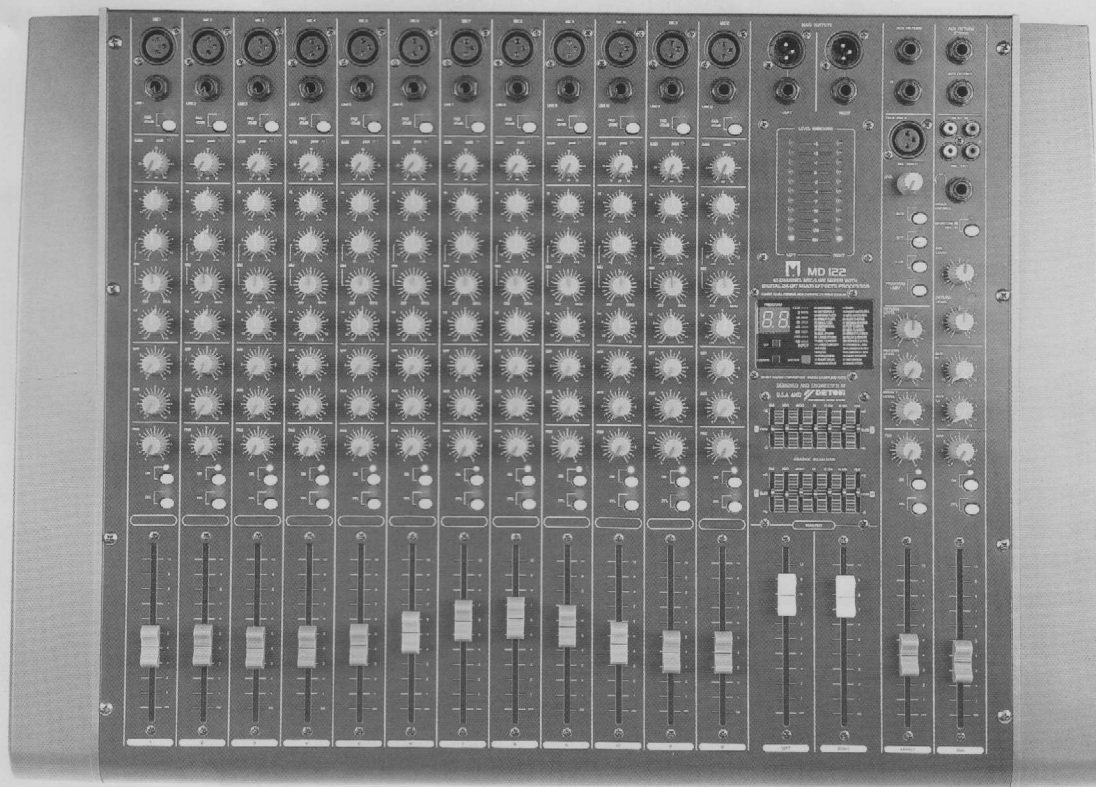




MD SERIAL  
PROFESSIONAL  
MIXERS



MD82/MD82A/MD122/MD122A

OWNER'S MANUAL

MD SERIES MIXERS ARE NEWLY DEVELOPED MIXERS. THEY ARE CONVIENIT IN OPERATION AND PERFECT IN FUNCTION. HIGH GAIN AND LOW NOISE MICROPHONE, DIGITAL SIGNAL PROCESSOR(DSP) AND100MM SLIP POTENTIOMETER CAN MEET ALL KINDS OF DEMANDS FROM USERS.

## CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN

TO TREVENT ELECTRIC SHOCK  
DO NOT REMOVE COVER OR  
BACK.NO USER SERVICEABLE  
PARTS INSIDE REFER SERVICING  
TO QUALFIED SERVICE PERSON-NEL



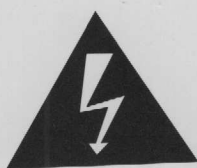
## WARNING

TO REDUCE THE RISK OF ELECTRIC  
SHOCK,DO NOT EXPOSE THIS  
EQUIPMENT TO RAIN OR MOISTURE

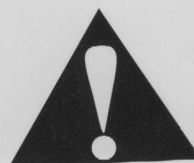
## Magnetic Field

CAUTION!DO not locate sensitive high-gain equipment such as preamplifiers or tape decks drecity above or below the unit,Because this amplifier has a high power density,it has strong magnetic field which can induce hum into unshielded devices that are located nearby .The field is strongest just above and below the unit.  
If an equipment rack is used ,we recommend locating the amplifiers in the bottom of the rack and the preamplifier or other sensitive equipment at the top.

## WATCH FOR THESE SYMBOLS:



The lightning bolt  
triangle is used to  
alert the user to the  
risk of electric shock.



The exclamation point  
triangle is used to alert the  
user to important operating or  
maintenance instructions.

## A.CHANNEL SECTION

All channels of powered mixers & mixing consoles are the same. Therefore ,this manual shows the control functions of only one channel.

### 1.MICROPHONE

Electronically Microphone inputs accept a standard XLR male connector.

- 1.GROUND=shield, 2.HOT=signal input,
- 3.COLD=ground(shield).

You can use max 20-60dB according to signal level by GAIN control.

### 2.LINE INPUT

USING BY 1/4" standard line connector, You can use unbalance (tip/sleeve) and balance (tip/ring/sleeve). It can be connected with keyboards or other electric instruments.

Tip=positive ring=negative sleeve=ground

### 3.PAD(-20dB)

This switch, when pushed, attenuates the input signal -20dB.

### 4.CLIP(PEAK LEVEL INDICATOR)

The peak indicator LED will begin to illuminate when the post EQ, per fader signal of that channel is within 10dB of actual clipping.

### 5.GAIN CONTROL

Adjust input sensitivity from -60dB to -20dB with the -20dB pad switch in the out position and -40dB to 0dB. When the -20dB pad switch is pushed.

### 6.HIGH FREQUENCY EQUALIZATION CONTROL

Provides  $\pm 15$ dB of fixed frequency equalization that shelves at 12KHz.

### 7.MID FREQUENCY EQUALIZATION CONTROL

Provides  $\pm 15$ dB of fixed frequency equalization that shelves at 250KHz-6KHz.

### 8.LO FREQUENCY EQUALIZATION CONTROL

Provides  $\pm 15$ dB of fixed frequency equalization that shelves 100Hz.

### 9.EFFECT CONTROL

Use this control when you want to get effect sound by adjustment of input signal. When you don't use external source, digital delay will be working which is installed inside.

### 10.AUX CONTROL

Use this control to set the level of signal from external stereo source and the main signal control is re-controlled by master section. (see AUX section)

### 11.PAN CONTROL

The pan control sends continuously variable amounts of the post fader signal to either the Left & Right main busses. In the center position, equal amounts of signal are sent to the left and right busses. As the control is rotated in either direction, more signal is sent to the buss indicated in the direction of the rotation while less signal is sent to the other buss, if the control is turned all the way to one side, the signal is only.

### 12.CHANNEL ON/OFF

When you want to control this, press this button, the green indicator LED to indicate the signal of the channel has been lined in. Turn off the other channels to improve the reality of the noise and to clear away the unnecessary noises. That would make it more perfect in the effect and voice.

### 13.PRE-FADER LEVEL(PFL)

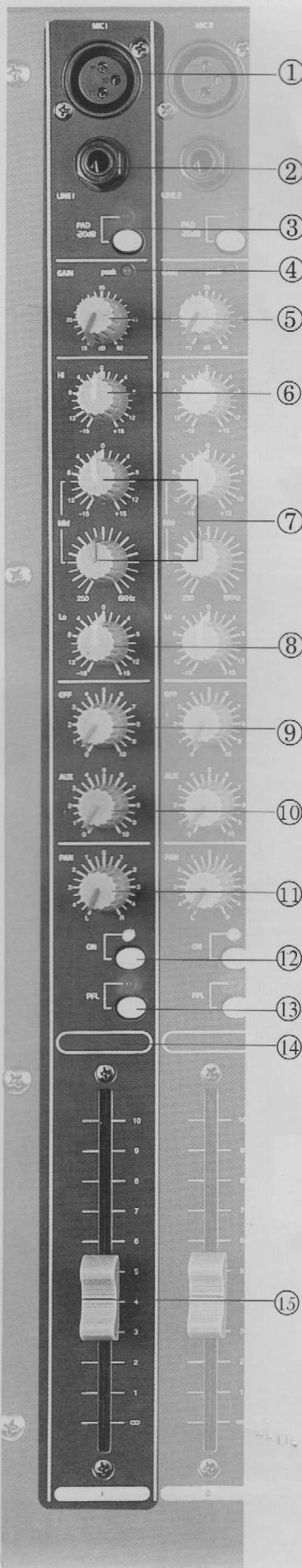
You can monitor the signal of the only channel which PFL switch is turned on using by headphone in useful. When PFL switch is turned on, other channels are cut off automatically. See monitor section.

### 14.INDICATION

Can be found easily by inputted input signal which is recorded on the sticker.

### 15.CHANNEL FADER

You can adjust the volume of signal sources which are connected to the relevant channel.



## B. MASTER SECTION

### 1.THE LEFT &RIGHT MASTE BUSSES BALANCED OUTPUT JACK.

3.COLD 2.HOT 1.GROUND(shield)

### 2.THE LEFT & RIGHT MASTE BUSSES UNBALANCE JACK

#### CHANNEL VOLUME

Tip=signal+ ring=ground- sleeve=GROUND(shield)

### 3.MASTER LEVEL DISPLAY

This is level VU-meter which shows output levels of left and right channel and working condition on the way of operation. Therefore, you can see output condition thru this master level display. Please do not exceed +3dB to avoid any distortion sound. The lamp lighting shows power is turned on or off.

### 4.5.STEREO GRAPHIC EQUALIZE

(4).left stereo graphic equalizer

This

Has a function which finally differentiates a signal and adjusts the frequency you want. This control control consists of left Channel band. You Can adjust equalization by this according to listening position and listener's taste.(Upper movement of this control increases the level and vice verse.)

(5).Rihgt stereo graphic equalizer

The same usage as the left graphic equlizer

### 6.LEFT MASTER FADER

By adjusting,you can get finally mixed left output.

### 7.RIGHT MASTER FADER

By adjusting,you can get finally mixed right output.

### 8. DSP DIGITAL INDICATOR

Indicating the effect which the dsp is working at.

### 9/10.DSP PRESETS

(9) and (10) are up presets and down presets. When you choose different presets, the correspondent number will change accordingly. When you push the presets, the led is on but there is no effect output. Only you push enter key(13), there is correspondent effect output and the led will stop flashing.

### 11. DSP SIGNAL INPUT LEVEL

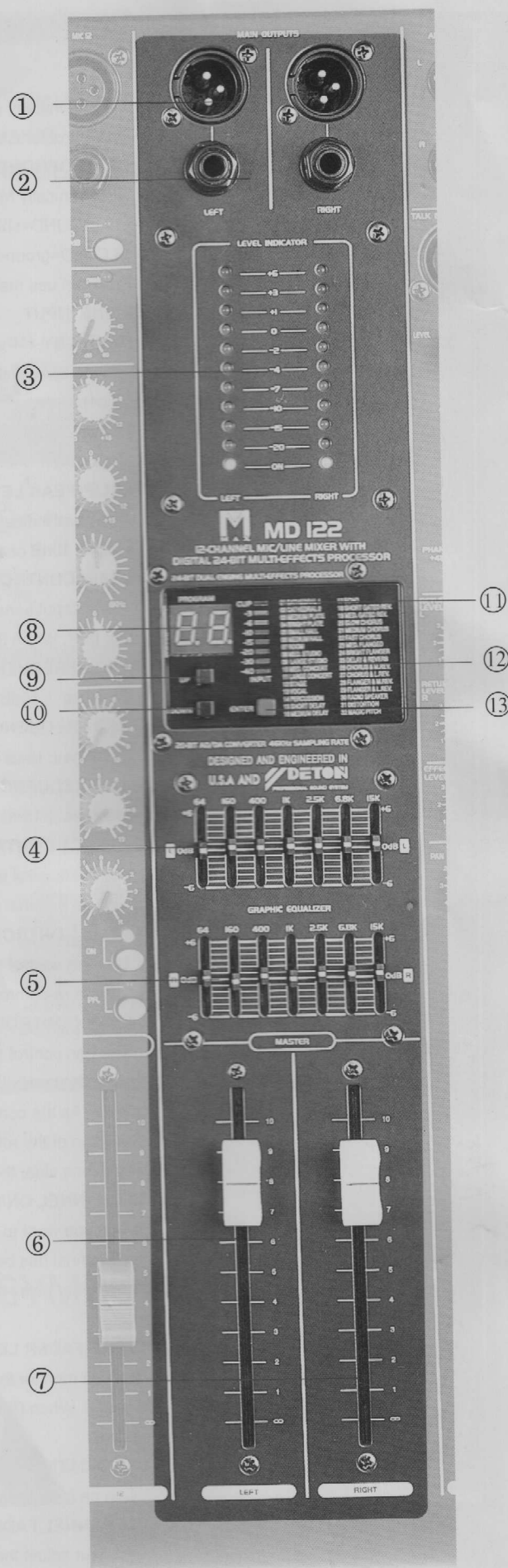
It indicates the dsp signal input level. When the red led is on, please make the input level a little smaller.

### 12. INTERNAL DSP

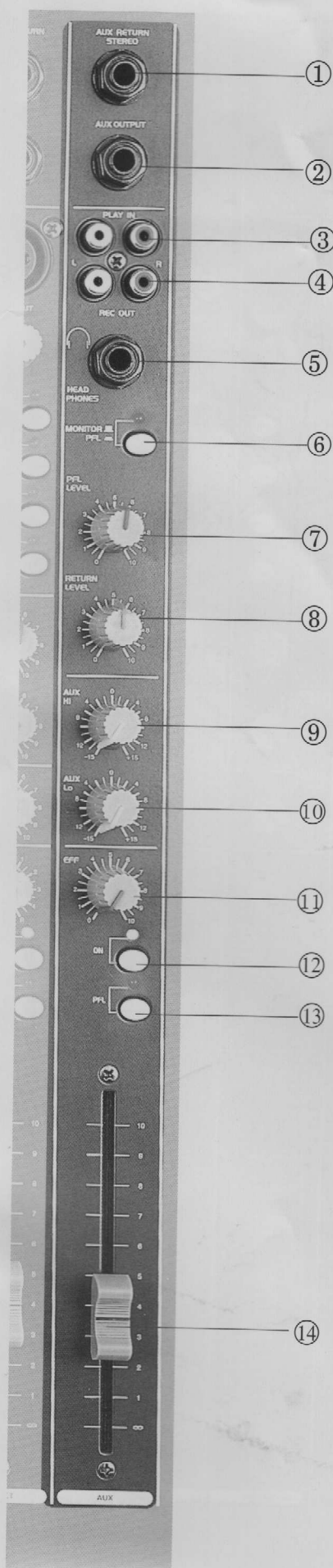
There are 32 effects. You can choose what you want.

### 13. DSP ENTER

When you choose your presets, please push the key and the dsp is at the effect status that you choose.







## C.AUX SECTION

### 1.AUX INPUT

It's a 1/4" stereo jack, it is to be connected with stereo effect equipments or other external auxiliary signal.

Tip=left signal ring=right signal

sleeve=negative

### 2.AUX OUTPUT

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

### 3.4.STEREO RECORDER & PHONO JACK

(3). These jacks are can be connected with cassette deck when playing back recorded..

(4). These jacks are can be connected with cassette deck when recording the MIXED output.

### 5.HEADPHONE JACK

You can monitor working condition by sound thru Headphone.

You can monitor master sound and a certain channel

### L6.PRE-FADER LEVEL(PFL )CONTROL

When you want to monitor one certain channel push this switch and the LED will be turned on. When

you want to monitor the master output and release the switch.

### 7.HEADPHONE VOLUME CONTROL

Using by this control, you can adjust output level of headphone.

### 8.AUX INPUT LEVEL CONTROL

By adjusting, you can control input level of from AUX INPUT and play back (see No. 1).

### 9.MONITOR HI FREQUENCY EQUALIZATION CONTROL

Using by this control, you can equalizer 12KHz of level to  $\pm 15$ dB from AUX INPUT.

### 10.MONITOR LO FREQUENCY EQUALIZATION CONTROL

Using by this control, you can equalizer 100KHz of level to  $\pm 15$ dB from AUX INPUT.

### 11.AUX EFFECT CONTROL

Using by this control, you can adjust effect level AUX INPUT

### 12.CHANNEL SWITCH

When you want to connect the auxiliary input, press the button; the button; if not release it to get better voice.

### 13.PFL SWITCH CONTROL

When you want to monitor the AUX INPUT signals, adjust the button.

### 14.MASTER MONITOR CONTROL

Using by this control, finally you can adjust output level from adjust AUX.

## D.EFFECT SECTION

### 1/2. LEFT AND RIGHT AUX EFFECT RETURN

These are to be connected with other external processor.

### 3.TALKBACK MIC INPUT JACK

This jack can be used with a movable microphone

For the DJ.

1.GROUND=shield, 2.HOT=signal input.

3.COLD=ground(shield)

### 4.TALKBACK LEVEL CONTROL

You can set the level of the talkback being input

By adjusting the knob.

### 5.TALKBACK SIGNAL DISTRIBUTION CONTROL

When you want the signal to be distributed to the Auxiliary channel, push AUX. When you want the signal to be distributed to the

Effect channel, push EFF.

When you want the signal to be distributed to the L/R channel, push L-R.

### 6. PHANTOM POWER SWITCH

When you use the microphone, push the button from the small hole to switch on the +48v power. The led will be on.

### 7. LEFT MASTER LEVEL CONTROL

You can control the aux return level by adjusting the knob.

### 8. RIGHT MASTER LEVEL CONTROL

You can control the aux return level by adjusting the knob.

### 9.INPUT LEVEL CONTROL

Adjusting by this, you can control the level being put into the digital DST.

### 10.PAN CONTROL

Using by this control, you can adjust echo sound & external dffector sound between left & right.

### 11.CHANNEL SWITCH CONTROL

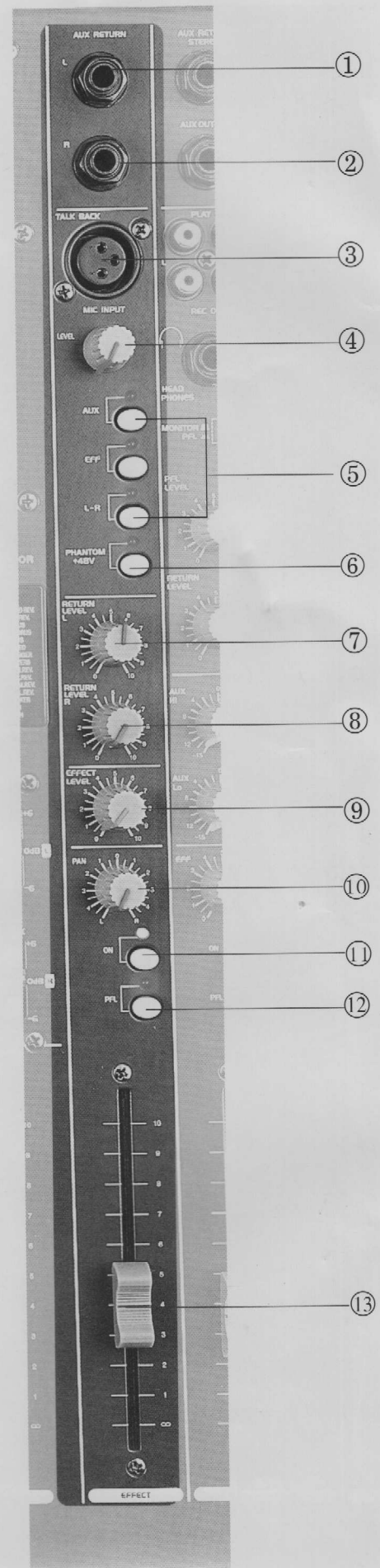
If you want the effect, push the button then the effect will enter the main channel, if not, release it to get the better voice.

### 12.PFL SWITCH

If push this button, you can monitor the effect Independently by headphone.

### 13.EFFECT FADER CONTROL

Using by this control, you adjust signal level& external effector.



MODE CONDITON	MD82	MD82A	MD122	MD122A
Input Sensitivity	-60dBm~-40dBm PAD ON: -40dBm~-20dBm	-60dBm~-40dBm PAD ON: -40dBm~-20dBm	-60dBm~-40dBm PAD ON: -40dBm~-20dBm	-60dBm~-40dBm PAD ON: -40dBm~-20dBm
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	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	Eff Send - 10dBm Aux Send 0dBm
Common Mode Rejection	-60dB	-60dB	-60dB	-60dB
Output Voltage (mixer Part)	4VMax	4VMax	4VMax	4VMax
S/N Ratio	≥70dB	≥70dB	≥70dB	≥70dB
THD(1kHz Full Power)	Less than 0.03%(at 1KHz)	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	20Hz-20KHz ± 3dB
Headphone	7V/220 Ω	7V/220 Ω	7V/220 Ω	7V/220 Ω
Parametric CQ	Hi ± 15dB/12KHz Mid ± 15dB 250Hz-6KHz Lo ± 15dB/80KHz	Hi ± 15dB/12KHz Mid ± 15dB 250Hz-6KHz Lo ± 15dB/80KHz	Hi ± 15dB/12KHz Mid ± 15dB 250Hz-6KHz Lo ± 15dB/80KHz	Hi ± 15dB/12KHz Mid ± 15dB 250Hz-6KHz Lo ± 15dB/80KHz
Output Power		2 x 350W/4 Ω		2 x 350W/4 Ω
Power Consumption	40W	900W	40W	900W
Power Supply	AC 220-240V,100-120V(option)/50-60Hz			

