

SLS[™]WMA-15 Wall Mount Rigging Kit User's Guide

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Part Number 9112405

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LIMITED WARRANTY AND WARRANTY EXCLUSIONS:

THE LIMITED WARRANTY AND WARRANTY EXCLUSIONS MAY BE FOUND AT THE FOLLOWING URL: https://www.dolby.com/us/en/about/warranty-and-maintenance-policies.html

PRODUCT MODEL:

THIS DOCUMENTATION APPLIES TO MODEL CID1004.

Part Number 9112405 Issue 4



IMPORTANT SAFETY INSTRUCTIONS



- 1. INSTALLER ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR THE INSTALLATION OF THIS PRODUCT.
- 2. Prior to installing this product, read and completely understand the installation instructions. You must read these instructions to prevent personal injury and property damage. Keep the installation instructions in an easily accessible location for future reference.
- 3. Installation must be performed by qualified, licensed, and insured installers, and installed in accordance with all laws, rules, and regulations applicable to the installation site. Failure to do so could result in serious personal injury or even death. Consult an installation professional if the installation instructions are not understood.
- 4. Compliance with local building codes (and, where applicable, national codes) is the responsibility of the installer. Installers should consult with local regulatory authorities for specific codes and/or guidelines for the use of this product.
- 5. Use proper personal lifting techniques when working with heavy objects to avoid personal injury.
- 6. Any supplied rigging hardware is intended only for use with the specified loudspeaker. The installer assumes all risk of loss and/or injury arising out of the use of the supplied rigging hardware with any other loudspeaker.
- 7. This guide is meant only for the purpose of instructing the installer in the intended use of SLS supplied rigging. All other rigging is considered part of the venue and/or installer supplied equipment and is not addressed in this guide.
- 8. This guide is not a comprehensive source for rigging in general. Installer assumes all responsibility for ensuring that accepted rigging and safety practices are employed. Installer assumes all responsibility for the appropriate use of SLS supplied rigging hardware and follows at a minimum all applicable laws, rules, and regulations in force for each venue.
- A system safety cable (not included) must be mounted to the building structure. Do not attach the system safety cable to any wood structure, wood roof joists, or wood frame.
 - For wall installations, the system safety cable must be anchored to the building structure independent of the primary rigging hardware. In all instances, the safety cable must be mounted in a way that supports a minimum of five times the static weight of the speaker, or greater if a higher requirement is mandated by local laws.
- 10. Do not install on a structure that is prone to abnormal vibration, movement, or chance of impact. Failure to do so could result in damage to the equipment and/or damage to the mounting surface.
- 11. Make sure that no water pipes, natural gas lines, electrical wire, or conduit are present where the speaker is to be installed. Cutting or drilling into water pipes, natural gas lines, electrical wire, or conduit could cause serious personal injury or property damage.
- 12. Prior to installation, always inspect all hardware components for wear, deformations, corrosion, and missing or damaged parts.
- 13. This product is intended for installation in dry indoor locations only. Premature product failure or serious personal injury could occur if this product is used outdoors or in wet indoor environments.
- 14. No open flame sources should be placed on or near the apparatus.
- 15. Only clean product with a dry or damp cloth.
- 16. Do not block any ventilation openings.

- 17. Do not expose the product to rain or moisture.
- 18. Hearing damage may result from prolonged exposure to excessive sound pressure levels (SPL). The loudspeaker is easily capable of generating SPL sufficient to cause permanent hearing damage to performers, production crew, and audience members. Caution should be taken to avoid prolonged exposure to SPL in excess of 90 dB.
- 19. The products covered by this manual are not intended for use in high-moisture environments. Moisture can damage the product and cause corrosion of electrical contacts and metal parts. Avoid exposing the speakers to direct moisture. Keep speakers out of extended or intense direct sunlight.
- 20. The loudspeaker can generate considerable acoustical energy and may move during use. The system must be mounted in a way that allows sufficient clearance for this movement without risk of contact with the building structure, rigging, or other equipment.
- 21. Installed systems should be inspected at least annually or as required by local laws. The inspection shall include a visual survey of all corners and load-bearing surfaces for signs of cracking, water damage, delamination, or any other condition that may decrease the strength of the rigging frame and speakers. The rigging hardware must be inspected for fatigue at least annually or as required by local laws. The inspection shall include a visual survey of the hardware for signs of corrosion, bending, or any other condition that may decrease the strength of the hardware.
- 22. THIS APPARATUS IS NOT INTENDED FOR CEILING OR FLOOR-STANDING INSTALLATIONS.
- 23. No information contained in this guide is intended as a warranty on the part of SLS. Anyone using this information assumes all liability arising from its use. Product abuse, use of the product not in accordance with SLS instructions, or use in an application for which the product has not been designed is not covered under any SLS warranty, nor is SLS liable for any loss or damage.

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Introduction

This document provides step-by-step instructions for installing the SLS[™] wall mount rigging kit (part number WMA-15). This kit was developed to reduce the time and expense required when installing SLS multi-axis speakers in Dolby Atmos[®] cinema environments.



Figure 1-1 WMA-15 Wall Mount

THIS EQUIPMENT MUST BE INSTALLED BY LICENSED AND PROFESSIONAL INSTALLERS.

1.1 Safety Precautions

The weakest component determines the safety of the entire finished installation. Prior to connecting the rigging kits to the venue structure, always inspect all hardware components for deformations, corrosion, and missing or damaged parts, and compare all included SLS rigging kits parts to the supplied parts list. Also inspect the venue rigging points (attachment points) for wear and structural integrity, and confirm that these points are suitably load rated for the SLS rigging kits (including the weight of the loudspeakers that will be suspended from these kits). This product is designed only to be used for its specified purpose within these identified limits. SLS Audio is not responsible for any loss or damage resulting from improper use or installation.

Installers in countries outside the United States should not assume that their local regulations are equivalent to regulations and practices in the United States or the state of California.

Installers should consult with local regulatory authorities for specific codes and/or guidelines.



Warning: TO PREVENT INJURY, THIS APPARATUS MUST BE SECURELY ATTACHED TO THE BUILDING STRUCTURE WALL IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS. CONSULT A PROFESSIONAL MECHANICAL OR STRUCTURAL ENGINEER TO OBTAIN APPROVAL FOR ALL ATTACHMENTS TO THE STRUCTURE. THIS APPARATUS MUST BE INSTALLED BY LICENSED PROFESSIONAL INSTALLERS. IF NOT ATTACHED TO THE STRUCTURE PROPERLY, THIS APPARATUS COULD FALL AND CAUSE PERSONAL INJURY OR DEATH. SUSPENSION OF HARDWARE COMPONENTS MUST BE CALCULATED WITH A GIVEN SAFETY FACTOR TO BE WITHIN THEIR RESPECTIVE LOAD LIMITS. INSPECT ALL COMPONENTS BEFORE INSTALLATION. THIS APPARATUS

IS NOT INTENDED FOR FLOOR-STANDING OR CEILING INSTALLATIONS ANCHORAGE. ALL LOCAL BUILDING AND SEISMIC CODES MUST BE

1.2 SLS Wall Mount Rigging Kit Supported Speaker Weights

ADHERED TO.

This product is designed for use only in connection with SLS multi-axis speakers (referred to in this document as "supported speakers") and has not been evaluated for performance in connection with any other products. You assume any and all loss resulting from your use of any nonsupported speakers in connection with the products.

In addition, these guidelines pertain only to the assembly of the product with supported speakers, and illustrations are provided on how to attach the product to an attachment point. You assume any and all loss resulting from your attachment of the product to the ultimate attachment point in the venue.

1.3 Inspection and Maintenance

Suspension systems are mechanical devices in nature, which require regular inspection and routine maintenance.

Regularly inspect the SLS rigging kits for fatigue, and immediately inspect these kits after any significant seismic activity or other structural interference.

Inspections must include a visual survey of all corners and load-bearing surfaces for signs of cracking, water damage, delamination, or any other condition that may decrease the strength of the SLS rigging kits.

Inspect all suspension system hardware that is included with the SLS rigging kits for fatigue once a year (or more). Perform a visual inspection of all hardware, and check for any indication of corrosion, bending, or other conditions that would compromise the strength of the fastener. Check the eyebolts for any indications that spin-outs of the enclosure might occur.

Installing the Wall Mount Rigging Kit

2.1 Identifying the Rigging Kit Parts

The wall mount rigging kit includes the following parts, as shown in Figure 2-1.

- 1. Wall assembly
- 2. Speaker assembly:
 - M20 stud assembly
 - Yoke brace
 - M20 nut
 - M20 washer

In addition, a template is provided to prepare the wall for mounting.

Warning: USE THE APPROPRIATE QUANTITY OF M10 or 3/8" BOLTS TO SECURE THE HARDWARE TO THE STRUCTURE. HARDWARE MUST BE SECURELY TIGHTENED.

Hardware for mounting the wall assembly (for example, nuts, bolts, or other fasteners) and a safety cable are required but are not provided with this kit. The installer is responsible for proper selection of the hardware. The installer must carefully select hardware and safety cable components that can support a minimum of five times the weight of the speaker, or as otherwise required by local building codes. For related information, see Section 2.3 and Section 2.8.

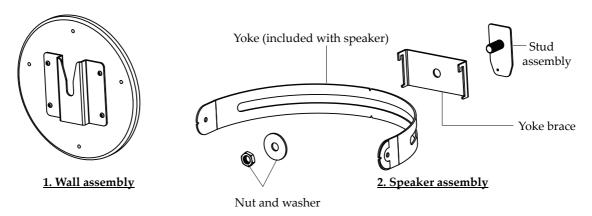


Figure 2-1 Wall Mount Rigging Kits Parts

The SLS three-axis speakers ship with the yoke installed but the speaker body is not shown in the figures within this document (for clarity).

2.2 Understanding Speaker Aiming Angles

Before starting the installation, you need to understand the speaker aiming angles. The Dolby® Audio Room Design Tool (DARDT) provides this information for accurate speaker aiming. The DARDT is an Excel-based tool that is used to help design a room and plan equipment to ensure that the design meets Dolby requirements. Authorized users can download this tool at http://customer.dolby.com. If you do not have access, please contact cinemasupport@dolby.com to request the tool. These figures provide an example.

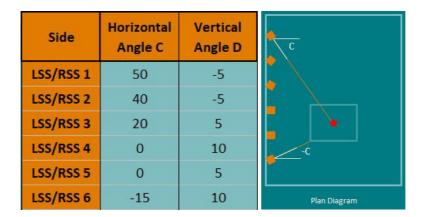


Figure 2-2 Speaker Aiming Angles

Stickers are shipped with SLS multi-axis speakers. These stickers provide angle information that should match the DARDT output values.

2.3 Preparing a Speaker

To prepare a speaker, refer to Figure 2-1, and then proceed as follows:

1. Position the yoke brace, as shown in this figure (while the yoke is still attached to the speaker).

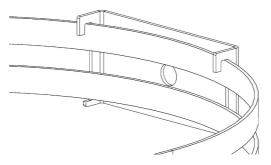


Figure 2-3 Position the Yoke Brace



Caution: You must position the yoke brace as shown in this figure. <u>Do not</u> position the yoke brace upside down or the speaker may fall off the wall.

2. Assemble all pieces together, as shown in the Speaker assembly section of Figure 2-1, keeping everything loose to allow for adjustments.

The slot in the yoke sliding adjustment is labeled **Angle C**. The following figure exemplifies a single point to building structure rigging setup using the **Angle C** yoke sticker to indicate the desired degree. The center of the installer-provided suspension point is used as a reference to set the angle.



Figure 2-4 Angle C at 0 and 45 Degrees (Up to 65 Degrees is Obtainable)

The provided yoke attachment to the speaker pivot point is labeled **Angle D**. The seam in the plastic speaker enclosure is the angle indicator.



Figure 2-5 Angle D at 0, 45, and 90 Degrees Using Speaker Body Seam as Indicator

2.4 Preparing the Wall

To prepare the wall:

- 1. Use the provided template to mark the four points to drill for the hardware, according to the dimensions shown in the following figure. These bolts are not supplied in this kit. The installer is responsible for proper selection of the fasteners. The diameter of the drilled holes for any installer-supplied hardware is .303 inches (7.7 mm).
- 2. Mount the wall assembly so that the bottom edge of the metal receiving plate is level.
- 3. Drill the holes in the drywall (or other wall material) for the installer-supplied fasteners. You must use all four of the provided mounting locations to attach the wall assembly to the building wall structure.

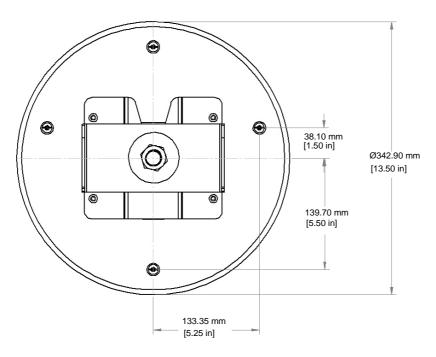


Figure 2-6 Prepare Wall

2.5 Performing the Final Assembly

To perform the final assembly, lift the speaker into place and slide it down into position, making sure that the M20 stud assembly slides into the wall mount receiver and the yoke brace is on the other side (speaker housing not shown here for clarity).



Caution: During the installation, the speaker and yoke brace slides down into the speaker wall mount. You must mount the wall assembly as described here and shown in this figure. <u>Do not</u> position the assembly upside down.

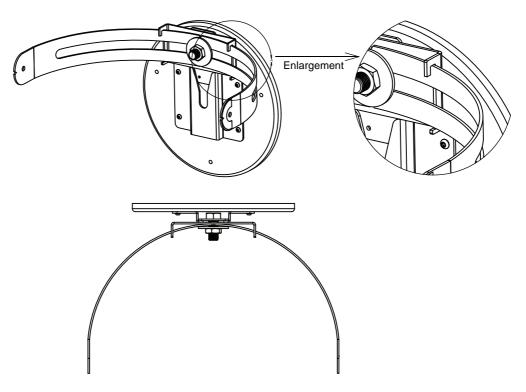


Figure 2-7 Final Assembly

2.6 Positioning

To position the unit:

- 1. Use the aiming adjustments described in Section 2.2 to verify the speaker aiming.
- 2. Tighten the M20 bolt behind the speaker to anchor side-to-side movement.
- 3. Tighten down the M10 screws (not shown) that are attached to the speaker on each side of the yoke.

2.7 Connecting Audio

The supported speaker input barrier strip accepts 16- to 12-gauge wire, with either #6 spade lugs or bare wire. Always use industry-standard practices for selecting wire gauge, based on the product power rating and cable length. Note that the barrier strip is marked with a plus (+) or red indicator to show the polarity. Always tie down the cable to available hardware to minimize any buzzing or pullouts.



Warning: TURN OFF ALL AMPLIFIERS WHEN CONNECTING THE LOUDSPEAKER WIRING.

2.8 Connecting the Safety Cable

After attaching the supported speakers to the structure, you must connect a safety cable from the speaker attachment point to an independent point on the building structure. An M6 eyebolt on the speaker is provided to attach an installer-supplied safety cable. Based on the weight of the supported speaker, all installer-supplied safety rigging hardware must have a minimum 5:1 safety factor, or greater if a higher requirement is mandated by local laws. Remove all slack to avoid any shock loading of the cable in a case where the primary rigging fails.

Make sure that the safety cable is secured so that it does not:

- Rattle against the speaker or speaker mount.
- Come into contact with exposed speaker wiring or the terminal block. A metal cable could short the connection causing the speaker to not work.



Warning: INSTALLER-SUPPLIED RIGGING HARDWARE MUST HAVE A MINIMUM 5:1 SAFETY FACTOR BASED ON THE WEIGHT OF THE APPARATUS. YOU MUST SECURELY TIGHTEN THE HARDWARE. DO NOT SECURE THE SAFETY CABLE BACK TO THE YOKE. REMOVE ALL SLACK FROM THE CABLE. REPLACE THE CABLE IF IT HAS BEEN PULLED IN A CASE WHERE THE PRIMARY RIGGING FAILS.

2.9 Testing the Speaker for Buzzing or Rattling

If possible, play sound through the speaker to check for any connection issues, buzzing, rattling, or vibrations.