

D*AP4 VAP - 2 Channel Voice Audio Processor

The fully featured dual mono or stereo D*AP4 VAP contains a suite of performance enhancing and creative audio processes dedicated to extracting the maximum potential quality from voice audio with dependable consistency. Flexible I/O options include AES, analog, 3G SDI, MADI, DanteTM Audio over IP and high quality mic preamps.



Aimed at applications including radio broadcast, TV voice over and audio post production, the D*AP4 VAP is designed to ensure that vocal quality and accuracy is always maintained at its best from program to program and day to day.

Overview

The D*AP4 VAP features a two channel voice signal path and separate stereo program path for either standalone voice processing, or to provide automatic or manual integration of voice and program signals. An optional microphone pre-amp allows direct input to the dedicated voice path. The range of onboard signal processing comprises of:

Mid/Side Matrix

As a creative tool, the M/S Matrix uses two mics placed closely together to capture and produce variable width stereo recordings.

Phase Rotator

The Phase Rotator automatically detects imbalanced audio waveforms and restores symmetry to prevent transients that may unnecessarily trigger downstream processing.

De-Esser

The De-Esser greatly reduces the effect of excessive sibilance from spoken voices.

Parametric and Dynamic EQ

A 5-band Parametric EQ is coupled with Spectral Signature dynamic equalizer, a powerful creative tool allowing adaptive control of spectral balance.

Incoming audio is analyzed and its spectral structure is compared to a predetermined reference curve. This allows dynamic EQ corrections to be applied only if necessary to achieve a consistent sound image and tonal balance.

Dynamics

In addition to a traditional upward compressor, a threshold based downward compressor is also included. Both types adaptively adjust timing parameters based on the incoming audio structure. An expander/gate effectively removes low-level noise without introducing artifacts.

Voice Leveler

To assist in loudness based programming, a voice leveler can be used to precondition the voice component prior to combining it with the program element.

Voice Over

Voice Over provides seamless integration of voice and program content in situations such as continuity announcements or video description with automatic ducking.

Level Magic Loudness Management

Based on a unique multi-loop control principle, the optional Level Magic algorithm provides adaptive wideband loudness control with exceptionally high audio quality that is free of coloration, pumping, distortion or modulation effects. The optional J*AM software displays input vs output levels and can log long term values to a destination folder anywhere on the network.

System Integration

All system parameters are remotely accessible allowing the unit to be integrated and remotely operated by broadcast control systems. An advanced built-in Event Management tool allows the remote loading of parameter presets either by hotkeys on the optional X*AP RM1 remote panel, by 8 onboard GPI/O's or by network commands using the Ember+TM control protocol. This makes it easy to assign individual settings to each user and re-call them instantly.

Web Configuration

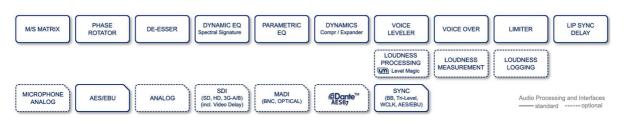
A web interface permits easy and intuitive setup and configuration from anywhere in your network. Onscreen metering and measurements are available for easy reference.

Mobile User Interface

A dedicated "mobile" UI is tailored specifically for touch screens or smaller displays such as tablets and smartphones. It offers fast access to user profiles and commonly required functions such as Cough Cut and Voice Over.

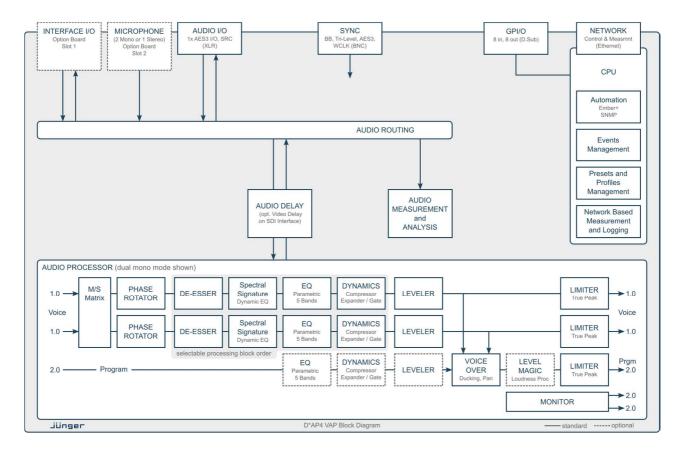
Interfaces and System Security

Audio I/O's range from onboard AES3 to optional 3G SDI including video delay, MADI, DanteTM audio over IP, analog and high quality mic pre-amps. With power fail bypass relays, dual redundant PSU's and SNMP integration, the unit ensures maximum operational safety and peace of mind for today's critical 24/7 radio and TV broadcast or audio production facilities.





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Key Features

- · Dual mono or stereo voice channel configuration
- · 2 channel program path in addition to voice channels
- · Algorithms specialized for voice processing
- Sophisticated user profile management
- True peak limiting, De-Esser and Phase Rotator
- 5 band Parametric EQ and Spectral Signature dynamic EQ
- Dynamics with upward/downward compressor and expander/gate
- · Voice Over functionality
- Voice leveler and optional Level Magic loudness management compliant with all current standards and recommendations
- · Optional loudness logging software (J*AM)
- · Ethernet connectivity for setup and control via web browser
- · I/O modularity via 1 interface slot
- On board interfaces: 1x AES/EBU I/O (XLR), Sync in, Sync out, 8 GPI/O
- · External control via network or GPI/O's
- · Power fail bypass relays, 19"
- · 1RU device, redundant PSU

Versions and Options

- D*AP4 VAP: D*AP4 base unit plus VAP feature set
- · X*AP RM1: hardware remote control linked via Ethernet



- · Option Board 16ch SDI I/O (3G/HD/SD)
- Option Board 4ch analog I/O
- · Option Board 8ch analog Out
- · Option Board 8ch AES/EBU I/O
- Option Board 16ch Dante™ Audio over IP
- Option Board 16ch MADI I/O
- Option Board Analog Line-in / Mic-in
- · License Level Magic Loudness Management

