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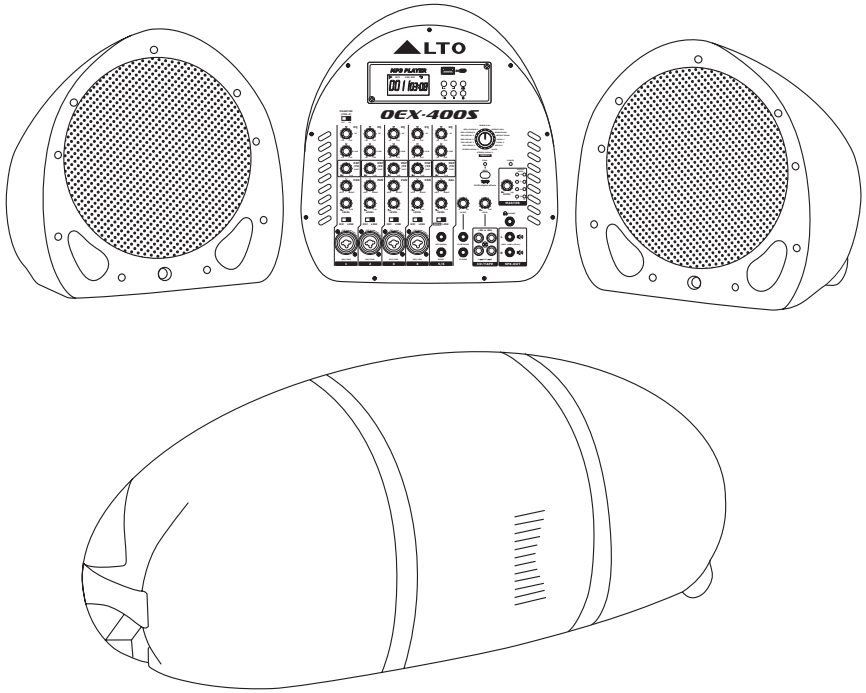
NF03374-1.2

MUSIC, PASSION, DESIGN

USER'S MANUAL

OEX-400S

***STEREO** FULL-RANGE COMPACT PORTABLE SOUND SYSTEM*
WITH 24-BITS DIGITAL EFFECTS



www.altoproaudio.com
Version 1.2 DEC. 2010

English

9. WARRANTY

1. WARRANTY REGISTRATION CARD

To obtain Warranty Service, the buyer should first fill out and return the enclosed Warranty Registration Card within 10 days of the Purchase Date.

All the information presented in this Warranty Registration Card gives the manufacturer a better understanding of the sales status, so as to provide a more effective and efficient after-sales warranty service. Please fill out all the information carefully and genuinely, miswriting or absence of this card will void your warranty service.

2. RETURN NOTICE

2.1 In case of return for any warranty service, please make sure that the product is well packed in its original shipping carton, and it can protect your unit from any other extra damage.

2.2 Please provide a copy of your sales receipt or other proof of purchase with the returned machine, and give detail information about your return address and contact telephone number.

2.3 A brief description of the defect will be appreciated.

2.4 Please prepay all the costs involved in the return shipping, handling and insurance.

3. TERMS AND CONDITIONS

3.1 ▲LTO warrants that this product will be free from any defects in materials and/or workmanship for a period of 1 year from the purchase date if you have completed the Warranty Registration Card in time.

3.2 The warranty service is only available to the original consumer, who purchased this product directly from the retail dealer, and it can not be transferred.

3.3 During the warranty service, ▲LTO may repair or replace this product at its own option at no charge to you for parts or for labor in accordance with the right side of this limited warranty.

3.4 This warranty does not apply to the damages to this product that occurred as the following conditions:

- Instead of operating in accordance with the user's manual thoroughly, any abuse or misuse of this product.
- Normal tear and wear.
- The product has been altered or modified in any way.
- Damage which may have been caused either directly or indirectly by another product / force / etc.
- Abnormal service or repairing by anyone other than the qualified personnel or technician.

And in such cases, all the expenses will be charged to the buyer.

3.5 In no event shall ▲LTO be liable for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

3.6 This warranty gives you the specific rights, and these rights are compatible with the state laws, you may also have other statutory rights that may vary from state to state.

8. TECHNICAL SPECIFICATION

FAT analysis	Supports FAT 16 and FAT 32, Supports VFAT (long file name), Supports multi-partion up to 1
MP3 DECODE	Supports sample rates 8KHz, 32KHz, 11.025KHz, 22.05KHz, 44.1KHz, 12KHz, 24KHz, and 48KHz. Supports bit rate 8 to 320 kbps and VBR (Variable Bi Rate) except free format
Electric Specification	Frequency Response 20Hz~20KHz
	Output level 0 dB
	S/N Ratio > 90 dB
	Distortion (at 1 KHz) <0.05%
Power Section (SPK.OUT)	
Distortion	<0.1% (at 1W & 1 KHz)
	<0.15% (at 100W & 1 KHz)
Frequency Response	20Hz to 22kHz, +/-2dBu (at 100W)
SNR (Line IN)	≧100 dBu
Output level	30.5dBu +/-1dBu (+10 Led Light & COMP.Start)
Power continuous 1KHz,THD 1%	2 X 200W @ 4Ω
	2 X 110W @ 8Ω
Power EIAJ 1KHz,THD 1%	2 X 250W @ 4Ω
	2 X 130W @ 8Ω
Thermal protection	over-temperature power limiting
	thermal shutdown
	Temperature controlled 12V DC fan output
Short protection	short-circuit protection
	overload output protection
Voltage protection	over voltage protection
	DC offset shutdown
Speaker Section	
Passive System Type	2 -way Coax vented box
Continuous Power	150W AES standard (each speaker)
Peak Power	300W Peak (each speaker)
Max SPL at 1M	117.5dB SPL calculated
Frequency Response	65Hz-20KHz at -10dB
Impedance	8Ω nominal
Crossover Frequency	2.3KHz/12dB/Oct
Protection	Electronic on the Driver
Coaxial Type Low Frequency Driver	10″ Woofer / 2″ Voice Coil
High Frequency Driver	1″ Neodymium Driver / 1″ Voice Coil
Coverage HxV	70° Hx70° V Spherical hom
Connectors	Power Input with mono Jack
Statis Power Consumption	
No Output powerstate at 230V	≦32W
Dielectric Strength	
Between Live+Negative→Earth	1500VAC at Test,Frequency 50/60Hz,Leakage Current:5mA for 1minute
Between Live+Negative→IN/OUT Terminal(Positive+Negative)	3000VAC at Test,Frequency 50/60Hz,Leakage Current:5mA for 1minute
Insulation Resistance	
Between Live+Negative→ Earth(A Voltage of 500VDC)	>2MΩ
Between Live+Negative→ IN/OUT Terminal(Positive+Negative) (A Voltage of 500VDC)	>4MΩ
Power supply	
Main voltage	100-120VAC~60Hz
	220-240VAC~50Hz
	100~120V: T10A 250V
	220~240V: T5A 250V
Physical	
Dimension (W D H)	984mm*440mm*460mm (38.7″ x17.3″ x18.1″)
Net Weight	19.61kg
Cross Weight	25.41kg

IMPORTANT SAFETY INSTRUCTION

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN

TO REDUCE THE RISK OF ELECTRIC SHOCK PLEASE DO NOT REMOVE THE COVER OR THE BACK PANEL OF THIS EQUIPMENT. THERE ARE NO PARTS NEEDED BY USER INSIDE THE EQUIPMENT. FOR SERVICE, PLEASE CONTACT QUALIFIED SERVICE CENTERS.

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)
ϟ Hazardous Live Terminal
ON: Denotes the product is turned on.
OFF: Denotes the product is turned off.

CAUTION
Describes precautions that should be observed to prevent damage to the product.

1. Read this Manual carefully before operation.
2. Keep this Manual in a safe place.
3. Be aware of all warnings reported with this symbol.
4. Keep this Equipment away from water and moisture.
5. Clean it only with dry cloth. Do not use solvent or other chemicals.
6. Do not damp or cover any cooling opening. Install the equipment only in accordance with the Manufacturer's instructions.
7. Power Cords are designed for your safety. Do not remove Ground connections! If the plug does not fit your AC outlet, 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.
8. Unplug this equipment when unused for long periods of time or during a storm.
9. Refer all service to qualified service personnel only. Do not perform any servicing other than those instructions contained within the User's Manual.
10. 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.

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

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

11. Move this Equipment only with a cart, stand, tripod, or bracket, specified by the manufacturer, or sold with the Equipment. When a cart is used, use caution when moving the cart / equipment combination to avoid possible injury from tip-over.

12. Permanent hearing loss may be caused by exposure to \ extremely high noise levels. The US. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible exposure to noise level.
These are shown in the following chart:

HOURS X DAY	SPL	EXAMPLE
8	90	Small gig
6	92	train
4	95	Subway train
3	97	High level desktop monitors
2	100	Classic music concert
1,5	102	
1	105	
0,5	110	
0,25 or less	115	Rock concert

According to OSHA, an exposure to high SPL in excess of these limits may result in the loss of heat. To avoid the potential damage of heat, it is recommended that Personnel exposed to equipment capable of generating high SPL use hearing protection while such equipment is under operation.

The apparatus shall be connected to a mains socket outlet with a protective earthing connection.

The mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

IN THIS MANUAL

1. INTRODUCTION

Congratulations! Now you are the owner of the OEX-400S. The OEX-400S is a plastic reinforced trolley that includes a versatile mixer with DSP effects, L&R full range speaker cabinets. Besides, this package also includes some essential accessories such as power cord, signal cables, speaker cables. In order to ensure high versatility and excellent audio performances, the OEX-400S adopts optimal crossover frequency and advanced power amplifier technologies.

The L&R speaker cabinets are tightly hooked on the trolley. When you operate the OEX-400S, first of all take care of the setting of the L&R cabinets . It is the development of ALTO's experience and knowledge in speakers field, in order to faithfully reproduce sound for each kind of applications.

Inlaid in OEX-400S panel there's a compact extractable 8-channel mixer, which adopts 24-bit A/D&D/A converters and 24-bit DSP effects with accurate algorithms (16 presets). It also provides 4 MIC inputs with ultra low noise microphone pre-amplifiers, natural 2-band EQ; AUX send/return and 2TK in/out and optional MP3 and 9 band EQ and so on.

In a word, it is ideally suited for live sound applications, small venues applications, live recording and many other musical purposes. In order to get the best performances from your OEX-400S, we recommend you to thoroughly read this owner's manual before installation and operation.

8. TECHNICAL SPECIFICATION

Mono channels(CH1-CH4)	
Microphone Input	Electronically Balanced, discrete Input Configuration(SW to MIC)
Frequency Response:	20Hz to 22kHz, +/-2dBu
Distortion(THD&N)	0.02% At 1kHz
Sensitivity	-30 dBu
Maximum Voltage Gain	51 dB CH MIC INPUT→HEAD PHONE OUT 51 dB CH MIC INPUT→TAPE OUT 51 dB CH MIC INPUT→FX SEND
SNR(Signal to Noise Rate)	≧100 dBu
Phantom power	+45V~+49V with switch control (Mic Pin2/Pin3 And Pin1)
Line Input	Electronically Balanced(SW to LINE)
Frequency Response:	20Hz to 22kHz, +/2dBu
Distortion(THD&N)	0.02% At 1kHz
Sensitivity	0 dBu
Maximum Voltage Gain	21 dB CH LINE INPUT→TAPE OUT
Stereo channels(CH5/6)	
Line Input	Electronically Balanced(SW to LINE)
SNR(Signal to Noise Rate)	≧100 dBu
Frequency Response:	20Hz to 22kHz, +/-2dBu
Distortion(THD&N)	0.02% At 1kHz
Sensitivity	0 dBu
Maximum Voltage Gain	20 dB FX RETURN→TAPE OUT 20 dB RCA TAPE INPUT→TAPE OUT
Impedance	
Microphone Input	3.9k Ohms
All Other Input	10k Ohms or Greater
Tape Out	1k Ohms
All Other Outputs	120 Ohms
Equalization	
High(Mono channels)	±15 dB @12 kHz
High(Stereo channels)	±15 dB @12 kHz
Low(Mono channels)	±15 dB @80 Hz
Low(Stereo channels)	±15 dB @80 Hz
DSP Section	
A/D And D/A Converters	24 Bit
DSP Resolution	24 Bit
Type of effects	WARM HALL, BRIGHT HALL, WARM ROOM, BRIGHT ROOM, VOCAL1, VOCAL2, VOCAL3, PLATE, STEREO DELAY1, STEREO DELAY2, REV+DELAY1, REV+DELAY2, REV+DELAY3,REV+DEALY4,REV+CHORUS1,REV+CHORUS2
Presets	16
Controls	16-Posistion PRESET Selector CLIP LED MUTE SWITCH with LED Indicator
Crosstalk	
Adjacent Input	≦-75 dB @ 1KHz (CH1-6)
Input to Output	≦-70 dB @ 1KHz (STEREO L/R,CH1-4,PAN:panned hard left or right)
Main Mix Section	
TRACK,Aux,Phones Output	Output level 0dBu Unbalanced, 1/4" Jacks Max out +22dBu Unbalanced, 1/4" Jacks
Master Output(to AMP)	Output level -5dBu (CN10,CN11)
Main EQ(Option)	+/-12dB @ 9 bands(63,125,250,500,1K,2K,4K,8K,16KHz)
Noise (Bus noise)	≦-78dB @ 20Hz~22KHz (channel & MAIN level at 0dB, other at minimum,DSP mute)
Compressor	
Threshold	7dBu
Ratio	6:1
Mp3 Section(Option)	
USB HOST	"Builds in the USB FULL speed(12Mbps)HOST control function" Supports the USB mass storage class

7. PRESET LIST

NO.	Preset	Description	Parameter
1	WARM HALL	Simulate a small acoustic space of the sound.	Rev. Decay time: 360ms Pre-delay: 45ms
2	BRIGHT HALL	Simulate a large acoustic space of the sound.	Rev. decay time: 290ms Pre-delay: 23ms
3	WARM ROOM	Simulate a small acoustic space of the sound.	Rev. decay time: 210ms Pre-delay: 45ms
4	BRIGHT ROOM	Simulate a studio room with many early reflections.	Rev. Decay time: 210ms Pre-delay: 23ms
5	VOCAL 1	Simulate a room with without delay time.	Rev. decay time: 450ms
6	VOCAL 2	Simulate a room with small delay time.	Rev. decay time:240ms Pre-delay: 25ms
7	VOCAL 3	Simulate a small space with slight decay time.	Rev. decay time:100ms Pre-delay: 114ms
8	PLATE	Simulate the transducers sound like classic bright vocal plate.	Pre-delay: 10ms Rev. decay time: 290ms
9	STEREO DELAY 1	Recreate the input sound on the stereo output with different time.	Period: 352ms
10	STEREO DELAY 2	Recreate the input sound on the stereo output with different time.	Period: 238ms
11	REV+DELAY 1	Delay with room effect.	Delay period: 326ms Rev. decay time: 290ms
12	REV+DELAY 2	Delay with room effect.	Delay period: 211ms Rev. decay time: 240ms
13	REV+DELAY 3	Delay with room effect.	Delay period: 375ms Rev. decay time: 210ms
14	REV+DELAY 4	Delay with room effect.	Delay period: 277ms Rev. decay time: 150ms
15	REV+CHORUS 1	Simulate the sound effect achieved by rotating horn speakers and a bass cylinder.	Chorus rate: 3.67Hz Rev. decay time: 290ms
16	REV+CHORUS 2	Simulate the sound effect achieved by rotating horn speakers and a bass cylinder.	Chorus rate: 3.02Hz Rev. decay time: 150ms

2. FEATURES

- ▲ Lightweight, Luggage style, Trolley appearance portable system
- ▲ Two 10" speakers + 8-channel powered mixer in super combination
- ▲ Stereo full-range speaker system
- ▲ 4 XLR MIC input with ultra low noise microphone pre-amplifiers
- ▲ +48V Phantom power
- ▲ 1 stereo LINE input & 1 stereo CD/TAPE input
- ▲ Warm, natural 2-band EQ , PAN(BAL) for each channel
- ▲ Precision level control
- ▲ 24-bit DSP effects with powerful algorithms (16 presets)
- ▲ MP3 player & 9-Band EQ for option
- ▲ 2 speaker cables & 2 microphone and cables
- ▲ Amp. System with 250W *2 @ 4ohm in EIAJ; 200W * 2 @ 4ohm in RMS

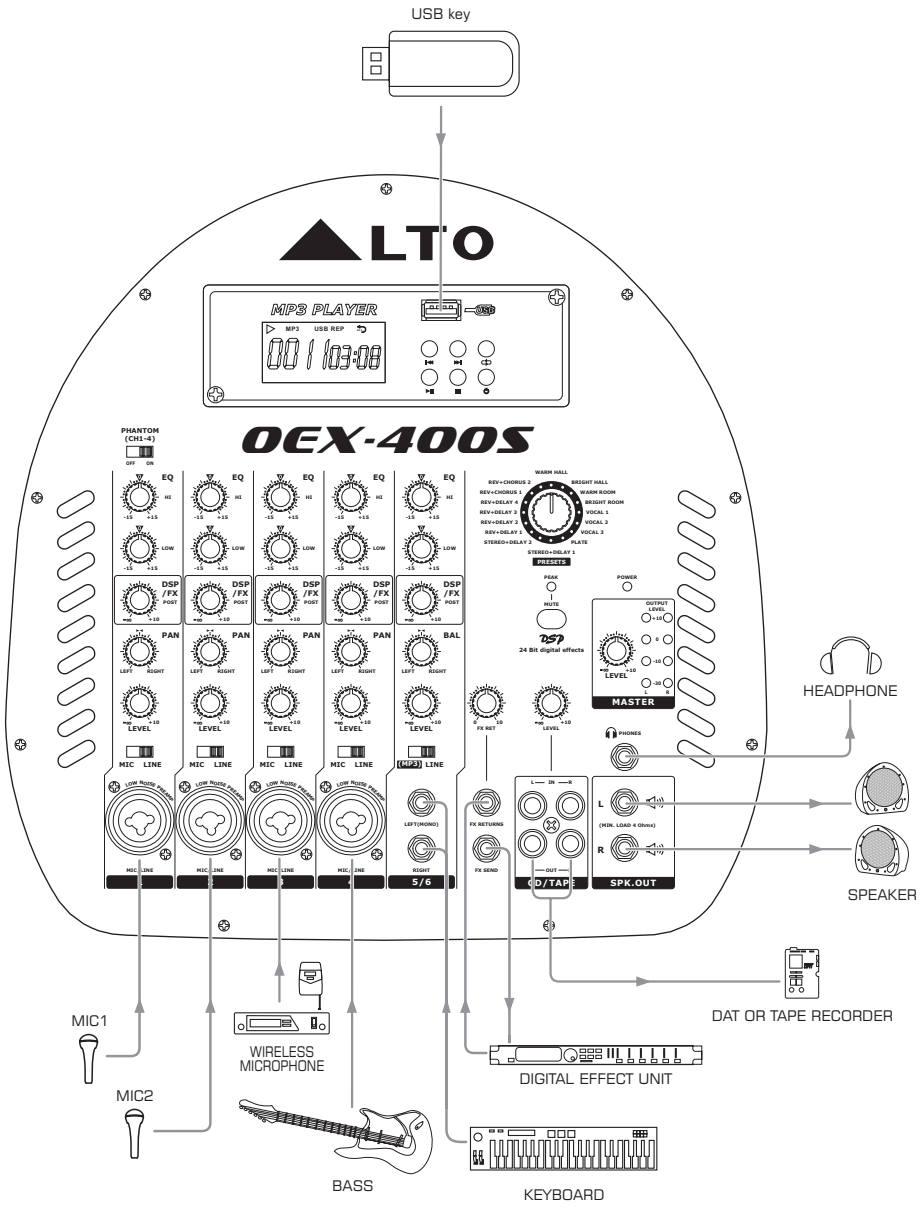
3. QUICK START

This is the fastest way to get something out from your OEX-400S, if you have a keyboard and a microphone.

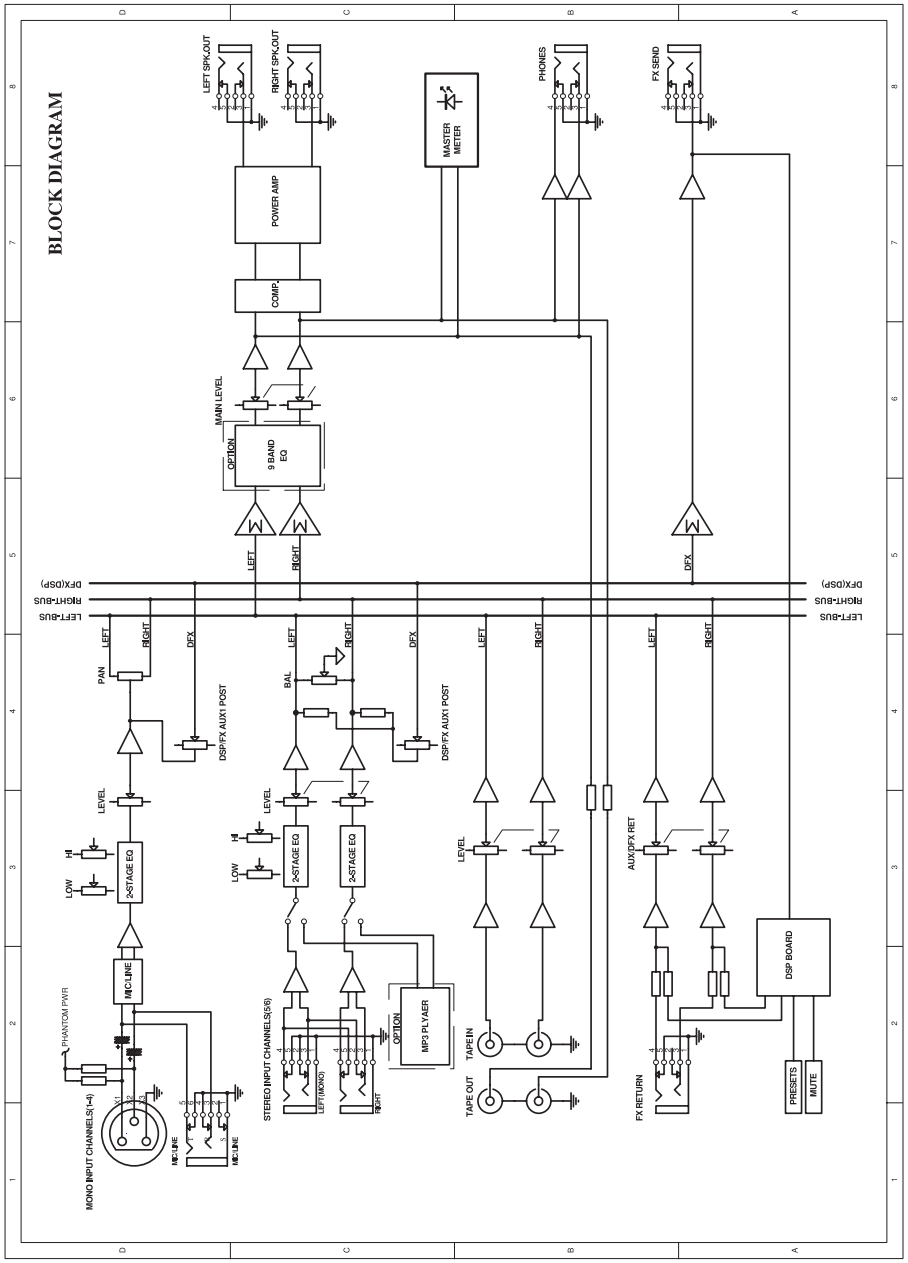
a. Please check the AC voltage available in your country before connecting your OEX-400S to the AC socket.
b. Be sure that the main power switch is turned off before connecting the powered mixer to the AC socket. Also, you should make sure that all input and output controls are turned down. This will avoid damages to your speakers as well as excessive noise.
c. Please connect a passive speaker to your OEX-400S speaker connector or 1/4" jack(#35). Otherwise, you can connect a pair of active speakers directly to your OEX-400S Main Out Left & Right 1/4" jacks(#18).
d. Complete these connections as illustrated.
e. Before disconnecting the OEX-400S always turn-off the Power switch.
f. Do not use solvents to clean your OEX-400S. A dry and clean cloth will be OK.

Here you are. It is your first GIG with your OEX-400S.

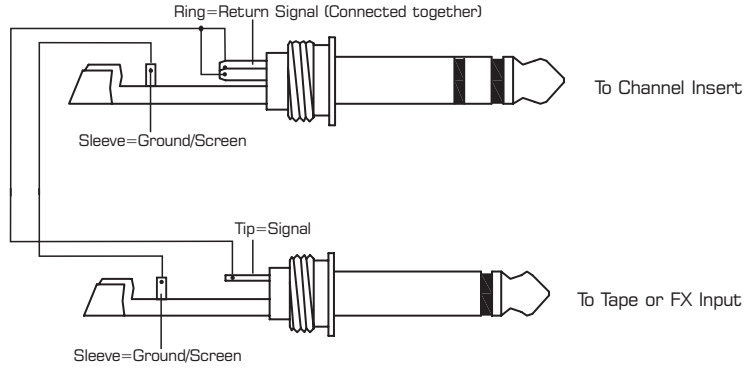
GIG HOOKUP DIAGRAM



6. BLOCK DIAGRAM

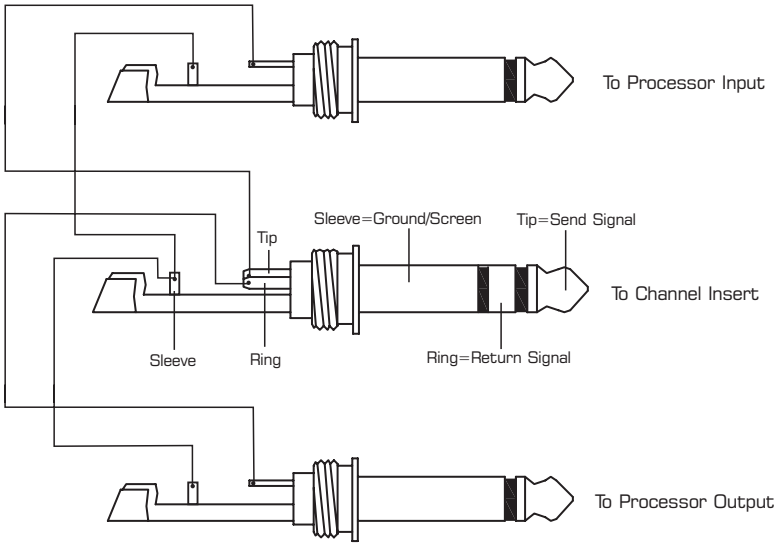


5. INSTALLATION AND CONNECTION



'Tapped' Connection Direct Output Lead

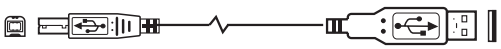
(Enables the Insert to be used as a Direct Output while maintaining the channel signal flow)



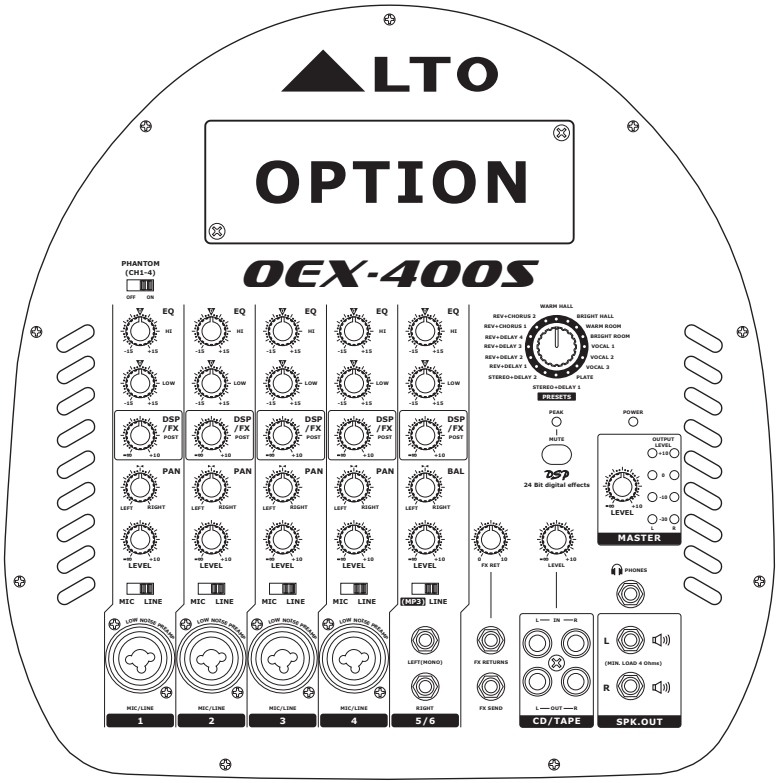
Y-Stereo lead for insert Connection

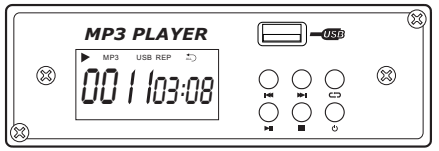
(To be used when the processor does not employ a single jack connection for the In/Out Connections)

USB Connection

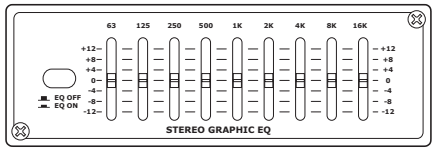


OEX-400S





Option NO.1



Option NO.2

4. CONTROL ELEMENTS

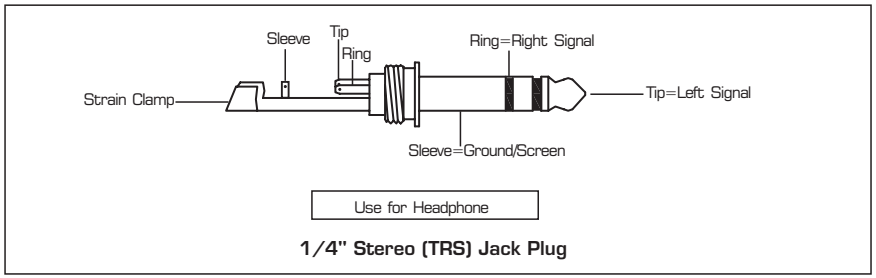
Accessory List:

① Power cord	1 x IEC power cord
② Customized Speaker Cable	2 x 7m
③ MIC	2 x 5m
④ F-8 stands (optional)	
⑤ F-3 stands (optional)	
⑥ F-3 stand adaptor (optional)	

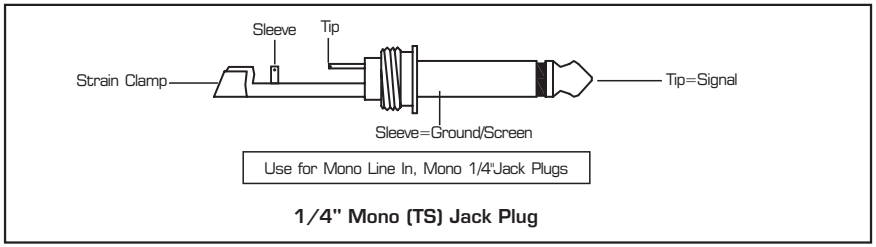
5. INSTALLATION AND CONNECTION

Audio Connections

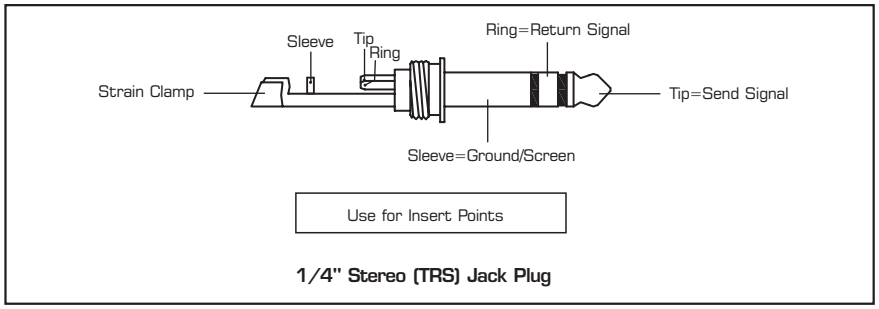
You can connect unbalanced equipment to balanced inputs and outputs. Simply follow these schematics.



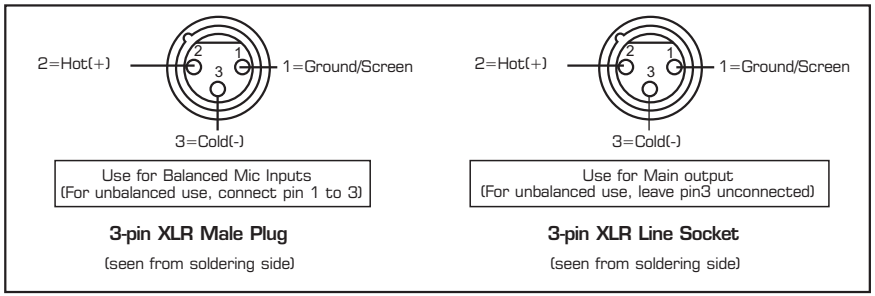
1/4" Stereo (TRS) Jack Plug



1/4" Mono (TS) Jack Plug



1/4" Stereo (TRS) Jack Plug



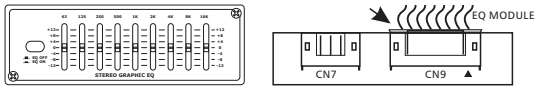
3-pin XLR Male Plug

(seen from soldering side)

3-pin XLR Line Socket

(seen from soldering side)

9 BAND EQ selective mode



Please connect the 8PIN row-wire on the 9BAND EQ model to the CN9 header on the main mixer board. Then fix the 9BAND EQ model on the mixer panel with two screws.

34 POWER ON/OFF

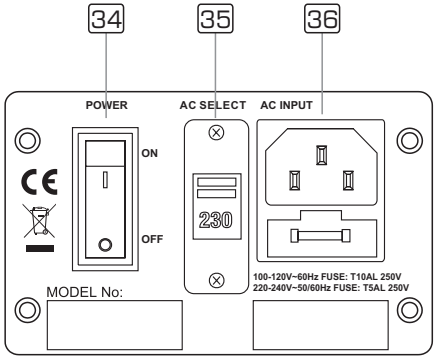
This switch is used to turn the main power on/off.

35 AC SELECT

Before connecting the OEX-400S to the mains supply first check that the Voltage Selector is showing the correct voltage for your country.

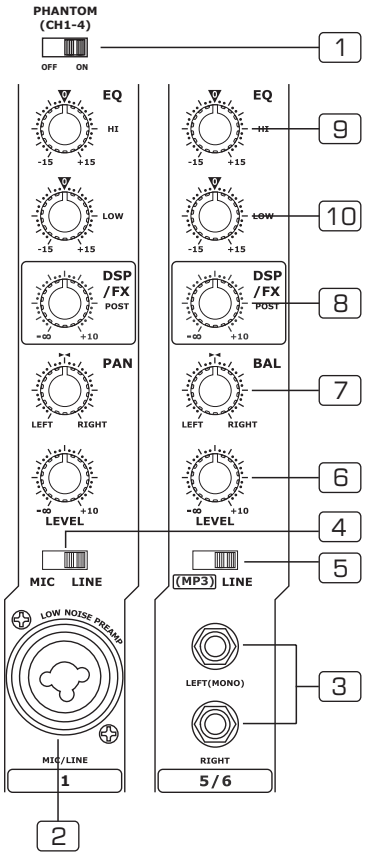
36 AC INLET

This jack is used to connect the unit to the mains with the enclosed power cord. (Depends on applicable country regulators)



1 PHANTOM POWER Switch

This button will apply +48 Volt Phantom Power only to the 4 XLR MIC input sockets. When condenser microphones are not used, please make sure that the Phantom Power is disengaged.
NOTE: When switch on/off the phantom power, please firstly turn the level control knob to min.



2 MONO INPUT CHANNELS(CH1 TO CH4)

There is CH1 through CH4, which comes with balanced MIC IN and LINE IN connectors. Use the XLR (MIC IN) socket to connect low impedance microphone or low level signal. Use the 1/4" TRS (LINE IN) jack to connect either a microphone or a line level instrument such as synthesizers, drum machines, effect processors or any other line level signal.
NOTE: Never try to connect a line-level signal to the XLR MIC input when the phantom power is engaged or you may seriously damage your equipment.

3 STEREO INPUT CHANNEL(CH5/6)

These are channels 5/6. They are organised in stereopair and provided with 1/4" TRS phone sockets. If you connect only the left jack, the input will operate in mono mode, that is the mono signal will appear on both input channels. You can use these inputs with a stereo keyboard, drum machine, etc.

4 MIC / LINE switch

When using XLR socket, please put the switch at the MIC position; When using 1/4" TRS jack, please put the switch at the LINE position.

5 MP3/LINE switch

Pushing this switch to left will route the signal from MP3 IN to CH5/6 path, while to right will route the signal from 1/4" TRS jack.

6 LEVEL CONTROL

This control is used to adjust the overall level of respective Channel. The adjustable range goes from -∞ to +10dB.

7 PAN/BAL CONTROL

This is the PANORAMA control, or balance control. You can adjust the stereo image of the signal via this control. Keep this control in center position and your signal will be positioned in the middle of stage. Turn this control fully counter clockwise and the signal will be present only on the left speaker and vice-versa. Of course a large number of intermediate positions is available.

8 DSP/FX control

This control is configured as POST-FADER, so the audio signal will be affected by channel level control. Via the FX SEND socket, the AUX1 signal can be sent to an external effect device.

EQUALIZER

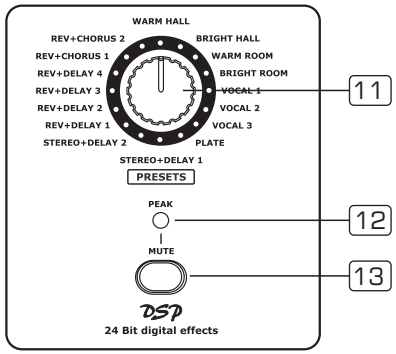
Your OEX-400S features a 2-band equalizer allowing you to adjust the high and low frequencies separately on each mono channel. Both bands provide up to +15dB of boost or cut.

9 HIGH

This is the treble control. You can use it to get rid of high frequency noises or to boost the sound of cymbals or the high harmonics of the human voice. The gain range goes from -15dB to +15dB with a center frequency of 12kHz.

10 LOW

This is the bass control. It is used to boost male voice or kick-drum and bass guitar. Your system will sound much bigger than what it is. The gain range goes from -15dB to +15dB and the center frequency is 80Hz.



DSP SECTION

Your OEX-400S features the special 16-preset digital effect, further details please refer to following content.

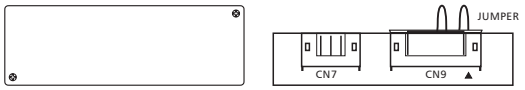
When the player is searching for Mp3 songs, the interface is as follows:

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

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

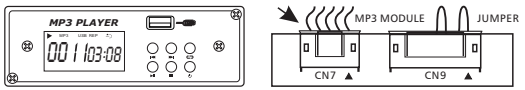
MP3 and 9 BAND EQ selective mode section(Option)

No selective mode



At normal state, there is no selective mode on the front panel, only a piece of panel without any painting and function. But there are two selective modes for what you like, that is MP3 mode and 9 BAND EQ mode. Please note that on the main mixer board, there is a short circuit row-wire in the CN9 header.

Mp3 selective mode



Please connect the 5PIN row-wire on the MP3 model to the CN7 header on the main mixer board. Put the provided 8PIN short circuit row-wire in the CN9 header on the main mixer board. Then fix the MP3 model on the mixer panel with two screws.

27 USB PORT

For connecting with USB memory.

28 PREVIOUS

In pause state, press this button it will go to the previous song and keep in pause state. In play state, press this button it will go to the previous song and start playing.

29 NEXT

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

30 REPEAT

Press this button the player will change between the following four modes. REP ALL means to repeat all songs in the memory, the mark on the screen is all. REP1 means to repeat one song, the mark on the screen is 1. Play in order means to play the songs according to the order, the mark on the screen is blank. Random play means to play the songs at random, the mark on the screen is A.

31 PLAY/PAUSE

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

32 STOP

In play state, press STOP button to stop playing and the whole quantity of Mp3 songs in the USB memory will display on the screen. In STOP state, press the PRE/NEXT button or press the STOP button again to go to the first songs and the player will keep in pause state, then press down the PLAY/PAUSE button to play it.

33 POWER

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

NOTE: Basic interface instruction.

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

11 PRESETS

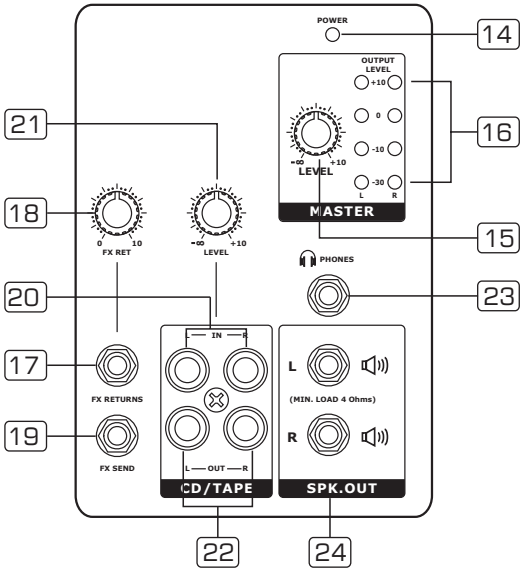
Adjust this knob to select the right effect you wish to perform. There are total 16 options for you: WARM HALL,BRIGHT HALL, WARM ROOM, BRIGHT ROOM, VOCAL 1, VOCAL 2, VOCAL 3, PLATE, STEREO DELAY1,STEREO DELAY2, REV + DELAY1, REV + DELAY2, REV + DELAY3, REV + DELAY4, REV + CHORUS1 and REV + CHROUS2.

12 PEAK/MUTE LED

This LED lights up when the input signal is too strong. In case of the digital effect module being muted, this LED also lights up.

13 DSP MUTE SWITCH

This switch is used to activate/deactivate the effect facility.



14 POWER LED

When you switch on the apparatus,the LED will light on.

15 MASTER LEVEL CONTROL

This control is used to adjust the overall volume of main mix output, and the signal also input to the preamplifier.

16 MASTER LEVEL LED

The 4-segment LED metre is used to indicate the master output level. When the red LED lights on, it means that the MIX OUT reaches +10dB, or start the compressor from the build in AMP.

17 FX RTN. Jack

Use the stereo phone jack to return the sound of an effect unit to the main mix. You can also use it as a extra auxiliary stereo input.

18 FX RET CONTROL

This control is used to control the volume of the processed signal sent to Main Mix bus, which can be varied from -∞ to+10 dB.

19 FX SEND

This jack is used to send out the signals from AUX bus.

20 CD/TAPE IN

Use the Tape input to connect a CD Player, Tape, DAT, iPOD or any other line-level source.

21 CD/ TAPE LEVEL CONTROL

This knob controls the signal sent from CD/TAPE IN,which can be varied from -∞ to+10 dB.

22 CD/TAPE OUT

These RCA jacks will route the main mix signal into a tape or DAT recorder.

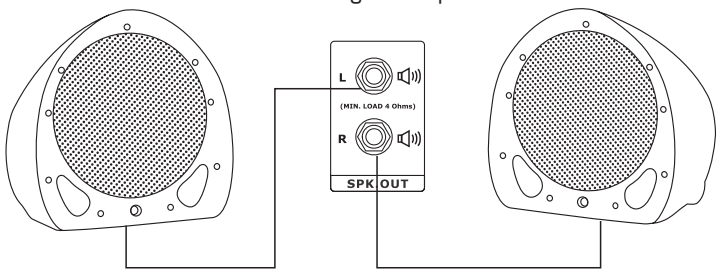
23 PHONES

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

24 SPK. OUT

The SPEAKER L&R phone jacks output the main signal from the internal power amplifier and are used to connect speakers. They are internally connected in parallel and output the same signal.

Connecting two speakers



4~8Ω

Note: The total impedance of the connected speaker system must be between 4 and 8 ohms. Do not connect anything other than speakers to these jacks.

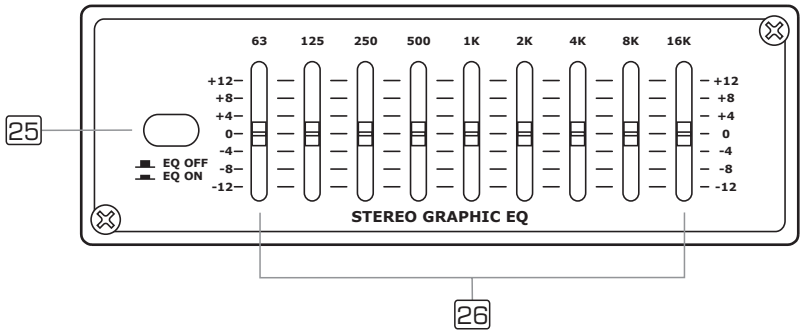
9 Band EQ section (Optional)

25 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.

26 STEREO GRAPHIC EQ

Each one of these faders will boost or attenuate (+/-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.



MP3 section (Optional)

The file system of USB memory for USB-MP3 player is FAT16 and FAT32. The player can only decode MP3. It can have 7 rank subordinate folders at most, and the maximum quantity of folders within MP3 files is 24. In the whole USB memory, the total folders can not beyond 256(incluing those folders without MP3 songs).