

Product Overview - Specifications and Applications

ANDROMEDA

The **ANDROMEDA** is the newest and most powerful audio codec from MAYAH. Read on to find out what makes this audio codec so exceptional and why you should consider using one to get the most advanced audio transmission experience currently available.



Distinguishing Features

Up to 384 channels

The ANDROMEDA boasts a grand total of channels of up to 384 mono or 192 stereo i, using three MADI interfaces. This makes it the leading product in the market, no other audio codec can handle this many channels. This allows you a staggering number of simultaneous connections depending on the connection requirements.

Scalable and Adaptable Audio Transmission

This audio codec offers a large variety of options to customize the audio transmission, so that you get exactly the level of quality, performance, redundancy and safety you need. No matter what you use it for, the ANDROMEDA performs well and with the reliability you expect from MAYAH.

High Customizability

The ANDROMEDA is a veritable toolbox and fully customizable. MAYAH can provide you with exactly the builds that fit your needs the best. Need ISDN connection in addition to IP? Done. Need support for additional encoding/decoding algorithms? Done. Prefer MADI or AES? We can deliver both. There is very little the ANDROMEDA cannot do for your audio transmission needs. If you are unsure what would be the most appropriate solution for your needs, we would be happy to help.

Wide Codec and Protocol Support

No matter which coding algorithm or communications protocol you wish to use, the ANDROMEDA can handle them. Supported communications protocols include EBU TECH 3326, RTP, RTMP, SIP (including access to multiple SIP servers). Supported audio coding algorithms include AAC, Opus, FLAC, AES67 and many more.

Applications

Multi-talent

Thanks to its scalability and customizability, the ANDROMEDA performs well no matter what areas of audio transmission applications you use it for. Whether it is used as a central hub for multiple connections, multi-program streaming encoder, high quality answering or logging machine, format converter, gateway or to bring together audio from multiple sources in real-time, the ANDROMEDA impresses. Its support for 3x MADI interfaces or up to 16 AES/EBU interfaces means that it is especially well-suited for any kind of operation that would otherwise require a large number of regular codecs.

Specifications

Algorithms	
Base	<ul style="list-style-type: none"> • Linear • G.722 • MP3 • MPEG 1 & 2 Layer II
Optional ¹	<ul style="list-style-type: none"> • Opus • FLAC • AES67 • AAC / AAC HE • Others on request
Bit Rates	Supported according to the respective algorithms.
Sampling Rates	Supported according to the respective algorithms.
Transport Protocols	<ul style="list-style-type: none"> • RTP • RTMP • SDP • SIP • UDP • EBU Tech 3326
Audio Quality Features	<ul style="list-style-type: none"> • FEC (Forward Error Correction) • PLEC (Packet Loss Error Concealment)

¹ See Page 5 for details.

	<ul style="list-style-type: none"> • Jitterbuffer • Echo Cancellation • Silence Detection • Extended Programming • Backup Stream • Backup Recording • Encryption • VPN (Virtual Private Network)
Audio Interfaces	<ul style="list-style-type: none"> • Up to 3x MADI • Up to 8x AES • AES67
Network Interfaces	<ul style="list-style-type: none"> • 2x Ethernet Gigabit LAN <ul style="list-style-type: none"> ◦ Data (Audio streams) ◦ Control (web interface) • Others on request
Other Interfaces	<ul style="list-style-type: none"> • 2x USB 3.0, 2x USB 2.0
Audio channels	<p>Variable, depending on chosen audio interfaces, including</p> <ul style="list-style-type: none"> • 3x MADI: 384 • 8x AES: 32
Control & Monitoring	<p>Proprietary browser-based control software on the device: the MAYAH WebRemote. Offering:</p> <ul style="list-style-type: none"> • Highly customizable widget-based Dashboard as central control hub, perfectly adaptable to every type of user • PIPE Concept for simple call and connection management/monitoring via simple all-in-one drag-and-drop controls • Advanced user and user group management • Modern and clear design
Power Supply	Internal, fanless, 240W
Cooling	Heatpipe cooling, entirely noiseless
Internal Hard Drive	256 GB SSD (Solid State Drive)
Housing	19" rack mount, 2 RU, with front handles for easier placement and carry
Front Panel	Power Status LED

Example Applications

As mentioned before, the ANDROMEDA is highly customizable. The following examples show you some of the possible builds and the applications they are suited for.

ANDROMEDA Central Hub Machine

With its great performance and high number of supported channels the ANDROMEDA is ideally suited for being the central hub machine in a network of audio transmission devices. Receiving a large number of calls from multiple locations all over the globe is no problem even for a single ANDROMEDA. Whether you need a huge amount of low bit-rate connections or a few hi

ANDROMEDA Transcoder

Built for transcoding one audio format into another. It can handle nearly every format you could require. Even better, with this machine you barely ever need to worry about workload as the high number of available channels ensures that it will be handled efficiently and with room for redundancies.

ANDROMEDA Answering Machine

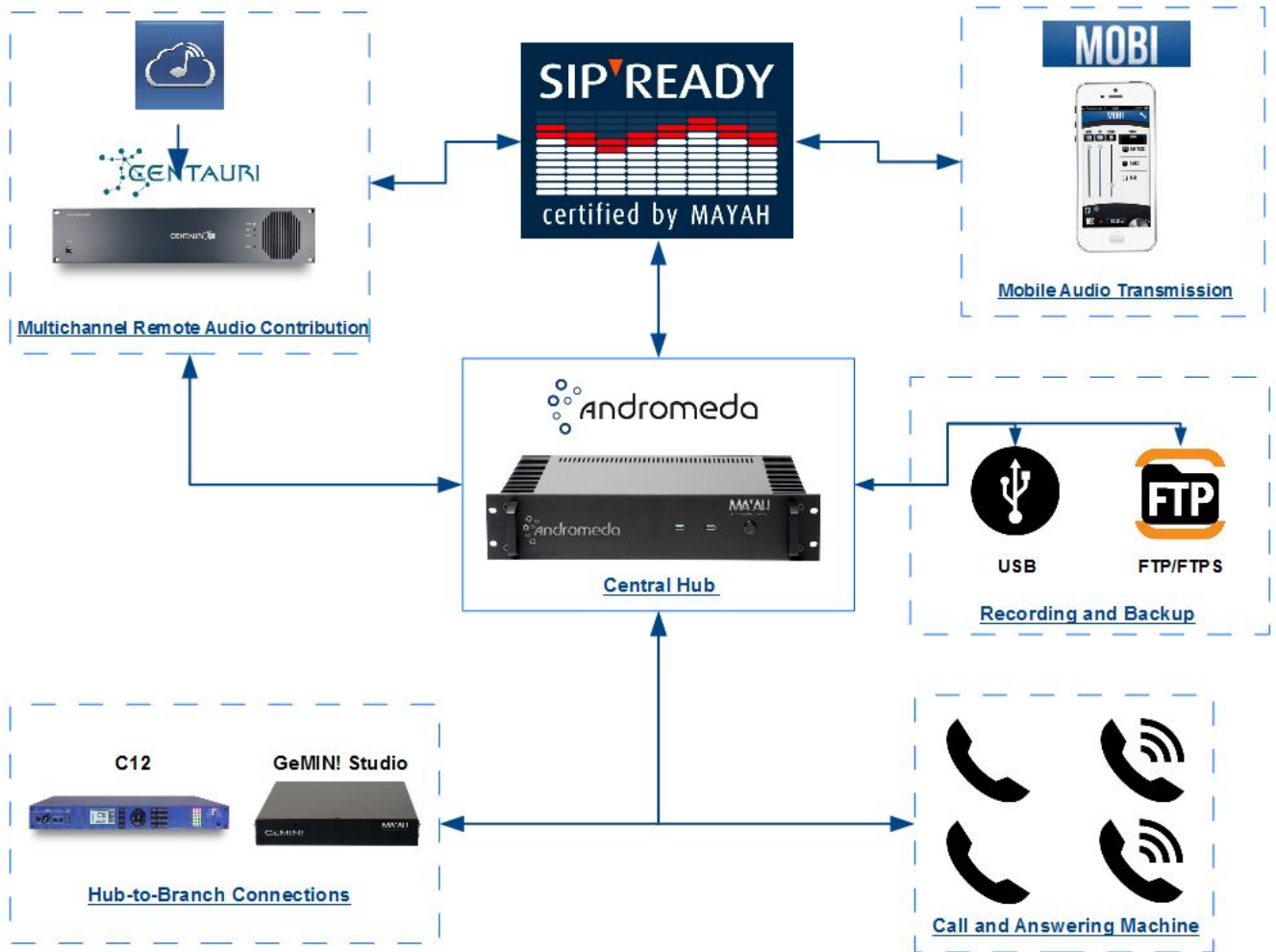
The ANDROMEDA is our recommendation if you need an audio codec to handle a large amount of high quality calls. It is perfect for traffic reporting, scouting or any other kind of broadcasting that can expect a large number of incoming calls.

ANDROMEDA RTMP Multi-program Encoder

The ANDROMEDA can use a large variety of audio coding algorithms for encoding. You can always pick the one best suited to your needs. This is facilitated through the RTMP capabilities of the ANDROMEDA, including the ability to send RTMP encoded streams to RTMP servers (e.g. Wowza).

ANDROMEDA Remote Orchestra

An experimental concept. This build allows musicians in different places to transmit their specific parts of a song in real-time to a central hub (the ANDROMEDA) and have the full song played through it. Imagine a concert performed remotely by musicians from around the world!



Available Algorithm Modules

Audio Coding Algorithm	Module Number	Description
Opus	A-5021	OPUS, encoder, decoder, channel 1-8, fully integrated in modular PIPE concept
	A-5022	OPUS, encoder, decoder, channel 9-32, fully integrated in modular PIPE concept
	A-5023	OPUS, encoder, decoder, channel 33-64, fully integrated in modular PIPE concept
AAC HE	A-5025	AAC HE, encoder, decoder, channel 1-8, fully integrated in modular PIPE concept
	A-5026	AAC HE, encoder, decoder, channel 9-32, fully integrated in modular PIPE concept
	A-5027	AAC HE, encoder, decoder, channel 33-64, fully integrated in modular PIPE concept
AES67	A-5030	AES67 (planned), encoder, decoder, channel 1-8, fully integrated in modular PIPE concept
	A-5031	AES67 (planned), encoder, decoder, channel 9-32, fully integrated in modular PIPE concept
FLAC	A-5035	FLAC, encoder, decoder, channel 1-8, fully integrated in modular PIPE concept
	A-5036	FLAC, encoder, decoder, channel 9-32, fully integrated in modular PIPE concept
	A-5037	FLAC, encoder, decoder, channel 33-64, fully integrated in modular PIPE concept