Interfacing to an AVAtrix HD Home Theater Routing System (Model 1156 and 1166)

Application:

Interfacing the HAI Omni and Omni II series panels with the AVAtrix Home Theater Routing System.

Installation:

1. Equipment:

    a) HAI Controller - LT, Omni Pro (firmware version 1.8 or later), Omni II, Omni IIe, Omni Pro II, Lumina, or Lumina Pro
    b) 10A17-1 Serial Interface Module (Optional) - required on the Omni Pro, but optional on any other HAI product
    c) 36A05-4 Serial Connectivity Kit or Standard Serial Cable (DB9F-to-DB9M) if using the 10A17-1 Serial interface Module
    d) PC Access Software

2. Setup:

    a) If using the 10A17-1, install on the HAI controller, following the module's instructions.
    b) Connect the 36A05-4 to the AVAtrix, and to a built-in serial port on the HAI controller. If using the 10A17-1 Serial interface, make the connection between the module and AVAtrix using a standard serial cable.
    c) Using a console or PC Access, go to Setup>>Installer>>Expansion and set the Serial Function of the desired serial port to Pro-Link Note: If using the Serial Interface Module, you will set the "Module #" (based on the address jumper) to Pro-Link.
    d) Set the Serial Port Baud Rate to 9600.
    e) Using a console or PC Access, go to Setup>>Names>>Messages, and name the messages that are to be sent and/or received between the HAI controller and they AVAtrix system.

Programming:

Using the built-in Pro-Link protocol in HAI controllers, you can send and receive ASCII text strings over the serial interface. Pro-Link is programmable, so you can custom build the ACSII strings based the defined protocol(s) of other systems.

The Pro-Link protocol allows you to send and receive predefined text messages through an HAI serial interface. Each message can be up to 15 ASCII characters long. Several messages can be strung together and sent as one long message. Messages can be sent using any system trigger (timed, event, or macro) just like any other item in the controller.

Pro-Link also monitors each serial interface for incoming messages. Incoming ASCII strings that match stored messages in the controller can be used to activate macros. When a message is matched, the Program Command (macro) corresponding to the matching message is activated. When receiving an ASCII message that is over 15 characters, the HAI controller only processes the last 15 characters of the message.

With that said, you can send commands to the AVAtrix to control any of its functions (see the AVAtrix protocol found in the Installation and Operation manual).

To send commands to the AVAtrix, the commands must first be entered into the HAI by naming “Messages.” Messages can be named in Setup > Names and Voices > Messages. Simply use the command set outlined in the AVAtrix protocol to name the messages. For example, to connect wall plate 1 of A/V router 2 to source 3, the following message should be created; you can then send the message out of the appropriate serial port.

```
U213^M
```

Note: When sending commands to the AVAtrix, remember to use the ^M (carriage return).

Next, you can create “Buttons” and programs to allow control of the AVAtrix from the HAI panel. For example, a button may be named

```
Living Room DVD
```

With this button named a program could then be written to change the feed on the television connected to the living room wall plate to the DVD player. The program would look like:

```
WHEN Living Room DVD
      THEN SEND U213^M OUT SERIAL 1
```