

# DMV-96

Digital automatic mixing amplifier  
with 8 mic/line inputs and 6 outputs



## Streaming Media Server:

- DMV-96 is a live audio streamer
- It records audio from an input/output channel, encodes it and sends it to a streaming server.
- DMV-96 can do live streaming, so people can hear your video while it is being recorded.
- It can be used to create an internet radio station or a privately running jukebox and many things in between.
- It is very versatile in that new formats can be added relatively easily.
- DMV-96 supports open standards for communication and interaction.
- DMV-96 supports TCP/IP, UDP, RTSP and RTMP streaming protocols.

## Technical specifications

### Analog inputs

- Number of balanced inputs 8 (Phoenix 3,5 mm connector)
- Number of unbalanced inputs 1 (RCA connector)
- Analog gain (manually adjustable) 0 dB - 30 dB
- Nominal sensitivity (balanced input) MIV-HI -58 dBu (1mV<sub>rms</sub>)
- Nominal sensitivity (balanced input)MIV-LO -34 dBu (15mV<sub>rms</sub>)
- Nominal sensitivity (balanced input)MIV-HI -19 dBu (87mV<sub>rms</sub>)
- Phantom power (Activating at DIP-Switch) +48 Volt stabilized, very low noise
- Balanced input impedance (Phoenix) 5 kΩ @ 1 kHz
- Unbalanced input impedance (RCA) 33 kΩ @ 1 kHz
- Balanced input CMRR <60 dB @ 1 kHz
- On Mic (20 - 20 kHz weighted) R<sub>s</sub> =150 Ohm -126 dBV
- Frequency response MIC (-3dB) 160 Hz to 20 kHz
- Frequency response LINE (-3dB) 40 Hz to 20 kHz
- Input protections radio frequency interference (RFI)  
transient voltage spikes  
external overvoltage

### Analog outputs

- Number of balanced outputs 6 (Phoenix 3,5 mm connector)
- Number of unbalanced outputs 1 (RCA connector)
- Dynamik range 120 dB ("A" weighted)
- Residual noise of output driver -100 dBu (20 Hz ÷ 20 kHz)
- Nominal level (balanced output) 0 dBu (7,75 V<sub>rms</sub>)
- Maximum level (balanced output) 20 dBu (7,75 V<sub>rms</sub>)
- Balanced output impedance 140 Ω
- Unbalanced output impedance 70 Ω
- Ausgangsschutz short circuits  
Overvoltage protection

### Analog to digital converter

- Bit resolution 24-bit
- Converter type sigma delta
- sampling frequency (F<sub>s</sub>) 48 kHz
- Signal to noise ratio (SNR) 104 dB ("A" weighted @ 48 kHz)
- Dynamic range 104 dB (-60 dB<sub>F<sub>s</sub></sub>)
- Total harmonic distortion (THD) -93 dB (1 kHz, -1 dB<sub>F<sub>s</sub></sub>)
- Oversampling factor 512 F<sub>s</sub>

### Digital Signal Processor

- DSP 32-bit / 40-bit, Floating point  
150 MHz - 6,6 ns cycling rate  
Super Harvard Architecture  
900 MFLOPS  
1Mbits SRAM, two-channel

### Digital to analog converter

- Bit resolution 24-bit
- Converter type sigma delta
- Sampling frequency (F<sub>s</sub>) 48 kHz
- Signal to noise ratio (SNR) 112 dB ("A" weighted @ 48 kHz)
- Dynamic range 112 dB (-60 dB<sub>F<sub>s</sub></sub>)
- Total harmonic distortion (THD) -94 dB (1 kHz, 0 dB<sub>F<sub>s</sub></sub>)
- Delay time 0,58 ms
- Oversampling factor 512 F<sub>s</sub>

## Digital Processing

### Input

- Highpass/lowpass filter (anti hum, anti rumble and more )  
Butterworth filter type with adjustable cutting frequency and selectable slope 12/24/48 dB/Octave
- 5 parametric equalizer PEQ  
Frequency [20 Hz ÷ 20 kHz]  
Gain [-15 dB ÷ 15 dB]  
Bandwidth [0,01 ÷ 6 oct]
- Noise Gate  
Threshold [-80 dB<sub>FS</sub> ÷ 0 dB<sub>FS</sub>]  
Hold time [100 ms ÷ 10 s]
- Automix function  
Hold time [100 ms ÷ 5000 ms]  
Attenuation [-60 dB ÷ 0 dB]  
NOM Gain  
(increase post gain of -3dB for each doubling of opened automix channels)  
Max. opened channels [1 ÷ 6]
- Volume control  
[-100 dB ÷ 10 dB]

### Routing Matrix:

- Matrix size  
8 inputs / 6 outputs
- Matrix crosspoint level adjusting  
[-60 dB ÷ 10 dB]

### Audio output

- Easy adjustment of the sound columns  
AT-N series  
Live SM series
- 31 bands graphic equalizer  
Gain [-12 dB ÷ 12 dB]
- Dynamic compressor range  
Threshold [-90 dB<sub>FS</sub> ÷ 20 dB<sub>FS</sub>]  
Ratio [R=1:1 ÷ R=20:1]  
Post Gain [-20 dB ÷ 20 dB]  
Attack Time [1 ms ÷ 250 ms]  
Release Time [10 ms ÷ 2500 ms]
- Limiter  
Threshold fixed at 0 dB<sub>FS</sub>  
[0 m ÷ 35 m], [0 ms ÷ 100 ms]  
[0°, 180°]  
[-100 dB ÷ 10 dB]  
[-100 dB ÷ 10 dB]

### Data connections

- Rear panel  
ETHERNET 802.3  
Wi-Fi 802.11  
USB 2.0

### Display

- LCD  
20 characters x 2 lines

### PSU Module

- AC range  
230 VAC ± 10%

- Input frequency 47 Hz to 67 Hz
- Power consumption max. 33 W
- Analog voltages +48 VDC, ±15 VDC, +5 VDC
- Digital voltages +3,3 VDC, +1,2 VDC
- Voltage regulators linear type (no switching noise)

### Dimensions and weight

- Height 84 mm
- Width 484 mm
- Depth 340 mm + 60 mm connector
- Weight 5.6 kg (1x480W)  
6.8 kg (2x320W and 2x480W)  
12 kg (1x150W and 1x240W)  
13.5 kg (2x150W)

### Temperature range

- Indoor 0°C to 40°C (32°F bis 102°F)

### Certifications

- AES48-2005 grounding scheme
- 2002/95/EC
- CE



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