

Compatible with all InnovaSON consoles, the DO-8XES Digital Output module provides 8 processed channel outputs in both AES digital and EtherSound format for network connectivity.

Using InnovaSON's Sensoft Patch-OUT screen, matrix, bus or direct line level outputs can be patched to the DO-8XES modules located in the local Mix Box for distribution to amplifiers, loudspeakers, etc, ... located anywhere on an EtherSound network.

Consecutive channels are paired for AES output (4 x 2 pairs) and the same 8 channels are sent in 8 consecutive EtherSound channels controlled either by the ES Control software or via a hardware selector located on each DO-8XES module.

Each channel output has the following processing features :

- Patch from 32 buses and 64 inputs (direct I/O) console audio channels
- Full dynamics with Gate/ Expander and Compressor / Limiter
- 8 bands of full parametric equalization
- Delay up to 1365 ms (@ 48kHz)
- Output gain
- Mute

Processing is controlled, displayed and stored

by Sensoft, the  consoles' software.



EtherSound™

Using standard Ethernet protocol, CAT5 cabling and usual peripherals, EtherSound is an audio signal transport and distribution system capable of 64 audio channels of 24 bits at 48 kHz (or 44.1 kHz).

Breakout boxes and access cards in consoles and audio equipments provide the bricks for a cost effective and flexible audio network. Installation and use is simple, efficient and expandable.

In touring applications and fixed installations such as theatres, houses of worship, conference centres, radio and TV studios, audio routing and distribution is simplified using network cabling and switches for permanent or even temporary audio production.

The patented EtherSound™ protocol provides fully deterministic, low latency (125 μ s and 1.6 μ s per additional network node). Control data and bi-directional status are available and transmitted for remote controls or signalisation with RS232 and GPIO.

Although standard Ethernet CAT5 is 100m, there is really no limit for distance as a standard switch is a buffer and a splitter and fibre optic interfaces can be used to extend cable runs. An infinite number of output terminations are able to share the 64 available channels.

Flexible digital audio distribution

Light and cost effective cabling

Full processing for each channel

Live applications and fixed installations

Fast, straightforward user interface

Uses standard Ethernet components

Up to 64 EtherSound Channels

Enhanced configuration with ES control

Third party equipments available

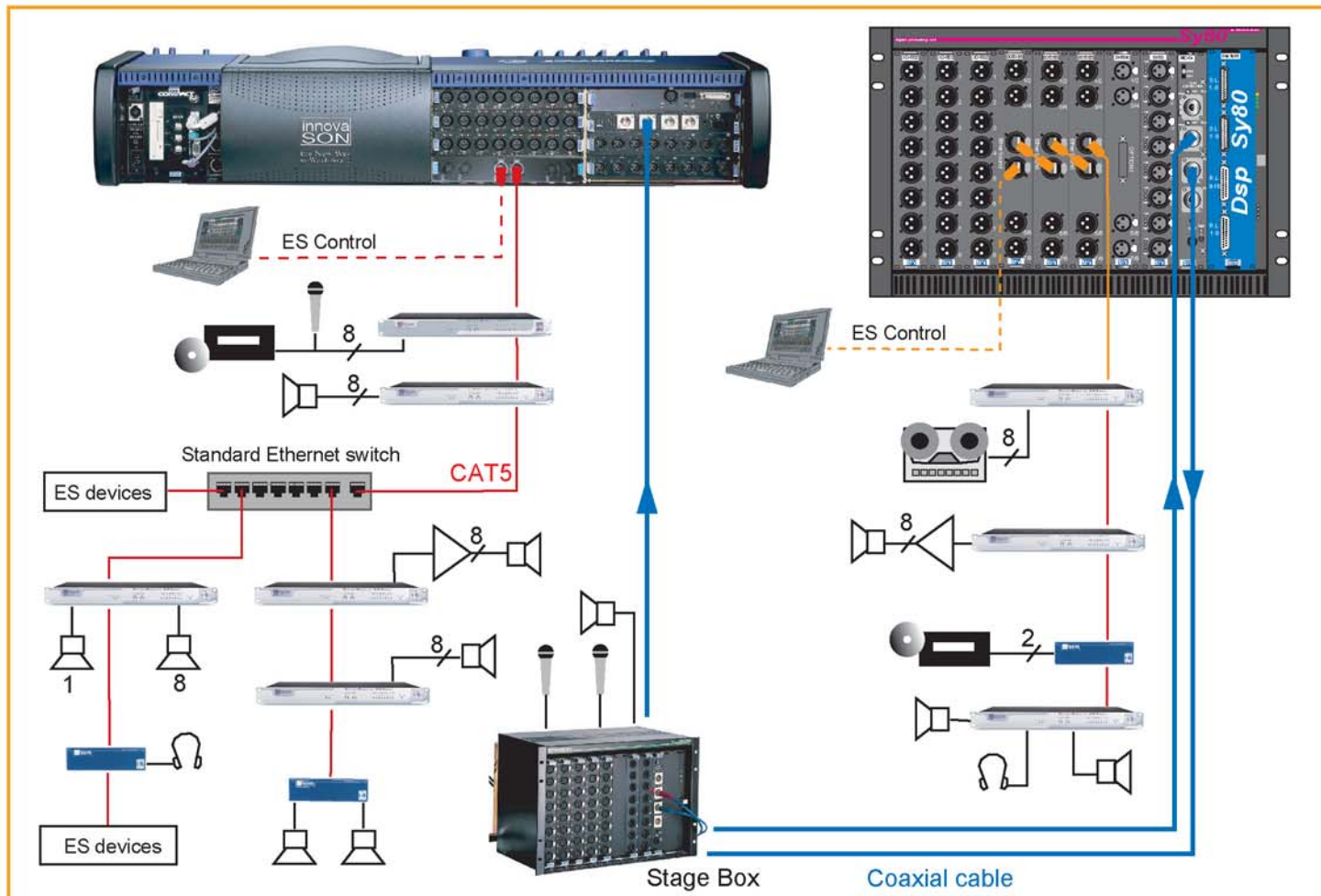
Quick and easy to configure

DO-8XES and EtherSound applications and specifications

Sy40 typical configuration :
 24 processed outputs, 16 Analogue, 8 (4x2) AES and EtherSound
 24 mic/line, 8 line level inputs and Stage Box inputs

Sy80 Mix Box typical configuration :
 64 outputs, 48 processed, 24 analogue,
 24 (12x2) AES and EtherSound, 16 line.

32 inputs, 8 (4x2) AES, 8 mic/line, 16 line
 And inputs in the Stage Box



DO-8XES module characteristics

Dimensions (l x h x d) : 266x41x160 mm
 Weight : 500 g

Delivery case : 320x220x80 mm – 900 g

Bus connector : DIN 41612 InnovaSON

Front panel :

- AES outputs on 4 XLR3-Male
- ES network on 2 Ether-Con / RJ45
- network activity 4 leds



Audio characteristics

8 digital channels, 24 bits 48 kHz with SRC
 Simultaneous AES and EtherSound outputs
 Patch from InnovaSON digital bus, 24 bits
 Processing (32/ 40 bits floating point)

Each output provides:

- 8 Full-band Parametric Equalization (Frequency, Width, Level and notch)
- Compressor (Att., Rel, Threshold, ratio, gain)
- Gate (Att., Rel., Threshold, range, hold)
- Output delay (up to 1365 ms)
- Mute and output gain (-11.5 to 0 dBfs)

Delay, internal bus to outputs (@48kHz) :

AES / EtherSound : 94 frames (1.9 to 2.1 ms)

Delay, EtherSound to EtherSound : 2µs

EtherSound addressed by on-board selector
 DO-8XES can be Primary Master or Master

Software functions

EtherSound linked components have selectors to manually define channel use and network addresses.

A PC, running ES Control software connected to the DO-8XES 'FROM' RJ45 connectors controls the whole network and displays all detected ES modules. Channel assignments, patches and the network configuration is stored in each active module's flash memory.

Mix buses (or direct outputs) are assigned to the DO8-XES using the console's Sensoft Patch-OUT screen.

EtherSound clock source :

- console if the module is Primary Master
- network if the module is daisy chained.