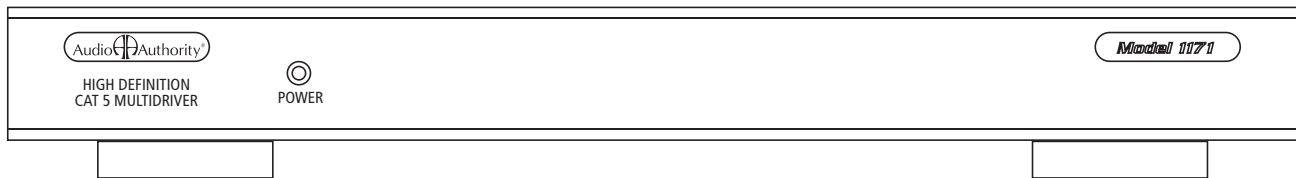


Installation and Operation



Model 1171 High Definition Cat 5 MultiDriver™

Audio Authority®

Installation and Operation Manual

Model 1171 **High Definition Cat 5 MultiDriver™**

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Audio Authority Corporation
Lexington, Kentucky

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Warnings

To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.



The exclamation point symbol alerts users to important operating and maintenance instructions in this manual.

- Read these instructions before installing or using this product.
- Do not apply power to this system until all cables have been tested and connections verified.
- This product must be installed by qualified personnel.
- Do not open the cover—there are no user-serviceable parts inside.
- Do not expose this unit to excessive heat.
- Install only in dry, indoor locations.
- Clean the unit only with a dry or slightly dampened soft cloth.

Getting Started

- Read these instructions.
- Unpack the product and its accessories.
- Connect associated equipment (detailed instructions are found in the Installation Section).
- Connect the product to a suitable power outlet using only the power supply provided.

General Information

The Model 1171, when combined with Model 9878 Cat 5 HDTV Connection Plates (Wallplates), enables HDTV signals to be distributed to multiple locations from a single source. Component video (YPbPr), analog stereo audio, and coaxial digital audio can be included in each two-cable Cat 5 pathway. By connecting IR remote control receivers to the 9878 Wallplates and an infrared distribution system to the Model 1171, users can easily control source equipment from other remote locations.

In conjunction with Model 9878 Wallplates, the Model 1171 provides distribution of audio, video and IR control signals on Cat 5 cable runs of up to 1,000 feet. The buffered Cat 5 bus outputs on the Model 1171 drive from one to six 9878 Wallplates. To expand the Wallplate capacity of the system, up to six Model 1170s may be stacked with one Model 1171, for a total capacity of 42 Wallplates. Wallplates are powered by the Model 1171 or 1170 to which they are connected.

The Model 1171 is well suited to residential use as well as professional applications such as retail stores, clubs and churches.

To make a complete audio/video distribution system, you may need to add one or more Model 1170s, a number of Model 9878s, infrared remote controls and IR distribution equipment.

Carton Contents

- Model 1171 High Definition Cat 5 MultiDriver™
- 18-volt Power Supply
- User Manual

Other Materials You May Need

- Category 5e or 6 cable and plugs (Installation Tip: use a different color cable jacket for A and B cables)
- Universal infrared remote controls for Model 9878s
- Infrared remote control receivers for Model 9878, such as Xantech® 291-00 (see “Using Compatible Infrared Products” at the end of this manual)
- Infrared emitter for source

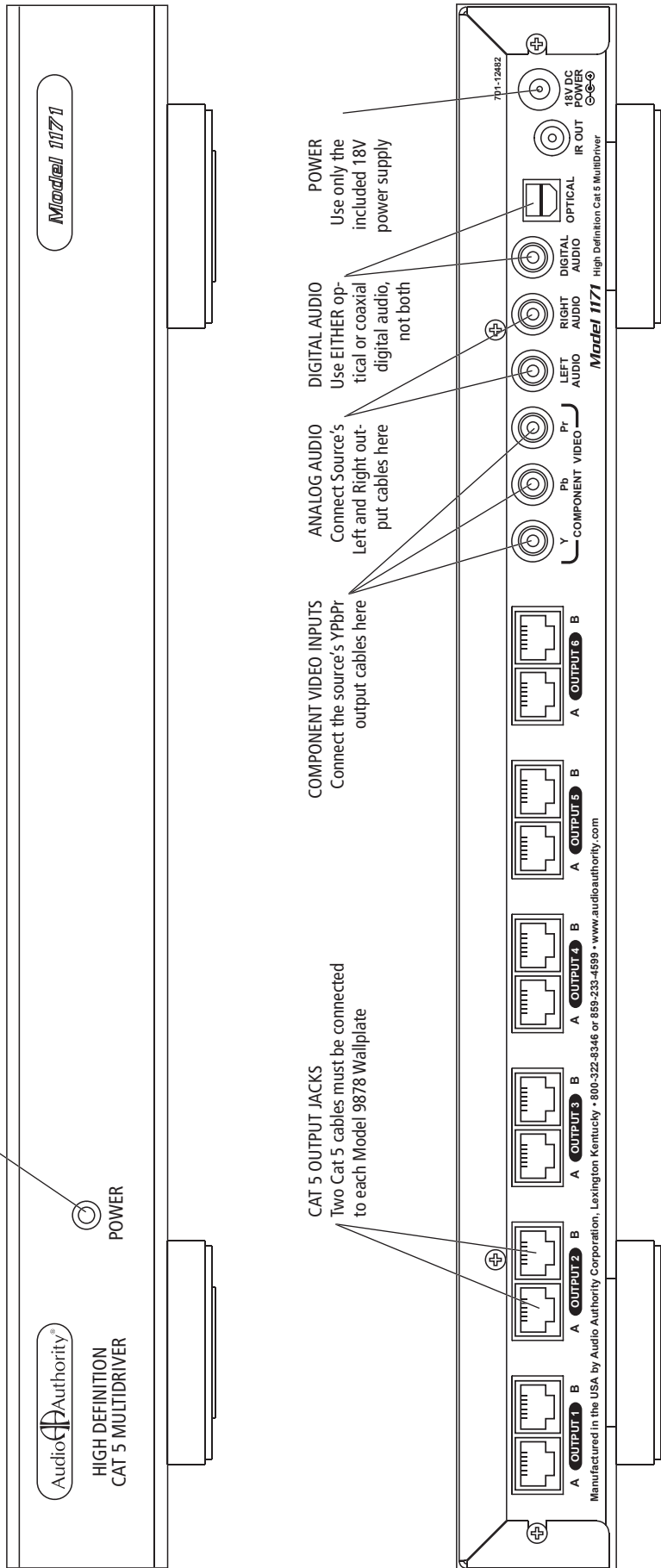
Suggested Accessories

- Model 1170 High Definition Cat 5 MultiDriver™ Expanders
- Model 9878 Cat 5 HDTV Connection Plates (Wallplates)
- Model 1191 Rack Mounting Adapters secure these models in 19-inch racks
- Model 802-567 4-port bus cable—for up to 3 expanders
- Model 802-568 7-port bus cable—for up to 6 expanders

Panel Descriptions

Shown below are the front and back views of the 1171.


POWER INDICATOR
A green LED indicates the presence of power.

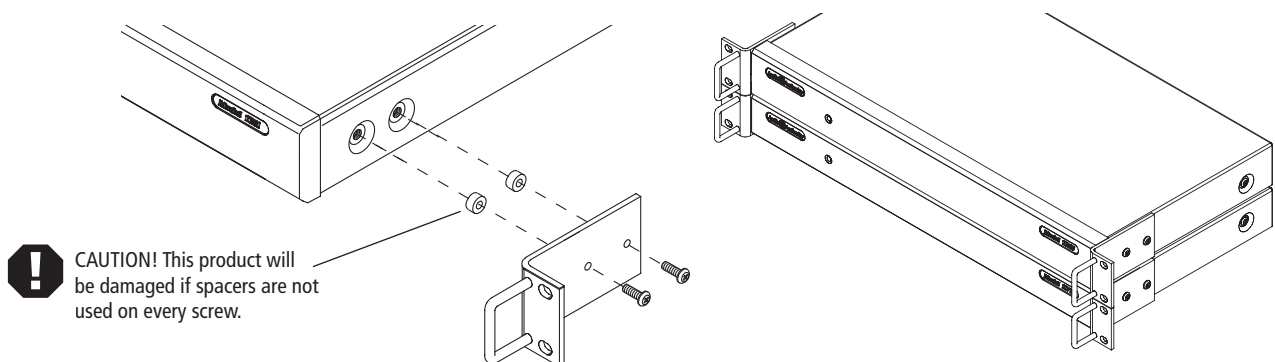


Installation

This product should be installed by a qualified custom electronics installer.

1. **Stacking.** Follow these steps if you are installing this product in a stack with one or more Model 1170s.
 - a. Lay the Model 1171 upside down on a protective surface, such as a terrycloth towel.
 - b. Remove the four feet and the bus port cover and save them and their attaching screws for later use.
 - c. Plug one end of the bus cable (purchased separately) into the connector visible through the bus port—apply enough pressure with a wooden or plastic tool to assure that the plug is completely seated. A center polarizing key is located on the top of each bus plug. Note that there is a right end and a wrong end to the bus cable.
 - d. Turn the Model 1170 to be stacked upside down, thread the bus cable through its bus ports, and engage its four threaded studs with the four threaded holes in the Model 1171 formerly occupied by the feet.
 - e. Tighten the hex head screws in the bottom of the stacking product in sequence a few turns each, until they are all lightly snug.
 - f. Plug the next plug of the bus cable into the connector as in 1.c.
 - g. Continue this stacking procedure until all units have been stacked. Always plug the last connector of the bus into the bottom unit, pushing any excess cable into the empty space inside the unit. View the bus through the bus port to be sure all plugs are fully seated.
 - h. Install the bus port cover and feet you removed from Model 1171 on the bottom Model 1170 and turn the stack right side up.

2. **Rack Mount Adapters.** Do these steps if you are installing this product or a stack of products in a 19-inch equipment rack.
 -  a. Remove the cover screws adjacent to the front panel of each product and use them to mount Model 1191 rack adapters. Be sure to place a cylindrical metal spacer under the adapters at every screw location.
 - b. Use a straightedge to line up rack adapters on a stack of product.



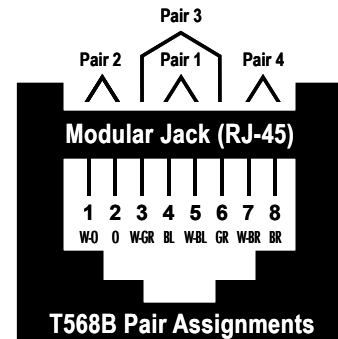
3. **Placement.** Place the Model 1171 or stack on its shelf or in the rack. If rack mounting, secure the 1171 or stack to the rails with the screws supplied with the rack adapter kits.

4. **Source Hookup.** Connect the source in these steps.
 - a. Connect the source unit to the RCA input jacks. Use good quality cable and keep the runs under 6 feet if possible, especially for Component Video connections.

- b. Connect all the signals available from the source unit: Component Video, Digital Audio and Analog Audio. Use either, but NOT BOTH Optical and Coaxial Digital Audio.

5. Wallplate Hookup. Caution! Do not connect A and B cables incorrectly. Do not apply system power until cables are tested and A and B connections are verified.

- a. Pull two lengths of good quality Category 5e or 6 UTP cable from the main system to each Wallplate location. Carefully mark cables of each pair A and B; if they are connected incorrectly, damage to the Wallplate may result. It is best to use a different cable jacket color, or label each end for A and B to ensure proper connection.
- b. Install an RJ-45 plug on each end, using EIA-568B pairing (pins 1-2, 3-6, 4-5, 7-8). Check each cable with a professional network cable tester before plugging it into the 1100 Series system. **Continuity testing is not adequate!** The twisted pairs must be properly matched for balanced line transmission.
- c. Plug the pairs of cables into the output jacks on the Model Model 1170s. Be sure to plug cables A and B into their respective jacks A and B.
- d. Plug a pair of cables into each Model 9878 Wallplate. Be sure to plug cable A into jack A and cable B into jack B. Do not mount the Wallplates permanently yet.
- e. Adjust the Cable Length Compensation control on each Wallplate according to the distance of that unit from the head end. Set the dial to the nearest number of hundreds of feet of cable distance. After system power up (see 6, below) use an HD source and display to fine tune each cable length compensation setting.
- f. *NOTE: Mount Wallplates after initial testing.*



- 6. Initial Testing.** Plug the power supply furnished with each 1100 Series product into its respective unit, and plug the power supplies into a wall outlet or plug strip.
 - a. Check that the power indicators on the Model 1171, all Model 1170s and all Wallplates are illuminated. When 1170s are present, allow up to 1 minute on initial power-up for the 1171 system to finish self-addressing before starting any tests. The Model 1171 power lamp blinks slowly while addressing is taking place.
 - b. Apply power to the source equipment.
 - c. Check for clear video and audio at each Wallplate using an HD display. Mount the Wallplates.
- 7. Infrared Hookup.** Connect and check IR system components in this step.
 - a. Plug an Infrared Control Receiver into the 3.5mm jack on each Wallplate that is to have source control.
 - b. Infrared commands returned from a Wallplate to Model 1171 are repeated through the IR Output jack on the Model 1171. Patch the IR Output jack to an input of the IR control system.
 - c. IR commands returned from a Wallplate to Model 1171 are only repeated through the IR Output jack and perform no function within the switching system.
- 8. In Case of Difficulty.** If at any time the 1171 system fails to respond as expected, use the outline on page 8 to find the cause or narrow the possibilities.

Troubleshooting Guide

Symptom

Possible Cause(s)

Picture has artifacts or appears sparkly	Excessive cable length compensation
Digital audio inoperative	Neither or both optical and coaxial cables connected to source
Does not repeat an IR command	Some remotes cannot be processed by this system; IR Output not connected to IR system
One Wallplate inoperative	Cables swapped or plugs incorrectly pinned out
Wallplates inoperative on one Model 1171 or 1170	Bus cable loose or power supply unplugged

Operation

The Model 1171 and its companion Model 1170s, if present, provide wideband distribution of video and audio signals to multiple rooms or locations in a home or commercial building. The Infrared pathway must be connected to a receiver on the Wallplate end, and a compatible emitter system on the 1171 end.

If so equipped, a universal infrared remote may be used to control the source equipment. Ask your installer for specific instructions.

Model 1171 Specifications

Subject to change without notice.

Video Parameters

Signal Type	Component (YPbPr)
Video Formats	480i/p, 576i/p 720p, 1080i/p*
Input Impedance	75 ohms
Input Ground Isolation	No
Gain	1
Gain Accuracy	2%
3dB Bandwidth	100MHz
Input Coupling	AC
S/N Ratio	60dB
Max Gain/Equalization	1

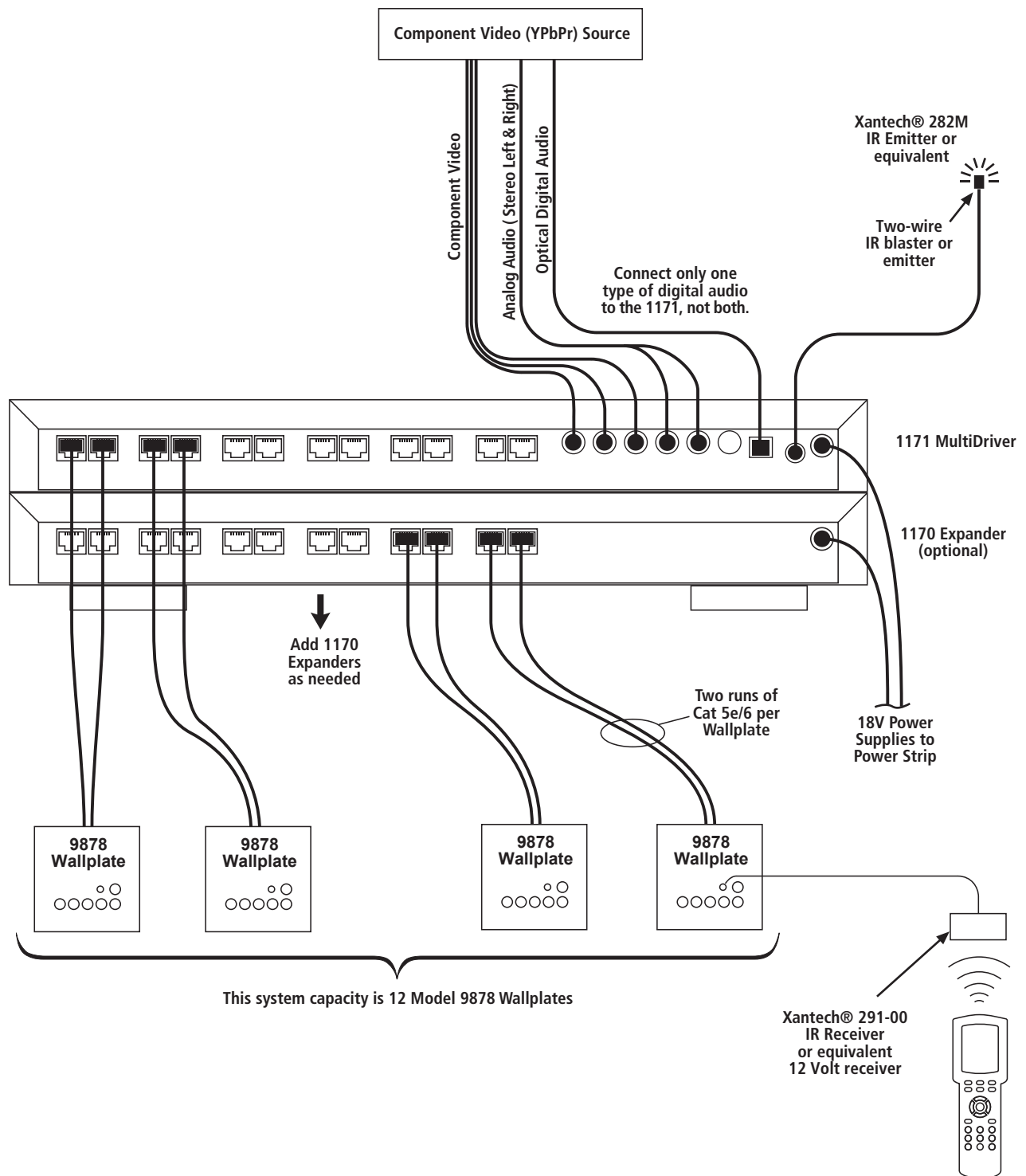
Audio Parameters

Format	Digital/Analog
Digital Audio Input Type	Coaxial/Optical
Input Impedance	75 ohms/50K ohms
Min Load Impedance	75 ohms/10K ohms
Multi-channel Digital	Yes
Frequency Response	10-50KHz
S/N Ratio	75dB
THD+Noise	.07%
Crosstalk	75dB
DC Input Connector	5.5 X 2.1mm Center +
DC Input	18 volts, 1.3 amps

* Model 1171 is compatible with most any video format (including most types of computer video) as long as the video format does not exceed the maximum bandwidth of the 1171.

1171 and 1170 Combination

Model 1171 Cat 5 MultiDriver provides input connections for an HDTV source such as a satellite box or DVD player, and up to six Wallplate outputs. To expand the number of outputs, up to six 1170 MultiDriver Expanders can be added for a total of 42 outputs. Connect stereo analog audio, and one type of digital audio, either optical or coaxial. See “Using Compatible IR Products” on the next page for infrared control pathway functionality.



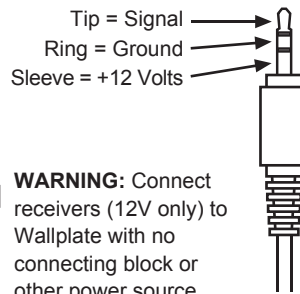
Using Compatible IR Products

Infrared signals may be transmitted from any Wallplate location back to the 1171 IR output by connecting a compatible IR receiver to the Wallplate's IR jack. The Wallplate provides 12V power to the IR receiver; ***do not use IR receivers that provide their own power or damage could result.***

Connect a compatible emitter to the 1171's IR output. Use only passive emitters or damage could result.

Receiver Pinout

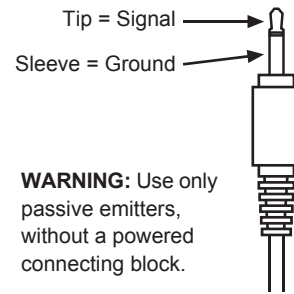
Receivers are powered by 12 volts on the sleeve contact of the 9878 Wallplate IR jack.



WARNING: Connect receivers (12V only) to Wallplate with no connecting block or other power source.

Emitter Pinout

A passive emitter usually has a two-conductor plug.



WARNING: Use only passive emitters, without a powered connecting block.

Limited Warranty

Should any consumer use product manufactured by Audio Authority fail due to defects in materials or workmanship within one year from the date of the original sale to the end-user, Audio Authority guarantees to replace the defective product at no cost. Freight charges for the replacement unit will be paid by Audio Authority (Ground service only). A copy of the invoice from an Authorized Reseller showing the item number and date of purchase (proof-of-purchase) must be submitted with the defective unit to constitute a valid in-warranty claim.

Units that fail after the warranty period has expired may be returned to the factory for repair at a nominal charge, if not damaged beyond the point of repair. All freight charges for out-of-warranty returns for repair are the responsibility of the customer. Units returned for repair must have a Return Authorization number which can be obtained by calling 800-322-8346.

This is a limited warranty and is not applicable for products which, in our opinion, have been damaged, altered, abused, misused, or improperly installed. Audio Authority makes no other warranties either expressed or implied, including limitation warranties as to merchantability or fitness for a particular purpose. Additionally, there are no allowances or credits available for service work or installation performed in the field by the end user.

Audio Authority[®]

2048 Mercer Road, Lexington, Kentucky 40511-1071

Phone: 859/233-4599 • Fax: 859/233-4510

Customer Toll-Free USA & Canada: 800/322-8346

Website: <http://www.audioauthority.com>

Custom Installer _____

Telephone Number _____