OneHome™ Audio Integration Note Management and Control Solutions Audio Integration Note Manufacturer: Matrix Audio Model Number(s): Series 4, 6, 8; Mi Series 4, 6, 8 Comments: Document Revision Date: 12/17/2007

OVERVIEW AND SUPPORTED FEATURES

The following features are supported:

Traditional Whole-House Audio: The Matrix system has keypads in each zone that control the volume and source.

Four wire solution: There is no dedicated keypad wire: only the speaker wires are needed from each zone back to the system, enabling it to be retrofitted in a home that has just volume controls in each zone.

Support for IR: The Matrix system has IR outputs that can provide signals to each of the sources, enabling transport control (Play, Pause, Stop, etc) for equipment that has IR control.

Support for AM/FM Radio: With the optional tuner module, AM/FM radio can be used in conjunction with the Matrix system, which enables the custom AM/FM tuner interface on the **One**Home Viewer.

Expansion Modules: The Series Expansion Controllers can be added to increase the total number of zones in the system. Keep in mind that the **One**Home system only needs to connect to the main Series Controller.

VIEWER INTERFACE FOR IR SOURCES

The interfaces shown on the Viewer for sources to the Matrix system are as follows:

- o For radio sources (AM/FM), the **One**Home **AM/FM/XM** tuner interface is shown.
- For digital media sources, the OneHome Music Library interface is shown.
- For IR sources, a customizable interface is shown for the type of equipment. Refer to the Integration Note for the particular source, or refer to the **Generic IR Source** Integration Note.

INSTALLATION OVERVIEW

- 1. During the rough-in phase, install speaker wire for the speakers: note that separate Cat5 cable for the keypads is NOT needed.
- Also during the rough-in phase, run a Cat5 wire from the location of the Matrix system back to the Network Assembly of the OneHome system for RS-232 communications. Refer to the RS-232 Connection Options Integration Note for other options.
- 3. Mount the speakers and keypads in each zone, and install the Matrix system and the sources.
- 4. Program the Matrix system. This includes setting the number of sources, the names for each source, and the IR codes for each source.
- 5. If you have the optional internal tuner, keep in mind that the tuner requires input 1 (and input 2 for two tuners). You cannot connect other equipment to an input used by the internal tuner.
- 6. If you have optional Series Expansion Controllers, connect them to the main Series Controller and configure them as described in the Matrix documentation.
- 7. Test the entire Matrix system to ensure that all the sources play correctly in every zone, and that the keypad buttons behave correctly from the keypads.
- 8. Connect the **One**Home system to the Matrix system electrically. See the wiring diagrams for more information. Be careful to note the correct zone number for each zone, as explained below.
- 9. Configure the **OneHome** system for the Matrix and confirm communication between the Matrix and the **Home**Brick.
- 10. Test the system by changing sources in a zone to confirm the correct source plays, and by testing the **One**Home interface transport control and media server controls.

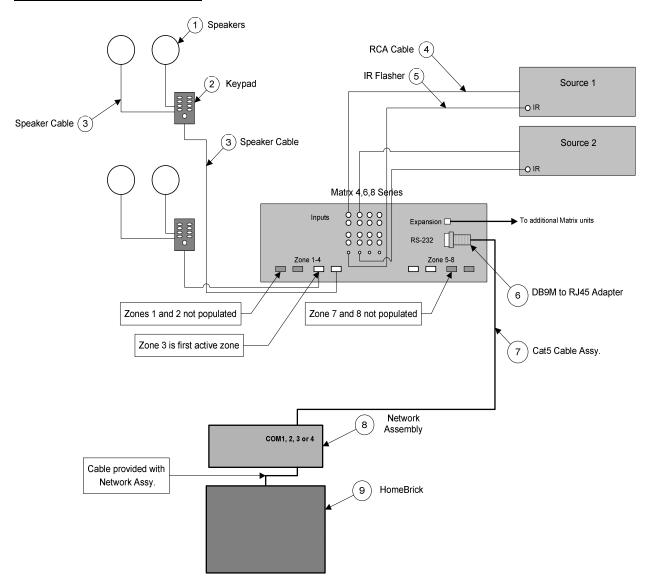
ZONE NUMBERING ON THE SERIES CHASSIS

The zone numbers that you must enter in the HomeLogic Configurator for each zone in your system assumes that you have a fully populated system. As a result, you must take care to track the zone numbers so that you can enter them properly in the HomeLogic Configuration.

The Series 4, 6 and 8 and Mi Series all come in essentially the same package. Zone 1 is always the left-most connector on the rear of the chassis, even if zone 1 is not populated on your unit. Zone 2 is next and so on, until you get to zone 8, which is always the right-most connector when you look at the back of the chassis.

For example, if you are installing a Series 4 chassis, the first two zones are not populated. The first zone that is populated is zone 3, as shown on the connection diagram below. As a result, when you setup the zones in the **One**Home Configurator, the first listening zone will be zone 3, the second will be zone 4, the third will be zone 5 and the last zone will be zone 6.

CONNECTION DIAGRAMS



BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	Speakers	N/A		Analog	Wire	
2	Keypad	Matrix	Various	Custom	Wire	
3	Speaker Cable	N/A	N/A	Analog	Wire	
4	RCA Cable	N/A	N/A	Analog	RCA X RCA	None included with Series controller
5	IR Flasher	Matrix	N/A	IR	Mini Jack X IR Flasher	Included with the Series controller
6	DB9M to RJ45 Adapter	HomeLogic	HA-CB-307	RS-232	DB-9 Male X RJ-45 Female	
7	Cat5 Cable Assy.	Installer	N/A	RS-232	RJ-45 Male X RJ-45 Male	You must terminate all 8 conductors
8	Network Assembly	HomeLogic	HW-NA-18X4	RS-232	RJ-45 Female X DB-9 Female / USB	
9	HomeBrick	HomeLogic	HW-HB-1080	RS-232	DB9 Male / USB	

HomeLogic Configuration Details

The following table provides settings used in the HomeLogic Configurator. Please refer to the Configurator Reference Guide for more details.

"<Select>" the Configurator. Select the appropriate item from the list (or drop-down) in

"<User Defined>", etc. Type in the desired name for the item.

Devices	Variable Name	Setting	Comments
Communication Devices	Name	<pre><user defined=""> (Default: Matrix Series 4.6.8)</user></pre>	
	Туре	Serial Port	
		Matrix Series 4,6,8	
	Location	<user defined=""> (Not Required)</user>	
	COM Port	<select></select>	
	Baud Rate	<select></select>	See Notes
Audio Tuners (See Note 1)	Name	<pre><user defined="">(Default: Matrix Series AM/FM Tuner)</user></pre>	
7.44.0 74.10.0 (000 1.10.0 1.)	Device Type	<select> (Default: Matrix Series AM/FM Tuner)</select>	
	Location	<user defined=""> (Not Required)</user>	
Audio Zone Controllers	Name	<user defined=""> (Default: Matrix Series 4,6,8)</user>	
	Device Type	Matrix Series 4,6,8	
	Location COM Device	<user defined=""> (Not Required) <select> (Default: Matrix Series 4,6,8)</select></user>	
Sources	Name	<user defined=""></user>	
	Source Device	<select></select>	
	Source Volume	<select> (See Note 2)</select>	
	Show Source	<select></select>	
Zones	Name	<user defined=""></user>	
	Show Zone	<select></select>	

- The tuner is optional. Add one tuner for each on board tuners in the Matrix unit.
 For systems with devices that have controllable volume (such as an AudioTron), select the desired volume (normally 100%).
- 3. The Series 4, 6 and 8 units communicate at 4800 Baud. The Mi Series communicate at 9600 Baud.

COMMON MISTAKES

- 1. Improper programming of the Matrix controller. Make sure you complete programming of the Matrix equipment, and that it functions properly as a stand-alone system, before attempting to connect and control from the **One**Home system.
- 2. Improperly setting the addresses for systems with Series Expansion controllers. Remember to set the address as explained in the Matrix documentation.