

Christie Vive Audio S218LP Low Profile Subwoofer

User Manual

020-101268-03

CHRISTIE®

NOTICES

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Products are warranted under Christie's standard limited warranty, the complete details of which are available by contacting your Christie dealer or Christie. In addition to the other limitations that may be specified in Christie's standard limited warranty and, to the extent relevant or applicable to your product, the warranty does not cover:

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- e. Problems or damage caused by the use of any lamp, replacement part or component purchased or obtained from an unauthorized distributor of Christie lamps, replacement parts or components including, without limitation, any distributor offering Christie lamps, replacement parts or components through the internet (confirmation of authorized distributors may be obtained from Christie).
- f. Problems or damage caused by misuse, improper power source, accident, fire, flood, lightning, earthquake or other natural disaster.
- g. Problems or damage caused by improper installation/alignment, or by equipment modification, if by other than Christie service personnel or a Christie authorized repair service provider.
- h. Problems or damage caused by use of a product on a motion platform or other movable device where such product has not been designed, modified or approved by Christie for such use.
- i. Problems or damage caused by use of a projector in the presence of an oil-based fog machine or laser-based lighting that is unrelated to the projector.
- j. For LCD projectors, the warranty period specified in the warranty applies only where the LCD projector is in "normal use" which means the LCD projector is not used more than 8 hours a day, 5 days a week.
- k. Except where the product is designed for outdoor use, problems or damage caused by use of the product outdoors unless such product is protected from precipitation or other adverse weather or environmental conditions and the ambient temperature is within the recommended ambient temperature set forth in the specifications for such product.
- l. Image retention on LCD flat panels.
- m. Defects caused by normal wear and tear or otherwise due to normal aging of a product.

The warranty does not apply to any product where the serial number has been removed or obliterated. The warranty also does not apply to any product sold by a reseller to an end user outside of the country where the reseller is located unless (i) Christie has an office in the country where the end user is located or (ii) the required international warranty fee has been paid.

The warranty does not obligate Christie to provide any on site warranty service at the product site location.

PREVENTATIVE MAINTENANCE

Preventative maintenance is an important part of the continued and proper operation of your product. Please see the Maintenance section for specific maintenance items as they relate to your product. Failure to perform maintenance as required, and in accordance with the maintenance schedule specified by Christie, will void the warranty.

Environmental


The product is designed and manufactured with high-quality materials and components that can be recycled and reused. This symbol  means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from regular waste. Please dispose of the product appropriately and according to local regulations. In the European Union, there are separate collection systems for used electrical and electronic products. Please help us to conserve the environment we live in!

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Safety Information

- Read this information thoroughly before installing or operating a speaker.
- Read these instructions.
- Keep these instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
- Do not use this apparatus near water.
- Do not install the speaker near water where the electrical components can be exposed to moisture. Do not place objects containing liquids, such as vases, on the product.
- Clean only with a dry cloth.
- Do not overpower or underpower speaker systems.
- Use only in accordance with manufacturer's specifications and installation guidelines.
- Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in their susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. These are the permissible noise level exposures specified by the United States Occupational Safety and Health Administration (OSHA):

Duration (Consecutive)	Sound Pressure Level (dbA), Slow Responses
8 hrs	90
6 hrs	92
4 hrs	95
3 hrs	97
2 hrs	100
1.5 hrs	102
1 hr	105
30 min	110

Duration (Consecutive)	Sound Pressure Level (dbA), Slow Responses
≤15 min	115

- According to the OSHA, any exposure in excess of the above permissible limits could result in some hearing loss. Earplugs or protectors to the ear canals or over the ears must be worn when operating this amplification system to prevent permanent hearing loss, if exposure is in excess of the described limits.
- Two people are required to safely lift and install the speaker.
- Speakers and speakers mounted to brackets must be affixed to a suitable structure following all local safety standards and regulations.
- Always install all legally required additional redundant safety straps or cables.
- Install the minimum number of rigging wires (refer to [Installation](#) for more details) that are required to suspend the speaker. Observe load ratings and all applicable local safety codes.
- Only use attachments or accessories specified by Christie.
- To reduce the risk of system damage, turn off the power amplifier and then disconnect the speaker wire before performing a repair or maintenance.
- All servicing must be completed by qualified service personnel. Servicing is required when the apparatus has been damaged in any way. For example, liquid has been spilled or objects have fallen onto the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Changes or modifications to the product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Technical support

Technical support for Christie products is available at:

- North and South America: +1-800-221-8025 or Support.Americas@christiedigital.com Europe, Middle East, and Africa: +44 (0) 1189 778111 or Support.EMEA@christiedigital.com
- Asia Pacific: +65 6877-8737 or Support.APAC@christiedigital.com
- Coolux: +49 221 99 512 300 or Support.PandorasBox@christiedigital.com
- Christie Managed Services: +1-800-550-3061 or NOC@christiedigital.com

Introduction

This user manual provides subwoofer installation, troubleshooting, and specification information.

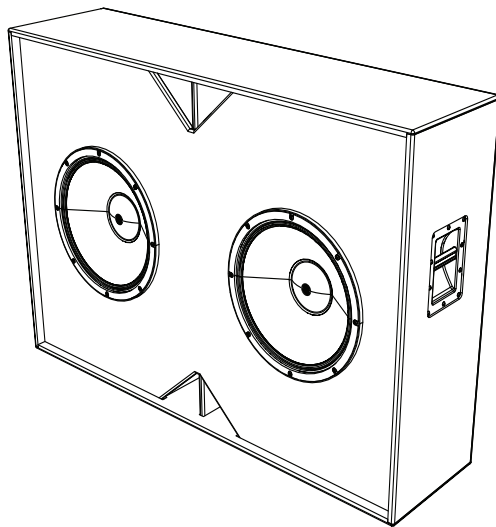
Speaker overview

The S218LP low profile subwoofer is used for low frequency effects (LFE) channel applications.

What's in the box?

This table lists the components that are shipped with the S218LP.

Quantity	Description	Part number
1	Christie S218LP low profile subwoofer	145-181101-XX



Installation



Warning! Failure to comply with the following could result in death or serious injury.

- Before installation, inspect all components for cracks, deformations, corrosion, and missing or damaged parts that could reduce their installation strength.
- A minimum of two people are required to safely lift and install the speaker.
- Speakers must be affixed to a suitable structure following all local safety standards and regulations.
- Only use attachments or accessories specified by the manufacturer.



Notice. Failure to comply with the following may result in property damage.

- Allow speakers exposed to extremely low temperatures to warm for a minimum of one hour before playing them at typical application levels. Failure to comply may result in equipment or property damage.
- Speaker wire affects sound quality. Make sure the speaker wire quality and gauge are appropriate for your application.
- The high-pass filter must be set to 24 dB/octave Butterworth at 20 Hz to avoid damaging the subwoofer.

Complete the following procedures to install the speaker.

Connect the speaker wire

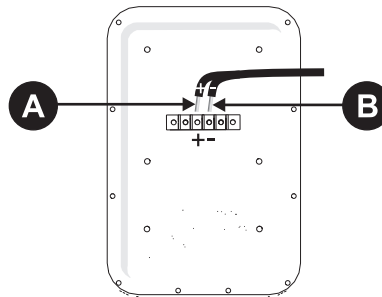


Notice. Failure to comply with the following may result in property damage.

- The amplifier must be turned off and unplugged before you start this procedure.

1. Install the speaker according to the mounting instructions provided in this manual.
2. Connect the speaker wire to the positive (A) and negative (B) terminals on the back of the speaker.

Use a #8 spade lug (part number: 145-159106-XX) if you are creating crimped spade lug terminations.



A	Positive (+) connection
B	Negative (-) connection

3. Connect the negative and positive speaker wires from the speaker to the corresponding terminals on the amplifier.
4. Turn on the amplifier and verify that the speaker is receiving power.

Platform mount the S218LP subwoofer

You can place the S218LP subwoofer on a floor or platform without lag bolts, or secure the subwoofer to the platform using appropriately sized lag bolts (not provided in the box), according to laws and regulations applicable to the venue.



The S218LP subwoofer cannot be flown.

Troubleshooting



Caution! Failure to comply with the following could result in minor or moderate injury or damage.

- Do not service the speaker. All servicing must be completed by qualified service personnel.

The speaker does not function

The speaker is connected to the amplifier, but is not producing any sound.

Resolution

- Verify that the speaker is receiving power from the amplifier.
- Verify that the circuit breaker for the main circuit to the amplifier is closed.
- Reset the circuit breaker. If the AC mains breaker continues to open, check the voltage and amperage of the circuit.
- Verify that the negative and positive speaker wires from the speaker are correctly connected to the terminals on the amplifier.

The speaker sound is degraded

The speaker is powered on and sound is being produced, but it is distorted.

Resolution

- Visually inspect the speaker for deterioration or holes.
- Reduce the output level of the source.
- Verify that the negative and positive speaker wires from the speaker are securely connected to the terminals on the amplifier.
- Verify that there are no missing screws. Replace all screws that you removed during installation.

- Have an authorized dealer complete an audio test (for example, pink noise, frequency sweeps, and content and program material).

There is speaker noise or hiss

The speaker is producing static noise or hiss when powered.

Resolution

- Mute channels, one at a time, to isolate the problem.
- Verify that the cables are in good working condition.
- Reroute audio cables away from AC power and lighting cables.
- Verify correct gain structuring of B Chain and input and output levels of source devices and amplifiers.
- Check the polarity.

Specifications

Audio

Specification	Description
System type	Subwoofer, ported enclosure, with extended bass shelf (EBS) tuning to 23 Hz
Driver components	Two 18 in. low frequency drivers each with dual 4 in. voice coil and long linear excursion
Recommended crossover	<ul style="list-style-type: none"> · External active electronic protection bandpass filter is required for proper operation · High pass: Butterworth 24dB/octave @ 20 Hz · Low pass: Bessel 24dB/octave @ 250 Hz
Frequency response ^a	20-250Hz at -10dB, 24-200Hz at -6dB
Maximum sound pressure level (SPL) ^b	133.5 dB, continuous, 145.5 dB, peak
Sensitivity ^a , 1 W/1 m	100.5 dB (40-150 Hz)
Recommended amplifier power	1500 W - 2150 W (FTC) at 4 Ohms / Christie CDA5 or Christie CDA7.5 (depending on application)
Rated impedance	4 Ohms

^aRated for free space conditions at 1 m. Measured at 2m, ground plane conditions, with value calculated for free space conditions at 1 m.

^bAES refers to AES2-2012 standard. Pink noise with 6 dB crest factor at 1 m. Maximum continuous SPL is calculated based on sensitivity and AES power handling. IEC refers to IEC 60268-5 standard. IEC pink noise with 9 dB peak factor. Maximum peak SPL is calculated using peak voltage during IEC short-term power test.

Connections

Specification	Description
Inputs	Screw terminal barrier strip

Power

Specification	Description
Power handling ^b	2000 W (AES) continuous, 4000 W (IEC) short-term

Physical

Specification	Description
Enclosure	Extended Bass Shelf ported 18 mm MDF Heavily damped and braced
Dimensions (L x W x H)	150.6 cm x 39.4 cm x 103.7 cm (59.2 in) x (15.5 in) x (40.8 in)
Weight (net)	99 kg (216 lb)

Parts

Specification	Part Number
18 in. cone driver	003-120884-XX

Accessories

Specification	Part Number
SpeakON Connector (for amplifier output to speaker)	145-158105-XX
#8 Spade Lug (for speaker input from amplifier)	145-159106-XX

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