



## AFM-20DSP

20-Port Audio Matrix with DSP and Interchangeable Inputs & Outputs

| HDMI | Speakers | Ethernet - RJ-45  
| 4K/60 UHD (4:2:0)



AFM-20DSP is a high-performance, professional audio matrix switcher with 20 analog ports that can be configured as inputs or outputs according to preset I/O configurations. AFM-20DSP includes multi-channel DSP, built-in 2x60W @ 8Ω and 1x120W @ 70V / 100V power amplifier, 4x4 Dante interface, HDMI embedding and de-embedding, and S/PDIF. The comprehensive and user-friendly graphic interface makes configuring every detail of your audio system intuitive and easy

### FEATURES

**High-Performance, Professional Audio Matrix Switcher** - Professional, studio grade signal conversion technology, including the latest generation 32-bit advanced Digital Analog Converter architecture to achieve excellent dynamic performance and improved tolerance to clock jitter. Maintains the quality of the original audio signal with selectable sampling rates up to 96 kHz. Flat frequency response, unmatched sonic performance, excellent signal to noise ratio, and extraordinarily low distortion levels

**Wide Range of I/O Formats** - Includes 20 analog ports, 4x4 Dante interface, HDMI input and output, and S/PDIF input and output

**Multi-Channel Processing** - Provides DSP (Digital Sound Processing) that enables simultaneous processing of all input and output signals

**Built-in Power Amplifier** - 2x60W @ 8Ω and 1x120W @ 70V / 100V power amplifier

**Maximum Flexibility** - Customize the analog port configuration: use the default 12 x8 I/O matrix configuration or select from one of the many other preset I/O configurations. Route any input to any output: even between different formats (for example, route an analog input to an S/PDIF output). Control volume and DSP per port. Route any of the ports to the power amplifier

**Intuitive and Comprehensive Configuration and Control** - Via a powerful, user-friendly graphic interface, set volume (gain and attenuation) and DSP per input, execute routing, select line in, mic in, phantom power or line out on each port, configure master level and more

**Audio De-embedding** - De-embeds the audio signal from the HDMI input for routing to any of the outputs or for routing to the loop output

**Programmable** - Supports up to 10 global presets per I/O configuration plus 10 mixer snapshot presets

**Convenient Control** - Via the user-friendly embedded web pages and RS-232 serial controller, control signal routing, independent volume

**Easy, Cost-Effective Maintenance** - LED indicators for main power, line in/out, mic in, clipping, power amp, Dante sync, and HDMI, enable easy local maintenance and troubleshooting. Local firmware upgrade via the USB type-A port ensures lasting, field-proven deployment

**Easy Installation** - 19" enclosure for rack mounting a unit in a 1U rack space with included rack ears and universal 100-240V AC power connection



## TECHNICAL SPECIFICATIONS

---

I/O	20 balanced Mono Audio: On 3-pin terminal blocks
Inputs	1 HDMI: On a female HDMI connector
	1 S/PDIF: On an RCA connector
Outputs	1 HDMI: On a female HDMI connector
	1 S/PDIF: On an RCA connector
	120W Amplifier: On a 4-pin large terminal block
Ports	1 Dante: On an RJ-45 female connector
	1 mini USB: On a female mini USB-A connector
	1 RS-232: On a 3-pin terminal block
	1 Ethernet: On an RJ-45 female connector
Amplifier	Input Sensitivity Attains full power @ 0.3V (-10dBV)
	Output Power 2 x 60W @ 4Ω or 8Ω, 1 x 120W @ 70V or 100V
	Amplifier Type Class D
	Maximum Voltage Gain 26dB SE / 32dB BTL
	Dynamic Range 119dB
	Frequency Response 20Hz to 20kHz @ +/-1dB
	S/N Ratio 80dB — 10dBV, 20 Hz — 20 kHz
Audio THD + Noise THD+N (1kHz @ 1W) 0.003 %	
Audio 2nd Harmonic 0.08% @ 75W RMS @ 4Ω 6.67kHz	
Video	Max Bandwidth: 10.2Gbps (3.4Gbps per graphic channel)
	Max Resolution: 4K UHD @60Hz (4:2:0) 24bpp resolution
	Compliance: HDMI and HDCP 1.4
User Interface	Front Panel LEDs: 1 status, 20 analog audio ports, 4 Dante I/O, HDMI embed, HDMI de-embed, 2 S/PDIF I/O, and 2 amplifier channel
Control RS-232	Baud Rate: 115200
Supported Web Browsers	Windows: Chrome
Power	Consumption: 104VA max
	Source: 100-240V AC 50/60Hz
Environmental Conditions	Operating Temperature: 0° to +40°C (32° to 104°F)
	Storage Temperature: -40° to +70°C (-40° to 158°F)
	Humidity: 10% to 90%, RHL non-condensing
Regulatory Compliance (Standards Compliance)	Safety: CE
	Environmental: RoHs, WEEE

Enclosure

Size: 19" 1U

Type: Aluminum

Cooling: Fans

Accessories

Included: Power cord