

# User's Manual

## SR Series



[www.altoproaudio.com](http://www.altoproaudio.com)

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— English —

## SAFETY INSTRUCTIONS



### ▲ "Electric discharge"

This symbol, alert you to the presence of uninsulated dangerous voltage inside the product enclosure, which constitutes a risk of electric shock.

### ▲ "Exclamatory point"

This symbol, alert the user to the presence of important operating and maintenance instructions in the owner's manual included to the product.



Disposing of this product should not be placed in municipal waste and should be Separate collection.

### 1. Read Instructions

All the safety and operation instructions should be read before using the product and retain them for future reference.

### 2. Water & Moisture

This product should not be used near water and will be protect from atmospheric agents in fixed or temporary installations.

### 3. Heat

This product should be situated away from heat sources such as radiators, or other devices which produce heat.

### 4. Liquid Entry

Care should be taken so that liquids are not spilled into the product and that objects do not fall on.

### 5. Service Assistance

This product should be serviced only by qualified service personnel when :

- a. Liquids has spilled or objects have fallen into this product, or
- b. This product has been exposed to rain, or
- c. This product does not appear to operate normally or exhibits change in performance, or has been dropped or its cabinet / chassis damaged.

### 6. Package

The package of this product has been tested, inspect the package before open, if any damage is found, notify to your dealer.

### 7. Hearing

This product produce high acoustic levels may cause permanent hearing loss, (SPL in for a defined period of time).

### 8. Installations

This product should be installed on the floor with a specific stand, according to the max weight, or in suspension with a five points included in the cabinet (M10 x 1.5PH Length 30mm).

The suspension of more speaker cabinet in a vertical array is NOT advised.

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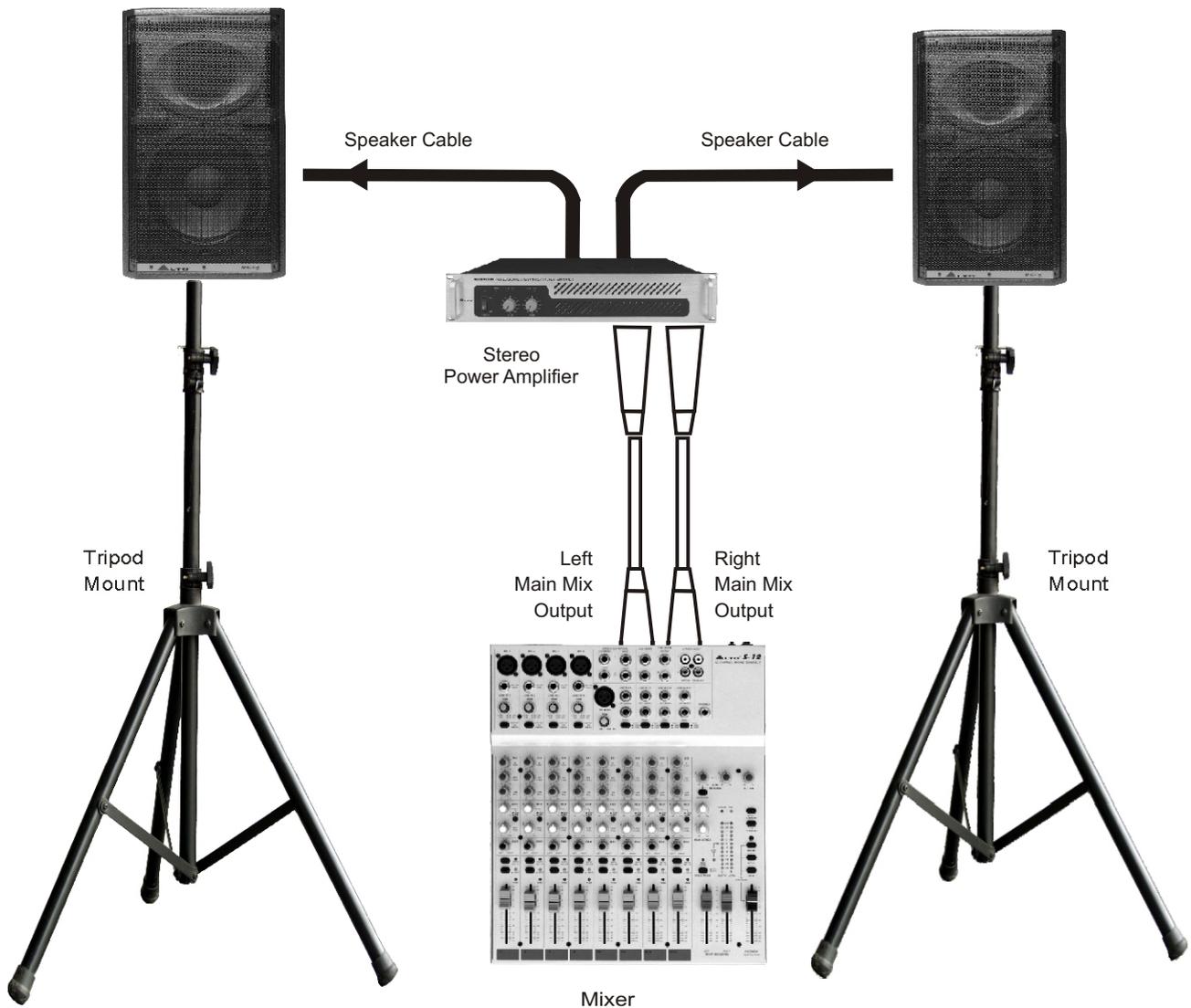
# 1. QUICK START - PASSIVE SPEAKER CABINET

Make all initial connections with all the equipment powered off, and ensure that all the main volume controls are turned completely down.

## - For Passive Full-range Speakers

- 1). Connect one side of the speaker cable to the output CHA/CHB or binding post of your stereo power amplifier and the other side to the input socket of your speaker cabinet.
- 2). Complete other connections as illustrated.
- 3). Turn on your mixer first, then the stereo power amplifier.
- 4). Turn up the volume controls of your amplifier to about 70%.
- 5). Use PFL function to get the proper input level for the mixer, and adjust the main mix level control to manipulate the output level.
- 6). After using, turn off your stereo power amplifier first, then the mixer.

### QUICK START SR Passive Full-range Speakers

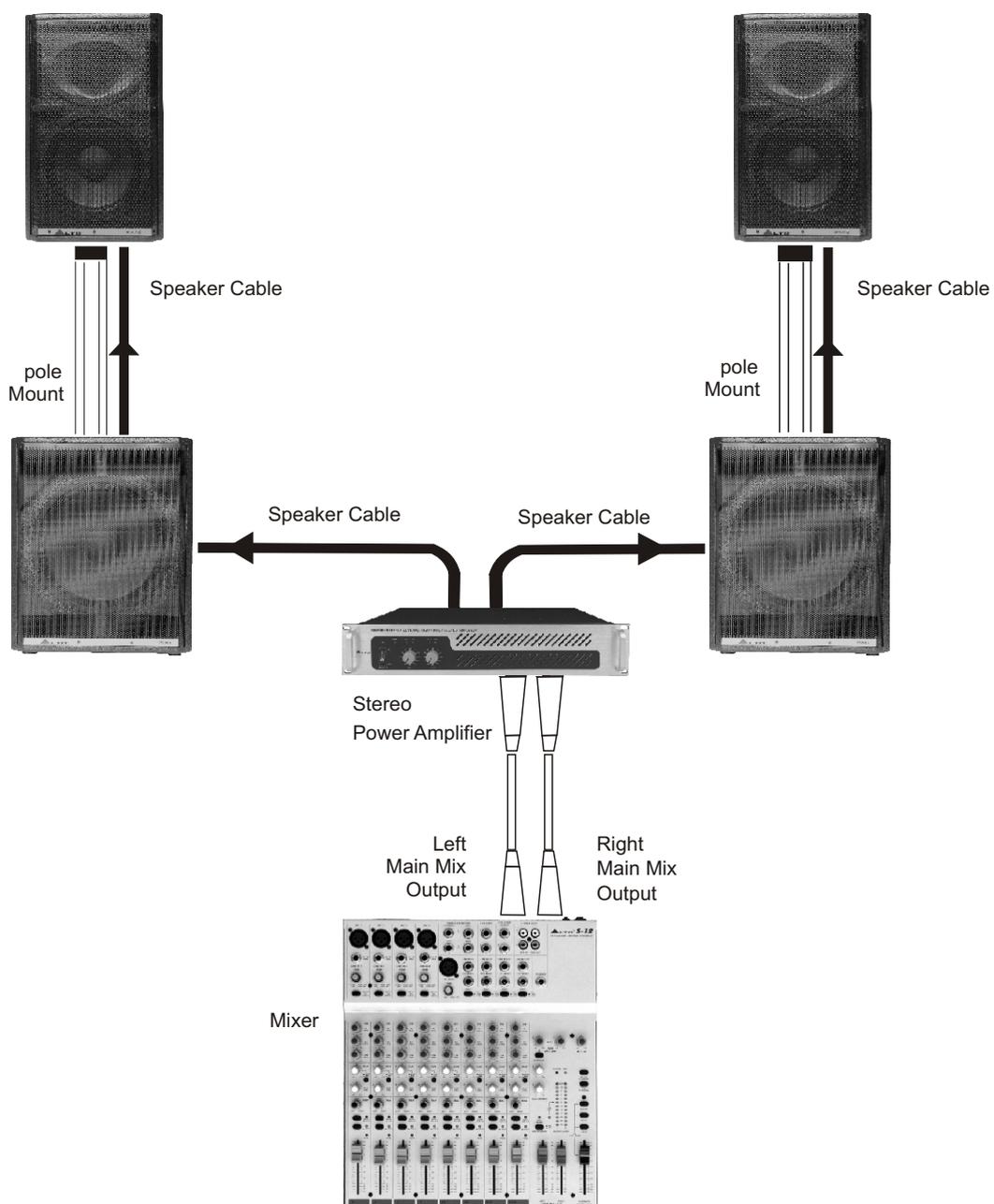


## - For Passive Subwoofer & Satellite Speakers

- 1). Connect one side of speaker cable to the output CHA/CHB or binding post of your stereo power amplifier and the other side to the input socket of your subwoofer, with the second speaker cable connect the output of the subwoofer to the input of satellite.
- 2). Complete other connections as illustrated.
- 3). Turn on your mixer first, then the stereo power amplifier.
- 4). Turn up the volume controls of your amplifier to about 70%.
- 5). Use PFL function to get the proper input level for the mixer, and adjust the main mix level control to manipulate the output level.
- 6). After using, turn off your stereo power amplifier first, then the mixer.

### QUICK START

#### SR Passive Subwoofer & Satellite Speakers

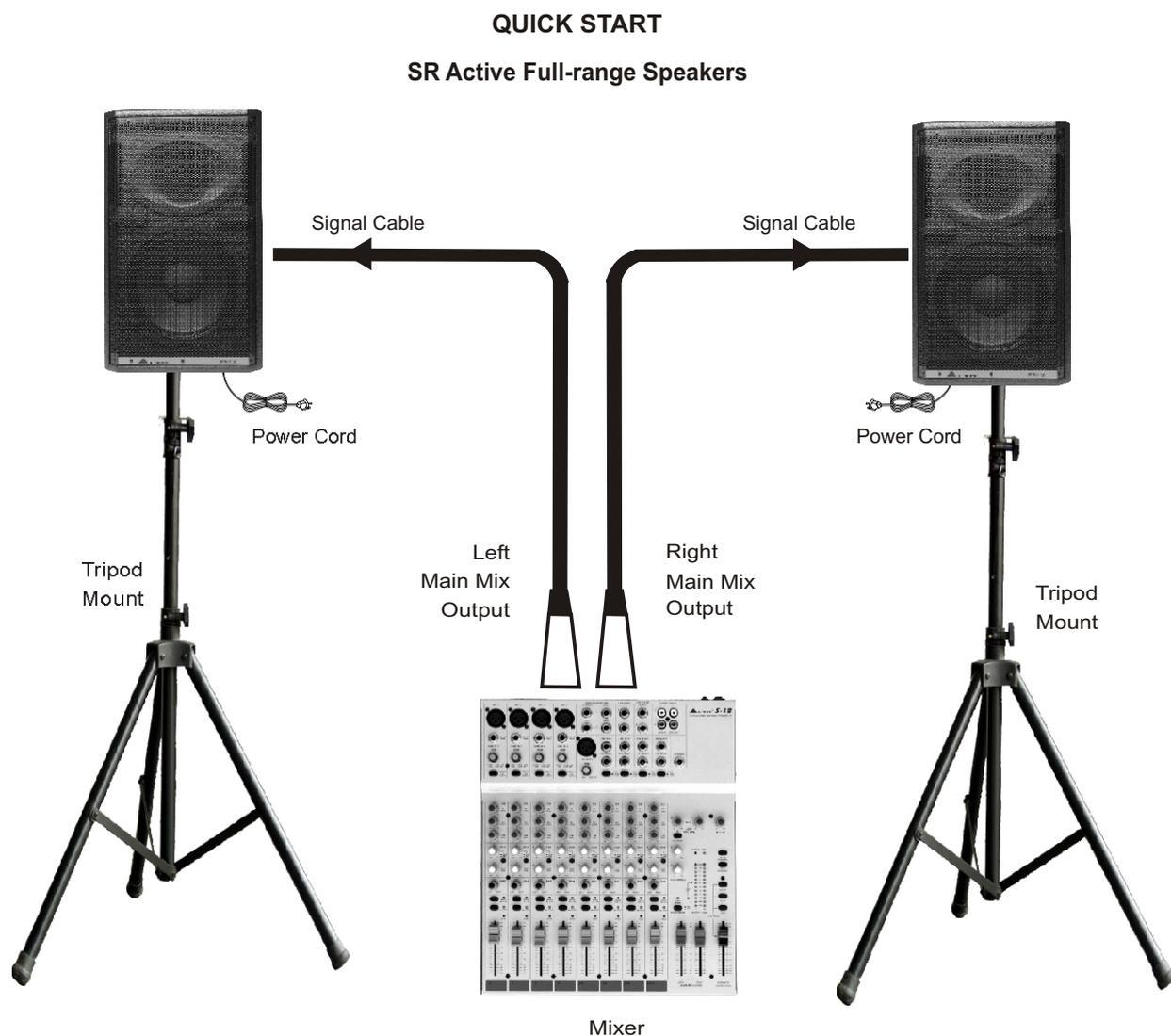


## 2. QUICK START - ACTIVE SPEAKER CABINET

Make all initial connections with all the equipment powered off, and ensure that all the main volume controls are turned completely down.

### - For Active Full-range Speakers

- 1). Connect one side of the signal cable to the output left /right (with Stereo-Jack or XLR) of your audio mixer and the other side to the line input (COMBO) of your active speaker cabinet (with Stereo-Jack or XLR).
- 2). Connect the power cord to mains.
- 3). Turn on your mixer first, then the active speaker cabinets.
- 4). Turn up the volume control of the active speaker cabinets.
- 5). The SR400A work with 16 presets, select your favorite between 1 (CONCERT - HALL), to 9 (KARAOKE), this preset included a +6dB bass boost, except the preset 3 (FLAT), 4 (VOCAL) and 8 (FLOOR MONITOR); the other presets between 10 (CONCERT H. + SW), to 16 (KARAOKE + SW), work with a natural bass response, if required from the musical program, or for improve the matching with a subwoofer SR500SA.
- 6). Use PFL function to get the proper input level for the mixer, and adjust the main mix level control to manipulate the output level.
- 7). After using, turn off your active speaker cabinets first, then the mixer.

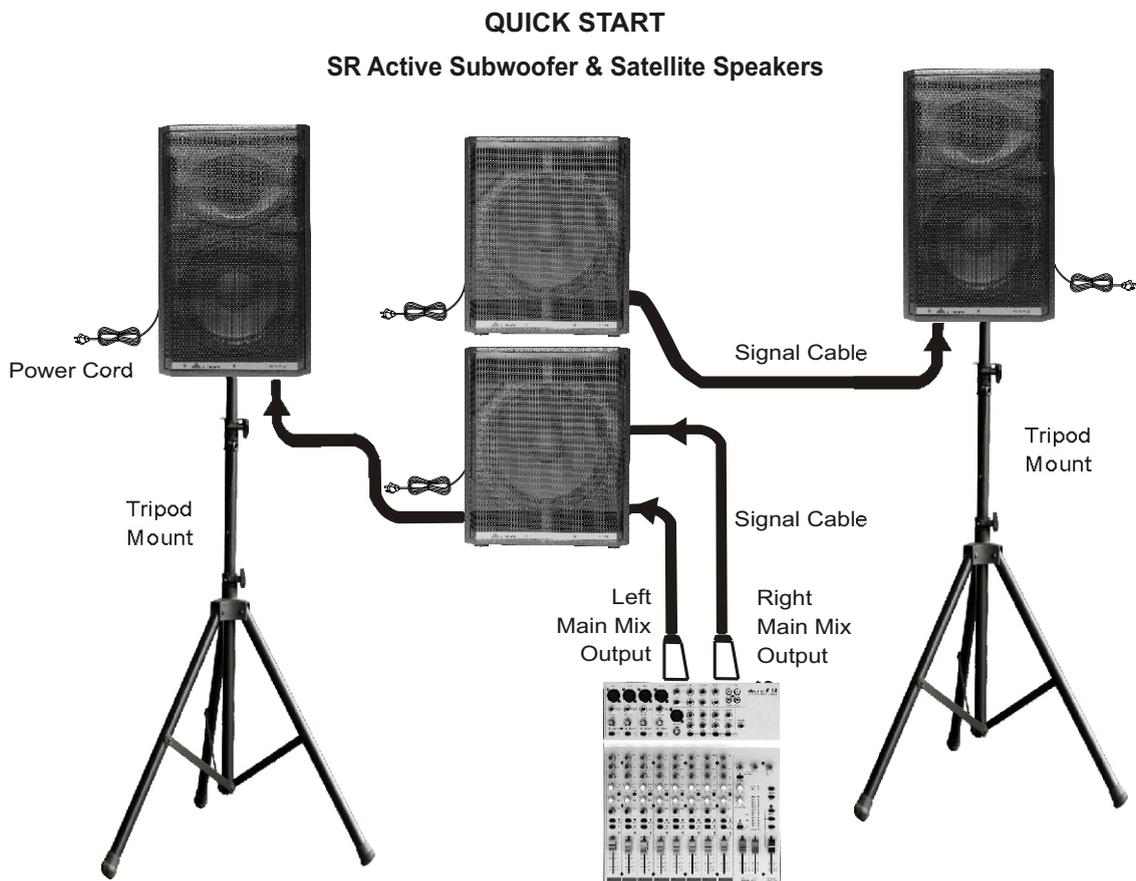


**- For Active Subwoofer & Satellite Speakers**

- 1). Connect one side of signal cable to output left/right of your audio mixer (with stereo-Jack or XLR) and the other side to the left/right input (stereo/mono XLR) of the active subwoofer; with the second signal cable connect the left/right output of the subwoofer (stereo/mono- XLR) to the line input (COMBO) of the active satellite (with stereo - Jack or XLR).
- 2). Connect the power cord to mains.
- 3). Turn on your mixer first, then the active speaker cabinets.
- 4). Turn up the volume control fo the active speaker cabinets.
- 5). Select one of the sixteen presets in to SR400A, with encoder knob (example: number 15 - DISCO + SW).
- 6). The Subwoofer SR500SA work with 16 presets, select the best crossover frequency presets between 1 (80Hz BOOST 0°) in phase or 2 (80Hz BOOST 180°) out of phase, to 9 (160Hz BOOST 0°) in phase or 10 (160Hz BOOST 180°) out of phase, this preset included a +6dB bass boost; the other presets between 11 (100Hz FLAT 0°) in phase or 12 (100Hz FLAT 180°) out of phase to 15 (140Hz FLAT 0°) in phase or 16 (140Hz FLAT 180°) out of phase, work with a Natural Bass response, if required from the musical program.  
Select one of the sixteen presets in to SR500SA, with encoder knob (example: number 4 - 100Hz BOOST 180° out of phase, or the number 6 - 120Hz BOOST 180°) out of phase, for coupling to the preset 15 - DISCO + SW of the satellite. The selection of phase conditions between 0° in phase or 180° out of phase is always necessary after the setting of SR500SA in the environment

PRESET	SR400A SATELLITE	PRESET	SR500SA SUBWOOFER
10	CONCERT H. + SW	1-2-3-4	80Hz/100Hz BOOST 0°/180°
11	LIVE + SW	3-4-5-6	100Hz/120Hz BOOST 0°/180°
12	FLAT + SW	11-12-13-14	100Hz/120Hz FLAT 0°/180°
13	JAZZ + SW	11-12-13-14	100Hz/120Hz FLAT 0°/180°
14	ROCK + SW	3-4-5-6	100Hz/120Hz BOOST 0°/180°
15	DISCO + SW	3-4-5-6	100Hz/120Hz BOOST 0°/180°
16	KARAOKE + SW	1-2-3-4	80Hz/100Hz BOOST 0°/180°

- 7). Use PFL function to get the proper input level for the mixer, and adjust the main mix level control to manipulate the output level.
- 8). After using, turn off your active speaker cabinets first, then the mixer.

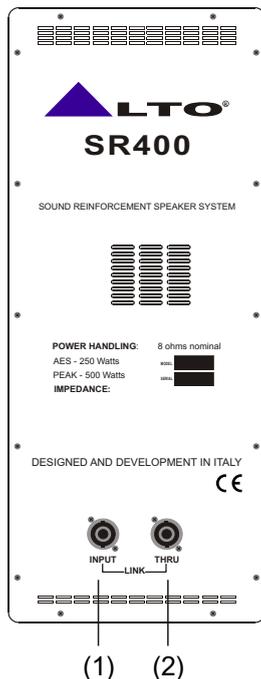


### 3. CONNECTION PLATE

#### - Passive Full-range Speaker for SR300 / SR400 / SR500

(1) **INPUT:** Receive the power coming from an external power amplifier (SPK +1/-1 connected; +2/-2 not connected).

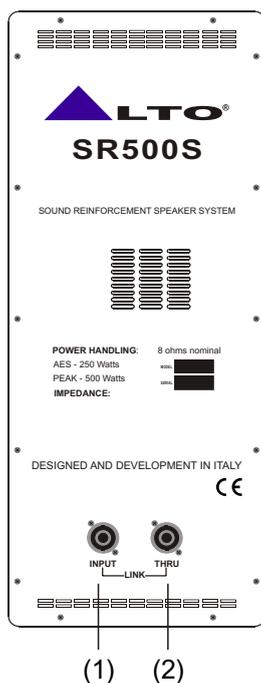
(2) **THRU:** Direct LINK for connect in parallel a second speaker cabinet (SPK +1/-1 connected; +2/-2 not connected).



#### - Passive Subwoofer Speaker for SR500S

(1) **INPUT:** Receive the power coming from an external amplifier (SPK +1/-1 connected; +2/-2 not connected).

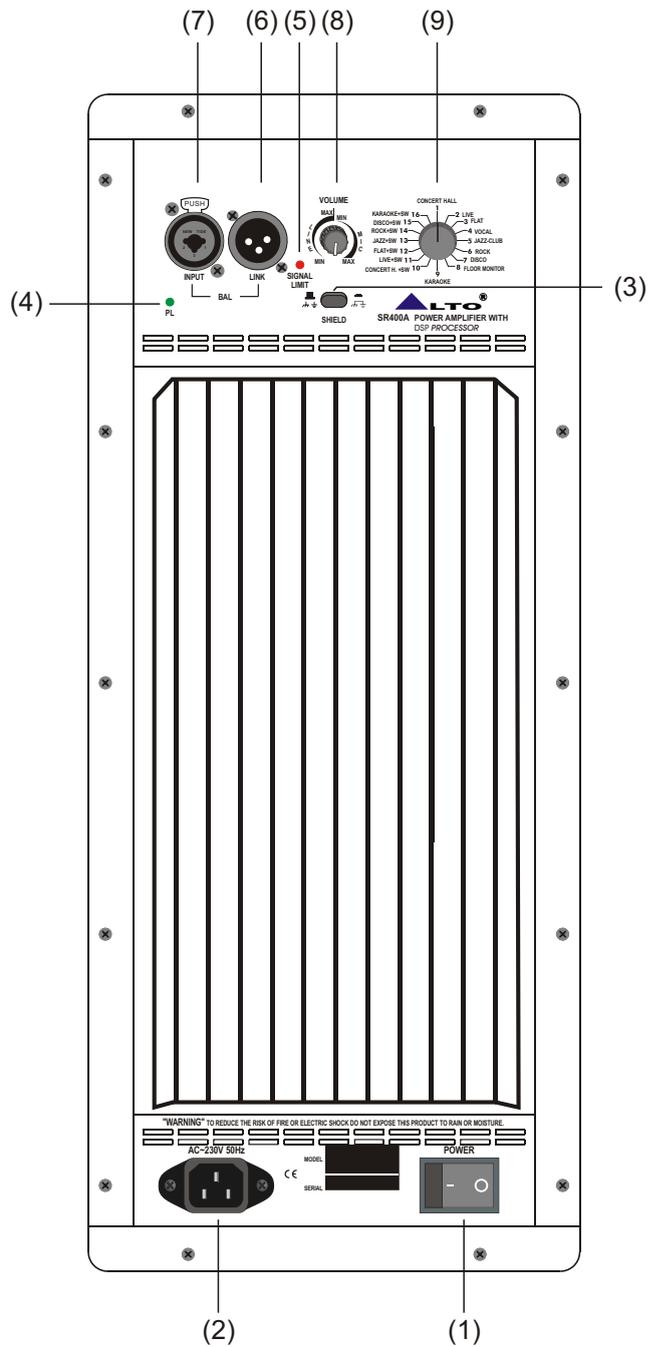
(2) **OUTPUT:** Power output for satellite speaker, under passive crossover filtered at 125Hz (SPK +1/-1 connected; +2/-2 not connected).



**- Active Full- range Speaker for SR300A / SR400A / SR500A**

- (1) Bi-polar main power switch
- (2) Input AC power socket
- (3) Ground switch
- (4) POWER, blue LED, indicate ON status
- (5) SIGNAL / LIMIT, green/red LED
- (6) LINK on XLR connector
- (7) LINE / MIC IN on COMBO connector
- (8) Main VOLUME control
- (9) PRESETS control with 16 presets as follows

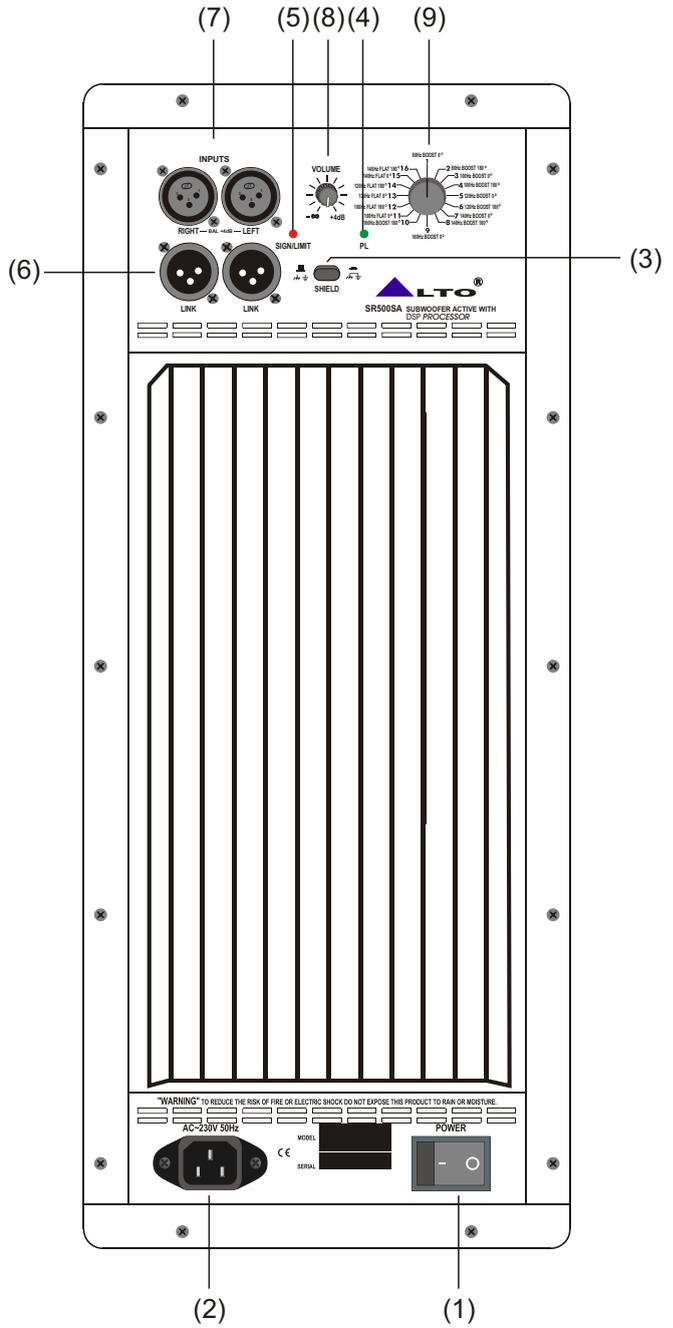
Preset NO	Descriptions
1	CONCERT HALL
2	LIVE
3	FLAT
4	VOCAL
5	JAZZ-CLUB
6	ROCK
7	DISCO
8	FLOOR MONITOR
9	KARAOKE
10	CONCERT H. + SW
11	LIVE + SW
12	FLAT + SW
13	JAZZ + SW
14	ROCK + SW
15	DISCO + SW
16	KARAOKE + SW



**- Active Subwoofer Speaker for SR500SA**

- (1) Bi-polar main power switch
- (2) Input AC power socket
- (3) Ground switch
- (4) POWER, blue LED, indicate ON status
- (5) SIGN / LIMIT, green/red LED
- (6) LINK OUT on XLR connector
- (7) LINE / MIC IN on XLR connector
- (8) Main VOLUME control
- (9) PRESETS control with 16 presets as follows

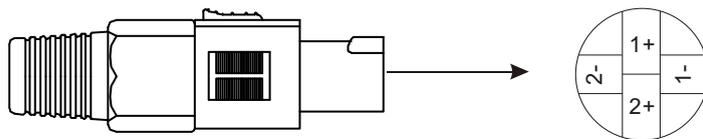
Preset NO	Descriptions
1	80Hz BOOST 0°
2	80Hz BOOST 180°
3	100Hz BOOST 0°
4	100Hz BOOST 180°
5	120Hz BOOST 0°
6	120Hz BOOST 180°
7	140Hz BOOST 0°
8	140Hz BOOST 180°
9	160Hz BOOST 0°
10	160Hz BOOST 180°
11	100Hz FLAT 0°
12	100Hz FLAT 180°
13	120Hz FLAT 0°
14	120Hz FLAT 180°
15	140Hz FLAT 0°
16	140Hz FLAT 180°



## 4. WIRE CONNECTIONS

### - For Passive Speaker Cabinets

Please use only the power connectors to make connections with other signal source equipment for the passive speaker cabinets. The power connector has four terminals: 1+, 1-, 2+, 2-.

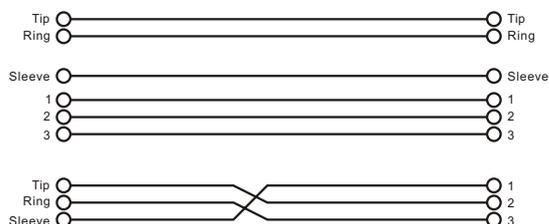
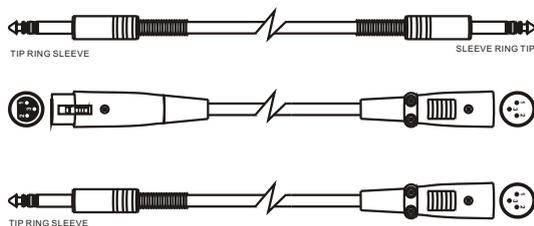


In our cabinets, only 1+/1- are used to connect the Speaker+/Speaker-, and 2+/2- are not used.

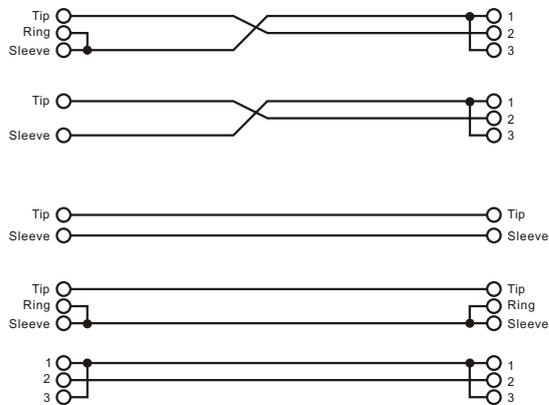
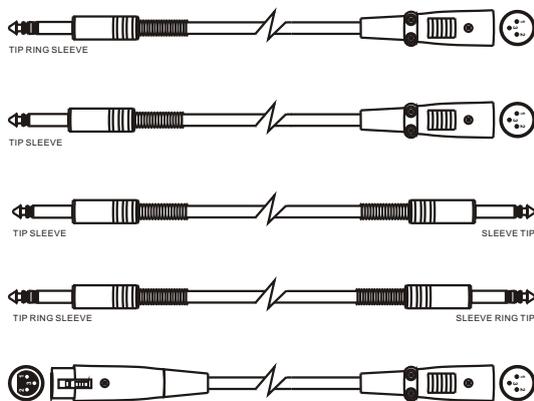
### - For Active Speaker Cabinets

As to these circumstances, audio connections is mostly intended for the signal flow, so, determine the wire configuration according to your real application system and its connecting facility. Normally, you have the following choices:

#### · Balanced



#### · Unbalanced



## 5. TECHNICAL SPECIFICATIONS

Descriptions	SR300A	SR400A	SR500A
Active System Type	Bi - Amp. With DSP processor	Bi - Amp. With DSP processor	Bi - Amp. With DSP processor
LOW - RMS Output Power	250Watt RMS Class H	164W @80hm, 251W @40hm Class H	232W @80hm, 382W @40hm Class H
HIGH - RMS Output Power	100Watt RMS Class AB	164W @80hm, 251W @40hm Class AB	232W @80hm, 382W @40hm Class AB
System Peak Power	600Watt Peak	800Watt Peak	1000Watt Peak
Max SPL at 1m	120dB SPL calculated	122dB SPL calculated	124dB SPL calculated
Frequency Response	60Hz / 20kHz at -10dB	55Hz / 20kHz at -10dB	50Hz / 20kHz at -10dB
Impedance Low - High	Low 4ohm - High 8ohm	Low 4ohm - High 8ohm	Low 4ohm - High 8ohm
Crossover Frequency	2250Hz - DSP Processor	2150Hz - DSP Processor	2000Hz - DSP Processor
Protection Low - High	DSP Lim/Comp. each section	DSP Lim/Comp. each section	DSP Lim/Comp. each section
Low Frequency Device	10" / 266mm - 2" voice coil	12" / 318mm - 2.5" voice coil	15" / 385mm - 3" voice coil
High Frequency Device	1.35" Compression-driver		
Horn Coverage H°x V°	90°H x 60°V		
Input Sensitivity	Mic / Line +4dB / 1.23V		
Input Impedance	30kohm Balanced / 15kohm Unbalanced		
Connectors	Input with Combo / Link with XLR		
Plywood Cabinet	18mm Multilayer Plywood		
Hardware Suspension	Five suspension point		
Amplifier Protections	Soft Start - Short Circuit - DC voltage - Thermal Protection		
External Control	Line Volume - Encoder with 16 preset - Clipping LED indicator - Ground Switch		
Power Supply	230Volt / 115Volt 50 / 60Hz		
Dimensions H x W x D	565x346x355mm	645x395x385mm	
Net Weight lbs/kg	50.7lbs/23.0Kg	59.77LBS/27.11Kg	
Gross Weight lbs/kg	59.08lbs/26.80Kg	72.88LBS/33.06Kg	
Shipping Volume	5.21CFT	6.56CFT	

Descriptions	SR500SA
Active System Type	Amp. with DSP processor
LOW - RMS Output Power	233W @80hm, 378W @40hm Class H
System Peak Power	1000Watt Peak
Max SPL at 1m	124dB SPL calculated
Frequency Response	45Hz / 20kHz at -10dB
Impedance Low - High	Low 4ohm
Crossover Frequency	16 selectable Crossover
Protection Low - High	DSP Limiter / Compressor
Low Frequency Device	15" / 385mm - 3" voice coil
Input Sensitivity	Line +4dB / 1.23V
Input Impedance	30kohm Bal. / 15kohm Unbal.
Connectors	Input / Output with XLR
Plywood Cabinet	18mm Multilayer Plywood
Hardware Suspension	No suspension point
Amplifier Protections	Same to SR400A
External Control	Same to SR400A
Power Supply	230Volt / 115Volt 50 / 60Hz
Dimensions H x W x D	598x500x600mm(23.54"x19.69"x23.62"mm)
Net Weight lbs/kg	93.81LBS/42.55Kg
Gross Weight lbs/kg	104.65LBS/47.47Kg
Shipping Volume	14.29CFT

Descriptions	SR300	SR400	SR500
Passive System Type	2 - way vented box	2 - way vented box	2 - way vented box
Continuos Power	250Watt AES Standard	300Watt AES Standard	350Watt AES Standard
Peak Power	500Watt Peak	600Watt Peak	700Watt Peak
Max SPL at 1m	119dB SPL calculated	121dB SPL calculated	123dB SPL calculated
Frequency Response	65Hz / 20kHz at -10dB	60Hz / 20kHz at -10dB	55Hz / 20kHz at -10dB
Impedance	8ohm	8ohm or 4ohm	8ohm or 4ohm
Crossover Frequency	2250 - 12dB/Oct.	2150 - 12dB/Oct.	2000 - 12dB/Oct.
Protection	Electronic Dynamic Protection	Electronic Dynamic Protection	Electronic Dynamic Protection
Low Frequency Device	10" / 266mm - 2" voice coil	12" / 318mm - 2.5" voice coil	15" / 385mm - 3" voice coil
High Frequency Device	1.35" Compression-driver	1.35" Compression-driver	1.35" Compression-driver
Horn Coverage H°x V°	90°H x 60°V		
Connectors	2 x SPK4 @ Power Input / Output		
Plywood Cabinet	18mm Multilayer Plywood		
Hardware Suspension	Five suspension point		
Dimensions H x W x D	560x345x355mm	645x395x385mm	680x455x440mm
Net Weight lbs/kg		46.76lbs/ 21.21Kg	
Gross Weight lbs/kg		59.88lbs/ 27.16Kg	
Shipping Volume		6.56CFT	

Descriptions	SR500S
Passive System Type	Direct Radiator / Rear Loaded
Continuos Power	400Watt AES Standard
Peak Power	800Watt Peak
Max SPL at 1m	123dB SPL calculated
Frequency Response	50Hz / 200Hz at -10dB
Impedance	4ohm
Crossover Frequency	125Hz - 12dB/Oct.
Low Frequency Device	15" / 385mm - 3" long voice coil
Connectors	2 x SPK4@ Power Input / Output
Plywood Cabinet	18mm Multilayer Plywood
Hardware Suspension	No suspension point
Dimensions H x W x D	598x500x600mm(23.54")x(19.69")x(23.62)
Net Weight lbs/kg	78.15LBS/35.45Kg
Gross Weight lbs/kg	89LBS/40.37Kg
Shipping Volume	14.29CFT

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