



SLS™ Ceiling Tile Rigging Kits Installation Guide

Issue 4

Part Number 9112389

Models: FCT-24 and RCT-24



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Caution

1. Read these installation instructions prior to installing. Failure to read and follow the installation instructions in this guide may result in personal injury and/or property damage. Keep the installation instructions in an easily accessible location for future reference.
2. The ceiling and wall structures must be capable of supporting the installed product.
3. A system safety cable (not included) must be mounted to the structural steel above the suspended tile ceiling in an auditorium. Do not attach the system safety cable to any wood structure, wood roof joists, or wood frame. In all instances, the safety cable must be mounted in a way that supports a minimum 7 to 10 times the weight of the speaker, or as otherwise required by applicable laws and regulations.
4. 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.
5. Make sure no water pipes, natural gas lines, electrical wire, or conduit are present where the safety mount is to be installed.
6. Cutting or drilling into water pipes, natural gas lines, electrical wire, or conduit could cause serious personal injury or property damage.
7. This guide applies solely to the SLS product identified on the cover of this guide. This guide does not cover proper use or installation of any equipment or apparatus not supplied by SLS.
8. Prior to installation, inspect all hardware components for wear, deformations, corrosion, and missing or damaged parts.
9. Installation should be performed only 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. This guide is not a comprehensive source of rigging practices in general, and you assume any responsibility for the appropriate use of the SLS supplied product.
10. This product is intended for indoor installation/use only. Premature product failure or serious personal injury could occur if this product is used outdoors.
11. If you do not understand these installation instructions, please consult an installation professional.
12. Compliance with local building codes (and, where applicable, national codes) is the buyer and/or installer responsibility.
13. 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 which the product has not been designed for is not covered under any SLS warranty, nor is SLS liable for any loss or damage.
14. Users in other countries should consult with local regulatory authorities for specific codes and/or guidelines in the use of this product.
15. Read and follow all warnings, operating instructions, and safety instructions in this manual and on the unit.
16. Make sure there are adequate supports in the ceiling tile grid to handle the additional weight of the speakers. SLS does not assume liability for the ceiling grid support structure.

Table of Contents

Chapter 1 Introduction	1
1.1 Safety Precautions	1
1.2 SLS Ceiling Tile Rigging Kits Supported Speaker Weights	2
1.3 Inspection and Maintenance.....	2
1.4 Spare Parts.....	2
1.5 Customer Support	2
Chapter 2 Installing the Ceiling Tile Rigging Kits.....	3
2.1 Identifying the Rigging Kit Parts	3
2.2 Preparing the Speakers	5
2.3 Preparing the Ceiling	5
2.4 Performing the Final Assembly.....	5
2.5 Positioning	5
2.6 Connecting Audio	6
2.7 Connecting the Safety Cable.....	6
2.8 Using Bass Management	6
2.9 Dimensions	7

Introduction

This document provides step-by-step instructions for installing the SLS™ flat-mount ceiling tile rigging kit (part number FCT-24) and the SLS recessed-mount ceiling tile rigging kit (part number RCT-24). These kits were developed to reduce the time and expense required when installing SLS 3-axis speakers in Dolby Atmos® cinema environments.

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 SLS ceiling tile rigging kits to the venue structure, always inspect all hardware components for deformations, corrosion, and missing or damaged parts, and compare all included SLS ceiling tile rigging kits parts to the supplied parts list. Also inspect the venue rigging points (attachment points) for wear or structural integrity, and confirm that these points are suitably load rated for the suspended SLS ceiling tile rigging kits (including the weight of the loudspeakers that will be suspended from these kits).

Users in countries outside the US should not assume that their local regulations are equivalent to the state of California, US regulations, or practices.

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

1.2 SLS Ceiling Tile Rigging Kits Supported Speaker Weights

The products are designed for use only in connection with SLS Express series speakers (referred to in this document as “supported speakers”) and have 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 ceiling tile 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 ceiling tile rigging kits.

Inspect all suspension system hardware that is included with the SLS ceiling tile 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.

1.4 Spare Parts

You should replace any defective components with SLS approved parts. Contact the factory directly at 417-883-4549 to obtain approved replacement parts. SLS is not responsible for problems caused by using parts not provided by SLS for the SLS supplied portion of the rigging.

1.5 Customer Support

If you need assistance or have other questions, you can contact us at:

Dolby Laboratories

Portal: www.dolbycustomer.com

Email: cinemasupport@dolby.com

Region	Support Phone Numbers
Americas	+ 1-415-645-4900
EMEA	+ 44-179-384-2130
APAC	+ 86-400-692-6780
Japan	+ 81-3-4540-6782

Installing the Ceiling Tile Rigging Kits

This chapter is provided for licensed professional installers. The following sections include step-by-step instructions for installing both the SLS flat-mount kit and the SLS recessed-mount kit.

2.1 Identifying the Rigging Kit Parts

The flat-mount rigging kit and the recessed-mount rigging kit include the following parts:

1. Cap to seal the wire and safety cable runs from a plenum space above the ceiling grid. When tightened, it encapsulates the wires running through it to create the seal.
2. M20 bolt to serve as a coupler to the sealing cap. One half of the bolt threads onto the end of the hollow all-thread assembly (item 7), whereas the other half is for the threads in the sealing cap (item 1).
3. M20 bolt for tightening the entire assembly together.
4. Steel washer.
5. Neoprene washer (interchangeable with the two washers in item 6).
6. Neoprene washers. These two washers fit snugly onto item 7 and hold it in place while the speaker is lifted into position.
7. Hollow all-thread assembly to enable the speaker cables and safety wire to pass through this hollow tube. The two tabs at the bottom of this assembly fit inside the yoke slot to prevent the part from spinning when the M20 bolt (item 3) is tightened.
8. Metal tile bridge.

[Figure 2-1](#) and [Figure 2-2](#) show these parts.

Figure 2-1 and Figure 2-2 show the parts in the rigging kits. The SLS 3-axis speakers ship with the yoke installed, but the speaker body is not shown in the figures (for clarity).

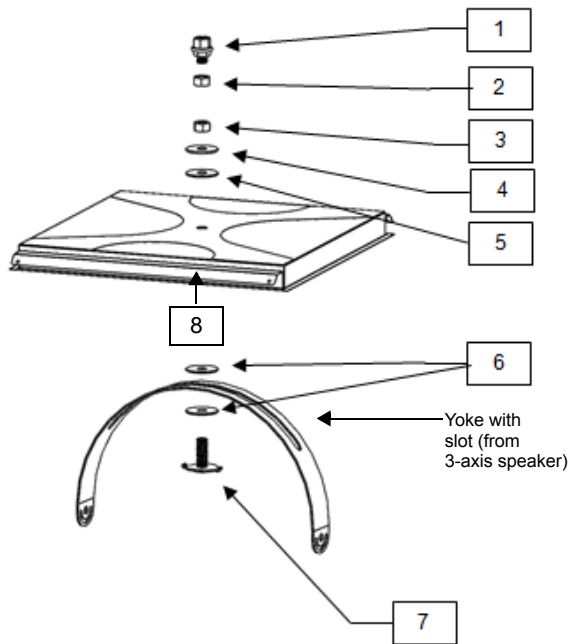


Figure 2-1 Flat-Mount Assembly

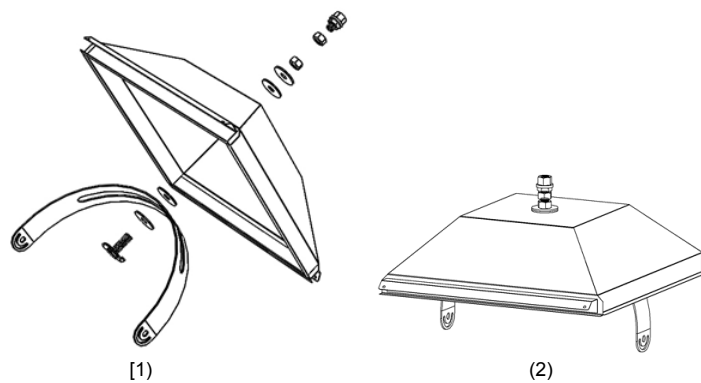


Figure 2-2 Recessed Assembly (1) and Recessed Assembly Fastened Together (2)

2.2 Preparing the Speakers

Refer to [Figure 2-1](#) and [Figure 2-2](#). To prepare the speakers:

1. Place a neoprene washer onto the hollow all-thread assembly, and push to the bottom.
2. Install the hollow all-thread assembly into the yoke slot (from the speaker side) with the tabs inside the slot.
3. Place the second neoprene washer onto the hollow all-thread assembly, and push down onto the yoke so that the assembly is held loosely to the yoke.

2.3 Preparing the Ceiling

To prepare the ceiling:

1. Remove two ceiling tiles, one for the speaker and one to allow access for the install.
2. If needed, cut a 2 x 4 ceiling tile in half to create a 2 x 2 section in the grid.
3. Place the metal tile bridge (either the flat or recessed version) into the grid. Make sure to position the supports over a main section of the grid and not a dressed section that is sometimes used in one orientation of the grid assembly.

The soft neoprene gasket (that is attached to the edge of the metal tile bridge), should rest against the lower edge of the grid (where a tile would normally set). Be sure to center the tile bridge in the grid opening, so that the edges are sealed on all four sides.

2.4 Performing the Final Assembly

Refer to [Figure 2-1](#) and [Figure 2-2](#). To perform the final assembly:

1. Place the third neoprene washer, the steel washer, and the M20 bolt on top of the metal tile bridge.
2. Lift the speaker into position underneath the metal tile bridge, and push up the hollow all-thread assembly through the hole in the center of the metal tile bridge.
3. Install the neoprene washer, and then the steel washer. Next, thread the M20 bolt onto the all-thread assembly. Loosely tighten the bolt so that side to side and rotation angles are adjustable.

2.5 Positioning

The rigging assembly provides a 3-axis aiming adjustment:

- Yoke attachment to speaker for up and down positioning
- Slot in yoke for side-to-side positioning
- Single point attachment to the metal tile bridge for rotation

To position the unit:

1. Use the 3-axis aiming adjustment to position the speaker.
For guidance on the proper aiming angles for your setup, refer to your surround system playback documentation.
2. After positioning the unit at the desired angles, tighten down the M10 screws (not shown) that are attached to the speaker on each side of the yoke.
3. Tighten the M20 bolt above the metal tile bridge.

2.6 Connecting Audio

To connect audio:

1. Bring your speaker wire down to the speaker (from above the tile grid) through the hollow all-thread assembly.
2. Connect your speaker wire to the yoke without making contact with the speaker enclosure (to minimize any buzzing).

The barrier strips accept 16 to 12 gauge wire, either with spade lugs or bare wire.

2.7 Connecting the Safety Cable

You must connect a safety cable (not included) as follows:

1. Use the safety cable to independently connect the 3-axis speaker to the building structure.
An M6 eyebolt (not shown) that is attached to the speaker input plate is provided for this purpose.
2. Bring your safety cable down to the speaker (from above the tile grid) through the hollow all-thread assembly. (This also secures the metal tile bridge into the safety cable support.)
As an additional option, the metal tile bridge provides locations on the edges to secure any secondary safety cabling.
3. Attach your safety cable to the yoke (hardware not provided), pulling it snugly against the M6 eyebolt to minimize the possibility of buzzing against the cabinet or the M6 eyebolt.

2.8 Using Bass Management

To help with any ceiling buzzing, you can apply bass management to the audio channels to a maximum of 150 Hz.

2.9 Dimensions

Following are the top view and side view dimensions for the flat and recessed rigging kits.

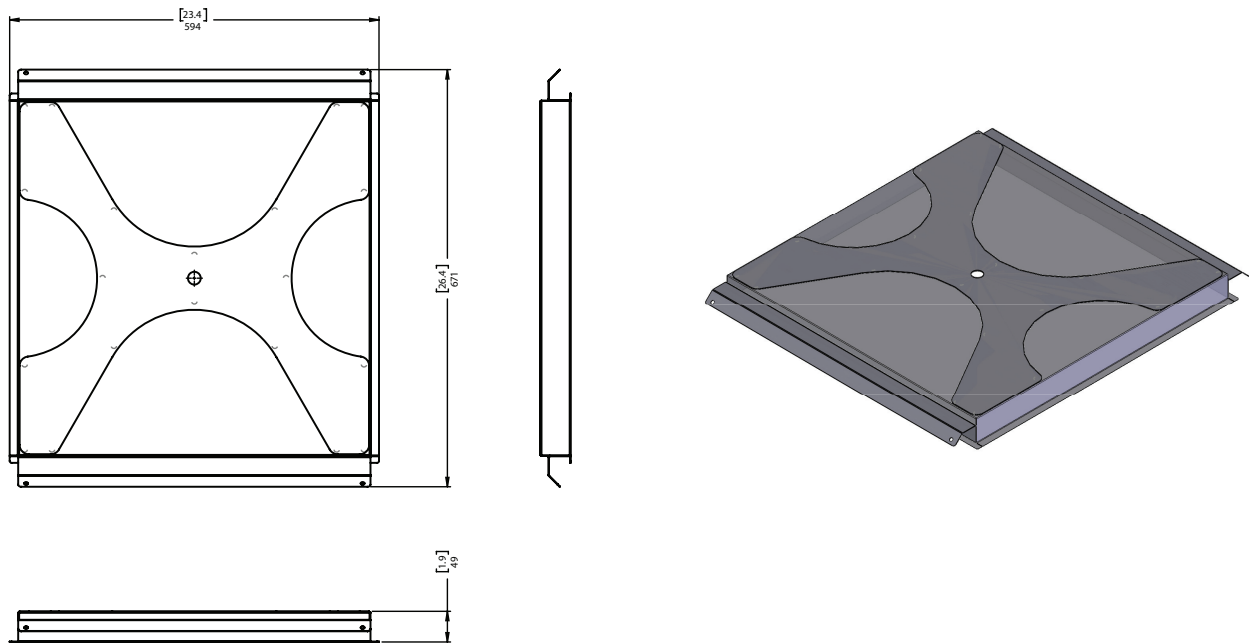


Figure 2-3 Flat-mount Rigging Kit (FCT-24) Top and Side Views

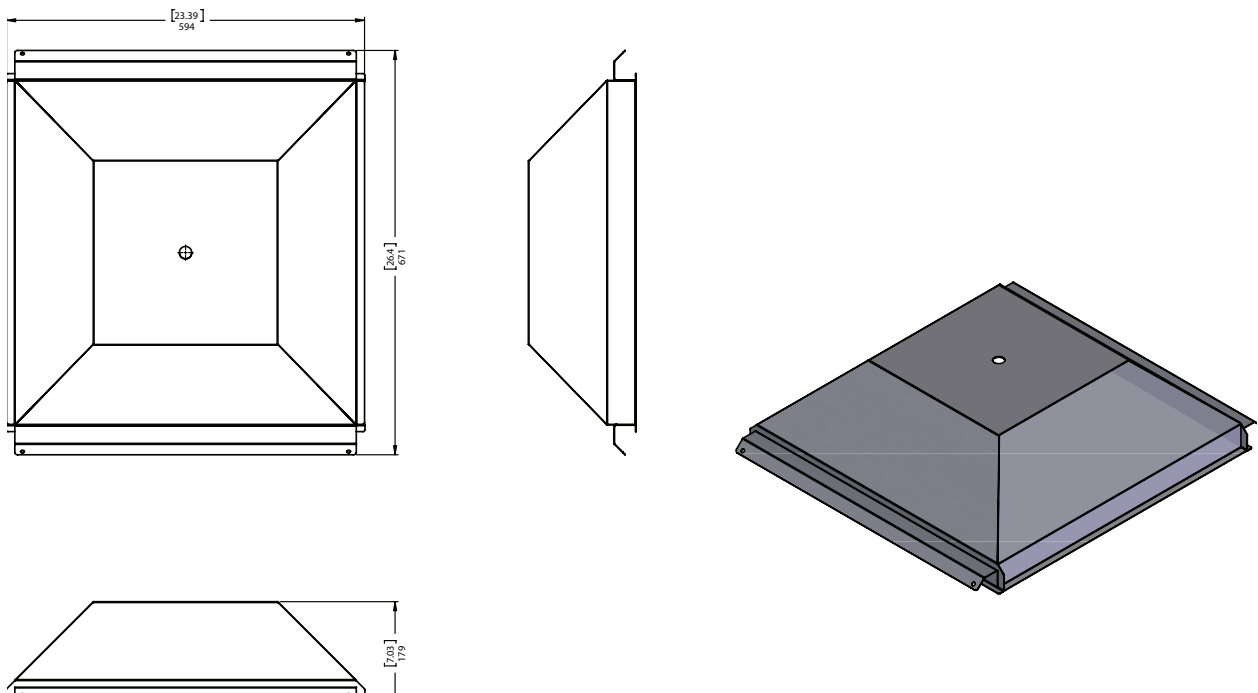


Figure 2-4 Recessed-mount Rigging Kit (RCT-24) Top and Side Views