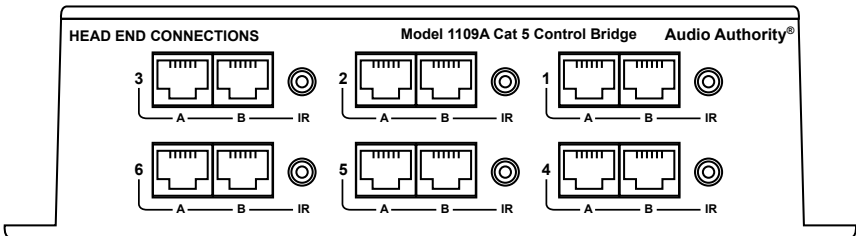


User Manual

Model 1109A

AVA*trix*[™]
Cat 5 Control Bridge



Audio  Authority[®]

MODEL 1109A

Cat 5 Control Bridge For Avatrix™ HD Home Theater Routing Systems

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WARNINGS

- Read these instructions before installing or using this product.
- To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.
- 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.

LIABILITY STATEMENT

Every effort has been made to ensure that this product is free of defects. Audio Authority cannot be held liable for the use of this hardware or any direct or indirect consequential damages arising from its use. It is the responsibility of the user of the hardware to check that it is suitable for his/her requirements and that it is installed correctly. All rights are reserved. No parts of this manual may be reproduced or transmitted by any form or means electronic or mechanical, including photocopying, recording or by any information storage or retrieval system without the written consent of the publisher.

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1.0 INTRODUCTION

Thanks for purchasing the 1109A Cat 5 Control Bridge from Audio Authority. This device provides an access point to inject IR signals into six Cat 5 zone pathways. This product is designed to allow an IR remote control system or RF home automation controller to send IR signals through the AVAtrix Cat 5 infrastructure to switch sources, control sources, TVs, and other equipment.

For downstream applications (Remote Zone) an IR controller simply injects IR commands into the Cat 5 zone pathway via the 1109A to control TVs or other equipment in the zones. A controller can also send commands upstream to the AVAtrix and its connected sources (Head End) without the need for slow, complicated macros. Through the 1109A, the AVAtrix receives commands as if the signals originate from Cat 5 receivers in remote zones, saving wire, wiring labor, and programming time.

Audio Authority also offers an extensive line of audio and video switchers, converters, and distribution amps available for purchase online at 800-322-8346, www.audioauthority.com or through authorized dealers.

1.2 FEATURES

- Injects IR signals into Cat 5 bus either “upstream” to the AVAtrix Head End, “downstream” to the Remote Zones, or in both directions
- Use standard 3.5mm cables to connect IR equipment (no AVAtrix 12V rail)
- Reduces complexity of commands and macros
- Passive device, requires no power source
- Works with Cat 5 outputs from AVAtrix™ (Models AVM-562, AVX-561, AVX-661, 1176BK and 1176)
- Works with any Audio Authority Cat 5 receiver including Models 9878, 9879, 9880, 1180R*, and 1180RD*
- Each Cat 5 receiver IR pathway operates independently
- Not recommended for current draws exceeding 200mA

* When using 1180R or 1180RD single Cat 5 zone receivers, always place the 1110 adapter between the 1109A and the zone receiver in the signal path. This configuration is useful for upstream (Head End) applications only.

2.0 CHECKING PACKAGE CONTENTS

- 1109A Cat 5 Control Bridge
- User Manual

Note: Please keep the original packing material in case the unit ever needs to be returned. If you find any items are missing, contact Audio Authority immediately. Have the invoice available for reference when you call.

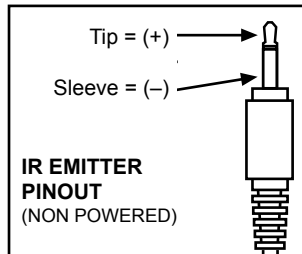
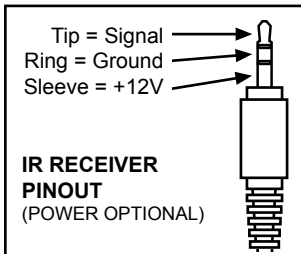
3.0 APPLICATIONS

The 1109A can be used in several different ways. The main applications are shown on the following pages. Since the 1109A handles each zone individually, some zones can be wired downstream or “Remote Zone”, and other zones can be wired upstream or “Head End”, or any zone pathway can be wired for both directions.

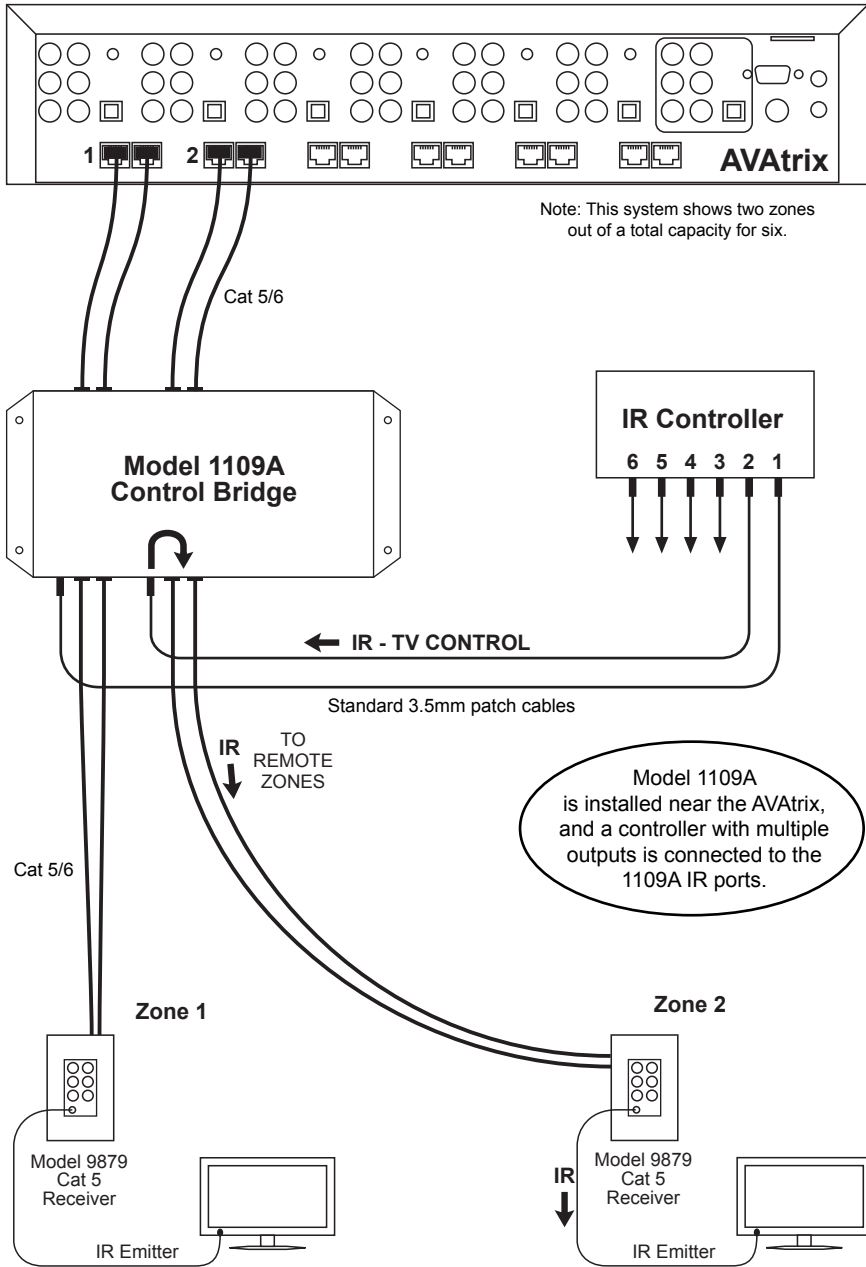
- Remote Zone applications usually involve turning TVs on/off and changing settings remotely. An example wiring diagram is shown on page 5.
- Head end applications usually involve an RF automation controller or a remote control system that has wired keypads. This application takes advantage of the AVAtrix IR routing system to send commands to the appropriate sources as well as accepting IR switching commands to route source signals. See page 7.

3.2 FABRICATING CABLES

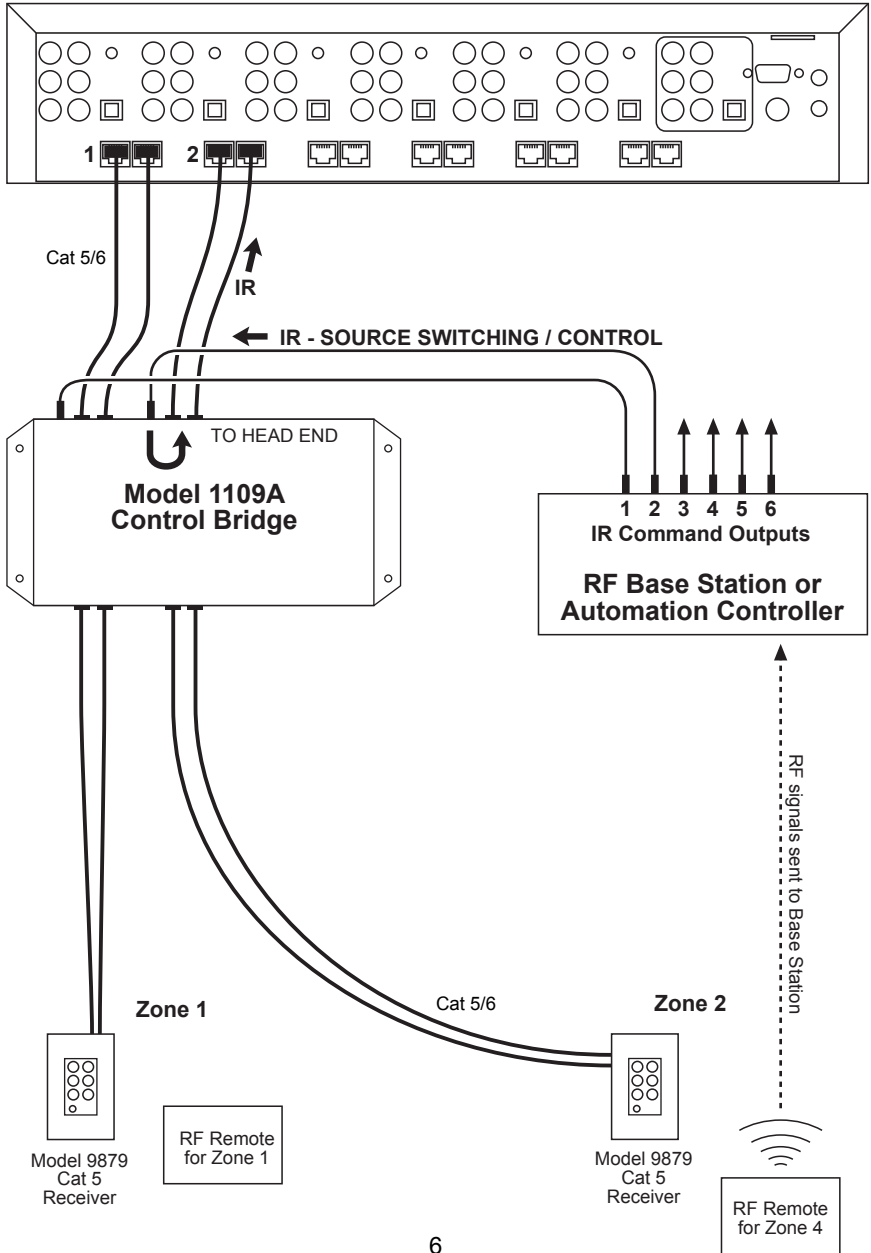
Refer to AVAtrix manual for Cat 5 cable termination. For IR cables, use standard 3.5mm patch cords or, if fabricating cables or using terminal blocks, refer to the pinout drawings.



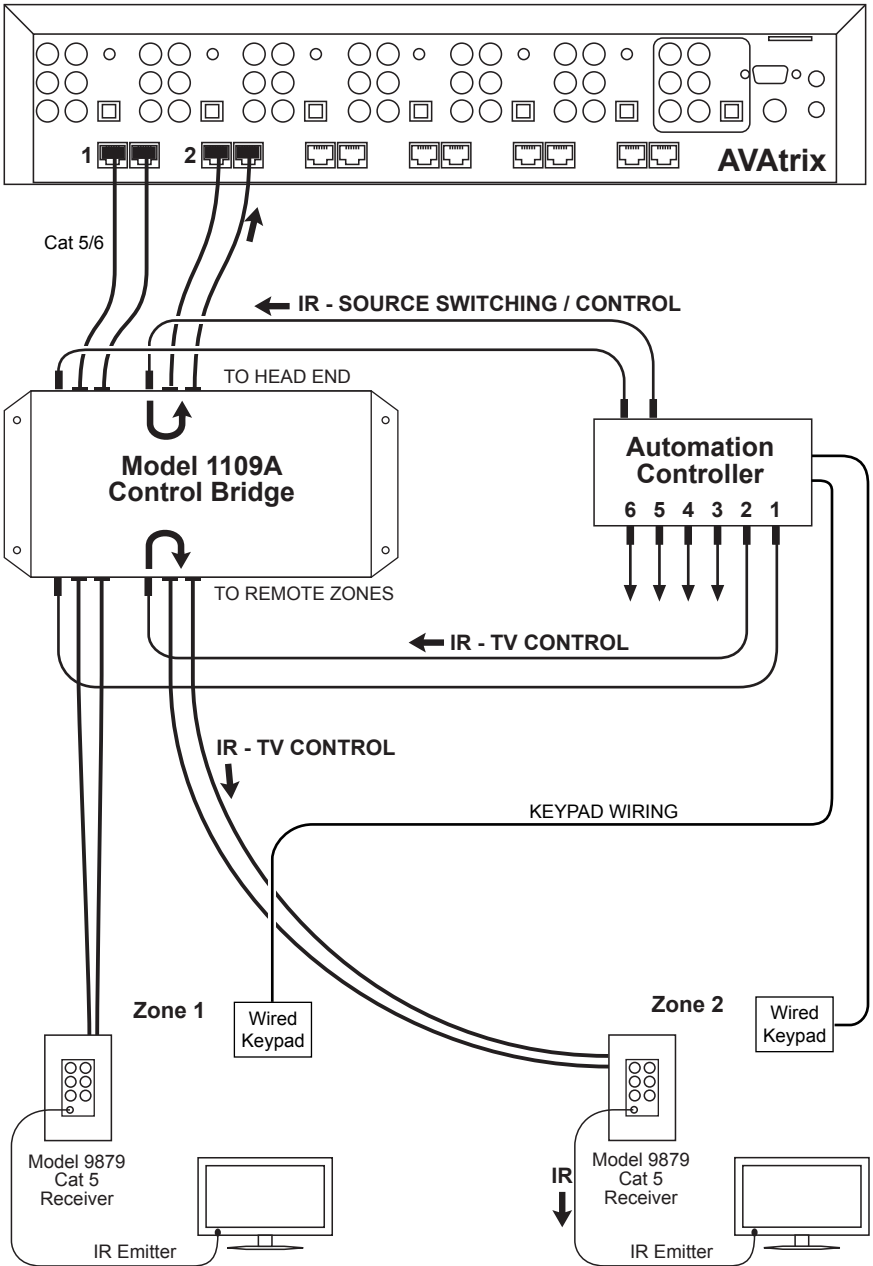
Remote Zone Application: The AVAtrix is connected to six TVs in remote zones (two zones are shown). An IR controller injects commands downstream to the TVs through the 1109A Remote Zone connections.



Head End Application: The AVatrix is connected to six zones. Each zone has a dedicated RF remote control that sends commands to the RF base station antenna. The base station translates the commands to IR and sends the IR command and other macros on its corresponding IR output port. A command from the zone 2 RF remote is output on the base station's #2 IR port, injected upstream, and received by the AVatrix as if it originated from the zone 2 Cat 5 receiver.



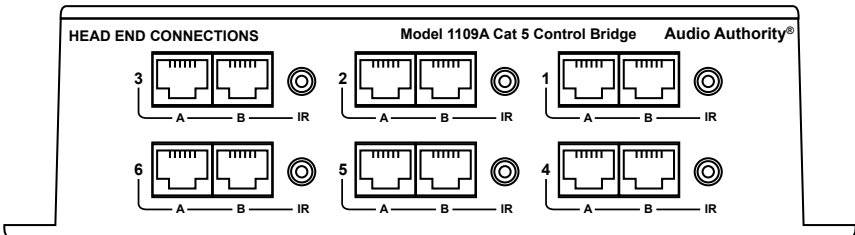
Multiple Function Application: The AVAtrix is connected to six zones, in a house with separately wired keypads. A command from the zone 2 keypad is output on the controller's #2 IR port, injected upstream, and received by the AVAtrix as if it originated from the zone 2 Cat 5 receiver. A Controller also sends commands downstream over Cat 5 to control the TVs in the zones via the 1109A.



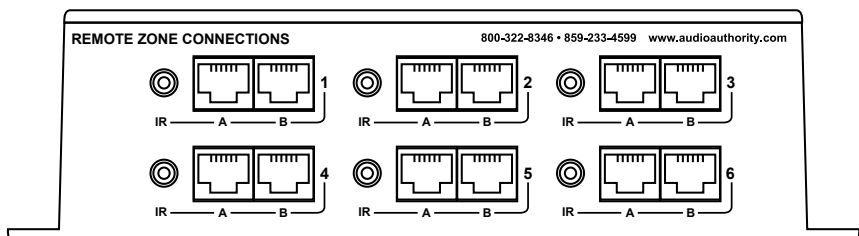
4.0 INSTALLATION

Follow the diagrams carefully. The automation controller should have at least as many IR outputs as the number of zones with room controllers; for example, in an application with six keypads or remotes, the controller should have at least 6 IR outputs.

- **Test all Cat 5 cables with a network cable tester, even factory-terminated cables.** Continuity testing is not adequate. Cables must have the *correct pairing* or damage could result. Use either EIA-568A or EIA-568B conductor pairing throughout the system.
- Place the Model 1109A near the AVAtrix and connect each numbered Cat 5 port on the AVAtrix to the same-numbered Input port on the 1109A, using short Cat 5 patch cords.
- Multiple 1109A Control Bridges may be used in one system to serve up to 36 zones. Install one Model 1109A for each set of six AVAtrix Cat 5 outputs.
- Connect the RF base station or automation controller IR outputs to the 1109A Head End and/or Remote Zone IR jacks using standard, 3.5mm stereo patch cords.



1109A Head End jack panel for upstream IR injection



1109A Remote Zone jack panel for downstream IR injection

4.1 PROGRAMMING

Each automation controller output should be individually assignable to an individual zone remote in the remote software. Program the remote for zone 1 to output IR on the base station's #1 output, zone 2 remote on the #2 output, etc.

Load the remote with codes for each device to be controlled as well as the codes for the AVAtrix. The only AVAtrix commands required are buttons 1 through 6. If you are using the AVAtrix temporary restriction features, add the commands for Lock, View-lock, IR-lock and Unlock.

Example macro	
To watch source #1:	Send "1" key from AVAtrix remote codes. Send DVD Power On command. Send DVD Play command.

5.0 TROUBLESHOOTING

- If signals are intermittent between the 1109A and the AVAtrix or if the IR path isn't operating correctly, check the integrity of the Cat 5 cables and the wiring of their plugs with a network cable tester.
- If IR in some zones do not function, check that Cat 5 cables and IR cables are plugged into the correct jack positions.
- If a problem persists contact the Audio Authority Technical Service department via email: support@audioauthority.com, or call 800-322-8346 or 859-233-4599.

6.0 LIMITED WARRANTY

If this Audio Authority product fails due to defects in materials or workmanship within one year from the date of the original sale to the end-user, Audio Authority guarantees that we will 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 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 assigned by the factory.

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.

6.1 WARRANTY SERVICE PROCEDURES

If you suspect a product defect, contact Audio Authority's Technical Service Department at 800-322-8346 or 859-233-4599 for assistance in verifying the problem. If a defect or potential defect is suspected, a replacement unit will be shipped immediately on a defect-exchange basis and a Return Authorization Number will be issued for the return of the defective product. Replacement units are sent out at the Manufacturer's Suggested Retail Price which is debited to the Customer's Credit Card at the time of shipment. Once we receive the defective unit back at the factory, it will be evaluated under the conditions of this warranty and if found to be in-warranty, a full credit will be issued to the Customer's Credit Card. Return freight charges for the defective unit are the customer's responsibility. Please contact our Technical Service Department for complete details concerning all in and out of warranty service matters.

We appreciate your confidence in our products and services and will always strive to meet or exceed your needs.

7.0 CONTACT INFORMATION

If you have questions or require assistance with this product in areas not covered by this manual, please contact Audio Authority using the information below.

Audio Authority Technical Service
800-322-8346 M-F 8:30 AM to 5:00 PM, EST
International: 859-233-4599 Fax: 859-233-4510
Send email to: support@audioauthority.com

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