

# DMX-66

Digital Audio Mixer with 6 micro/line inputs and 6 outputs



**DMX-66 is a powerful mixer for audio transmissions in difficult acoustic rooms like churches, conference rooms, lecture halls and so on. It provides the users with versatile features.**

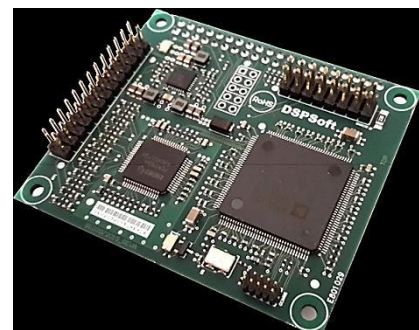
## **MP3 PLAYER – AUDIO WEBCASTING**

### **MP3 Player:**

DMX- 66 can play digital audio files using any USB flash drive stick.

### **Streaming Media Server:**

- DMX-66 is a live audio streamer..
- It records audio from an input/output channel, encodes it and sends it to a streaming server.
- DMX-66 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.
- DMX-66 supports open standards for communication and interaction.
- DMX-66 supports TCP/IP, UDP, RTSP and RTMP streaming protocols.



## Technical specifications

### Analog inputs

• Number of balanced inputs	6 (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) Rs =150 Ohm	-126 dBV
• Frequency response MIC (-3dB)	160 Hz bis 20 kHz
• Frequency response LINE (-3dB)	40 Hz bis 20 kHz
• Input protections	radio frequency interference (RFI) transient voltage spikes external overvoltage

### Analog outputs

• Number of balanced outputs	6 + 1 (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 (Fs)	48 kHz
• Signal to noise ratio (SNR)	104 dB ("A" weighted @ 48 kHz)
• Dynamic range	104 dB (-60 dB <sub>FS</sub> )
• Total harmonic distortion (THD)	-93 dB (1 kHz, -1 dB <sub>FS</sub> )
• Oversampling factor	512 Fs

### Digital Signal Processor

• DSP	32-bit / 40-bit, Floating point 150 MHz - 6,6 ns cycling rate Super Harvard Architecture 900 MFLOPS 1Mbits SRAM, zweikanalig
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### Digital to analog converter

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

## 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 equalizuer 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  
6 inputs / 6 outputs
- Matix crosspoint level adjusting  
[-60 dB ÷ 10 dB]

### Audio output

- Easy adjustment of the sound columnns  
AT-N series  
Live SM series
- 10 bands graphic equalizer  
Gain [-12 dB ÷ 12 dB]
- Dynamic compressor range  
Threshold [-90 dB<sub>FS</sub> ÷ 20 dB<sub>FS</sub>]  
Ratil [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>
- Delay  
[0 m ÷ 35 m], [0 ms ÷ 100 ms]
- Phase control  
[0°, 180°]
- Output level  
[-100 dB ÷ 10 dB]
- Master level  
[-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  $\pm$  10%
- Input frequency 47 Hz to 67 Hz
- Power consumption max. 33 W
- Analog voltages +48 VDC,  $\pm$ 15 VDC, +5 VDC
- Digital voltages +3,3 VDC, +1,2 VDC
- Voltage regulators linear type (no switching noise)

### Dimensions and weight

- Height 44 mm
- Width 484 mm
- Depth 230 mm + 60 mm connector
- Weight 3.6 kg

### 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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