AFM-20DSP is a member of the Kramer XSPerience family of DSP products. AFM-20DSP is an advanced, 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**

**Advanced 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 x 8 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.

**Simple and Powerful Maestro Room Automation** - Intuitive user interface enables you to fully automate your meeting room elements. Configure lights, shades, devices and more to be activated by an extensive range of triggers, including input/output connectivity, routing, and button pressing. By minimizing user intervention, Maestro room automation saves meeting prep time and minimizes human error before presentations.

**Intuitive and Comprehensive Configuration and Control** - Via a powerful, user-friendly graphic interface, set volume (gain and attenuation) and DSP per input; execute routing and select line in, mic in, phantom power or line out on each port; configure master level and more. Control signal routing, volume and other basic settings using API commands via RS-232 communication transmitted by a PC, touch screen system or other serial controller.

**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.

**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

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 balanced Mono Audio:</td>
<td>120W Amplifier:</td>
</tr>
<tr>
<td>On 3-pin terminal blocks</td>
<td>On a 4-pin large terminal block</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 HDMI: On a female HDMI connector</td>
<td>1 HDMI: On a female HDMI connector</td>
</tr>
<tr>
<td>1 S/PDIF: On an RCA connector</td>
<td>1 S/PDIF: On an RCA connector</td>
</tr>
</tbody>
</table>

### Ports

<table>
<thead>
<tr>
<th>Ports</th>
<th>Amplifier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dante: On an RJ-45 female connector</td>
<td>Input Sensitivity Attains full power @ 0.3V (~10dBV)</td>
</tr>
<tr>
<td>1 mini USB: On a female mini USB-A connector</td>
<td>Output Power 2 x 60W @ 4Ω or 8Ω, 1 x 120W @ 70V or 100V</td>
</tr>
<tr>
<td>1 RS-232: On a 3-pin terminal block</td>
<td>Amplifier Type Class D</td>
</tr>
<tr>
<td>1 Ethernet: On an RJ-45 female connector</td>
<td>Maximum Voltage Gain 26dB SE / 32dB BTL</td>
</tr>
</tbody>
</table>

### Amplifier

- 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

### 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 channels

### Control RS-232

- Baud Rate: 115200

### Supported Web Browsers

- Windows: Chrome

### Power

- Consumption: 190VA 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

- Safety: CE
- Environmental: RoHs, WEEE
Enclosure
Size: 19" 1U
Type: Aluminum
Cooling: Fans

Accessories
Included: Power cord

Product Dimensions
43.64cm x 23.72cm x 4.36cm (17.18" x 9.34" x 1.72") W, D, H

Product Weight
1.6kg (3.4lbs) approx

Shipping Dimensions
52.50cm x 33.00cm x 10.70cm (20.67" x 12.99" x 4.21") W, D, H

Shipping Weight
2.7kg (6.0lbs) approx