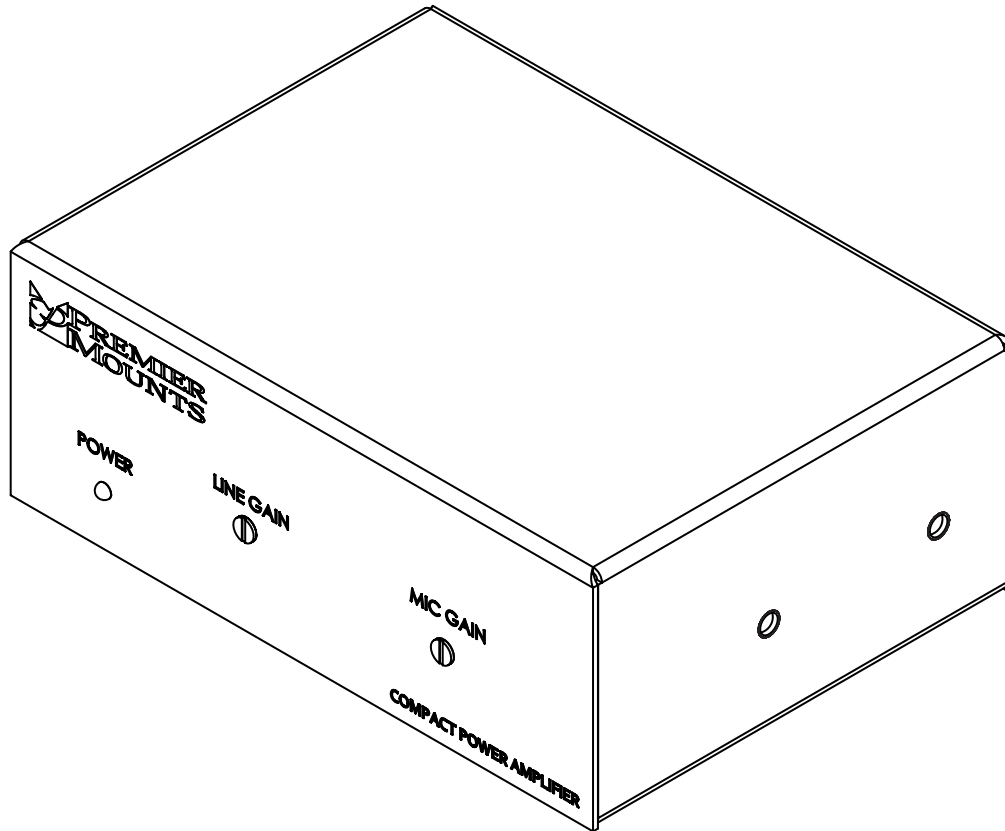


## INSTALLATION INSTRUCTIONS



### CPA-50

Compact Power Amplifier

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## Warning Statements



Prior to the installation of this product, these installation instructions must be read and completely understood. Keep these installation instructions in an easily accessible location for future reference.



Proper installation procedure by a qualified service technician must be followed, as outlined in these installation instructions. Failure to do so could result in property damage, serious personal injury, or even death.



Safety measures must be practiced at all times during the assembly of this product. Use proper safety equipment and tools for the assembly procedure to prevent personal injury.



Premier Mounts does not warrant against damage caused by the use of any Premier Mounts product for purposes other than those for which it was designed or damage caused by unauthorized attachments or modifications, and is not responsible for any damages, claims, demands, suits, actions or causes of action of whatever kind resulting from, arising out of or in any manner relating to any such use, attachments or modifications.



Be aware of the mounting environment. If drilling and/or cutting into the mounting surface, always make sure that there are no electrical wires in wall. Cutting or drilling into an electrical line may cause serious personal injury.



Make sure there are no water or natural gas lines inside the wall where the mount is to be located. Cutting or drilling into a water or gas line may cause severe property damage or personal injury.



This product is intended for indoor use only. Use of this product outdoors could lead to product failure and/or serious personal injury.



Do not install near sources of high heat. Do not install on a structure that is prone to vibration, movement or chance of impact.


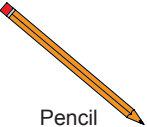
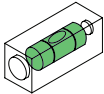


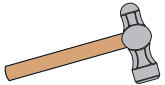


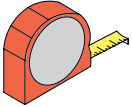




Contact Premier Mounts with any questions:  
(800) 368-9700  
techsupport@mounts.com



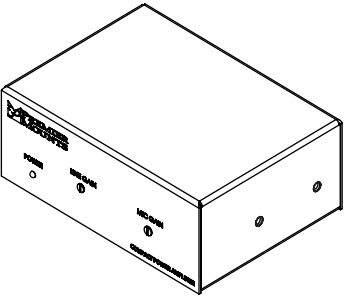





## Installation Tools

The following tools may be required depending upon your particular installation. They are not included.

 Hand Held Drill	 Pencil	 Level	 Protective Eyewear
 18 AWG Wire Stripper	 Hammer	 Ladder	 #1 Flat Blade Screwdriver
 Tape Measure	 M5 Security Allen Wrench	 #1 Phillips Tip Screwdriver	

## Parts List

Make sure your Premier Mounts product has the following hardware and components before beginning installation. If there are parts missing and/or damaged, stop the installation and call Premier Mounts at (800) 368-9700.

Amplifier Hardware			
 Compact Power Amp (Qty 1)	 AC Adapter (Qty 1)		
 AC Connector (Qty 1)	 4-Pin Captive Screw Plug (Qty 1)	 3-Pin Captive Screw Plug (Qty 1)	 Rubber Foot (Qty 4)

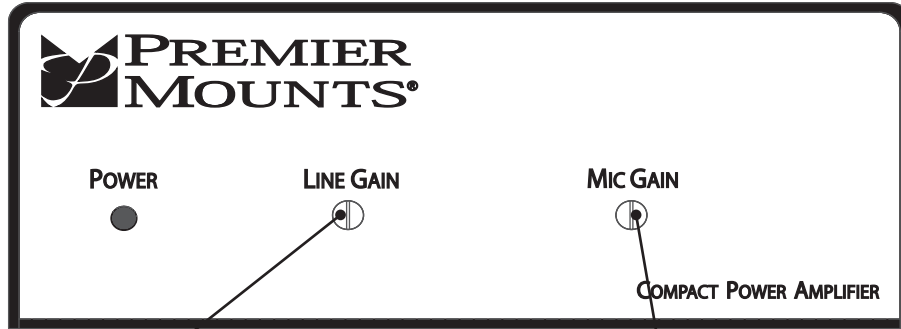


## Features

The CPA-50 compact power amplifier is designed to work with the GB-Audio or UNI series of short-throw projector arm mounts. The energy-efficient, 50W amp meets Energy Star® Class-D specifications and is perfect for a classroom or meeting room environment.

### Automatic Standby

Standby mode activates if no input signal is detected for 20 minutes.



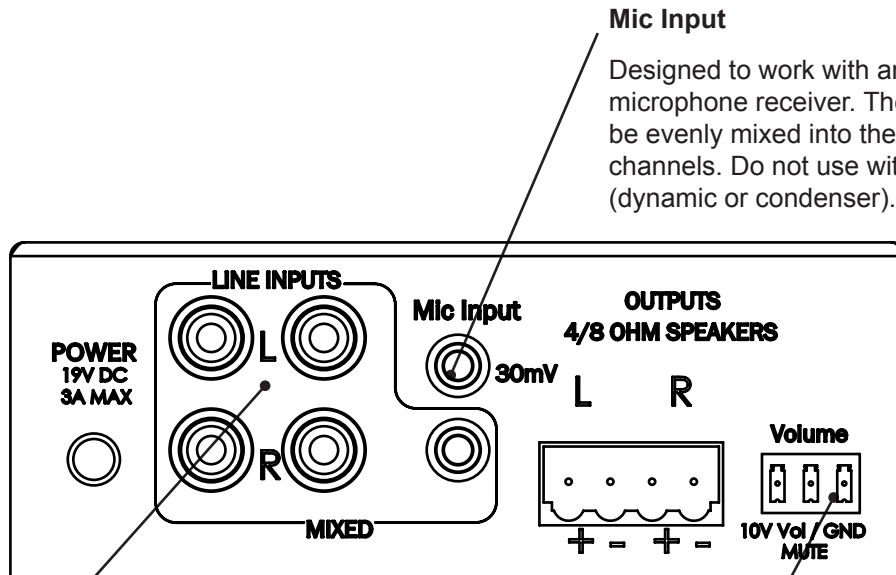
Front View

#### Line Gain

Use the Line Gain potentiometer on the front panel to control the gain on the mixed signal.

#### Mic Gain

Use the Mic Gain potentiometer on the front panel to control the gain on the mic signal.



Back View

#### Mic Input

Designed to work with an RF or IR wireless microphone receiver. The mono sound will be evenly mixed into the left and right amp channels. Do not use with wired microphones (dynamic or condenser).

#### Input Mixing

The CPA-50 has two line-level stereo inputs on RCA connectors plus one line-level stereo input on a 3.5mm mini-jack and one sub-line level (30 mV) mono microphone input on a 3.5mm mini-jack. Input switching is not needed. All signals are mixed inside the amp at a 1:1:1 ratio.

#### External Volume Control

You can plug in an optional 10k volume pot. The external volume control only adjusts the mixed line-level signals, not the mic signal.



# Installing the Compact Power Amplifier

## Introduction

The CPA-50 Amplifier is designed to complement Premier Mounts' On-Wall Speakers, Universal Short-Throw Projector Arm Mounts, Universal Digital Signage Mounts and GearBox™ Audio Mounts. All parts, metal plates, screws, and bolts that are required to complete the assembly are provided with the speakers. Please read through the safety instructions before installation.

**⚠** When wiring the + and - outputs, strip off the insulation from the speaker wires by 3/16". Make sure the speaker wire ends do not touch. Keep exposed wire ends short after stripping. If the speaker wires touch, they may short the amplifier.

Many subwoofer speaker-level crossovers connect the negative side to the ground. This setup will not work with the CPA-50 amplifier. Connect the subwoofer to the line-level signal instead.

## Wiring

### Step 1

**👉** Premier Mounts UNI-SPKR On-Wall Speakers (not included) come with the speaker wires pre-attached. Strip the speaker wires evenly and split the positive and negative wires first, if needed.

**?** If you are connecting the sound sources directly to the projector, follow the suggested Option A wiring diagram (Figure 1) for reference.

If you are connecting the sound sources directly to the CPA-50 Power Amp and are using the external volume control, follow the suggested Option B wiring diagram (Figure 2) and 10k Pot Volume Wiring Diagram (Figure 3) for reference.

Proceed to **Step 2** on page 6.

#### OPTION A

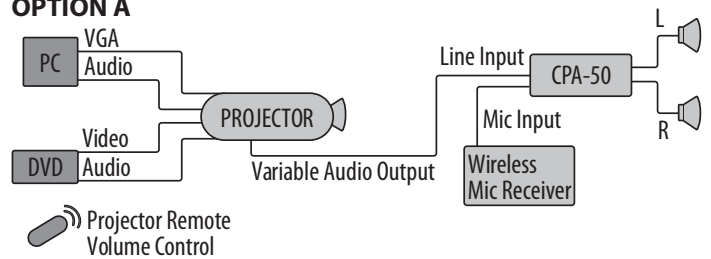


Figure 1

#### OPTION B

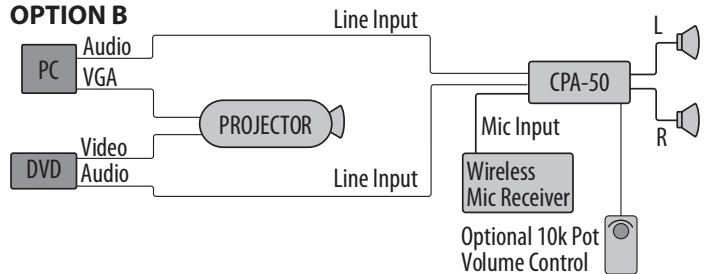


Figure 2

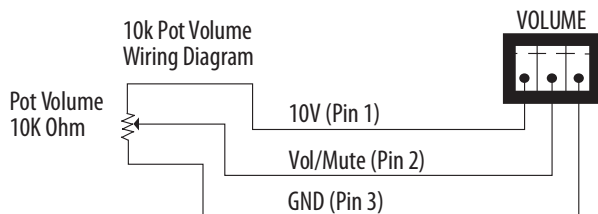


Figure 3



### Step 2

- 1 Use standard RCA connectors and/or 3.5mm mini-cables to connect the input devices (e.g., the projector, other audio sources) to the power amp.

Match the wiring polarity. For example, red for positive, black or white for negative.

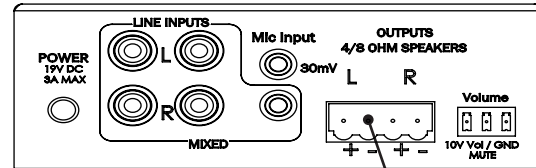
Make sure no wire strand bridges (shorts) the adjacent terminals.

- 2 Insert all four wires on each speaker into the blue 4-pin captive screw plug supplied with the power amp.

Use a #1 Phillips screwdriver to tighten the locking screws.

- 3 Insert the captive screw plug into the receptacle on the amp's rear panel (see drawing).

- 4 Attach the power amp plug to the amplifier.



Amp Receptacle for the Blue 4-Pin Captive Screw Plug

Do you need to wire the 10k pot volume?

If **Yes**, proceed to **Step 3** below.

If **No**, proceed to “Installing the Power Amp” on page 7.

### Step 3

When wiring the + and - outputs, strip off the insulation from the external volume control wire by 3/16". Make sure the wire ends do not touch. Keep exposed wire ends short after stripping. If the wires touch, they may short the amp.

- 1 Follow the 10k Pot Volume Wiring Diagram to connect the external volume control to the amp (Figure 1).

- 2 Insert all three pins from the external volume control into the green 3-pin captive screw plug supplied with the amp (see drawing).

Use a #1 flat blade screwdriver to tighten the locking screws.

- 3 Insert the captive screw plug into the receptacle on the amp's rear panel (Figure 2).

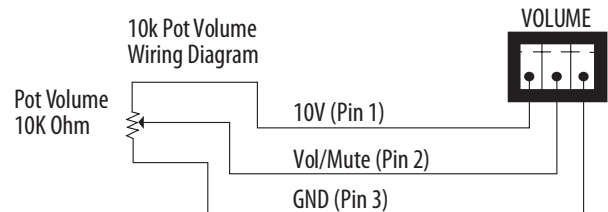


Figure 1

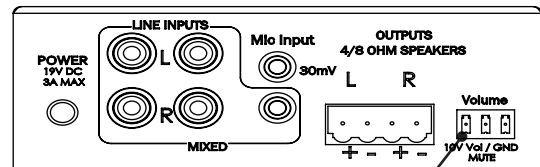


Figure 2

Amp Receptacle for the Green 3-Pin Captive Screw Plug



## Installing the Power Amp



These instructions assume the GearBox™ is attached to the wall. See installation instructions for the mount if needed. As another option, you may attach the amp to a rack. Optional feet are included for standalone installation.

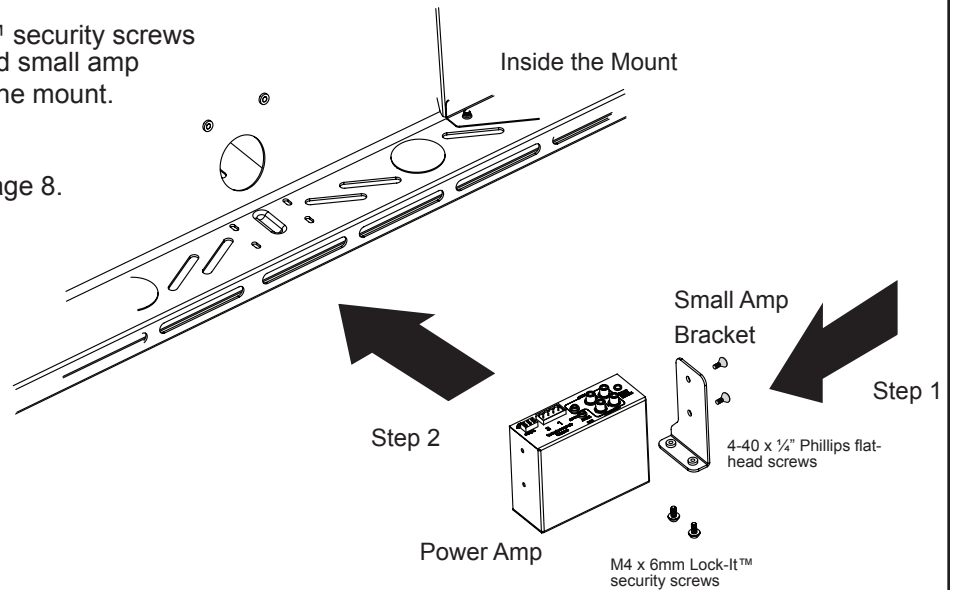
- 1 Use two (2) 4-40 x 1/4" Phillips flathead screws to attach the CPA-50 power amplifier to the small amp bracket.
- 2 Place the power amplifier inside the GearBox™ (see drawing).



The mounting bracket and screws are included with the UNI-SPKR On-Wall Speakers.

- 3 Use two (2) M4 x 6mm Lock-It™ security screws to attach the power amplifier and small amp bracket to the inside bottom of the mount.


Proceed to the "Setup" section on page 8.







## Setup

### Line Gain Control and Volume Setup

 The following instructions assume the GearBox™ and speaker system are mounted to a wall, and that the amp is plugged in. As another option, you may attach the amp to a rack. Optional feet are included for standalone installation.

 If you are using the Option A wiring method of installation on page 6, do the following:

- 1 Insert a #1 flat blade screwdriver through the GearBox™ slot to the Line Gain control.
- 2 To test the volume, use the screwdriver to gently turn the Line Gain control on the amp counter-clockwise to the end (Figure 1).
- 3 Turn Line Gain control clockwise 1/4 turn.
- 4 Play sound from the loudest audio source input on the projector to help adjust the amp volume.
- 5 Turn the Line Gain control on the amp clockwise slowly until the sound distorts.
- 6 Turn the Line Gain control counter-clockwise until the distortion disappears.
- 7 Adjust the projector volume until you reach the desired sound level.

 If you are using the Option B wiring method of installation on page 6, do the following:

- 1 Insert a #1 flat blade screwdriver through the GearBox™ slot to the Line Gain control.
- 2 To test the volume, use the screwdriver to gently turn the Line Gain control on the amp counter-clockwise to the end (Figure 1).
- 3 Turn the Line Gain control clockwise 1/4 turn.
- 4 Turn the 10k pot volume to the maximum level.
- 5 Play sound through all the audio inputs on the amp.
- 6 Choose the loudest audio source to help adjust the amp volume.
- 7 Turn the Line Gain control on the amp clockwise slowly until the sound distorts.
- 8 Turn the Line Gain control counter-clockwise until the distortion disappears.
- 9 Adjust the 10k pot volume until you reach the desired sound level.

After setting up the Line Gain, let the sound continue to play and proceed to the “**Mic Gain Setup**” section on page 9.

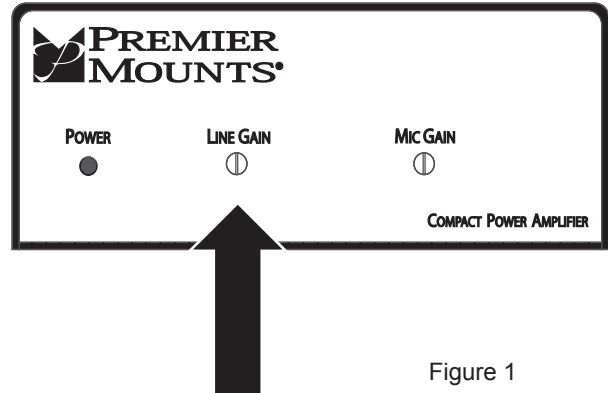


Figure 1





## Mic Gain Control Setup

1 Attach a microphone device to the amp input.



Make sure the mic is turned on.

2 Insert a #1 flat blade screwdriver through the GearBox™ slot to the Mic Gain control.

3 Use the screwdriver to gently turn the Mic Gain control on the amp counter-clockwise to the end (Figure 1).

4 Turn on the mic receiver, if applicable.

5 Have someone stand in the desired presentation location and speak into the mic.

6 Turn the Mic Gain control clockwise until you reach the desired sound level.

7 Test feedback by having someone walk around the room and speak into the mic.

? Is there feedback coming from the mic?

If **Yes**, turn the Mic Gain control counter-clockwise until the feedback is gone.

If **No**, continue to step 8.

8 Play music through the amp as you test the mic.

? Is the music too loud compared to the voice on the mic?

If **Yes**, turn the Line Gain control counter-clockwise until you reach the desired sound balance.

If **No**, you have finished installation.

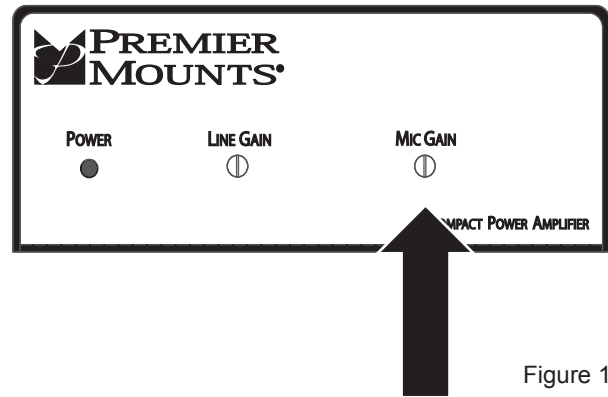
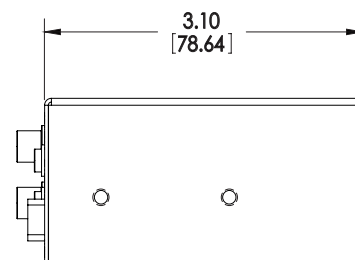
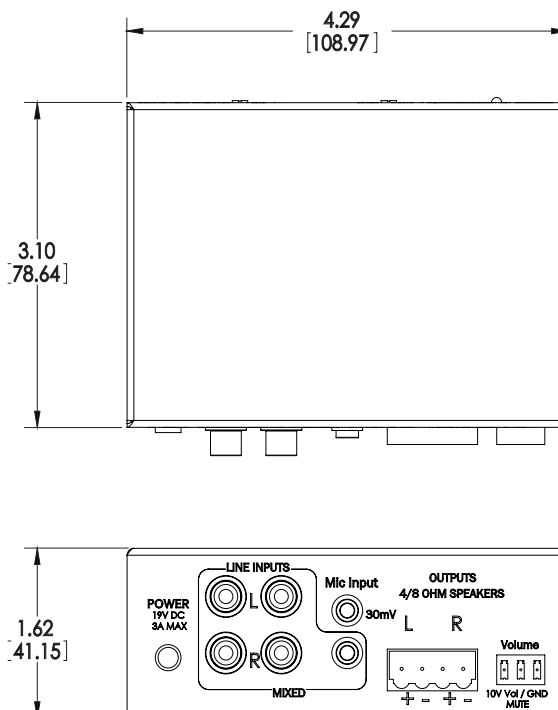


Figure 1

## Technical Specifications

All measurements are in inches(mm).







## Warranty

### PREMIER MOUNTS LIMITED 3-YEAR WARRANTY

#### What and Who is Covered by this Limited 3-Year Warranty and for How Long

Premier Mounts warrants this product to be free from defects in material and workmanship for three years after the purchase of this product. The limited warranty is valid only for the original purchaser of the product.

#### What Premier Mounts Will Do

At the sole option of Premier Mounts, Premier Mounts will repair or replace any product or product part that is defective. If Premier Mounts chooses to replace a defective product or part, a replacement product or part will be shipped to you at no charge, but you must pay any labor costs.

#### What is Not Covered; Limitations

PREMIER MOUNTS DISCLAIMS ANY LIABILITY FOR DAMAGE TO MOUNTS, ADAPTERS, DISPLAYS, PROJECTORS, OTHER PROPERTY, OR PERSONAL INJURY RESULTING, IN WHOLE OR IN PART, FROM IMPROPER INSTALLATION, MODIFICATION, USE OR MISUSE OF ITS PRODUCTS.

PREMIER MOUNTS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. PREMIER MOUNTS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO, INABILITY TO USE ITS PRODUCTS OR LABOR COSTS FOR REMOVING AND REPLACING DEFECTIVE PRODUCTS OR PARTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

#### What Customers Must Do for Limited Warranty Service

If you discover a problem that you think may be covered by the warranty you MUST REPORT it in writing to the address below within thirty (30) days. Proof of purchase (an original sales receipt) from the original consumer purchaser must accompany all warranty claims. Warranty claims must also include a description of the problem, the purchaser's name, address, and telephone number. General inquiries can be addressed to Premier Mounts Customer Service at 1-800-368-9700. Warranty claims will not be accepted over the phone or by fax.

Premier Mounts  
Attn: Warranty Claim  
3130 East Miraloma Ave.  
Anaheim, CA 92806

#### How State Law Applies

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

## Disclaimer

Premier Mounts intends to make this manual accurate and complete. However, Premier Mounts makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without notice or obligation of any kind. Premier Mounts makes no representation of warranty, expressed or implied, regarding the information contained herein. Premier Mounts assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.



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