

AVKit-ES for AD8HR overview

AuviTran's AVKit-ES for AD8HR card brings EtherSound compatibility to Yamaha AD8HR.

Providing two EtherSound connectors and a RS232 port for both very-low latency audio and data transmission, up to 8 audio line or mic inputs can be sent from a Yamaha AD8HR to any other EtherSound compatible device, over regular CAT5 cables.

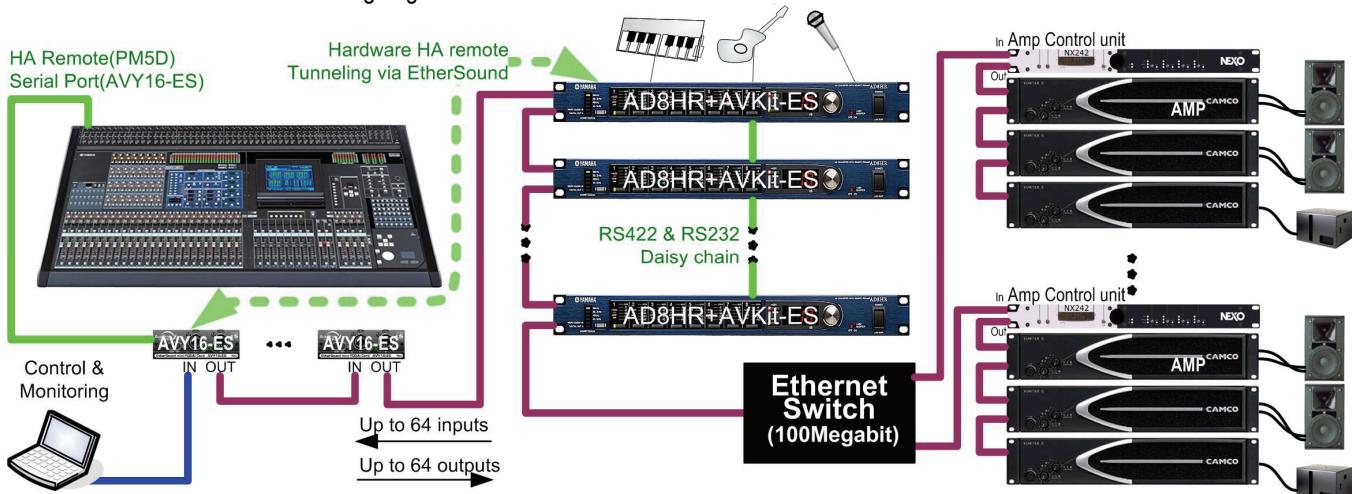
The AVKit-ES for AD8HR cards offer full network control of all AD8HR parameters as well as constant network status monitoring making it ideal for live professional audio applications.

The Serial port allows cascading and control of multi AD8HR's from the Yamaha Console device (PM5D, M7CL, DM2000 and DM1000) or from the Yamaha mixing engine (DME64N/24N).



Key Features

- 128 EtherSound channels (64 upstream and 64 downstream) of 24 bits of audio transmission over standard CAT5 Ethernet cable in bidirectional mode or 64 channels in unidirectional mode.
- 8 AD8HR mic or line inputs can be dynamically "inserted" to any of the 128 or 64 EtherSound channels.
- Network remote control of any AD8HR parameter and assignment of any AD8HR mic or line input to any EtherSound channel.
- 2 EtherSound connectors allow for daisy-chaining of multiple AVKit-ES for AD8HR cards or other 3rd-party EtherSound devices.
- Hardware HA remote tunnelling provides AD8HR direct control from Yamaha PM5D, M7CL, DM2000, DM1000 console and DME64N/24N mixing engine via EtherSound.



Mechanical Specifications

115 mm x 130 mm x 23mm (Replace the top RS232/422 and AES/EBU AD8HR card).

Applications

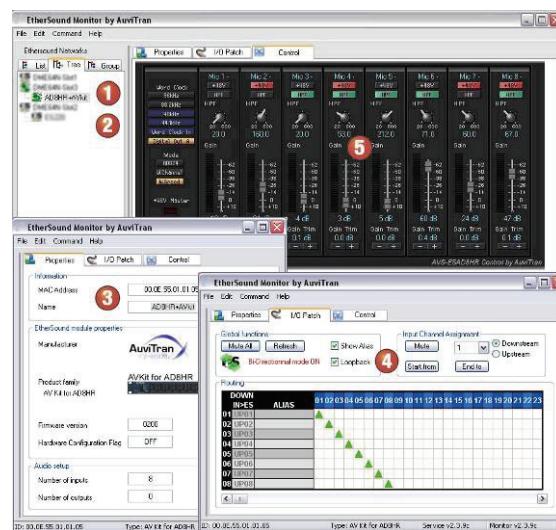
- Product for fixed installation with high quality Audio distribution, paging and zone management:
 - ◆ Stadium, Opera, theatre, museum and arts centre
 - ◆ Theme parks and resorts
 - ◆ Public Address: touring and fixed sound reinforcement
 - ◆ Broadcasting
 - ◆ Government administrative offices
 - ◆ Exhibition and conference Centres
- Product for Transportation public address
 - ◆ Train and bus stations terminals
 - ◆ Airport facilities and audio distribution
 - ◆ Cruise Ships paging including onboard entertainment and leisure centre audio facilities
- Product for Distribution, routing and control of audio for live and touring installation
 - ◆ Live broadcast PA/announcement
 - ◆ Live entertainment and concerts
 - ◆ TV and Radio Outside Broadcast
 - ◆ Electro acoustic music productions
 - ◆ Itinerant Museums and Theatres

Ether Sound Audio Distribution over Standard Ethernet: EtherSound™ enhances established technologies to provide easy-to-implement, high-quality audio networks. The patented EtherSound™ protocol provides fully deterministic, very low-latency (125µs plus 1.4µs per additional network node) transmission of synchronized audio channels over standard Ethernet. EtherSound™ provides a cost effective fully digital path between a virtually infinite number of networked audio devices with up to 128 channels of 24-bit digital audio at 48 KHz, with bi-directional status and control data. Off-the-shelf Ethernet components such as 100baseTX switch can be used to extend the number of audio devices, as well as the distance between the devices on the network.

ESMonitor Software overview

Downloadable on www.auvitran.com web site, Auvitran's ES-Monitor is a Windows XP application which runs on a remote PC connected to the Primary Master of an EtherSound™ network segment, through standard Ethernet connections. ES-Monitor offers:

1. Automatic discovery of AD8HR devices connected to an AVKit-ES for AD8HR and/or any EtherSound™ compatible device on the segment, as well as automatic hierarchical interconnection between them. It enables the use of aliases to identify the modules, network name and group management.
2. Monitoring of connection, disconnection and error status for all devices and EtherSound™ links.
3. Automatic identification of manufacturer ID, product ID and the Channel I/O.
4. Network Patch assignment of any EtherSound device input to any reachable EtherSound™ device output.
5. Control of the individual parameters of the AD8HR and Hardware serial port control setting for Yamaha remote console via an AVY16-ES



Technical Specifications

The user is informed that the AD8HR opening and AD8HR board disassembling will be done to its own liability and that it will involve the cancellation of the YAMAHA AD8HR device warranty. AUVITRAN DENIES LIABILITY FOR THESE ACTIONS.

General	
Size	115 mm x 130 mm x 23mm
Power Consumption	<3 Watts
Power Supply	+5 V, GND
Storage: Temp/Humidity (non-condensing)	- 5°C to 70°C / 0% to 95%
Operating: Temp/Humidity (non-condensing)	0 °C to 50°C / 5% to 90%
Connectors	1 AD8HR ribbon cable connector, 1 Sub-D9 (RS232) serial interface, 2 RJ45- female connectors (EtherSound™ IN/OUT links),
Audio Inputs and Outputs	
Number of inputs	8x inserted to any of the 128x EtherSound™ channels(64 upstream or 64 downstream)
Audio Specifications	
Synchronisation PLL locking range	44.1 kHz to 48 kHz ± 10%
Audio format	24 bits
Synchronization	
External clock synchronisation	Automatic from EtherSound™ network at 48 kHz or 44.1 kHz or manually from AD8HR front panel or from remote AD8HR control panel in ES-Monitor software
Other Inputs/Outputs	
RS232 serial interface	9-pin D-Sub
Development and Integration Environment	
OS Supported	Windows 2000/XP
ES-Monitor	ES-Monitor enables to remotely set, control and monitor an EtherSound network and provides enhanced property pages to manage the AVKit-ES for AD8HR specific parameters.
Development Tools	PC Telnet based development tools allowing access and control of all of the AVD devices' parameters.

Part number

AVKit-ES for AD8HR EtherSound Kit for Yamaha AD8HR preamp