PRELIMINARY

Dio™

Digital Input / Output – multichannel audio interfaces

InnovaSON's new **Dio™** multichannel audio interfaces are the latest way to connect InnovaSON systems with multiple 3rd party compatible products while at the same time greatly increasing the I/O capabilities of the Sy80 and Sy48 digital live mixing consoles. **Dio** interfaces use a host daughter card attached to the Sy80 or Sy48 DSP modules and this daughter card is able to support up to two multichannel digital audio interfaces.

Dio-ES, the first product in the range provides a link for 64 bi-directional EtherSound™ audio channels between two InnovaSON DSP cards giving you the ability to share audio resources between one or more InnovaSON consoles. This same interface can be used to access up to 64 channels of audio from external devices via EtherSound, or to connect to a second InnovaSON Stage Box* for situations where you need either more inputs than can be handled by a single remote Stage Box, or access to sources from more than one location.

Suitable for a broad range of sound reinforcement applications **Dio-ES** is fully scalable with the flexibilty to address everything from a small setup using one InnovaSON console and external devices connected via a single EtherSound network, to complex multi-source setups with multiple consoles and networks.

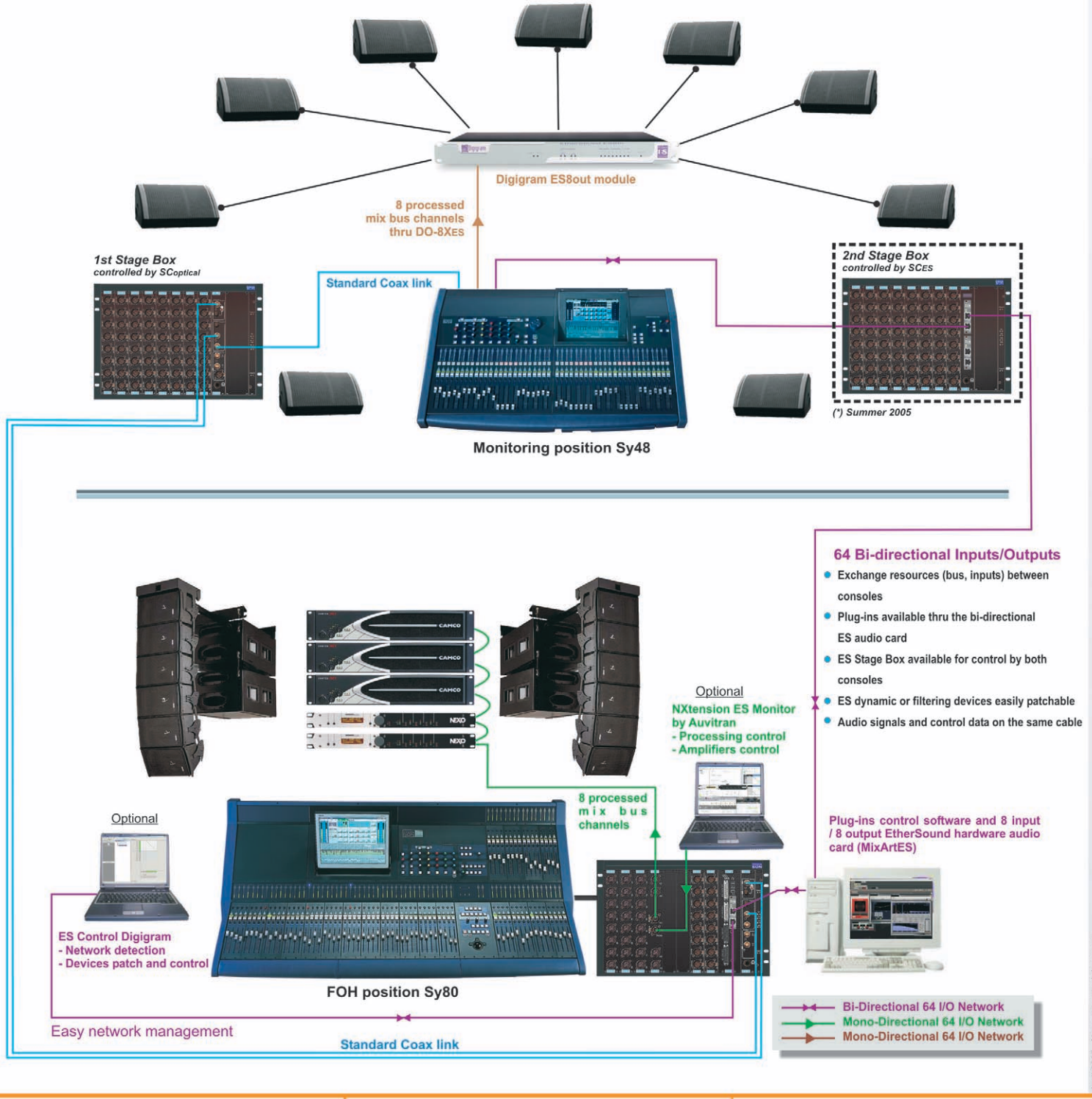
Routing inputs and outputs within a **Dio** network is extremely straightforward using InnovaSON's console software, Sensoft, with all patching saved and recallable within the console show files & Q/pages. When several local networks are required, for example one may be set up specifically to control the processing and gains of the amplifiers for a PA, additional PCs running product-specific EtherSound control software can be inserted into that LAN to monitor those resources.

EtherSound is a patented audio signal transport and distribution system with extremely low latency (125 µs) that uses standard Ethernet protocol, common CAT5 100Base-T cabling and peripherals for delivering 64 bi-directional audio channels of 24 bits at 48 kHz (or 44.1 kHz). For transmission distances over the 100 meters limit for CAT5, a standard switch can be used as a buffer / split, and converters to optical fibre cable used for extended cable runs. An infinite number of output terminations are able to share the 64 available EtherSound channels.

InnovaSON's **Dio-ES** interface with EtherSound digital audio networking is your connection to the future of live mixing.

Exceptional audio quality
Scalable network configurations
Up to 64 bi-directional audio channels
Compatible with Sy48 & Sy80 DSP cards
Programmable & recallable patches
Easy to set-up, easy to control
Upgrades available

Extremely low latency
Access to a growing number of EtherSound compatible products
Light and cost effective CAT5 cabling
Exchange inputs and busses between two or more InnovaSON consoles
Connect a 2nd Stage Box*



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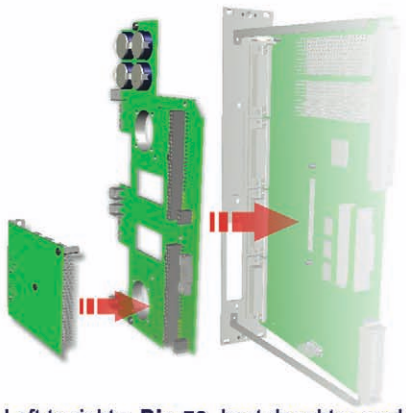
Specifications and appearance may change without prior notice.

The first interface card in the **Dio** range, **Dio-ES** provides up to 64 bi-directional channels of 24-bit (48KHz) digital audio between a virtually infinite number of networked audio devices, plus bi-directional status and control data. EtherSound is a patented audio signal transport and distribution system with an exceptionally low latency (125 µs plus 1.6 µs per additional network node) which delivers high quality synchronised audio over standard Ethernet.



Left to right : **Dio-ES**, host daughter card, Sy80 / Sy48 DSP board

Future **Dio** card options planned include :

- A second **Dio-ES** interface card for an additional network (or the duplication of the single network for redundancy)
- on-board EtherSound to fibre conversion
- a link card for running a second DSP within the same audio rack to further increase the I/O and mix capabilities of the Sy80 and Sy48 consoles.

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