

Axxess AX-ADCT2

Axxess Metra AX-ADCT2 80W Differential Converter Instruction Manual

Model: AX-ADCT2 | Brand: Axxess

1. INTRODUCTION

The Axxess Metra AX-ADCT2 is a 2-channel differential converter designed to facilitate the integration of aftermarket audio components into a vehicle's factory sound system. This device allows for the connection of an aftermarket head unit to a factory amplifier or the addition of an aftermarket amplifier to a factory system, converting high-level speaker signals to low-level RCA outputs.

Key Features:

- 2-channel input for speaker-level signals
- 80-watt maximum input handling
- 6:1 step-down ratio with variable output adjustment
- Separate level adjustment for each channel (Left and Right)
- Gold-flashed RCA outputs for optimal signal transfer



Image 1.1: Axxess Metra AX-ADCT2 Differential Converter unit. This image shows the compact black housing of the converter with input and

output connections clearly visible.

2. SAFETY INFORMATION

Always observe the following safety precautions during installation and operation:

- Disconnect the vehicle's battery negative terminal before beginning any electrical installation to prevent short circuits and damage.
- Ensure all wiring connections are secure and properly insulated to prevent electrical shorts.
- Do not exceed the maximum input wattage of 80 watts to avoid damaging the converter.
- Mount the converter in a location free from excessive heat, moisture, and vibration.
- Consult a professional car audio installer if you are unsure about any part of the installation process.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Axxess 2 Channel Differential Converter (AX-ADCT2)

4. SETUP AND INSTALLATION

The AX-ADCT2 converter allows you to add an aftermarket amplifier to a factory radio or integrate an aftermarket radio with a factory amplifier. Follow these steps for proper installation:

Wiring Diagram Overview:



Image 4.1: Axxess Metra AX-ADCT2 with included wiring harness. This image displays the converter unit alongside its multi-colored wiring harness, illustrating the connections for power, ground, remote, and speaker inputs.

Installation Steps:

1. **Identify Speaker Wires:** Locate the factory speaker wires from the head unit or factory amplifier that you intend to use as the input for the AX-ADCT2. Typically, these are the rear speaker wires for subwoofer applications or front speaker wires for full-range amplification.
2. **Connect High-Level Input:** Connect the factory speaker wires to the corresponding high-level input terminals on the AX-ADCT2. Ensure correct polarity (positive to positive, negative to negative) for each channel (Left and Right). The AX-ADCT2 features a 'Hi-IN' input section with 'L' and 'R' terminals.
3. **Power and Ground Connections:**

- Connect the **Ground** wire (usually black) from the AX-ADCT2 harness to a clean, unpainted metal surface on the vehicle chassis.
 - Connect the **12V Constant Power** wire (usually yellow) from the AX-ADCT2 harness to a constant 12V power source.
 - Connect the **Remote Turn-On** wire (usually blue) from the AX-ADCT2 harness to the remote turn-on output of your aftermarket head unit or to a switched 12V source that turns on with the ignition. This wire will provide the remote turn-on signal for your aftermarket amplifier.
4. **Connect RCA Outputs:** Connect RCA cables from the 'OUTPUT' jacks on the AX-ADCT2 to the RCA input jacks on your aftermarket amplifier.
 5. **Adjust Output Levels:** The AX-ADCT2 features separate variable level adjustments for each channel. Use a small screwdriver to carefully adjust these potentiometers to match the input sensitivity of your aftermarket amplifier. Start with the levels at their minimum setting and gradually increase them until the desired output is achieved without distortion.
 6. **Test System:** Reconnect the vehicle's battery. Turn on the audio system and test for proper functionality. Adjust the level controls on the AX-ADCT2 and your amplifier as needed to achieve balanced sound.

5. OPERATING INSTRUCTIONS

Once properly installed, the AX-ADCT2 operates automatically. When the vehicle's audio system is turned on, the converter will activate, providing a low-level RCA signal to your aftermarket amplifier. The remote turn-on output will also activate, turning on the connected amplifier. The variable output controls allow you to fine-tune the signal level to prevent distortion and achieve optimal sound quality from your amplifier.

6. MAINTENANCE

The AX-ADCT2 is designed for reliable, maintenance-free operation. However, periodic checks can ensure continued performance:

- **Inspect Connections:** Periodically check all wiring connections to ensure they remain secure and free from corrosion. Loose connections can lead to signal loss or intermittent operation.
- **Clean Unit:** If necessary, gently wipe the exterior of the converter with a dry, soft cloth to remove dust. Do not use liquid cleaners.
- **Environmental Check:** Ensure the mounting location remains free from excessive heat, moisture, or physical damage.

7. TROUBLESHOOTING

If you encounter issues with your AX-ADCT2, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No audio output from amplifier	<ul style="list-style-type: none"> Loose or incorrect wiring connections (power, ground, input, output) Amplifier not turning on Input signal too low Damaged RCA cables 	<ul style="list-style-type: none"> Check all wiring for secure connections and correct polarity. Verify remote turn-on signal to amplifier and AX-ADCT2. Increase output levels on AX-ADCT2. Test with different RCA cables.
Distorted or poor sound quality	<ul style="list-style-type: none"> Output levels set too high Incorrect gain settings on amplifier Poor ground connection 	<ul style="list-style-type: none"> Reduce output levels on AX-ADCT2. Adjust amplifier gain settings. Ensure ground connection is clean and secure.
Remote turn-on not working (amplifier not turning on)	<ul style="list-style-type: none"> Remote wire disconnected or improperly connected No signal from head unit's remote output 	<ul style="list-style-type: none"> Check the blue remote wire connection from AX-ADCT2 to amplifier and to head unit/switched 12V source. Verify head unit's remote output is active.
Converter stops working intermittently or completely	<ul style="list-style-type: none"> Loose power/ground connection Internal fault 	<ul style="list-style-type: none"> Re-check all power and ground connections. If problem persists, contact Axxess support or a qualified technician.

8. SPECIFICATIONS

Feature	Specification
Model	AX-ADCT2
Brand	Axxess
Manufacturer	Metra
Number of Channels	2
Maximum Input Power	80 Watts
Step-Down Ratio	6:1
Output Type	Variable RCA
Interface Type	RCA (Output), Speaker Level (Input)
Number of Pins	4 (for power/ground/remote)
Mounting Type	PCB Mount (internal component), Surface Mount (external unit)
Material Type	Gold (RCA contacts)

Feature	Specification
Compatible Devices	Amplifiers, Head Units

9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the official Axxess or Metra Electronics website, or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.