

USER'S MANUAL

— ACTIVE SPEAKER —

If there are changes in technical parameters, please forgive me for not giving notice

NOTES

Please read this manual carefully before operate the device.
Keep this manual in a safe place for reference.

⚠ WARNING

To avoid causing shock, short cut, damage, fire or any other dangers which lead to serious injury or even death, please ensure follow below notes. These notes include but not limited to below condition:

POWER SUPPLY / POWER CORD

- Keep the power cord away from heat sources, buckled or damaged. Do not place heavy objects on the device, or place the device in places where may causing trampled or crushed.
- Only use specify rated voltage of the device.
- Only use attachments power cord and plug.
- Regular checking and cleaning dirt of the power plug.
- Please ensure connect with grounded power sockets. Any disconnection of the grounding may cause electric shock.

DO NOT UNCLOSE THE DEVICE

Do not open the device, remove any internal parts or make any modifications. Stop using if any abnormal occur.

FIRE

Please do not place burning objects on the device, may causing a fire hazard.

THE DEVICE IS REQUIRED MAINTENANCE IN THE CONDITION BELOW

- If any of below condition occur, please disconnect the power supply by pulling the power plug. Ask professional person for maintenance.
 - Wore or damaged power cord or plug.
 - Abnormal smells or smokes.
 - Articles fall into the device.
 - Suddenly no sounds during operating the device.

⚠ CAUTIONS

To avoid causing any personal injury, facility or property damage, ensure follow below notes. These notes include but not limited to below condition:

POWER SUPPLY / POWER CORD

- Please grab the plug when pulling power plug from the device or power socket. Pulling power cord directly may cause damage.
- The device should be disconnected when unused for long periods of time or during lightning storms.

MOUNTED POSITION

- Do not place this device on unstable place, or might cause sudden turnover.
- If no safe fixation of the device, please do not installed in places even flat surface where easy falling down.
- Please do not use handles of the device for suspension installation, may causing damage or personal injury.
- During transportation or moving, make sure the device disconnected.
- Before installation, please contact with professional maintenance personnel, and must follow below notes:
 - Choose suitable installation site where can withstand the weight of the device.
 - Avoid places where constant vibration.
 - Use the correct tools for installation.
 - Inspect this device regularly.

CONNECTION

- Before connect this device with any other equipment, please turn off power switch of all the equipment.
- Please tune all the volume to minimum before turn on or off the power switch of all the equipment.

MAINTENANCE

Please ensure pull the power plug from the AC power socket before cleaning this device.

OPERATIONS

- Do not insert fingers or hands in any ventilation slits of this device.
- Do not press body or place heavy objects on this device, avoid operating button, switch or socket excessively and forcibly.
- Do not use this device under very high or uncomfortable volume level for long periods of time, otherwise may cause permanent ear damage. When encounter deafness or tinnitus, please seek medical treatment.
- Stop using this device when output sound distortion. Continue using under such status the device may overheat and cause a fire hazard.

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Introduction to the

Thank you for purchasing LAX brand active speakers.
Please read this manual completely to ensure long-term use of this product with optimum performance.
Please keep the manual in a safe place for future reference.

Series application

Theaters, banquet halls, clubs, hotels, luxury private rooms, etc.

Product characteristics

The 12" and 15" full-range speakers are midfield/near-field two-way speakers specially developed for theater performances. It consists of a high-power low-frequency unit and a 75-core three-inch titanium film high-frequency driver. Loaded H/V 90°x 60° wide-angle horn, smooth frequency response, clear and natural sound reproduction.

The cabinet is equipped with 10 M10 lifting points, and there are convenient lifting parts on both sides, which can be hoisted in multiple directions. The bottom of the speaker is equipped with a 35mm bracket bottom bracket and four anti-skid rubber feet.

The 15" horn speaker adopts a coaxial compact acoustic wave restraint structure with a narrow angle horn of H/V 40°x 40°, thus reducing the sidelobe effect caused by the wavelength distance of the acoustic center crossover point and improving the sound image of the sound Positioning capability, combining horizontal and vertical array systems, covering long-distance range. The full-band horn-loaded structure reduces the interference problems caused by reflection and diffraction in the middle and low frequencies, and can make the frequency response smoother, thereby reducing the resonance phenomenon in loudspeaker area.

The box is equipped with 16 M10 hoisting points, and convenient hoisting parts are provided on both sides, which can be hoisted in multiple directions.

This series of cabinets are made of high-strength birch board, sprayed with polyurea paint on the surface, high-strength speaker surface mesh, and covered with sound-transmitting mesh cotton.

[PRODUCT SPECIFICATIONS]

Active Speakers	1 × 12"	1 × 15"	1 × 15" horn speaker
Frequency response (-10dB)	60Hz-20KHz	56Hz-19KHz	75Hz-20KHz
DISPERSION(H×V)	90° × 60°	90° × 60°	40° × 40°
Sensitivity (1W/1m)	LF :98dB HF:112dB	LF :100dB HF:113dB	HF: 111dB LF: 104dB
The loudest pressure level	LF:120dB(continuous) HF:128dB(continuous) LF:132dB(peak)HF:141dB(peak)	LF:123dB(continuous) HF:129dB(continuous) LF:134dB(peak)HF:142dB(peak)	140dB
Rated power (AES)	LF:300W HF:80W	LF:300W HF:80W	400W
Cell configuration	LF : 1×12 " 4Ω HF : 1×75core 8Ω	Lf: 1×15 " 4Ω HF : 1×75 core 8Ω	LF : 1×15 "4Ω HF : 1×75 core 8Ω
Hardware	M10 suspension loop	M10 suspension loop	M10 suspension loop
Box structure	Inverted	Inverted	Inverted
Support hole	36mmx1	36mmx1	/
High performance 2-channel Class D amplifier	2x650W@4Ω	2x650W@4Ω	2x650W@4Ω
AC power input	200V-230V~50Hz	200V-230V~50Hz	200V-230V~50Hz
Dimensions (WxDxH)	380×430×620mm	425×430×700mm	597×699×654mm
Net weight	27.5kg	30.3kg	50.4kg

[DSP PARAMETER]

DSP precision	24-bit , 96KHz sampling rate
Parametric balance	The input channel has 15-band parametric equalization. The output channel has 10-band parametric equalization. Equalization Type: Parametric, Hi-shelf, Lo-shelf. The gain range is: -30dBu~+12dBu, with variable Q value, and frequency can be defined.
IIR filter	Butterworth: 6/12/24/36/48dB per octave Linkwitz Rayleigh: 12/24/36/48dB per octave Bezier: 12/24/36/48dB per octave
FIR filter	Straight-through, low-pass, high-pass, band-pass, band-stop, external customization (custom import optimization FIR filter program)
Noise gate	Start Threshold: -100~-50dBu Startup time: 1~100ms
Output voltage limit	Start Threshold: -25~+20dBu , Startup time: 1~100ms , Compression ratio: 1~100 Release rate: Atkx2 ~ x10 ,
Limiter	Start value: +6dB ; Set the limiter protection value according to the matching speaker power; (such as setting +3dB power amplifier
Delay	Input channel delay 10ms, Output channel delay 25ms, Step accuracy is 0.01ms

【FREQUENCY RESPONSE CURVE】

1 × 12" speaker



1 × 15" speaker

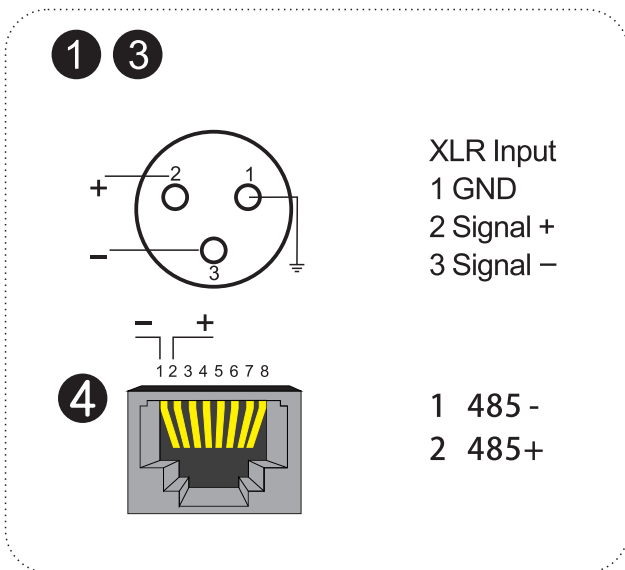
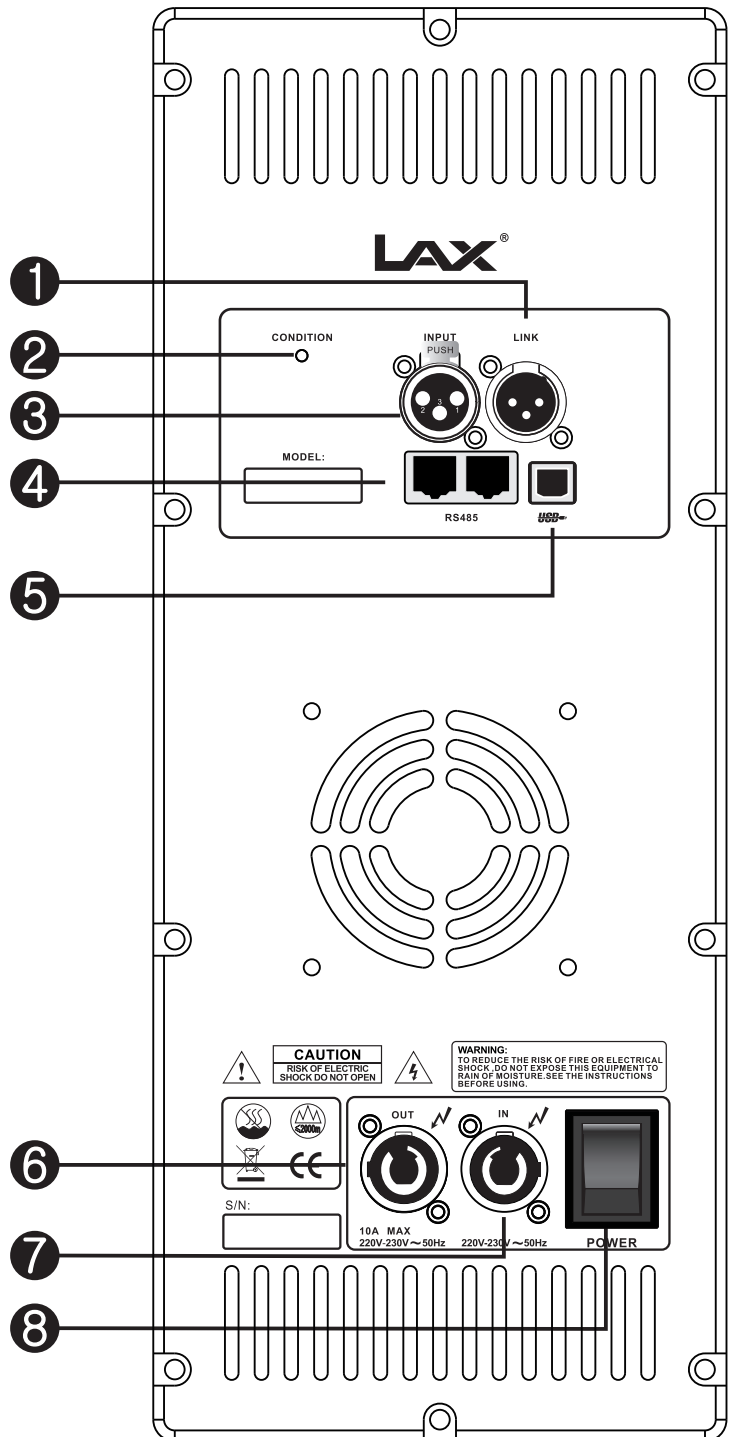


1 × 15" horn speaker



【Operation buttons of rear panel and function description】

- ① Output XLR socket
- ② indicator light
- ③ Input XLR socket
- ④ RS485 data interface
- ⑤ USB data interface
- ⑥ Power output interface
- ⑦ Power input interface
- ⑧ Switch



符号说明



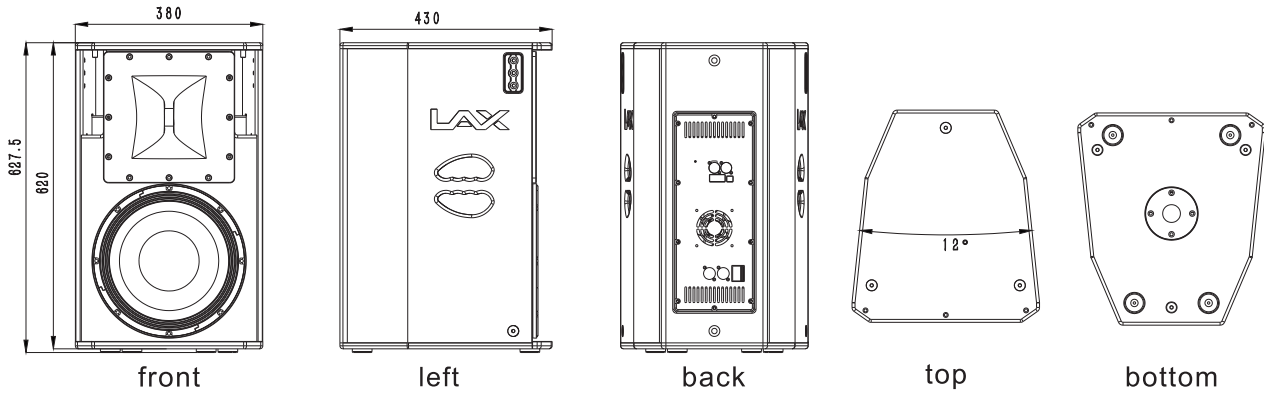
The figure shows that the device is only suitable for safe use in areas with an altitude below 2000m.



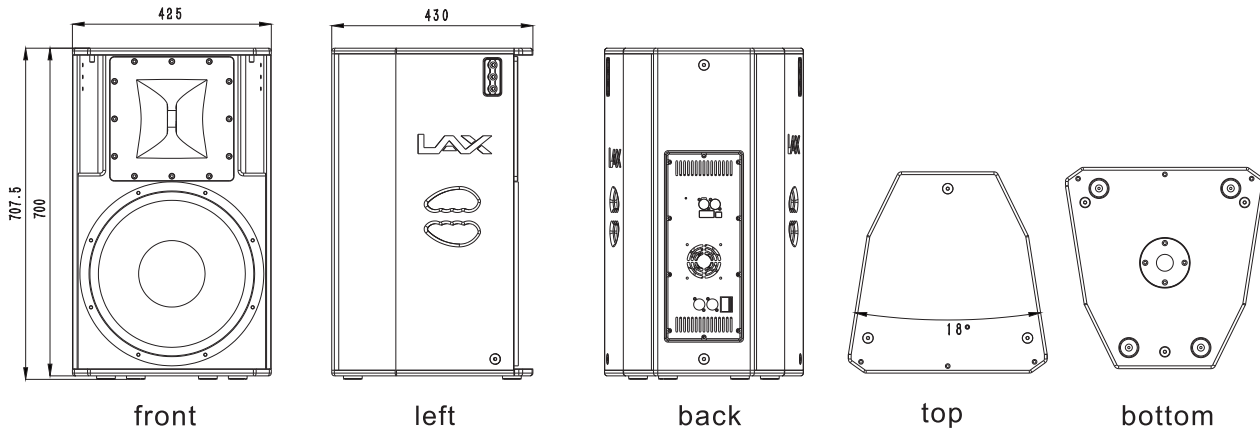
The diagram indicates that the equipment is only suitable for safe use in non-tropical climates.

[PRODUCT OUTLINE]

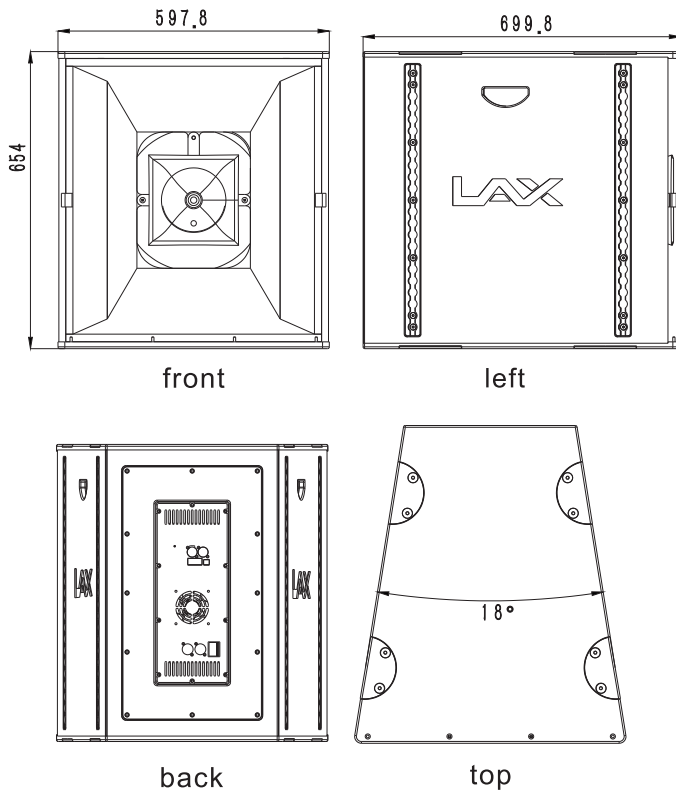
1 × 12" speaker



1 × 15" speaker



1 × 15" horn speaker



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