



AoIP (Audio over IP)

AoIP stands for **Audio over Internet Protocol** and it is a solution for transmitting digital audio signals via IP network (usually a Local Area Network = LAN).

AoIP is scalable, flexible and reliable: the main advantage is that it uses the same infrastructure already in place for Internet.

The sound is divided into little digital packets and then transmitted to its destination using the network infrastructure. Over short or long distances, AoIP is always suitable for high quality transmission: it can be music from main radio studio console, live sound at concerts, sports broadcasting announcers, interviews, news or background music.

AoIP uses different audio codecs to transmit and receive audio using the best sound quality per byte. AoIP uses AAC+, MP3, Ogg Vorbis, WMA, G.711, PCM.



Mozart FM transmitter series can support 2 different Audio over IP options, both installed internally and with independent control software.

The choice is mainly related to the digital audio input source the customer will use.



The first available AoIP option allows to play files and playlists from USB memory, PC or web server (http) or to stream from sources like:

- Shoutcast
- Icecast (Internet radio)
- RTP servers

Automatic failover function is available: in case of missing audio source in input, it is possible to set up to 3 URLs and eventually to play from local USB memory.



Graphical control interface is available for an easy setting of all main parameters.

The screenshot shows a web browser window with the URL 192.168.1.252/index.html. The page title is 'STREAMING CLIENT' and it features the 'dib DIGITAL BROADCAST' logo. The interface is divided into several sections:

- CONTROL:** Includes buttons for MUTE and ON/OFF.
- KEYBOARD:** A numeric keypad with buttons for 1-9 and 0.
- MAIN:** Includes buttons for SLEEP, PLAY, SHUFFLE, REPEAT, PREV, NEXT, CHA -, CHA +, VOL -, and VOL +.
- Player:** Shows 'Status: PLAYING', 'Source: URL 1', 'Channel: 1', and checkboxes for 'Shuffle' and 'Repeat'.
- Stream:** Shows 'http://188.165.195.176:8034/stream' and 'Title: Silent Circle - Stop The Rain (12 Version) / RMI - Euro Disco'.
- Audio Output:** Displays 'Bitrate: 128 kbps', 'Buffer: 65532 B', 'Volume: 100 %', 'Peak Left: -24 dB', and 'Peak Right: -27 dB' with corresponding progress bars.
- Control Outputs:** Eight checkboxes labeled 1 through 8.
- Help:** Provides instructions for 'Status page', 'Player', and 'Status' (IDLE, BUFFERING, PLAYING, PRIORITY, STAND-BY), and 'Source' (URL1, URL2, URL3).

The second available AoIP option allows to play a Streaming IP only via Dante Audio over IP, AES67 RTP.

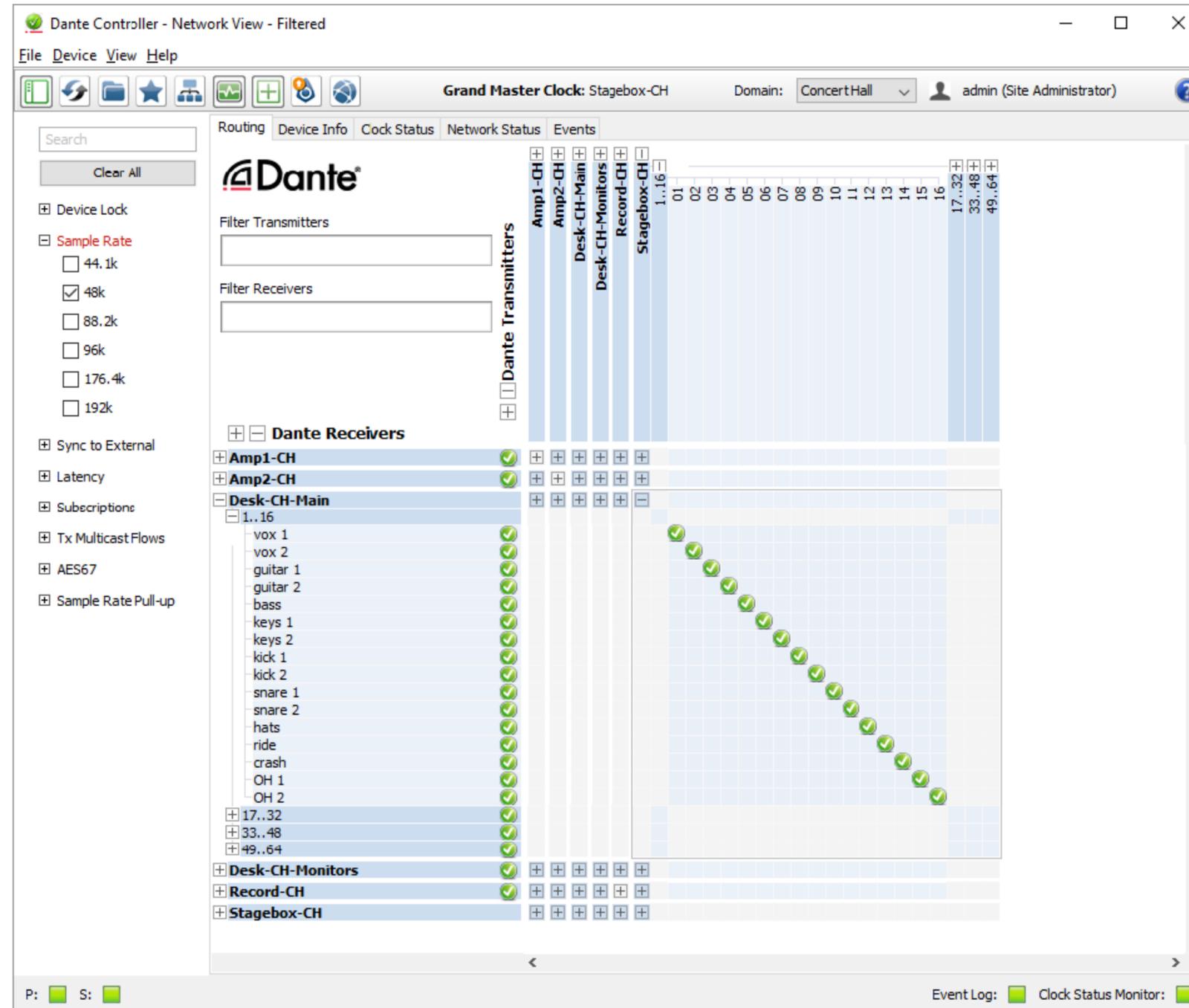
In this way it is possible to route audio around Dante networks.

Dante is an acronym or backronym for **digital audio network through Ethernet** and it is a common, proven protocol that improves on older options, like EtherSound and CobraNet.

In this case the Audio over IP module is supplied by POE.



Graphical control interface is available for an easy setting of all main parameters.



The screenshot displays the Dante Controller software interface in 'Network View - Filtered' mode. The window title is 'Dante Controller - Network View - Filtered'. The interface includes a menu bar (File, Device, View, Help) and a toolbar with various icons. The main area is divided into several sections:

- Search:** A search bar with a 'Clear All' button.
- Device Lock:** A checkbox that is currently unchecked.
- Sample Rate:** A section with checkboxes for 44.1k, 48k (checked), 88.2k, 96k, 176.4k, and 192k.
- Sync to External:** A checkbox that is currently unchecked.
- Latency:** A checkbox that is currently unchecked.
- Subscriptions:** A checkbox that is currently unchecked.
- Tx Multicast Flows:** A checkbox that is currently unchecked.
- AES67:** A checkbox that is currently unchecked.
- Sample Rate Pull-up:** A checkbox that is currently unchecked.

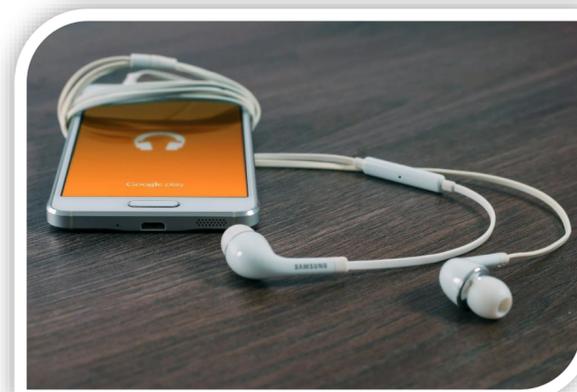
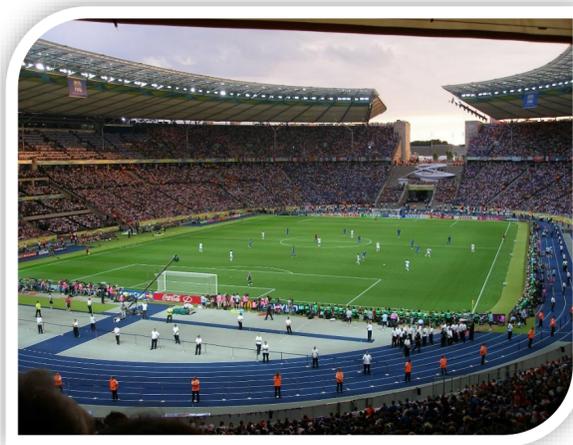
The central part of the interface shows a routing table with columns for 'Dante Transmitters' and 'Dante Receivers'. The 'Dante Receivers' column is expanded to show a list of channels and their status:

- Amp1-CH:** Status: Green checkmark
- Amp2-CH:** Status: Green checkmark
- Desk-CH-Main:** Status: Green checkmark
 - 1..16: Status: Green checkmark
 - vox 1: Status: Green checkmark
 - vox 2: Status: Green checkmark
 - guitar 1: Status: Green checkmark
 - guitar 2: Status: Green checkmark
 - bass: Status: Green checkmark
 - keys 1: Status: Green checkmark
 - keys 2: Status: Green checkmark
 - kick 1: Status: Green checkmark
 - kick 2: Status: Green checkmark
 - snare 1: Status: Green checkmark
 - snare 2: Status: Green checkmark
 - hats: Status: Green checkmark
 - ride: Status: Green checkmark
 - crash: Status: Green checkmark
 - OH 1: Status: Green checkmark
 - OH 2: Status: Green checkmark
- Desk-CH-Monitors:** Status: Green checkmark
- Record-CH:** Status: Green checkmark
- Stagebox-CH:** Status: Green checkmark

At the bottom of the interface, there are status indicators for 'P:' (Power) and 'S:' (Sample Rate), both showing green checkmarks. On the right side, there are indicators for 'Event Log' and 'Clock Status Monitor', both also showing green checkmarks.

Try the Digital audio from IP source: Mozart transmitters treat not only deep and warm sound from analog inputs but also pureness and high-quality digital audio in an analog transmission mode.

Contact us for more information!





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