDANCE Switch;
	Peak LED;
USB Audio	Stereo Input / Stereo Output;
	USB Audio Class 2.0 compliant;
	Sampling Frequency: Max 96 kHz, Bit Depth: 24-bit;
	Type B connector;
DSP effect	24-bit Sigma-Delta, 256-times oversampling;
	48KHz sampling rate;
Level Meter	2x6 point LED meter ;
Max output level	3 Vrms;
Frequency response	±0.5 dB, 20-20000Hz;
Dynamic range	102 dB;
THD+N @ 1KHz	≤0.03%;
Stereo crosstalk	92 dB;
Power Requirements	DC 5 V, 500 mA
Power Consumption	Max. 2.5 W
Dimensions (WxHxD)	166 mm x 66 mm x 165 mm (2 CH type)
	220 mm x 66 mm x 165 mm (4 CH type)
Net Weight	0.89 kg (2 CH type)
	1.17 kg (4 CH type)