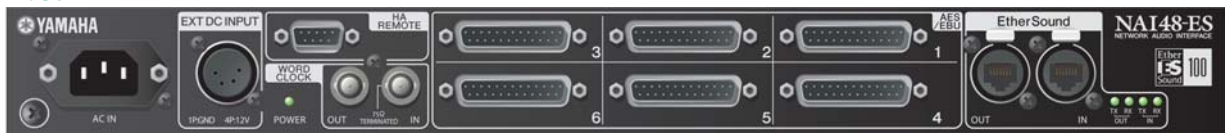# Network Audio Interface
NAI48-ES

Front

Rear

48 channels of digital audio each way over a single Cat-5 Ethernet cable

All-in-one digital mixing consoles such as Yamaha's acclaimed PM5D, M7CL and the remarkably compact LS9, are incredibly powerful and effective for a broad spectrum of live sound applications, and the NAI48-ES Network Audio Interface takes them to a new level of flexibility and convenience.

The NAI48-ES is a digital interface that lets you transfer up to 48 digital inputs and 48 digital outputs between console and stage or any other location via a single Cat-5 Ethernet cable. 48 AES/EBU inputs and 48 AES/EBU outputs are provided via 25-pin D-sub connectors.

The AES/EBU inputs and outputs can be directly connected to a wide variety of digital front-end devices such as Yamaha AD8HR 8-channel remote head amps for top-quality line or microphone input, as well as a range output gear.

EtherSound™ Networking

The NAI48-ES employs EtherSound networking technology to transfer multiple channels of digital audio over standard Ethernet cable with extremely low latency. This advanced, easy-to-manage protocol is designed to handle up to 64 channels of digital audio, and will easily transfer 48 channels of 24-bit 48-kHz audio in both directions over distances up to 100 meters with appropriate high-performance cables.

The most convenient way to add EtherSound capability to Yamaha digital mixing consoles is to install one or more AuviTran AVY16-ES EtherSound cards in the console's Mini-YGDAI card slots, according to the performance and channel capacity required. Then you can simply connect a standard Cat-5 Ethernet cable between the console and NAI48-ES to transfer all audio channels plus remote control signals for compatible devices such as the AD8HR remote head amplifier. You can even use standard Ethernet hubs and routers to create any network configuration that suits your needs.

AVY16-ES

Specifications

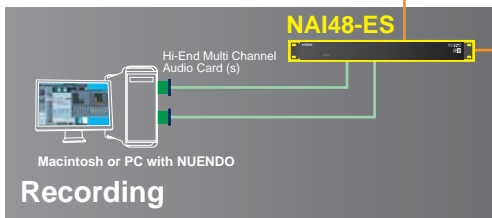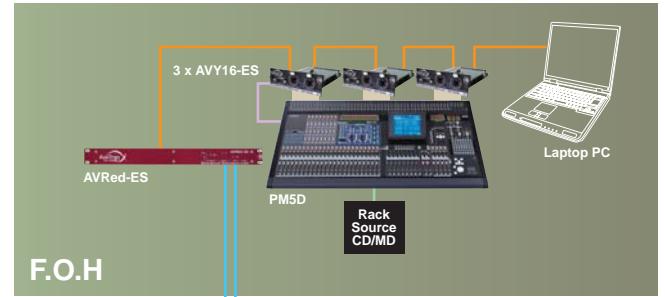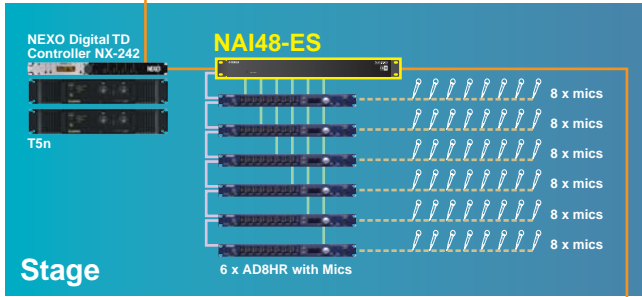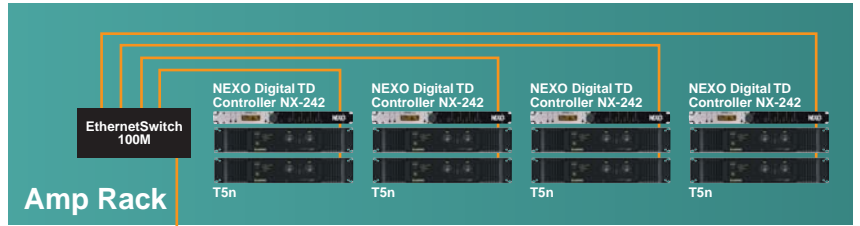|	Connector	#	Note
Audio Network	EtherCon	2	EtherSound
AES/EBU	D-sub 25 pin	6	
Word Clock In	BNC	1	
Word Clock Out	BNC	1	
HA Remote	D-sub 9 pin	1	AD8HR protocol
AC Input	3 pole receptacle	1	100V – 240V
External DC Input	XLR-4 pin	1	General DC input

Uncompromising Yamaha Quality, Compatibility, and Reliability

The NAI48-ES is not the only network device of this type, but it is without a doubt the best choice if maximum quality and economy are important criteria. The NAI48-ES delivers superior digital audio performance and networking capability at a cost that cannot be matched at the current time. And because it's designed with Yamaha Commercial Audio sound equipment in mind you can rest assured that it can be set up with minimum hassle and will operate trouble-free. For even further reliability assurance you can use the internal power supply plus an external redundant power supply unit for dual failsafe operation.

Large Live Sound System

This complex system is based on two PM5D digital mixing consoles – one for FOH and one for monitoring. The on-stage I/O gear and amplifiers can all be controlled and monitor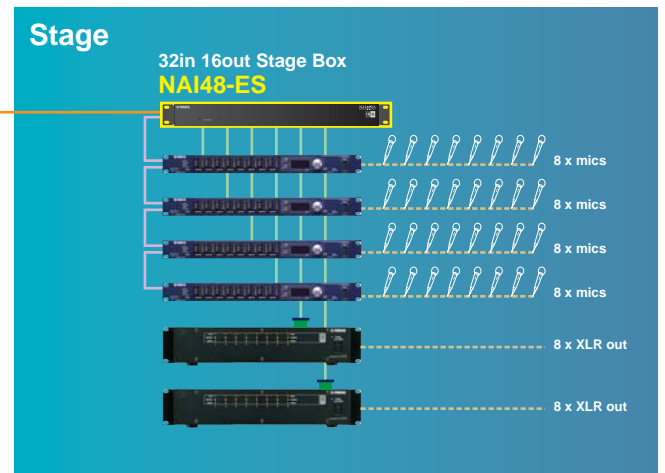ed from a laptop computer located near the FOH console. The AD8HR remote head amplifiers will also respond to scene changes from the main PM5D console. A high-resolution DAW system is included for high quality live recording.

Amp Rack

EthernetSwitch 100M

NEXO Digital TD Controller NX-242 — T5n
NEXO Digital TD Controller NX-242 — T5n
NEXO Digital TD Controller NX-242 — T5n
NEXO Digital TD Controller NX-242 — T5n

Stage

NEXO Digital TD Controller NX-242
T5n

NAI48-ES

8 x mics
8 x mics
8 x mics
8 x mics
8 x mics
8 x mics

6 x AD8HR with Mics

F.O.H

3 x AVY16-ES

AVRed-ES

PM5D

Rack Source CD/MD

Laptop PC

Recording

Hi-End Multi Channel Audio Card (s)

Macintosh or PC with NUENDO

NAI48-ES

Monitor

3 x AVY16-ES

Rack Ear Monitor

AVRed-ES

PM5D

— EtherSound
— AuviTran AVRed-ES Opto Fiver redundant
— HA Remote
— Digital
········ Analog

Medium-scale Live Sound System

This small to medium scale live sound system provides 32 inputs and 16 outputs on stage in a minimum amount of space with minimum wiring.

F.O.H

2 x AVY16-ES

Stage

32in 16out Stage Box
NAI48-ES

8 x mics
8 x mics
8 x mics
8 x mics
8 x XLR out
8 x XLR out

• EtherSound™ is a trademark of Digigram.
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• Specifications and appearance are subject to change without notice.

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