

OPERATION MANUAL



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



ATTENTION!

RISK OF HAZARDOUS ENERGY! SEE OPERATING MANUAL.
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THE AMPLIFIER TO RAIN OR MOISTURE;
DO NOT DISASSEMBLE THE AMPLIFIER.

CE RoHS Made in China



Sinbosen

PROFESSIONAL DIGITAL AMPLIFIER

SILENT POWER
MASSIVE PERFORMANCE

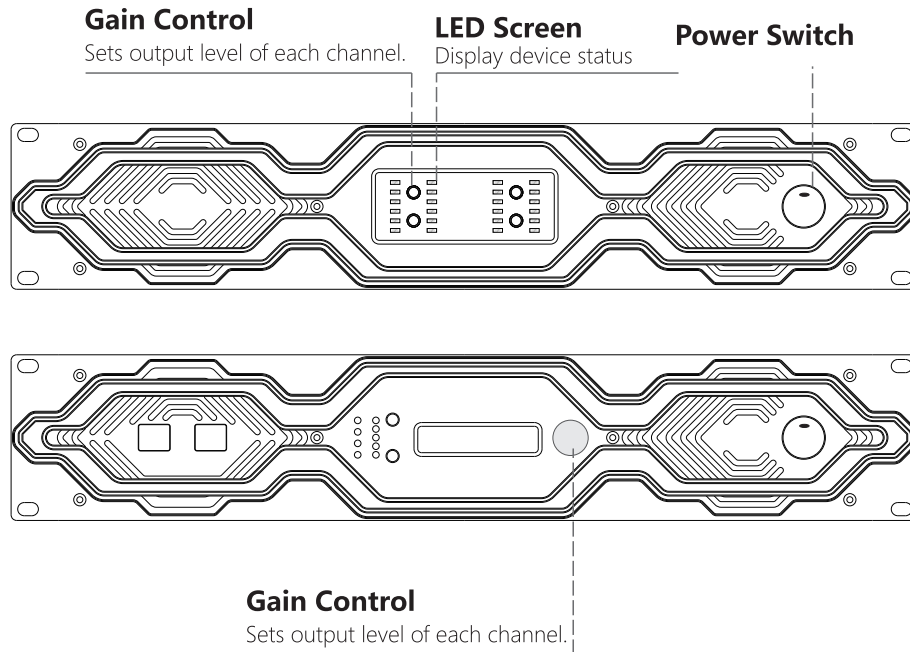


SR SERIES AMPLIFIER
Selectable DSP Function

Front panel Features

Due to the change of version, it may be inconsistent with the real thing, please refer to the product. The vent area and layout of this product have been strictly tested of experiments to meet the cooling needs. Please make sure not to block the vent during use.

This schematic diagram is a simplified version and does not include the panel section, that only displays the information of the control panel.



Dual Signal LED

The red LED turns on: This channel turn on protective state, stop working. Please wait for around a minute, if the device still stops working, please restart the device.

The yellow LED f lashes: This channel signal is audibly distorting. It may damage the tweeter.

The yellow LED turns on:

1.The temperature of the equipment $\geq 70^{\circ}\text{C}$;

2.The signal over load.

Green Signal LED

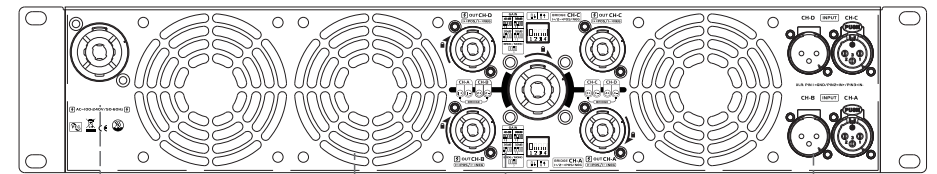
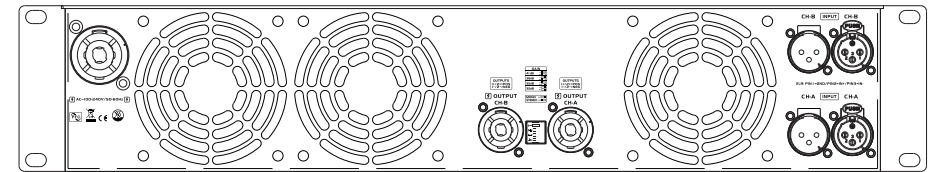
the output signal of SPEAKON $\geq -3\text{dB}$;

the output signal of SPEAKON $\geq -5\text{dB}$;

the output signal of SPEAKON $\geq -10\text{dB}$;

the output signal of SPEAKON $\geq -20\text{dB}$;

Rear panel Features



PFC Power
AC~100V-240V
wide voltage.

Fans

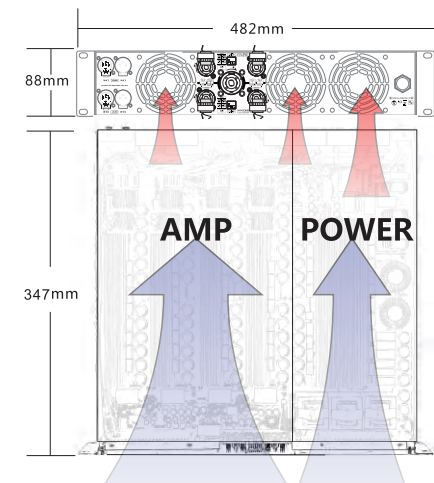
SPEAKON

One SPEAKON per channel connect to loudspeakers.

Input Connectors
One balanced XLR per channel.

Dimensions and cooling system

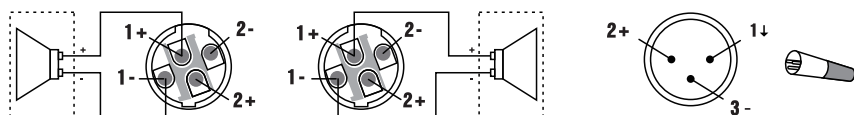
NOTE:
The size is 347mm inside of the device(without the cover plate and front panel).
The size is around 482mm of the complete device, but a little bit different size in the different front panel.
Some series with different size that had not shown, please learn it in the parameter.



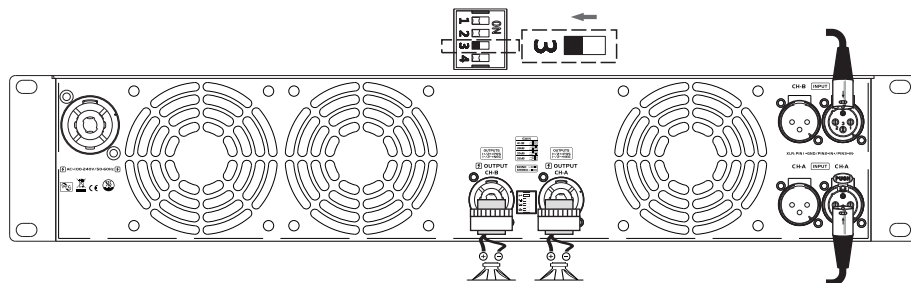
Tunnel through cooling system

Cold air comes in from the front panel of the equipment, forms a duct through the radiator to take the heat away and out from the rear panel of the equipment.

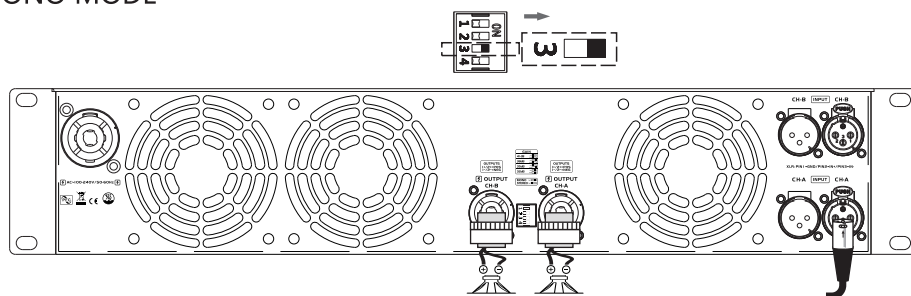
Application introduction (2channel series)



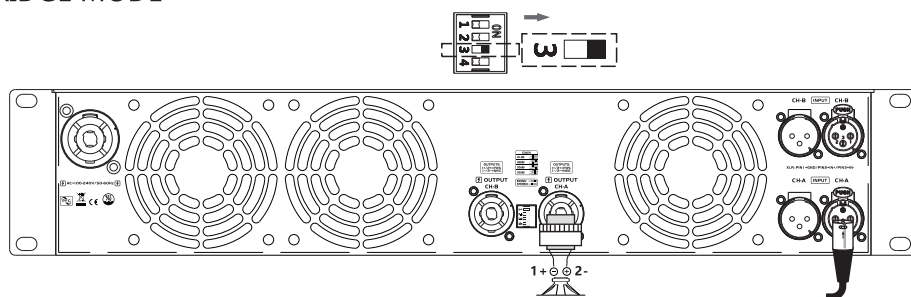
STEREO MODE



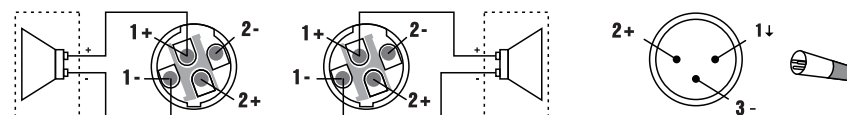
MONO MODE



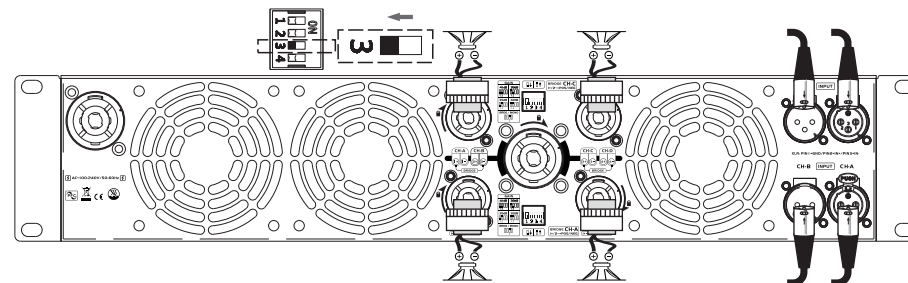
BRIDGE MODE



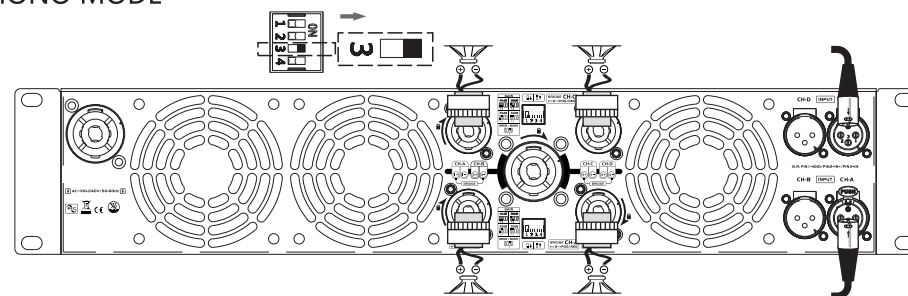
Application introduction (4channel series)



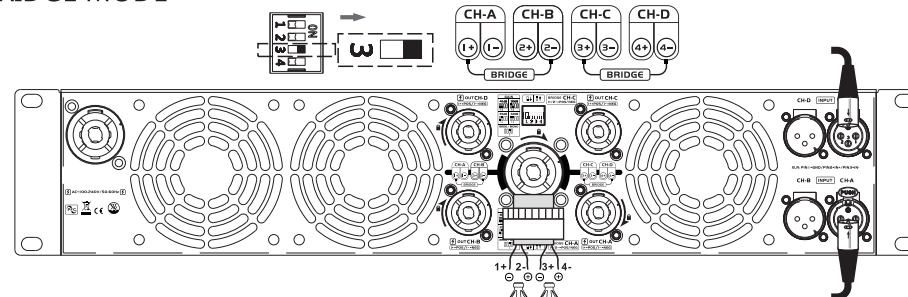
STEREO MODE



MONO MODE



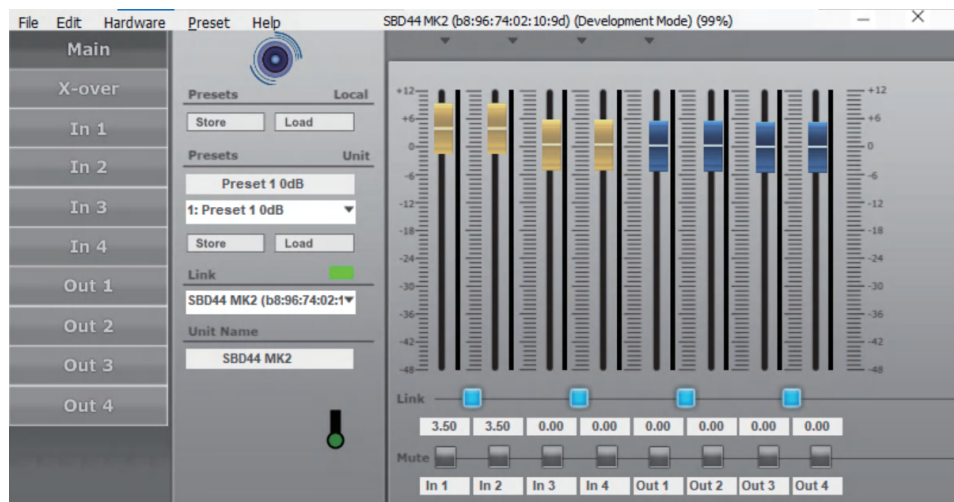
BRIDGE MODE



Performance parameter

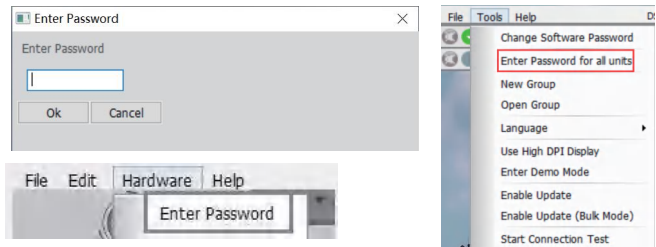
Alternating Current Power Supply	
Power	PFC Power
Rated power demand	100-240 V ±10%, 50/60 Hz
Operation voltage	90V-270V
Power correction factor cos (φ)	>0.95 @ >500 W
Standby	47W and 0.8A
Gain, Sensitivity	32dB, 35dB, 38dB, 41dB
Temperature	
Environment temperature	0°C- 45°C / 32°F-113°F
Cooling system	Tunnel through cooling system
Performance	
Frequency Response	20 Hz – 20 kHz (1 W @ 8 Ω, ±0.5 dB)
Signal-to-Noise Ratio	>110 dBA (20 Hz – 20 kHz, A weighted)
Crosstalk	> 66 dB @ 1 kHz
Input Impedance	10 kΩ balanced
Total Harmonic Distortion (THD)	<0.5% from 1 W to full power (Typical value <0.05%)
Intermodulation Distortion(IMD)	<0.5% from 1 W to full power (Typical value <0.05%)
Damping Factor (8 ohms)	>5000 @ 20-200 Hz
Slew Rate	50 V/μs @ 8 Ω
Front Panel	
Indicator LED/per channel	Four pieces Green LED: display the output signal (-20dB,-10dB,-5dB,-3dB) of SPEAKON
	1 piece dual LED (Yellow and Red): Protective state/Clip state/Over heat/Over load
Power Switch	Press-on;
Dust-proof	Two pieces dust-proof cotton, it can take off to clean from the bottom of front panel
Application	
Signal in-connection	4 Channel: One balanced XLR(with lock) female per channel;
	2 Channel: One balanced XLR(with lock) female and one balanced XLR male per channel.
Signal out-connection	One SPEAKON per channel connect to loudspeakers.
Power cord	Fixed to the device, and the CSA(cross sectional area) of the cord is 3 x 6mm², and the cord is 1.5 meters long.
Multiple-Functions Switch	Two Sensitivity Switches, one Mode Switch and one Clip Switch.
Structure	
Dimensions	482x88x367 (without front panel) mm³
Net weight/Gross weight	12.5Kg/14.5Kg
Packing size	580x580x143 mm³

SR Series Model	SR4-3200 (DSP)	SR2-4500 (DSP)	SR4-1800 (DSP)
Channels	4 Channels	2 Channels	4 Channels
8Ω Output Power (RMS)	4 × 3200W	2 × 4500W	4 × 1800W
4Ω Output Power (RMS)	4 × 5500W	2 × 8000W	4 × 3000W
2Ω Output Power (RMS)	4 × 6000W	2 × 7000W	4 × 3800W
2Ω Burst Power (20ms burst)	4 × 7000W	2 × 8500W	4 × 5600W
Frequency Response	20Hz – 20kHz, +0/-1dB		
Total Harmonic Distortion (THD)	<0.5%, 20Hz – 20kHz		
Intermodulation Distortion (IMD)	<0.05%		
Slew Rate	50 V/μs @ 8Ω		
Damping Factor	>1000 @ 20 – 200 Hz		
Signal-to-Noise Ratio (SNR)	>110dB		
Gain Selection	32dB / 35dB / 38dB / 41dB		
Chassis	2U Chassis		
Core Features & Protections	Advanced Patented Amplifier Technologies / Multiple Patent Protections		
	Clean Sound Quality with Ultra- Low Distortion & Background Noise		
	Reliable Stable 2Ω Drive Capability (Perfect for Line Array Systems)		
	Long-Term Stable Operation in High-Temperature & Demanding Environments		
	Versatile Application: Ideal for Line Arrays, Bars, Cinemas, Stadiums & More		
	Modular Circuit Layout for Easy Maintenance & Quick Serviceability		
	Comprehensive Short-Circuit & Multi-Level Circuitry Protection for Continuous Operation		
	Wide Voltage Operational Range (100V–240V) with Strong Grid Adaptability		
	Energy-Efficient Green Power Technology (Low Power Consumption)		
	Strict Reliable Testing (Aging, Shock, and Environmental Gradients)		
	Equipped with Genuine Original NEUTRIK Connectors for Rock-Solid Connectivity		
	Comes with a Detachable 32A PowerCON Heavy-Duty Power Cable		
	Output Interface: Equipped with 4 × NL4 and 1 × NL8 Genuine NEUTRIK Output Connectors (For 4Channels models)		
	Advanced Digital Signal Processing (DSP) Control System with Pro-Level Software		
	Ultra- Quiet Intelligent Cooling System (Fan speed varies automatically with temperature)		
	Multiple Audio Working Modes (Stereo / Parallel / Bridge / Matrix Switching)		



Our D series DSP amplifier used ALLDSP system from Gemany. It is suit for Windows,Mac and iOS system.

The application can be downloaded and installed from ALLDSP Website:
<https://www.alldsp.com/allcontrol-win-mac-oem.php>
Note that for a Windows computer, there are separate applications for Windows 32 bit and 64 bit. The software Password is **Develo_p**



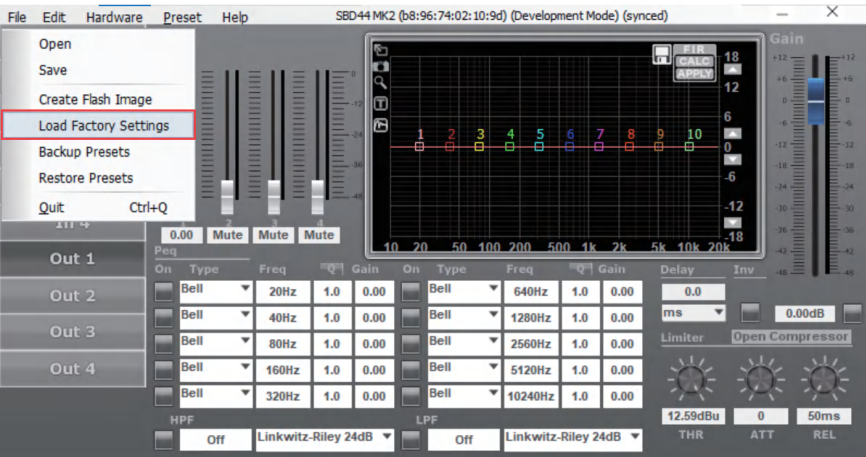
The Password is
Develo_p

Attention: You cannot connect the unit to the network through the USB or Ethernet at the same time. You can only control the unit from one platform at the same time –if you switch from one platform to another, you MUST shut down the control software at the previous platform first.

Local connectivity of the device to the control computer from a front-panel USB connector is also possible to download initial settings or as a fallback in case of network failure.

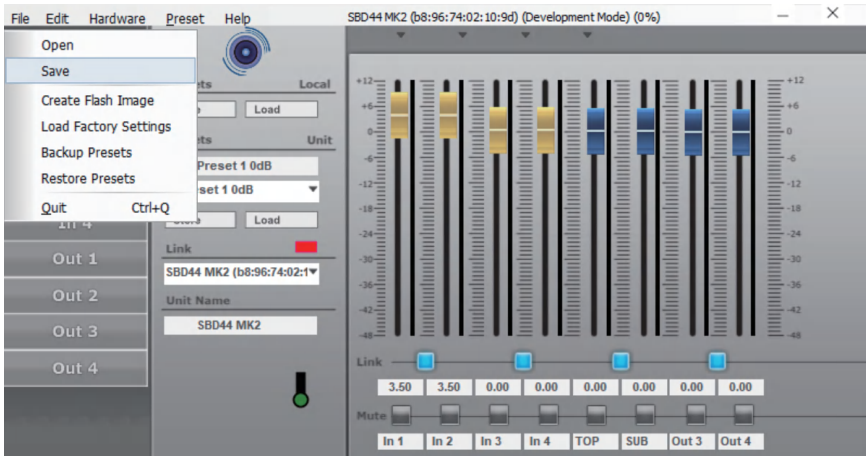
Load Factory Settings

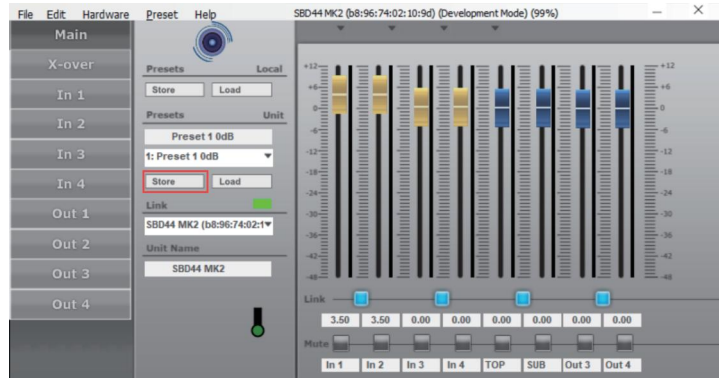
If noise or other issues occur due to the DSP amplifier, please contact the seller to obtain the updated firmware file. Click "Load Factory Settings" below to update the software.



Save and Load Preset

- 1.Save Preset:
Step 1: Click File - Save, Save the Presets on PC.
Step 2: Click Store to Save Presets on amplifier

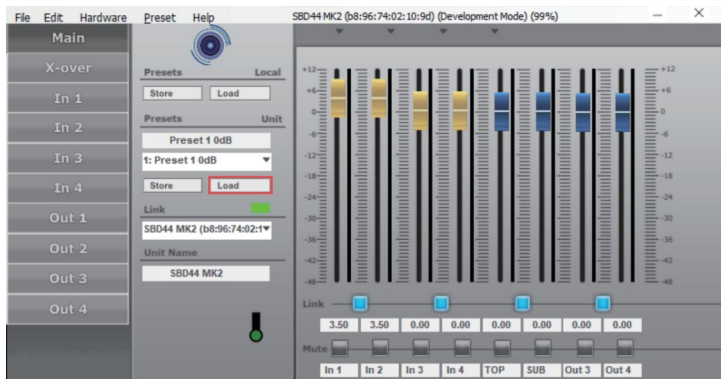
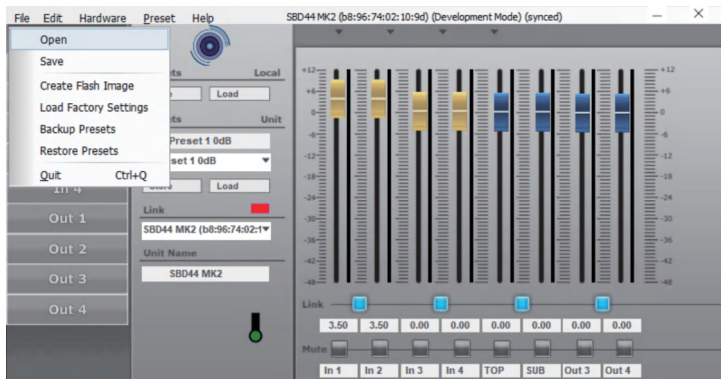




2.Load Preset:

Step 1: Click File - Open, Open the Presets from PC.

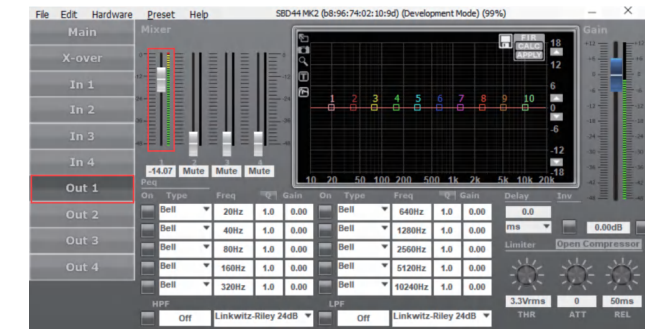
Step 2: Click Load, to Load Presets on amplifier.



Route one input signal to different outputs

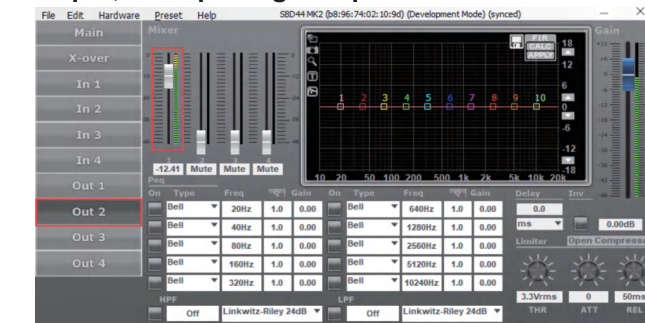
Example: When a signal is plugged into Channel A, users can configure the following settings in the software to achieve signal routing/distribution.

1-Input, 1-Output Signal Splitter



Turn on the Volume on Out 1

1-Input, 2-Output Signal Splitter



Turn on the Volume on Out 2

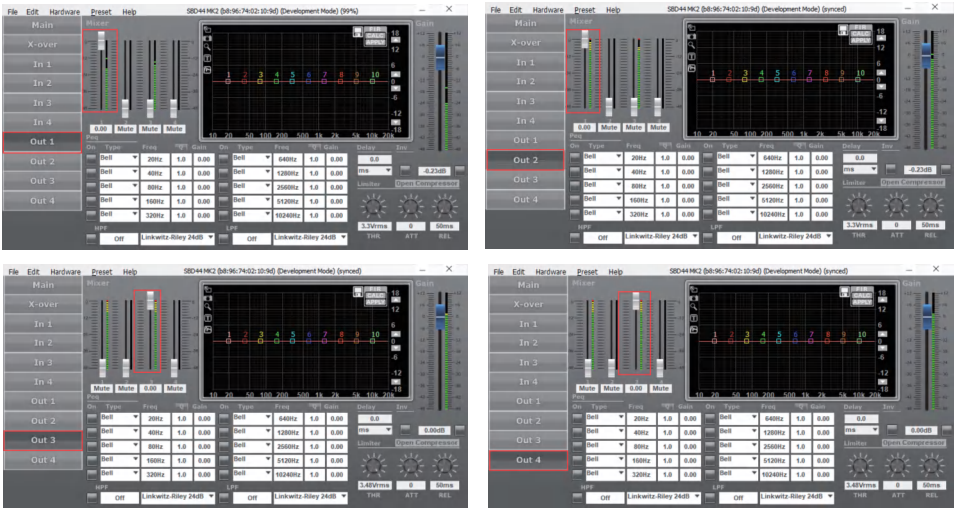
1-Input, 3-Output Signal Splitter



Turn on the Volume on Out 3

To enable bridge mode on the DSP amplifier:

- 1.Adjust Signal in Software as Image below:
Turn on the CH1 volume on Out 1 & Out 2
Turn on the CH3 volume on Out 3 & Out 4



- 2.Configure the Speakon wiring as 1+2-



3. Connect the XLR cable input on the A&C channel ;
Connect the speaker cable on the A&C channel, as shown in the image below.



A&C Output

A&C Input

WARNING

- IF THE POWER CORD IS DAMAGED, PLEASE GET A REPLACEMENT FROM THE DISTRIBUTOR. OTHERWISE, CONTINUED USE OF THE EQUIPMENT MAY LEAD TO FIRE OR ELECTRIC SHOCK.
- IF THE DEVICE FALLS FROM A HEIGHT OR THE SHELL IS DAMAGED, PLEASE IMMEDIATELY TURN OFF THE POWER SWITCH AND UNPLUG THE POWER PLUG. AND CONTACT THE AGENT DEALER TO SOLVE THE PROBLEM.
- WHEN ANY ABNORMALITY OCCURS, SUCH AS SMOKE, ODOR, ETC. PLEASE TURN OFF THE POWER SWITCH IMMEDIATELY AND UNPLUG THE POWER PLUG TO CHECK THE PROBLEM. AT THE SAME TIME, PLEASE CONTACT THE DISTRIBUTOR TO CHECK THE REASON FOR THE ABNORMALITY.
- TO PREVENT ELECTRIC SHOCK DO NOT REMOVE TOP OR BOTTOM COVERS.
- THE EQUIPMENT IS ONLY TESTED AND EVALUATED AT THE HIGHEST ALTITUDE OF 2,000 METERS.

All information provided in this manual is accurate at the time of delivery. Due to version change or design change, it cannot be timely notified. The latest information can be obtained by contacting the distributor.

Notice these symbols:



The exclamation point triangle symbol prompts the user for important operation and maintenance Instructions



Lightning, or the lightning triangle symbol, warns the user of the risk of electric shocks.

DESIGN CHANGES

WE RESERVE THE RIGHT TO CHANGE THE DESIGN OF ANY PRODUCT FROM TIME TO TIME WITHOUT NOTICE AND WITH NO OBLIGATION TO MAKE CORRESPONDING CHANGES IN PRODUCTS PREVIOUSLY MANUFACTURED.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions before unpack.

- ◆ Keep these instructions.
- ◆ Heed all warnings.
- ◆ Follow all instructions.
- ◆ Please keep the accessories (such as feet, instructions, desiccant and plastic bags) away from children.
- ◆ The packaging of the equipment is guaranteed of the drop test, ensuring that the original packaging is used in the transportation.

2. The installation operation.

- ◆ Do not use this apparatus near water.
- ◆ Do not block any ventilation openings.
- ◆ Do not install near any heat sources.
- ◆ Do not damage the safety function of the device with the polarity plug or grounding plug.
- ◆ Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- ◆ Unplug this apparatus during lighting storms or when unused for long periods of time.
- ◆ Do not expose this equipment to dripping or splashing and ensure that no object filled with liquids.

3. Use equipment

- ◆ Please make sure to turn the volume control knob to the minimum before turning on the power of the device. Otherwise, sudden bursts of sound may damage your hearing.
- ◆ Please avoid using the equipment on unstable surfaces or bevels.
- ◆ Please avoid using the equipment in the environment with high air humidity or dust accumulation.
- ◆ Please avoid using the equipment in an overheated environment.
- ◆ When connecting to the device, turn off all audio devices and speakers.

WARRANTY

SUMMARY OF WARRANTY

The warranty period provided by our company is one year (The warranty period is calculated from the purchase date of the original purchaser). During the warranty period, you can obtain the free maintenance if the product material and process caused by the problem.

WHAT THE WARRANTOR WILL DO

We will remedy any defect, regardless of the reason for failure (except as excluded), by repair, replacement. Warranty work can only be performed at our authorized service centers or at the factory.

WHAT SITUATION INVALID BY THE WARRANTY SERVICE

- Exceeds warranty period posterior product.
- The warranty does not cover any product which has been damaged because of any intentional misuse, accident, negligence, or loss which is covered under any of your insurance contracts.
- This Warranty also does not extend to the new product if the serial number has been defaced, altered, or removed.
- The equipment has been repaired or modified by people who does not belong to our company.
- The equipment broken in case of force majeure such as earthquake and fire, etc.
- Damage in transit caused by not using the original packaging, such as scratches, deformation or falls.

SUMMARY OF NON-WARRANTY SERVICE

The company provides paid maintenance services for products that have passed the warranty period. We'll show you the test report. And we will not start the repair until we get your approval and receive the cost for replacement parts. If you do not agree to repair, please take back the equipment.

THE COMPANY HAS NO OBLIGATION TO KEEP YOUR EQUIPMENT.
IF THE EQUIPMENT IS NOT TAKEN BACK WITHIN 30 DAYS WITHOUT SPECIAL REASONS, THE COMPANY SHALL HAVE THE RIGHT TO DISPOSE OF IT AT ITS OWN DISCRETION.