AV3rd-ES100 overview

AuviTran AV3rd-ES100 is a self powered box, bridging EtherSound and ASIO, without the need for a console.

AV3rd-ES100 is an EtherSound (ES100) access point with two Neutrik® EtherCon® connectors, and is also equipped with a third port, bringing full ASIO features provided by the AuviTran Network ASIO Streamer.

Through AuviTran ESMonitor application, patch ASIO and EtherSound audio channels to and from any device connected to the EtherSound network.

With an ASIO compatible application:

♦ Play up to 64 high quality audio channels on any EtherSound networked device
♦ Record up to 64 high quality audio channels from any EtherSound networked device

AV3rd-ES100 may also be used in following configurations:

♦ Third port insertion for control and monitoring in a ring configuration where all devices ports are already used
♦ Portable active EtherSound repeater, doubling the possible distance in an Ethernet connection

Key Features

■ Self powered (100-240 VAC) box, format 1U 1/3 19” rack.
■ 2 x EtherSound™ ES100 EtherCon® connectors for connection to other EtherSound devices.
■ 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.
■ AV3rd-ES100 is seen as a Virtual Sound card by any ASIO compatible application.
■ By connecting a PC with an ASIO compatible application to an AV3rd-ES100 through its third port, you can add record/playback features to the EtherSound existing features of the device:
  ♦ Play up to 64 audio channels from PC
  ♦ Record up to 64 audio channels to PC
■ The ASIO channels can be patched to and from any of the EtherSound audio channels though AuviTran ESMonitor application
■ Remote management with ESMonitor software through the EtherSound Network.
■ Dedicated control page for monitoring and controlling all the device parameters

Audio Stream Input/Output (ASIO) is a computer soundcard driver protocol for digital audio specified by Steinberg, providing a low-latency and high fidelity interface between a software application and computer's soundcard or ASIO device. It allows software to have access to the multi-channel capabilities of a wide range of powerful audio devices. ASIO is a trademark and software of Steinberg Media Technologies GmbH

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.

Mechanical specifications

135mm x 40mm x 200mm
(5.1” x 1.4” x 7.9”)
1U 1/3rd of 19” rack space
Application examples

Technical Specifications

General
Size 1/3 of 1U 19” rack : 145 mm x 44 mm x 200mm
Power Consumption 5 Watts
Power Supply 100-240VAC
Storage: Temp/Humidity - 5°C to 70°C / 0% to 95% (non-condensing)
Operating: Temp/Humidity 0 °C to 50°C / 5% to 90% (non-condensing)
Connectors 2xNeutrik EtherCon RJ45-XLR female connectors (EtherSound ES100 from/to links)
1x RJ45 connector for third port (PC control and ASIO Streamer interface)
1xSub-D9 (RS232) serial interface

AV3rd-ES100 and EtherSound
Audio Outputs 64 channels extracted from any of the 64 EtherSound downstream channels or from any of the 64 EtherSound upstream channels in bidirectional mode @ 44.1 kHz or 48kHz
Audio inputs 64 channels inserted from any of the 64 EtherSound downstream channels or from any of the 64 EtherSound upstream channels in bidirectional mode @ 44.1 kHz or 48kHz
Sample format 24 bit
Sample rate 44.1 kHz, 48kHz, 88.2 kHz, and 96 kHz
Synchronization Automatic from EtherSound network

Host PC minimum specifications for ASIO
Operating system Windows XP, Vista or Seven (32 bit or 64 bit)
Processor Dual core CPU, clock speed > 2GHz
Memory At least 1 GB for Windows XP
At least 2 GB for Windows Vista and Seven
Network 100Mbits or Gigabit Ethernet adapter
Storage Fast and large disk

AV3rd and ASIO
Firmware version 0x0E05 or later (1)
I/O count Add up to 64 ASIO inputs and 64 ASIO outputs to the EtherSound channels
Sample format 24 bit
Sample rate 44.1 kHz, 48kHz, 88.2 kHz, and 96 kHz

Development and Integration Environment
OS Supported Windows 32 bits Vista/XP Seven (32 bits or 64 bits)
AVS-ESMonitor AVS-ESMonitor enables to remotely set, control and monitor an EtherSound network and provides enhanced control pages to manage the AV3rd-ES100 specific parameters.
Development Tools PC Telnet based development tools allowing access and control of all the EtherSound devices' parameters.

Part number
AV3rd-ES100 EtherSound 3rd Port Access Point