

KICKER 48DCWR122-RS, 46CXA8001, HA-AK8

KICKER 48DCWR122-RS Dual 12" CompR Subwoofer System Instruction Manual

Comprehensive guide for the KICKER 48DCWR122-RS Dual 12" CompR Series Subwoofer Enclosure, 46CXA8001 Mono Amplifier, and HA-AK8 Amplifier Installation Kit.

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your KICKER car audio system. This system includes a KICKER 48DCWR122-RS Dual 12" CompR Series Subwoofer Enclosure, a KICKER 46CXA8001 Mono Amplifier, and a Harmony Audio HA-AK8 Amplifier Installation Kit. Please read this manual thoroughly before attempting installation or operation to ensure proper function and safety.

Safety Precautions:

- Always disconnect the vehicle's battery negative terminal before beginning any electrical work.
- Ensure all wiring is properly routed and secured to prevent damage or short circuits.
- Use appropriate personal protective equipment during installation.
- Consult a professional car audio installer if you are unsure about any part of the installation process.

2. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 x KICKER 48DCWR122-RS Dual 12" CompR Series Subwoofer Enclosure
- 1 x KICKER 46CXA8001 Car Audio Class D Mono Amplifier
- 1 x Harmony Audio HA-AK8 Car Stereo Complete 8 Gauge Amplifier Install Kit



Figure 2.1: Front view of the KICKER Dual 12 inch CompR Subwoofer Enclosure. This image shows the two 12-inch subwoofers mounted in a black carpeted enclosure with the KICKER logo.



Figure 2.2: Top view of the KICKER 46CXA800.1 Mono Amplifier. The amplifier is a compact black unit with the KICKER logo and model number CXA800.1 visible.



Figure 2.3: Harmony Audio HA-AK8 8 Gauge Amplifier Installation Kit components. This image displays various cables, a fuse holder, terminals, and zip ties included in the installation kit.

3. SETUP & INSTALLATION

Proper installation is crucial for optimal performance and safety. It is recommended to have this system installed by a qualified professional.

3.1 Subwoofer Enclosure Placement

The KICKER 48DCWR122-RS enclosure is designed for freestanding placement. Choose a secure location in your vehicle, typically the trunk or cargo area, where it will not shift during driving. Ensure adequate ventilation around the enclosure.

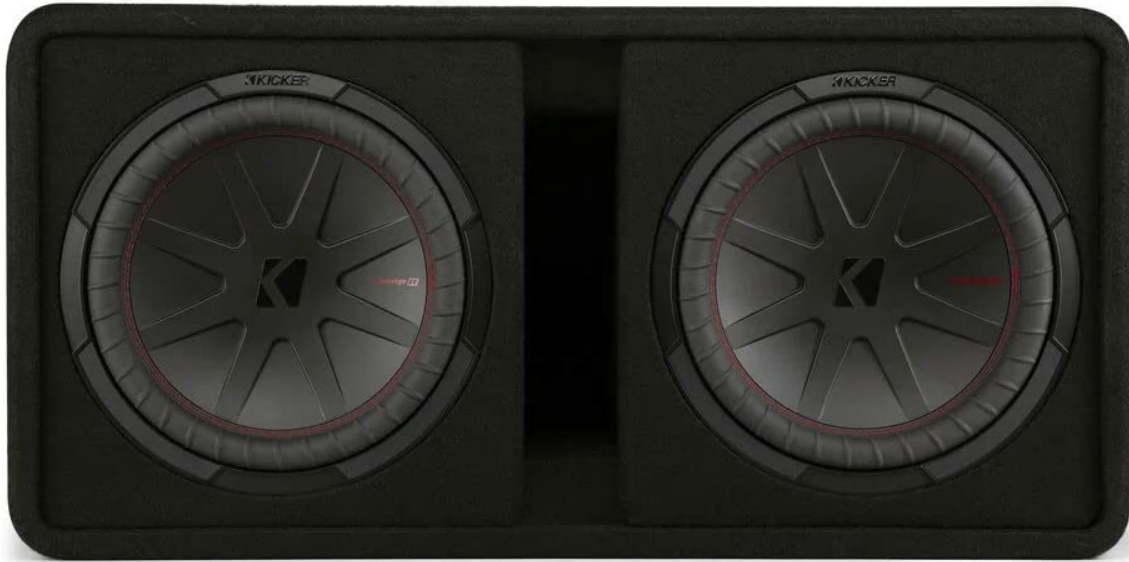


Figure 3.1: Rear view of the KICKER Dual 12 inch CompR Subwoofer Enclosure. This view shows the rear panel, typically where the speaker terminals are located for connection to an amplifier.

3.2 Amplifier Installation (KICKER 46CXA8001)

Mount the amplifier in a location that provides good air circulation and is protected from moisture and excessive heat. Common locations include under a seat, in the trunk, or attached to the subwoofer enclosure.

3.2.1 Power Wiring (HA-AK8 Kit)

1. **Power Cable (+12V):** Connect the 8-gauge power cable from the HA-AK8 kit to the vehicle's positive battery terminal. Install the fuse holder (included in HA-AK8 kit) as close to the battery as possible (within 18 inches) to protect the vehicle's electrical system. Route the power cable to the amplifier's +12V terminal.
2. **Ground Cable (GND):** Connect the 8-gauge ground cable from the HA-AK8 kit to a clean, unpainted metal surface on the vehicle's chassis. Ensure a solid, low-resistance connection. Connect the other end to the amplifier's GND terminal. The ground cable should be as short as possible, ideally less than 3 feet.
3. **Remote Turn-On Cable (REM):** Connect a thin gauge wire (typically blue) from your head unit's remote output to the amplifier's REM terminal. This wire turns the amplifier on and off with your head unit.

3.2.2 Signal Input

The 46CXA8001 amplifier supports both high-level (speaker level) and low-level (RCA) inputs. Use the appropriate input type based on your head unit's outputs.

- **Low-Level Input:** If your head unit has RCA outputs, connect them to the amplifier's RCA input jacks.
- **High-Level Input:** If your head unit does not have RCA outputs, use the speaker-level inputs. Refer to the amplifier's specific wiring diagram for connecting speaker wires directly to the amplifier.

3.2.3 Speaker Output

Connect the subwoofer enclosure's speaker terminals to the amplifier's SPEAKER output terminals. Ensure correct polarity (+ to + and - to -) for optimal sound. The 48DCWR122-RS enclosure is wired for a 2 Ohm load.



Figure 3.2: Connection side of the KICKER 46CXA8001 Mono Amplifier. This image shows the power (GND, REM, +12V) and speaker output terminals on one side of the amplifier.

4. OPERATING INSTRUCTIONS

Once the system is installed, follow these steps for initial setup and operation:

4.1 Initial Power-Up

1. Double-check all wiring connections.

2. Reconnect the vehicle's battery negative terminal.
3. Turn on your head unit. The amplifier should power on (indicated by an LED).

4.2 Amplifier Settings (KICKER 46CXA8001)

The 46CXA8001 amplifier features several adjustable controls:

- **Gain Control:** Adjust the gain to match the output voltage of your head unit. Start with the gain at minimum and slowly increase it until you hear distortion, then back off slightly. This is not a volume control.
- **Low Pass Crossover (LPF):** Variable from 50-200Hz. Set this to filter out frequencies above your desired subwoofer range. A common starting point is 80-100Hz.
- **Subsonic Filter:** Fixed at 25Hz. This filters out extremely low frequencies that the subwoofer cannot reproduce efficiently, protecting it from damage.
- **KICKER EQ Boost:** Variable to +12dB, centered at 40Hz. Use this to fine-tune the bass response to your preference. Use sparingly to avoid distortion.

5. MAINTENANCE

Regular maintenance ensures the longevity and performance of your KICKER system.

- **Cleaning:** Keep the amplifier and subwoofer enclosure clean and free of dust and debris. Use a soft, dry cloth. Do not use liquid cleaners directly on components.
- **Connections:** Periodically check all power, ground, remote, and speaker connections to ensure they are secure and free from corrosion.
- **Ventilation:** Ensure the amplifier's heatsink fins are not obstructed to allow for proper cooling.

6. TROUBLESHOOTING

If you experience issues with your system, refer to the following common problems and solutions:

6.1 No Power / Amplifier Not Turning On

- **Check Fuse:** Verify the fuse in the HA-AK8 kit's fuse holder is intact. Replace if blown.
- **Power Connection:** Ensure the +12V power cable is securely connected to the battery and amplifier.
- **Ground Connection:** Confirm the ground cable has a solid connection to the chassis and amplifier.
- **Remote Turn-On:** Check that the remote wire is connected to both the head unit and amplifier, and that the head unit is powered on.

6.2 No Sound from Subwoofer

- **Speaker Connections:** Verify speaker wires are correctly connected to both the amplifier and subwoofer enclosure, with correct polarity.
- **Signal Input:** Ensure RCA or high-level input cables are securely connected to both the head unit and amplifier.
- **Amplifier Gain:** Increase the amplifier's gain control slightly.
- **Head Unit Settings:** Check head unit's subwoofer output settings and volume.

6.3 Distorted Sound

- **Gain Setting:** Reduce the amplifier's gain control. It may be set too high.

- **Input Level:** Ensure the head unit's volume is not excessively high, causing the input signal to clip.
- **Crossover Setting:** Adjust the LPF setting on the amplifier.

6.4 Amplifier Overheating

- **Ventilation:** Ensure the amplifier has adequate airflow and is not covered.
- **Impedance:** Verify the subwoofer's impedance matches the amplifier's capabilities (the 48DCWR122-RS is 2 Ohm, which the 46CXA8001 supports).
- **Gain Setting:** Reduce the amplifier's gain.

7. SPECIFICATIONS

7.1 KICKER 48DCWR122-RS Dual 12" CompR Series Subwoofer Enclosure

- **Power Handling:** 1000 Watts RMS / 2000 Watts Peak
- **Recommended Power Range:** 500 - 1000 Watts RMS
- **Nominal Impedance:** 2 Ohm
- **Frequency Response:** 25 - 500Hz
- **Sensitivity:** 98dB
- **Cone Material:** Polypropylene
- **Surround Material:** Ribbed Santoprene
- **Enclosure Construction:** MDF (Medium Density Fiberboard) with extensive internal bracing
- **Enclosure Type:** Ported, Front-facing port
- **Dimensions (Approximate):**
 - Box Top Depth: 14"
 - Box Bottom Depth: 17 1/4"
 - Box Height: 16"
 - Box Width: 32 3/8"

7.2 KICKER 46CXA8001 Car Audio Class D Mono Amplifier

- **RMS Power Output:**
 - 600 Watts x 1 @ 2 Ohm
 - 800 Watts x 1 @ 1 Ohm
- **Peak Power Output:**
 - 1200 Watts x 1 @ 2 Ohm
 - 1600 Watts x 1 @ 1 Ohm
- **Frequency Response:** 25Hz - 200Hz
- **Signal to Noise Ratio:** 95dB
- **Input Sensitivity:**
 - High level: 250mV-10V
 - Low level: 125mV-5V
- **Active Crossover:** 12dB/octave, variable 50-200Hz, low pass only
- **Subsonic Filter:** 24dB/octave high-pass fixed @ 25Hz

- **KICKER EQ Boost:** Variable to +12dB, centered @ 40Hz
- **Dimensions (Approximate):** 8-1/8" Length x 2-3/8" Height x 7-3/16" Width

8. WARRANTY & SUPPORT

KICKER products are engineered for performance and reliability. For specific warranty information regarding your KICKER 48DCWR122-RS subwoofer enclosure and 46CXA8001 amplifier, please refer to the warranty card included with your product or visit the official KICKER website. For support with the Harmony Audio HA-AK8 installation kit, please refer to Harmony Audio's documentation.

If you require technical assistance or have questions not covered in this manual, please contact KICKER customer support or your authorized KICKER dealer.