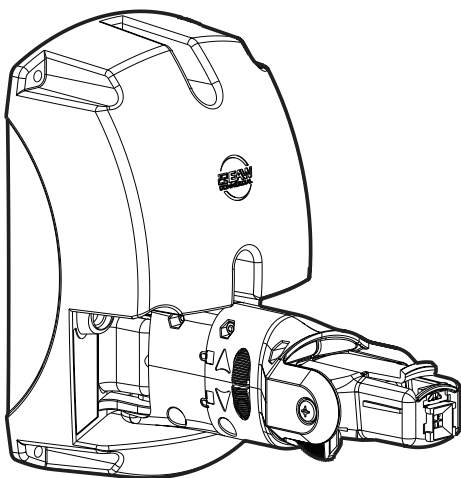




# CF-2LZ/CF-2TX

Clip Fit Bracket for SMS2124 and SMS2990 Loudspeakers



## INSTALLATION GUIDE

# 1. SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
11. The entire sound system must be designed in compliance with the current standards and laws regarding electrical systems.

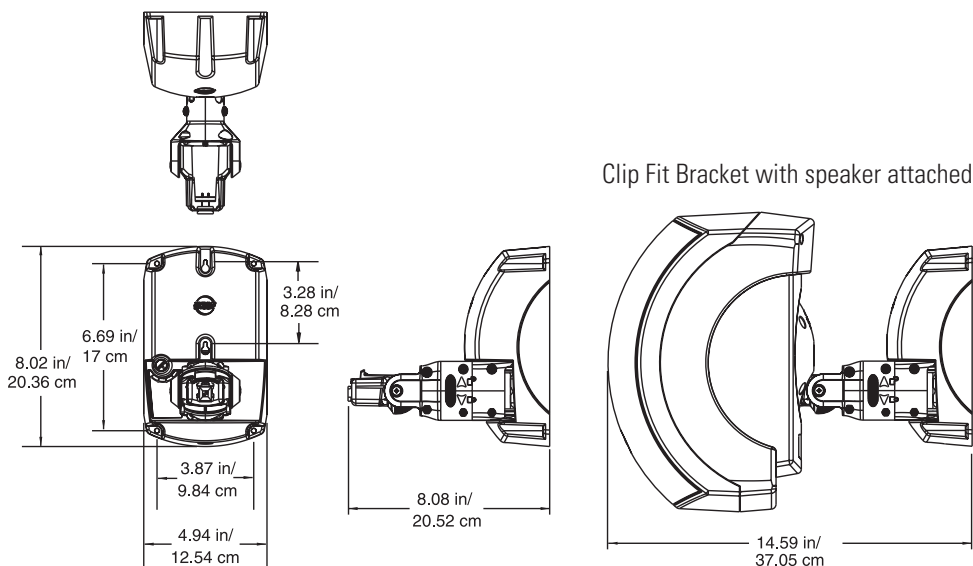


*The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the apparatus.*



**WARNING!** *This equipment has been designed to be installed by qualified professionals only! There are many factors to be considered when installing professional sound reinforcement systems, including mechanical and electrical considerations, as well as acoustic coverage and performance. EAW Commercial strongly recommends that this equipment be installed only by a professional sound installer or contractor.*

## Dimensions



Part No. 0023393 Rev. A 05/2008

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Printed in China.

12. Rigging Precautions: When mounting or suspending EAW Commercial loudspeaker enclosures, it is essential that load ratings, rigging techniques, and special safety considerations be appropriate for the installation. Use only the mounting/rigging points on the loudspeaker enclosure intended for this purpose. The user must determine the load requirements, dynamic loading, and any other contributing factors affecting the loudspeaker installation. The user must determine the proper design factor for specific applications and the required load rating of the connection to structure. Comply with all applicable federal, state, and local regulations.

EAW Commercial strongly recommends the following rigging system practices:

- Documentation: Thoroughly document the mounting/rigging design with detailed drawings and parts lists.
- Analysis: Have a licensed structural engineer or other qualified professional review and approve the mounting/rigging design before its implementation.
- Installation: Use personnel experienced and qualified for mounting/rigging loudspeakers in accordance with and in compliance with all federal, state and local regulations.



**DANGER:** Loudspeakers should be mounted or suspended only by persons with knowledge of the proper hardware and rigging techniques. Failure to follow these precautions may result in damage to the equipment, personal injury, or death.

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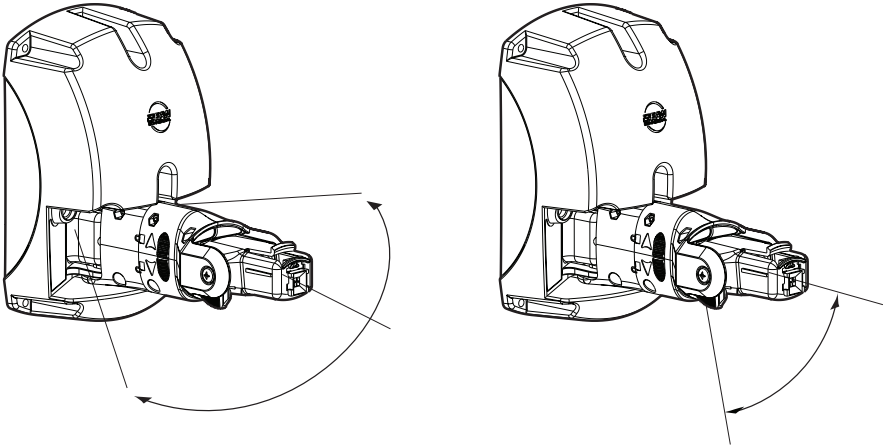
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## 2. INTRODUCTION

This bracket allows the SMS2124 and SMS2990 loudspeakers to be easily mounted to the wall, and electrically connected in the same operation. The bracket can be wired and mounted in place, and the loudspeaker added at a later time.

Once the bracket has been wired and mounted to the wall, the loudspeaker can be quickly pressed onto the input connector and held securely in place. It can be easily adjusted in vertical and horizontal angle, and locked in place with a locking wheel.



This manual covers two brackets:

- The CF-2TX has an internal transformer for constant voltage applications. The transformer has multiple taps, with a selector switch to set the desired power tap wattage for the system.
- The CF-2LZ is used for constant impedance applications, with no internal power transformer.
- Each bracket comes with two wire crimps, used for connecting the two bracket wires to your system wiring.

The mechanical mounting details are identical for each clip-fit bracket.

# 3. INSTALLATION

## Unpacking and Inspection

Visually inspect the outside of the shipping carton and check for any damage. After unpacking, if you find concealed damage to the bracket, save the packing materials for the carrier's inspection, notify the carrier immediately, and file a shipping damage claim. Although EAW Commercial will help in any way possible, it is always the responsibility of the receiving party to file any shipping damage claim. The carrier will help prepare and file this claim.

## Mounting Precautions



The mounting bracket is used for wall mounting the SMS2124 and SMS2990 loudspeakers ONLY.

**WARNING:** Installation should only be done by an experienced technician. Improper installation may result in damage to the equipment, injury or death. Make sure that the bracket is installed in a stable and secure way in order to avoid any conditions that may be dangerous for persons or structures:

- Check to make sure that the support surface (e.g., wall, etc.) has the necessary mechanical characteristics to support the weight of the bracket and loudspeaker without the danger of it falling.
- Always use support elements suitable for the material of the wall that will support the bracket (e.g., screw anchors for bricks, screw anchors for cement, etc.). Due to various construction methods and materials used today, the hardware for securing the bracket to the mounting surface is not supplied. Consult a building professional for the proper mounting hardware before mounting the bracket.
- Before mounting the bracket, carefully check all the components to be used to make sure there is no damage, deformation, corrosion and/or missing or damaged parts that could reduce the safety of the installation.
- Consult a professional rigger or structural engineer prior to mounting brackets and loudspeakers from a structure not intended for that use. Always know the working load limit of the structure supporting the loudspeaker. Always make sure that the rigging hardware minimum rating is at least five times the actual load.
- Avoid installing the bracket in places exposed to harsh weather conditions.

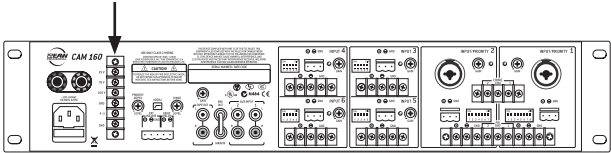
# CF-2TX Electrical Installation

Before the clip-fit bracket is mounted to the wall, the electrical connections to your system should be made. Two wire crimps are included to make the connections.



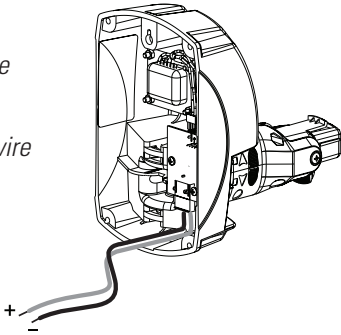
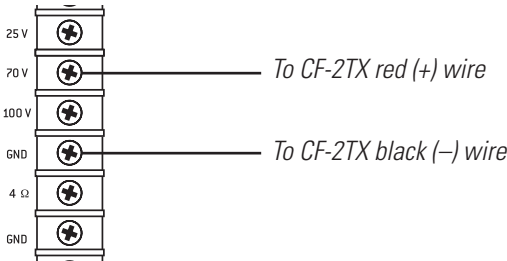
**Note:** Observe all local and national codes when installing the CF-2TX. All connections must be made with the power amplifier turned off.

The following examples of 70 V and 100 V connections show an EAW Commercial CAM160, a typical mixer/amplifier. Its speaker-level output is a screw terminal strip, with outputs for 25 V, 70 V, 100 V, ground, and 4 ohm.



## 70 V connection example

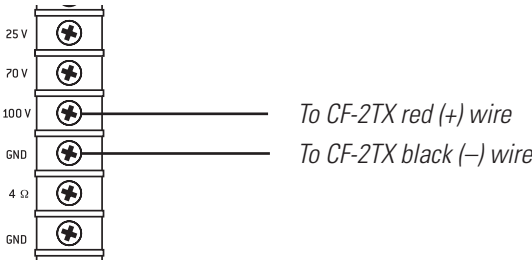
1. Connect the amplifier's 70 V terminal to the red (+) input wire on the CF-2TX.
2. Connect the amplifier's GND terminal to the black (–) input wire on the CF-2TX.



3. Select the power tap as shown on the next page.

## 100 V connection example

1. Connect the amplifier's 100 V terminal to the red (+) input wire on the CF-2TX.
2. Connect the amplifier's GND terminal to the black (–) input wire on the CF-2TX.



3. Select the power tap as shown on the next page.

## Selecting the power tap (CF-2TX only):



Make sure the power amplifier is turned off when adjusting the power taps or making connections.

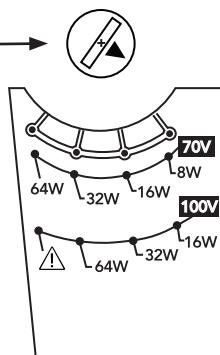
1. Select the desired power tap by turning the switch with a flat-ended screwdriver.

If you are using a 70 V system, the wattage ratings are: 8, 16, 32, and 64 W.

If you are using a 100 V system, the available wattage ratings are: 16, 32, and 64 W.



Make sure that you do not overload the amplifier. This may cause overheating to the amplifier, and possible damage to your loudspeakers. To avoid overloading, make sure that the selected taps on each bracket in the line add up to no more than 80% of the rated power of the amplifier being used.

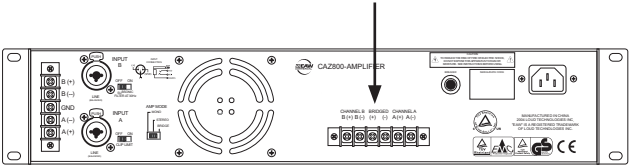


# CF-2LZ Electrical Installation

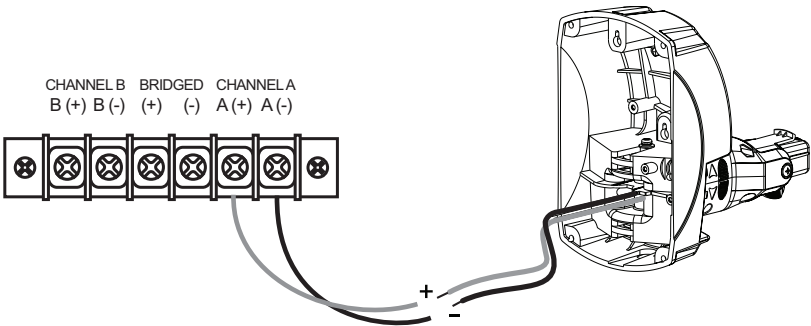


**Note:** Observe all local and national codes when installing the CF-2LZ clip-fit bracket. All connections to the loudspeaker must be made with the power amplifier turned off. Two wire crimps are included to make the connections.

The following example of a low-impedance connection uses a EAW Commercial CAZ800 amplifier. This amplifier uses a screw-terminal output.



1. Connect the A + terminal on the amplifier to the red (+) input wire on the CF-2LZ.
2. Connect the A – terminal on the amplifier to the black (–) input wire on the CF-2LZ.



The loudspeakers have a nominal impedance of 8 ohm. If you connect other loudspeakers in parallel, make sure that the overall impedance does not drop below the minimum required by your power amplifier.

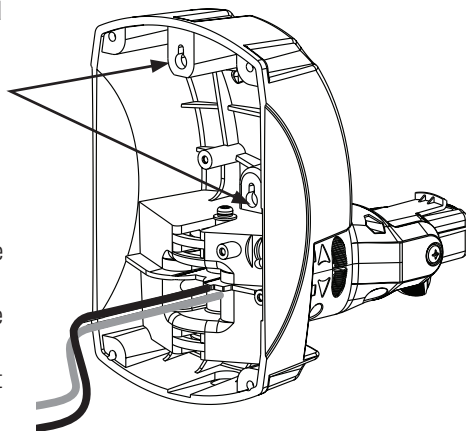


## CF-2LZ and CF-2TX Mechanical Installation

### Mounting the clip-fit brackets to the wall:

- a. Mount the wall bracket to the desired surface, in this vertical orientation only. Note that the bracket has two mounting keyholes with vertical spacing that allows them to be used with a standard wall J-box.

Two screws are supplied for securing the wall bracket to a J-box. Install the shorter 6-32 screw in the top hole of the J-box, and the longer screw in the bottom. Only screw them in by a few threads initially, then place the clip-fit bracket over the screws through the key-hole slots in the bracket as shown. Tighten the screws once the bracket is securely in place.

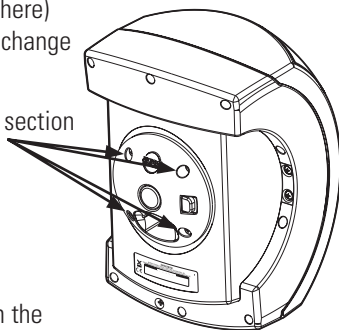


- b. In addition to securing the bracket to a J-box, secure it to a structural wall stud with user-supplied hardware. The spacing of the four corner holes is designed to align with structural studs on either side of the single-position J-box.

### Rotating the loudspeaker's input section (if required):

The loudspeaker can be mounted vertically (as shown here) onto the clip-fit bracket, or horizontally. If you want to change the orientation, follow these steps:

- a. Remove the four screws holding the circular input section in place.
- b. Pull out the input section by approximately half an inch, and rotate it through no more than 90 degrees.
- c. Secure the input section into its new position with the four screws.

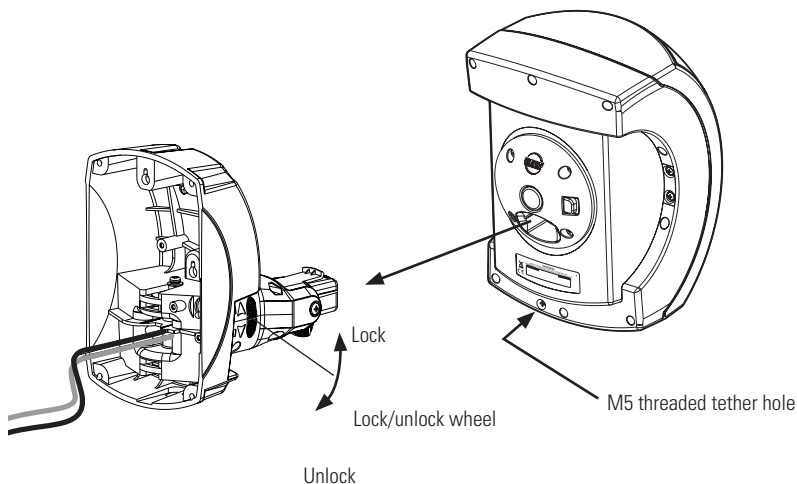


## Mounting the loudspeaker onto a bracket:

- Once the clip-fit bracket has been wired and secured to the wall, press the loudspeaker onto the input connector, until it clicks into place.



Make sure it is fitted on correctly and clicks into place securely.



## Adjusting the loudspeaker angle:

The adjustment and locking mechanism has been designed to be easy to use.

- Rotate the locking wheel until the loudspeaker can be rotated horizontally and vertically. Find the desired loudspeaker position, and then rotate the locking wheel until it locks this position. Slots are provided in the locking wheel to allow further tightening with a flathead screwdriver if required.
- Perform a listening test to verify that the coverage is acceptable.

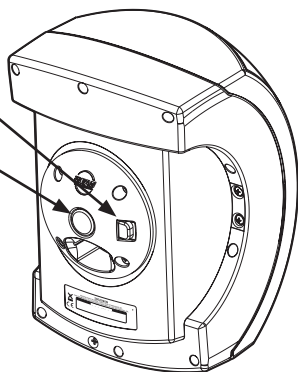
## Tethering the loudspeaker:

- An M5 threaded hole in the bottom rear of the loudspeaker is provided for tethering the loudspeaker. This will reduce the chance of it from falling during structural events such as earthquakes or fires. Professional installers will be able to advise the best tethering system for your installation.

## Unmounting the loudspeaker:

- Slide the red plastic tab left, towards the center of the loudspeaker, and hold it there while you press the red center button inwards.

Carefully pull the loudspeaker off the bracket, using both hands.



## 4. SERVICE INFORMATION

In the event that your bracket should require servicing, please follow these instructions:

1. Call EAW Commercial Tech Support at 1-888-337-7404, 7 am to 5 p.m. PST (Monday-Friday), to verify the problem and obtain a Return Authorization (RA) Number. Be sure to have the serial number of the unit when you call. You must have a Return Authorization Number in order to obtain warranty service at an authorized service center. You can also e-mail EAW Commercial Tech Support at: [service@eaw.com](mailto:service@eaw.com)
2. Pack the unit in its original packaging. THIS IS VERY IMPORTANT. LOUD Technologies is not responsible for any damage that occurs during shipping due to non-conventional packaging. Original packaging helps to minimize the possibility of shipping damage.
3. Include a legible note stating your name, return address (no P.O. boxes), daytime phone number, Return Authorization Number, and a detailed description of the problem, including how we can duplicate it.
4. Write the Return Authorization Number in BIG BOLD PRINT on the top of the box.
5. Tech Support will tell you where to ship the unit when you call for an RA Number. We suggest insurance for all forms of cartage.

## 5. EAW COMMERCIAL WARRANTY

**Warranty:** LOUD Technologies Inc. requires its authorized EAW Commercial distributors to abide by the following warranty terms for all EAW Commercial brand products (all dates are from the date of delivery from an Authorized EAW Commercial Distributor to the end user/installation site): Loudspeakers – 5 years; Active Electronics – 5 years; Accessories – 2 years.

**What Is Covered:** Defects in workmanship and materials and against malfunctions. EAW Commercial distributors must remedy all such defects and malfunctions without charge for parts or labor if the warranty applies. Final determination of warranty coverage lies solely with each authorized EAW Commercial distributor.

**What Is Not Covered:** This warranty does not extend to damage or malfunctions resulting from, but not limited to, shipment, improper installation, misuse, neglect, abuse, normal wear, accident, or to any product on which the serial number has been modified or removed. Exterior defects in or damage to the exterior appearance are specifically excluded from this warranty. EAW Commercial distributors shall not be liable for incidental or consequential damages resulting from the use of EAW Commercial products. Repairs and/or modifications by other than an Authorized EAW Commercial Distributor automatically voids this warranty.



**Correct Disposal of this product:** This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.



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EAW Commercial | One Main Street | Whitinsville, MA 01588 USA | TEL toll free within US/Canada 888.337.7404  
TEL outside US 425.892.6503 | FAX 425.485.1152 | [www.eaw.com](http://www.eaw.com)

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