

MIXER SERIES

SMALL-SERIES  
USER GUIDE

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction

**INPUT CHANNEL SECTION**

**1. MIC**  
These are to be connected with microphone XLRjacks are used for the balanced signal.

**2. LINE**  
These are to be connected with these line sources such deck tuner turntable keyboard etc.

**3. GAIN**  
This has function which adjusts the input sensitivity of each channel in order to input the constant level of the signal.

**4. HIGH**  
This has a function which controls the high frequency tone of each channel. Always set this control to the 12 o'clock position, but you can control the high frequency tone according to the speaker the conditions of listening position and listener's taste. Clockwise rotation of the control increases level, and vice versa.

**5. MIDDLE**  
This has a function which controls the high frequency tone of each channel. Always set this control to the clock position, but you can control the middle frequency listening position and listener's taste. clockwise rotation of the control increases the level, and vice versa.

**6. LOW**  
This has a function which controls the low frequency tone of each channel. Always set this control the 12 o'clock position, but you can control the low frequency tone according to the speaker, the conditions of listening position and listener's taste. clockwise rotation of the control increases the level, and vice versa.

**PEAK**

**7. AUX**  
This rotary fader sends out the channel signal to AUX bus. The signal is pre-fader so that the aux send to be independent of the fader; this is suitable for foldback or monitor.

**8. EFFECT**  
When you want to get echo effect of each channel, you can adjust the level of installed echo by this. (Unless you will use echo on any channel, turn to "O" Position of MON control at that channel.)

**9. PAN**  
This has a function which distributes the signal level between left and right channel to make a stereo sound effect.

**10. PEAK**  
This is the lamp which indicates the input signal level of this appliance (regardless of output) when GAIN volume is adjusted.

**11. CHANNEL VOLUME**  
These are used for adjusting the volume of signal sources, which are connected to the relevant channel.

**12. PFL**  
You can monitor the signal of the only channel on which PFL switch is turned "ON" through the headphone. (In this time, the other channel are automatically cut off.)

**PHONE LEVEL**

**MAIN L/R**

**MAIN CONTROL**

**1. BALANCE OUTPUT**  
These are jack to send the finally mixed outputs to the other appliance (amplifier).

**2. UNBALANCE OUTPUT**  
These are jack to send the finally mixed outputs to the other appliance (amplifier).

**3. AUX OUT**  
This jack is to be connected with the input jack of AUX amplifier when using separate AUX amplifier.

**4. HEADPHONE JACK**  
This is used for monitoring the master signal and individually monitoring each channel with PFL S/W.

**5. LEVEL METER**  
This is a lamp which indicates output levels of left and right channel and operating conditions of the appliance, and thus you can see all output conditions with your eyes.

**6. HEADPHONE FUNCTION SELECT SWITCH**  
The master volume control for the monitor. PFL output signal to the headphone jack.

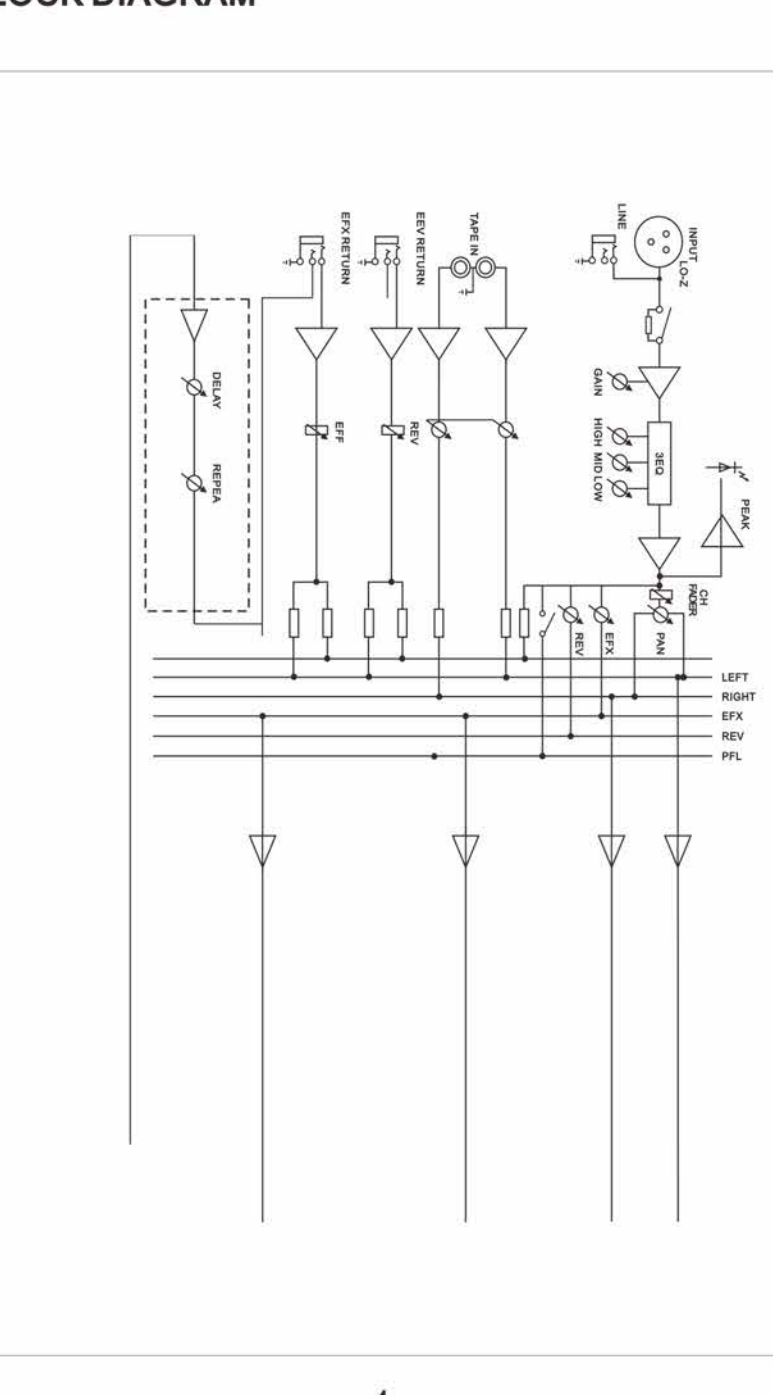
**7. AUX IN**  
You can adjust the volume of AUX IN signal by this when connecting AUX IN.

**8. AUX SEND**  
The AUX SEND control adjusts the volume level of the AUX signal provided at connector.

**9. PFL**  
You can monitor the signal of the only channel on which PFL switch is turned "ON" through the headphone. (In this time, the other channel are automatically cut off.)

**10. OUTPUT STEREO FADERS (LEFT/RIGHT)**  
This is a master fader for adjustment for volume of right /left output. Unity gain is the top of their travel.

**11. + 48 v work lamp**  
**12. + 48 v switch work instructions**



**AUX EFFECT CONTROL etc**

**1. EFF SEND**  
These are to be connected with external digital reverb & effect equipment.

**2. EFF RETURN**  
These are to be connected with external digital reverb & effect equipment.

**3. CTRL RM**  
This jack is to be connected with the input jack of monitor amplifier when using separate monitor amplifier.

**4. RECORD PIN JACK**  
This jack is to be connected with cassette deck when recording the mixed output.

**5. PLAY PIN JACK**  
This jack is to be connected with cassette deck when playing back. adjust frequency properly.

**6. EFF SEND**  
This is used for adjusting volume of echo sound when sending echo sound to SEND jack.

**7. REPEAT**  
This is used for adjusting frequency of echo repeat. Since too much echo repeat may cause a howl, please adjust frequency properly.

**CTRL RM**

**REVERB**

**EFFECT**

**8. DELAY**  
This is used for adjusting the time interval of echo repeat. The middle position (5) may be most effective.

**9. PAN**  
This has a function which distributes the signal level between left and right channel to make a stereo sound effect.

**10. PFL**  
Use this function if you want to monitor echo sound and external effects through a headphone

**11. EFFECTS FADERS**  
By using this control, you can adjust the signal level of echo repeat or external effects.

**12. MP3**  
USB port  
Indicator light  
On TV  
The volume increase/a song  
The volume reduction/the next song  
USB conversion

**POWER**

**1. Power switch**

**2. External power source port**  
To receive external power source unit, AC double 17V power source, 750mA.

**TECHNICAL PARAMETERS OF MIXER**

MODEL	6CH	8CH	12CH
Input Sensitivity	-60dBm~-40dBm	-60dBm~-40dBm	-60dBm~-40dBm
Nominal Input Level	Mic-60dBm Line-20dBm Eff Ret-20dB Aux In-20dB Tape In-10dB	Mic-60dBm Line-20dBm Eff Ret-20dB Aux In-20dB Tape In-10dB	Mic-60dBm Line-20dBm Eff Ret-20dB Aux In-20dB Tape In-10dB
Nominal Output Level	Eff Send-10dBm Aux Send 0dBm	Eff Send-10dBm Aux Send 0dBm	Eff Send-10dBm Aux Send 0dBm
Common Mode Rejection	-70dB	-70dB	-70dB
Output Voltage (mixer part)	4V Max	4V Max	4V Max
S/N Ratio	≥80dB	≥80dB	≥80dB
THD(1KHz Full Power)	Less than 0.03% (at 1KHz)	Less than 0.03% (at 1KHz)	Less than 0.03% (at 1KHz)
Frequency Response	20Hz-20KHz±3dB	20Hz-20KHz±3dB	20Hz-20KHz±3dB
Headphone	7V/220Ω	7V/220Ω	7V/220Ω
Parametric CQ	Hi±15dB/12KHz Mid±15dB/2.5K Low±15dB/80KHz	Hi±15dB/12KHz Mid±15dB/2.5K Low±15dB/80KHz	Hi±15dB/12KHz Mid±15dB/2.5K Low±15dB/80KHz
Power Consumption	30W	30W	30W
Power Supply	AC 220-240V / 50-60Hz		

