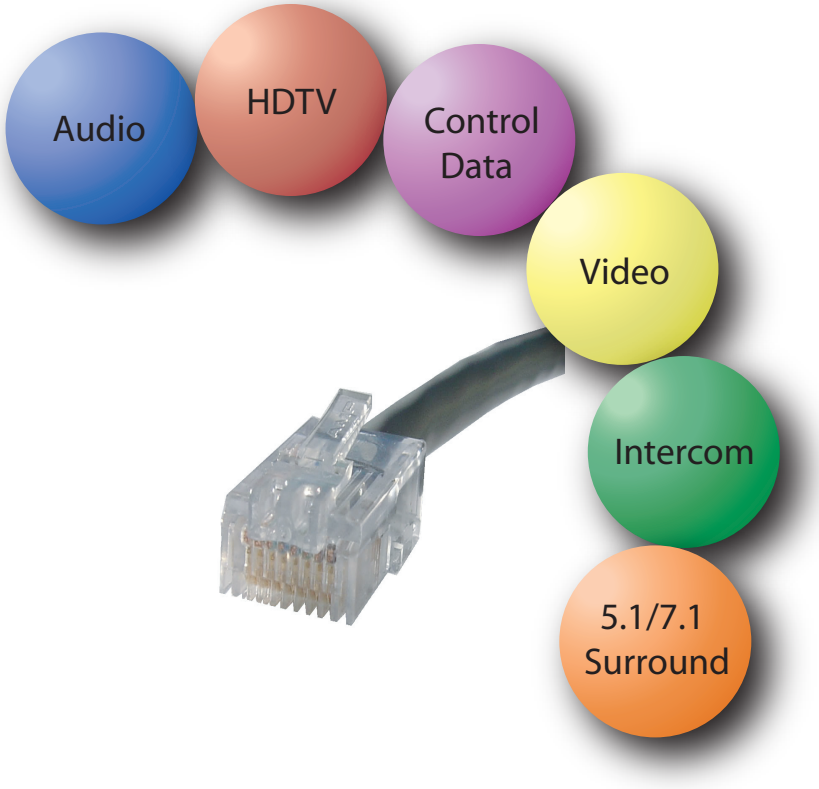
NETWORKSOUND

Synchronized Networking of Multichannel Audio,
Video and Control Data over CAT-5/6



MediaNet

Multiple Clock Support
Built in Redundancy

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The Next Generation of Media Transport

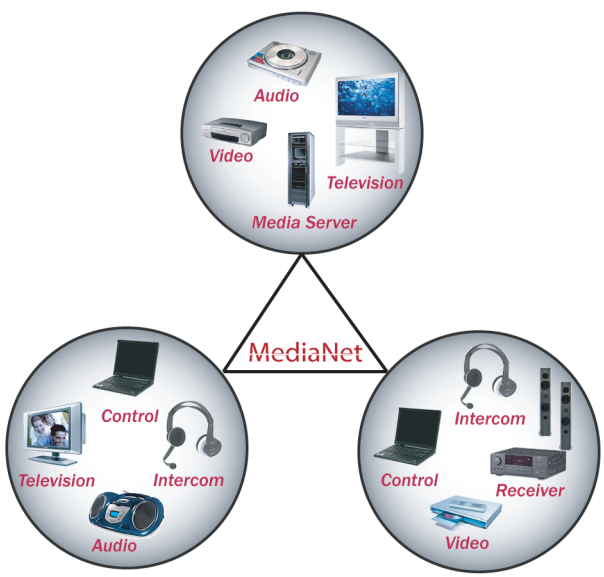
NetworkSound, the pioneer of multi-channel, real time professional audio/video over CAT-5 solutions, proudly presents MediaNet, the most powerful, flexible media transport solution ever.

Professional audio and video environments demand the highest quality content. The change from analog to digital in broadcasting, recording, mixing and other equipment has been instrumental to quality improvements, but the options to transport professional quality audio and video have been slow to evolve. The industry continues to rely on the decades old standard of analog cables. These bulky, expensive cables are vulnerable to cross-talk, ground loop problems and degradation of cable integrity over time. To overcome these limitations, NetworkSound has developed the complete digital replacement for analog cables, MediaNet.

NetworkSound has created MediaNet as a next generation digital audio/video transport solution. MediaNet transports multiple audio and video channels (analog or digital) and control data over a lightweight CAT-5/6 cable with very low latency and no bit loss, a necessity for professional environments, such as broadcasting recording studios and live performances. MediaNet is **the only solution capable of synchronously transporting multiple compressed and uncompressed audio and video streams over a standard CAT-5/6 network**. With the high channel count, unmatched capabilities, and low cost of MediaNet, NetworkSound is leading the digital revolution in video and audio transport.

Unique Capabilities

- Multi-channel audio, video and control over CAT-5/6
- Built in cable redundancy
- Plug and Play
- Support of compressed and uncompressed audio
- Support of HDTV (1020p), MPEG4, 656, and other formats
- Latency of less than 200 microseconds (I2S-I2S)
- Guaranteed delivery of every bit and audio sample
- Dedicated control bandwidth of 10 to 100 Mbps
- 128 audio channels over 100 Mbps or 1024 over 1 GbE
- Power over Ethernet (PoE)
- Star and daisy chain configuration
- Standard Ethernet switch support
- Fiber for long distance
- Multiple 5.1 & 7.1 surround sound audio support



Unparalleled Advancements

Synchronized networking of compressed media applications, such as high definition video, 5.1/7.1 digital surround sound and other compressed audio/video, requires synchronization of the unique clock source of each stream. NetworkSound's MediaNet protocol is the first technology capable of supporting multiple unique clocks over a standard CAT-5/6 network. MediaNet was designed for professional audio and video applications that require the highest quality and lowest latency possible. The unique technology can also be modified to work over a standard IP network for consumer-level quality in the home media distribution market. MediaNet is flexible and can also be adapted to different network infrastructures, such as wireless.

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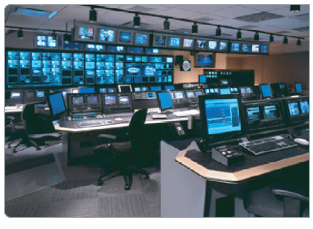
MediaNet Applications

Broadcast

MediaNet is ideal for broadcast applications, where there is a need to transport video, audio, intercom and control data. MediaNet eliminates the need for separate cables for each of these, replacing them all with one CAT-5/6, with no change to the way broadcasters work. Using MediaNet, feeds from video and audio sources can be sent throughout the studio, and to remote vans. Equipment operators can also communicate with directors and producers over intercom, as well as remotely control equipment, all using the same cable. This complete solution reduces cost, cabling complexity and installation time.



Musical Instruments

Our first product is a core component of Gibson's digital Les Paul, a new version of their flagship product with digital output via the built-in CAT-5 connection. The guitar uses special pickups to capture a separate analog signal for each individual string, which is converted into a digital signal and outputted by the NetworkSound component incorporated into the body of the guitar. Our modular design allows MediaNet to be incorporated into any musical instrument, enabling a digital output, whether the instrument is digital (synthesizers), analog (electric guitar), or microphone signal from acoustic instruments (acoustic guitar, cello, etc.).

Live Performances

Traditionally analog signals from instruments and microphones are carried from a stage to the mixer via a giant cable known as a "snake", a massive cable containing an individual jacketed, shielded, 3 conductor cable for each analog channel being carried. A typical snake carrying 64 channels can weigh more than 200 pounds, and has several inherent sound quality issues. We have developed a Digital Snake application of MediaNet with digital audio quality, built in redundancy, added flexibility, and the ability to carry video, intercom and control data over a single CAT-5/6. MediaNet also allows multiple distribution configurations, including point to point, splits and daisy chain. All configurations of the Digital Snakes are plug and play.

Home Audio/Video Distribution

With the ability to transport multiple audio and video streams and control data over a single CAT-5/6 cable, MediaNet provides a great solution for audio and video distribution throughout a house or commercial location (hotel, conference center). Using MediaNet, a multi-zone audio/video network can be created, where audio and video from equipment in separate zones can be made available to, and controlled by, any other zone in real time. Because MediaNet has extremely low latency, the zones are synchronized, with undetectable transport delay.

Other Applications

- Mixers, Amplifiers, Power speakers
- Signal Processors
- Audio control systems such as mixing, monitoring
- Digital Audio Workstations
- Digital Video Editors
- Public address (PA) system
- Studio and stage
- Intercom distances of up to 2,000 ft

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Products

MediaNet is available via modules to be included in OEM products. We have several modules designed and ready to employ. In addition, our core strength is custom designs for the unique needs of our customers. We take pride in providing solutions for whatever channel count, distance and I/O configuration fits a customer's application.

NetworkSound also manufactures products, including our plug and play digital snake, the Mamba. In addition to the Mamba we offer custom digital snake products capable of carrying up to 128 channels over a standard CAT-5/6 and 1024 over Gigabit with a delay of less than 200 microsecond. Using MediaNet's piece of mind redundancy feature, our snakes provide cable redundancy between two CAT-5/6 cables or one CAT-5/6 and Fiber or two Fibers. The failure of a cable is detected and the backup is engaged in less than 60 microseconds, leaving no detectable lapse. A remote mic-pre can be included into the snake unit, or by accepting balanced input, the snake can allow you to use your preferred mic-pre products.

The Mamba

- 32X16 Channels @ 48kHz 24 bit
- Balanced lined level Input and Output
- I/O via DB25
- 3U Rack mountable
- Auto cable redundancy

Please visit our website www.networksound.com for a complete list of products.

About the Company

NetworkSound is a spinout of 3Com that was founded in 2003. We design and produce products for delivering synchronized digital audio and video over a standard CAT-5/6 cable. With applications including broadcasting, plug and play digital snakes, musical instruments and home multi-zone audio and video distribution, our technology offers flexible solutions for high bandwidth delivery of media in real time. We have several ASIC/FPGA board designs available, and are able to custom design boards that fit the needs of our customers. We are looking for OEM partners for our new MediaNet protocol.

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