The FDX-S08 is a HDCP-compliant modular digital matrix switcher that supports resolutions up to 4K@30. It provides up to 8 inputs and 8 outputs. Video and embedded audio can be switched simultaneously. With audio boards, input digital audio signals can be converted into output analog audio or Dante network audio signals. Input analog audio signals and Dante network audio signals can be converted into digital audio signals and embedded to desired output video channels.

The FDX-S08 features RS-232C/LAN ports for remote control, redundant power supply, and system check that outputs an alarm in case an abnormality is detected in power supply voltage, fans, internal temperature, or board. The redundant power supply ensures constant availability and minimizes the chance of a failure even for mission-critical environments.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input board</td>
<td>2 slots (Up to 8 inputs)</td>
</tr>
<tr>
<td>Output board</td>
<td>2 slots (Up to 8 outputs)</td>
</tr>
<tr>
<td>Audio board</td>
<td>1 slot (Up to 32 stereo channels)</td>
</tr>
<tr>
<td>Transmission signal</td>
<td>Video Up to 4K@30</td>
</tr>
<tr>
<td></td>
<td>Audio Multi-channel LPCM up to 8 channels</td>
</tr>
<tr>
<td>Instant Alert output</td>
<td>Control Up to 38.4 kbps of RS-232, Up to 1080p resolution of LAN</td>
</tr>
<tr>
<td></td>
<td>1 port/captive screw (2-pin) Non-voltage contact input to output up to DC 24 V 300 mA Monitoring power supply voltage, fans, internal temperature, board, and audio board status.</td>
</tr>
<tr>
<td></td>
<td>Control RS-232C 1 port/captive screw (3-pin), full duplex, up to 38.4 kbps</td>
</tr>
<tr>
<td>Functions</td>
<td>I/O board, audio board, CPU board, fan unit, and power unit can be replaced without removing from rack, Preset memory (32 settings), Last memory, Button security lockout, System check, WEB browser control, Status notification, HDBaseT status display.</td>
</tr>
<tr>
<td>Power</td>
<td>100 - 240 VAC ±10%, 50 Hz/60 Hz ±3 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>About 10 Watts</td>
</tr>
<tr>
<td>Dimensions</td>
<td>16.9 (W) × 3.5 (H) × 15.7 (D) (430 (W) × 88 (H) × 400 (D) mm) (2U high) (Excluding connectors and the like)</td>
</tr>
<tr>
<td>Weight</td>
<td>20.5 lbs. (9.3 kg) (With redundant power supply: 21.4 lbs. (9.7 kg))</td>
</tr>
<tr>
<td>Temperature</td>
<td>Operating: 32°F to 104°F (0°C to +40°C) Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

### I/O boards

<table>
<thead>
<tr>
<th>Item</th>
<th>Parts Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input board</td>
<td>FDX-SIV4T</td>
<td>4 inputs 4K@30 HDCP 1.4 HDMI/DVI</td>
</tr>
<tr>
<td></td>
<td>FDX-SIV4T</td>
<td>4 inputs 4K@30 HDCP 1.4 HDBaseT</td>
</tr>
<tr>
<td></td>
<td>FDX-SIV4S</td>
<td>4 inputs 3G-SDI/HD-SDI/SD-SD</td>
</tr>
<tr>
<td>Output board</td>
<td>FDX-SOV4H</td>
<td>4 outputs 4K@30 HDCP 1.4 HDMI/DVI</td>
</tr>
<tr>
<td></td>
<td>FDX-SOV4T</td>
<td>4 outputs 4K@30 HDBaseT</td>
</tr>
<tr>
<td></td>
<td>FDX-SOV4HS</td>
<td>4 outputs 1080p HDBaseT 1.4 HDMI/DVI scan converter</td>
</tr>
<tr>
<td></td>
<td>FDX-SOV4ATS</td>
<td>4 outputs 1080p HDBaseT 1.4 HDBaseT scan converter</td>
</tr>
</tbody>
</table>

### Audio board

<table>
<thead>
<tr>
<th>Item</th>
<th>Parts Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio board</td>
<td>FDX-SAB4A</td>
<td>4 inputs Unbalanced</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 outputs Balanced/Unbalanced</td>
</tr>
<tr>
<td></td>
<td>FDX-SOA12A</td>
<td>12 outputs Unbalanced</td>
</tr>
<tr>
<td></td>
<td>FDX-SAB64D</td>
<td>1 input/output 64 Dante protocol channels (32 stereo channels)</td>
</tr>
</tbody>
</table>

### Redundant power supply unit

<table>
<thead>
<tr>
<th>Item</th>
<th>Parts Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Redundant power supply unit</td>
<td>FDX-SRP08</td>
<td>Redundant power unit with two independent power connectors</td>
</tr>
</tbody>
</table>

### Front & Rear Panels

This drawing (rear) is an example.
The FDX-SIV4H is a four-input HDMI board designed for FDX-S series Modular Matrix Switchers. The board supports HDMI and DVI at video resolutions up to 4K@30 and complies with HDCP 1.4.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>4 inputs</td>
</tr>
<tr>
<td>Video</td>
<td>HDMI/DVI 1.0 TMDS single link, HDCP 1.4 TMDS clock: 25 MHz to 300 MHz, TMDS data rate: 0.75 Gbps to 9 Gbps 36 bit Deep Color For WQHD, WQXGA, and 4K formats, 24 bit is supported. x.v.Color/3D/HDR/ARC/HEC/CEC are not supported. EDID emulation</td>
</tr>
<tr>
<td>Format</td>
<td>VGA to 4K (Dot clock: 25 MHz to 300 MHz) For WQHD/WQXGA, only Reduced Blanking is supported. 480i / 480p / 576i / 576p / 720p / 1080i / 1080p / 4K For 4K formats, 24 Hz/25 Hz/30 Hz are supported.</td>
</tr>
<tr>
<td>Audio</td>
<td>Digital Multi-channel LPCM up to 8 channels Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit Reference level: -20 dBFS, Max. input level: 0 dBFS</td>
</tr>
<tr>
<td>Connector</td>
<td>Female HDMI Type A (19-pin)</td>
</tr>
<tr>
<td>Maximum transmission distances</td>
<td>98 ft. (30 m) (1080p@60), 66 ft. (20 m) (4K@30) (*1)</td>
</tr>
<tr>
<td>General</td>
<td>Power consumption About 11 Watts</td>
</tr>
<tr>
<td></td>
<td>Weight 0.7 lbs. (0.3 kg)</td>
</tr>
<tr>
<td></td>
<td>Temperature Operating: 32°F to 104°F (0°C to +40°C) Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td></td>
<td>Humidity Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

*1 The maximum cable distance varies depending on the connected devices and was measured under following conditions:
- 1080p@60: When IDK’s 24 AWG cable was used and signals of 1080p@60 24 bit/pixel (8 bit/component) was input.
- 4K@30: When IDK’s 24 AWG cable was used and signals of 4K@30 24 bit/pixel (8 bit/component) was input.

The maximum cable distance depends on the connected devices. The distance may not be extended with some device combinations, cabling method, or other manufacturer’s cable. Video may be disturbed or may not be output even if signals are within the range mentioned above.

### Panel
The FDX-SIV4S is a four-input SDI board with loop-through designed for FDX-S series Modular Matrix Switchers. The board supports 3G-SDI, HD-SDI, and SD-SDI and receives video signals from source devices up to 984 ft. (300 m) over coaxial cables.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td>4 inputs (With loop-through output)</td>
</tr>
<tr>
<td>Note: When the FDX-S is powered on, SDI input signals are output from SDI loop-through output connectors.</td>
<td></td>
</tr>
</tbody>
</table>
| **Video**             | SDI 3G-SDI/HD-SDI/SD-SDI
NRZ/NRZ.
0.8 V(p-p)/75 Ω
SMPTE 424M (3G-SDI)/SMPTE 292M (HD-SDI)/SMPTE 259M-C (SD-SDI) |
| Format                | 480i / 576i / 720p / 1080i / 1080p
3G-SDI signals: Level A and Level B
720p: 23.98 Hz and 24 Hz are not supported. |
| **Audio**             | Digital
LPCM up to 6 channels (Selecting 2 groups of audio groups1 to 4)
Sampling frequency: 48 kHz, Sample size: 16 bit to 24 bit
Reference level: -20 dBFS, Max. input level: 0 dBFS |
| **Connector**         | BNC                                                                         |
| **Cable**             | 75 Ω coaxial cable for high frequency signal                               |
| **Maximum transmission distances** | With 1505A (BELDEN RG-59), SD-SDI: 1083 ft. (330 m)/HD-SDI: 656 ft. (200 m)/3G-SDI: 394 ft. (120 m)
With 1694A (BELDEN RG-6), SD-SDI: 1312 ft. (400 m)/HD-SDI: 767 ft. (240 m)/3G-SDI: 459 ft. (140 m)
*The maximum distances may be shorten depending on the quality of cable. Please make sure that the cable is long enough. |
| **Function**          | 3G-SDI/HD-SDI/SD-SDI input                                                |
| **General**           | Power consumption: About 30 Watts
Weight: 0.9 lbs. (0.4 kg)
Temperature: Operating: 32°F to 104°F (0°C to +40°C)
Storage: -4°F to +176°F (-20°C to +80°C)
Humidity: Operating/Storage: 20% to 90% (Non Condensing) |

### Panel
The FDX-SIV4T is a four-input HDBaseT board designed for FDX-S series Modular Matrix Switchers. The board supports video resolutions up to 4K@30 and complies with HDCP 1.4. Input video signals can be transmitted up to 328 ft. (100 m); 1080p (24 bit) video signals can be sent up to 492 ft. (150 m) in Long reach mode. RS-232C bidirectional communication and LAN transmission are also supported.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td>4 Inputs</td>
</tr>
<tr>
<td><strong>Video</strong></td>
<td><strong>HDBaseT</strong></td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td>VGA to 4K (Dot clock: 25 MHz to 300 MHz)</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Digital</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>RJ-45 (*1)</td>
</tr>
<tr>
<td><strong>Cable</strong></td>
<td>CAT.5E HDC, Cat5e UTP/STP, Cat6 UTP/STP (T568A/T568B straight-through)</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td><strong>Power consumption</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Weight</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Temperature</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Humidity</strong></td>
</tr>
</tbody>
</table>

*1 RJ-45 (HDBaseT connector) is only for extending digital video and audio signals over a Cat5e/Cat6 cable. Use it with IDK’s HDBaseT Products. Do not use for LAN devices.

*2 The maximum transmission distance was obtained when IDK’s CAT.5E HDC cable was used. The distance may not be extended with some device combinations, cabling method, or other manufacturer’s cable. Video may be disturbed or may not be output even if signals are within the range mentioned above. The maximum transmission distance is the shorter distance of connected HDBaseT product or sink device’s maximum transmission distance. Up to 492 ft. (150 m): 1080p (24 bit) in Long reach mode. For Long reach mode, use IDK’s HDBaseT Products that supports 328 ft. (100 m) or longer.

### Panel

---

---
The FDX-SOV4H is a four-output HDMI board designed for FDX-S series Modular Matrix Switchers. The board supports HDMI and DVI at video resolutions up to 4K@30 and complies with HDCP 1.4.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output</strong></td>
<td>4 outputs</td>
</tr>
<tr>
<td><strong>Video</strong></td>
<td>HDMI/DVI</td>
</tr>
<tr>
<td></td>
<td>TMDS single link, HDCP 1.4</td>
</tr>
<tr>
<td></td>
<td>TMDS clock: 25 MHz to 300 MHz, TMDS data rate: 0.75 Gbps to 9 Gbps</td>
</tr>
<tr>
<td></td>
<td>36 bit Deep Color</td>
</tr>
<tr>
<td></td>
<td>For WQHD, WQXGA, and 4K formats, 24 bit is supported. x.v.Color/3D/HDR/ARC/HEC/CEC are not supported.</td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td>HDMI/DVI 1.0</td>
</tr>
<tr>
<td></td>
<td>VGA to 4K (Dot clock: 25 MHz to 300 MHz)</td>
</tr>
<tr>
<td></td>
<td>For WQHD/WQXGA, only Reduced Blanking is supported.</td>
</tr>
<tr>
<td></td>
<td>480i / 480p / 576i / 576p / 720p / 1080i / 1080p / 4K</td>
</tr>
<tr>
<td></td>
<td>For 4K formats, 24 Hz/25 Hz/30 Hz are supported.</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Digital</td>
</tr>
<tr>
<td></td>
<td>Multi-channel LPCM up to 6 channels</td>
</tr>
<tr>
<td></td>
<td>Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit</td>
</tr>
<tr>
<td></td>
<td>Reference level: -20 dBFS, Max. output level: 0 dBFS</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>Female HDMI Type A (19-pin)</td>
</tr>
<tr>
<td><strong>Maximum transmission distances</strong></td>
<td>98 ft. (30 m) (1080p@60), 66 ft. (20 m) (4K@30) (*)1</td>
</tr>
<tr>
<td><strong>Functions</strong></td>
<td>Anti-snow, Connection Reset (*)2</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Power consumption</td>
</tr>
<tr>
<td></td>
<td>Weight</td>
</tr>
<tr>
<td></td>
<td>Temperature</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humidity</td>
</tr>
</tbody>
</table>

*1 The maximum cable distance varies depending on the connected devices and was measured under following conditions:
- 1080p@60: When IDK’s 24 AWG cable was used and signals of 1080p@60 24 bit/pixel (8 bit/component) was output.
- 4K@30: When IDK’s 24 AWG cable was used and signals of 4K@30 24 bit/pixel (8 bit/component) was output. The maximum cable distance depends on the connected devices. The distance may not be extended with some device combinations, cabling method, or other manufacturer’s cable. Video may be disturbed or may not be output even if signals are within the range mentioned above.

*2 For digital systems, some problems, such as an HDCP authentication error, can often be recovered by physically disconnecting and reconnecting the digital cables. However, the Connection Reset feature will fix these problems automatically without the need to physically plug and unplug the cables. It creates the same condition as if the cable were physically disconnected and reconnected. This feature only works for the FDX-S’s output. If other devices are connected between the FDX-S’s output and sink device, this feature may be invalid.
The FDX-SOV4HS is an HDCP 1.4-compliant four-output HDMI/DVI board designed for FDX-S series Modular Matrix Switchers. The board includes a scan converter that supports resolutions up to QWXGA or 1080p and switches input video signals fast. Videowall can easily be configured using this board.

The Lip Sync feature provides the user with a means to control time alignment between the video and audio.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output</strong></td>
<td>4 outputs</td>
</tr>
<tr>
<td>Video</td>
<td>HDMI/DVI 1.0, TMDS single link, HDCP 1.4, TMDS clock: 25.175 MHz to 202.5 MHz, TMDS data rate: 0.755 Gbps to 6.075 Gbps, 30 bit Deep Color, x.v.Color3D/HDR/ARC/HEC/CEC are not supported. Built-in cable EQ</td>
</tr>
<tr>
<td>Format (*1)</td>
<td>VGA / XGA / WXGA (1280x768) / WXGA (1280x800) / Quad-VGA / SXGA / WXGA (1360x768) / WXGA (1366x768) / SXGA+ / WXGA+ / UXGA / WSXGA+ / VESAHD / WUXGA / WXGA</td>
</tr>
<tr>
<td>Audio</td>
<td>Digital, Multi-channel LPCM up to 8 channels, Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit, Reference level: -20 dBFS, Max. output level: 0 dBFS</td>
</tr>
<tr>
<td>Connector</td>
<td>Female HDMI Type A (19-pin)</td>
</tr>
<tr>
<td>Functions</td>
<td>Scan Converter: Motion adaptive interlaced/progressive conversion, Aspect ratio control, Picture adjustment (brightness, contrast, image position, image size, etc.), Seamless Switching</td>
</tr>
<tr>
<td>Others</td>
<td>Videowall output, Lip Sync (Max. 256 ms.), Anti-snow, Connection Reset (*3)</td>
</tr>
<tr>
<td>General</td>
<td>About 33 Watts</td>
</tr>
<tr>
<td>Weight</td>
<td>1.8 lbs. (0.8 kg)</td>
</tr>
<tr>
<td>Temperature</td>
<td>Operating: 32°F to 104°F (0°C to +40°C), Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

*1 Input resolution: VGA to QWXGA and 480i/480p/576i/576p/720p/1080i/1080p are supported.

*2 The maximum cable distance varies depending on the connected devices and was measured under following conditions:
- 1080p@60: When IDK’s 24 AWG cable was used and signals of 1080p@60 24 bit/pixel (8 bit/component) was input or output. The maximum cable distance depends on the connected devices. The distance may not be extended with some device combinations, cabling method, or other manufacturer’s cable. Video may be disturbed or may not be output even if signals are within the range mentioned above.

*3 For digital systems, some problems, such as an HDCP authentication error, can often be recovered by physically disconnecting and reconnecting the digital cables. However, the Connection Reset feature will fix these problems automatically without the need to physically plug and unplug the cables. It creates the same condition as if the cable were physically disconnected and reconnected. This feature only works for the FDX-S’s output. If other devices are connected between the FDX-S’s output and sink device, this feature may be invalid.
The FDX-SOV4T is a four-output HDBaseT board designed for FDX-S series Modular Matrix Switchers.

The board supports video resolutions up to 4K@30 and complies with HDCP 1.4. Video signals can be transmitted up to 328 ft. (100 m); 1080p (24 bit) video signals can be sent up to 492 ft. (150 m) in Long reach mode. RS-232C bidirectional communication and LAN transmission are also supported.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output</strong></td>
<td>4 outputs</td>
</tr>
<tr>
<td><strong>Video</strong></td>
<td>HDBaseT</td>
</tr>
<tr>
<td></td>
<td>HDCP 1.4</td>
</tr>
<tr>
<td></td>
<td>36 bit Deep Color</td>
</tr>
<tr>
<td></td>
<td>For WQHD, WQXGA, and 4K formats, 24 bit is supported.</td>
</tr>
<tr>
<td></td>
<td>x.v.Color/3D/HDR/ARC/HEC/CEC are not supported. RS-232CLAN</td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td>VGA to 4K (Dot clock: 25 MHz to 300 MHz)</td>
</tr>
<tr>
<td></td>
<td>For WQHD/WQXGA, only Reduced Blanking is supported.</td>
</tr>
<tr>
<td></td>
<td>480i / 480p / 576i / 576p / 720p / 1080i / 1080p / 4K</td>
</tr>
<tr>
<td></td>
<td>For 4K formats, 24 Hz/25 Hz/30 Hz are supported.</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Digital</td>
</tr>
<tr>
<td></td>
<td>Multi-channel LPCM up to 8 channels</td>
</tr>
<tr>
<td></td>
<td>Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit Reference level: -20 dBFS, Max. output level: 0 dBFS</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>RJ-45 (1)</td>
</tr>
<tr>
<td><strong>Cable</strong></td>
<td>CAT.5E, Cat5e UTP/STP, Cat6 UTP/STP (T568A/T568B straight-through)</td>
</tr>
<tr>
<td><strong>Maximum transmission distances</strong></td>
<td>328 ft. (100 m); 492 ft. (150 m) (Long reach mode is used) (2)</td>
</tr>
<tr>
<td><strong>Functions</strong></td>
<td>Anti-snow, Connection Reset (3)</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Power consumption: About 18 Watts</td>
</tr>
<tr>
<td></td>
<td>Weight: 1.1 lbs. (0.5 kg)</td>
</tr>
<tr>
<td></td>
<td>Temperature Operating: 32°F to 104°F (6°C to +40°C)</td>
</tr>
<tr>
<td></td>
<td>Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td></td>
<td>Humidity: Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

*1 RJ-45 (HDBaseT connector) is only for extending digital video and audio signals over a Cat5e/Cat6 cable. Use it with IDK’s HDBaseT Products. Do not use for LAN devices.

*2 The maximum transmission distance was obtained when IDK’s CAT.5E HDC cable was used. The distance may not be extended with some device combinations, cabling method, or other manufacturer’s cable. Video may be distorted or may not be output even if signals are within the range mentioned above.

The maximum transmission distance is the shorter distance of connected HDBaseT product or sink device’s maximum transmission distance. Up to 492 ft. (150 m); 1080p (24 bit) in Long reach mode. For Long reach mode, use IDK’s HDBaseT Products that supports 328 ft. (100 m) or longer.

*3 For digital systems, some problems, such as an HDCP authentication error, can often be recovered by physically disconnecting and reconnecting the digital cables. However, the Connection Reset feature will fix these problems automatically without the need to physically plug and unplug the cables. It creates the same condition as if the cable were physically disconnected and reconnected. This feature only works for the FDX-S’s output. If other devices are connected between the FDX-S’s output and sink device, this feature may be invalid.

### Panel
The FDX-SOV4TS is an HDCP 1.4-compliant four-output HDBaseT board designed for FDX-S series Modular Matrix Switchers. The board includes a scan converter that supports resolutions up to QWXGA or 1080p and switches input video signals fast. Videowall can easily be configured using this board. Video signals can be transmitted up to 328 ft. (100 m); 1080p (24 bit) video signals can be sent up to 492 ft. (150 m) in Long reach mode. RS-232C bidirectional communication and LAN transmission are also supported.

The Lip Sync feature provides the user with a means to control time alignment between the video and audio.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output</strong></td>
<td>4 outputs</td>
</tr>
<tr>
<td><strong>Video</strong></td>
<td>HDBaseT&lt;br&gt;HDCP 1.4&lt;br&gt;30 bit Deep Color&lt;br&gt;x.v.Color/3D/DR/HDR/HEX/CEC are not supported.</td>
</tr>
<tr>
<td>Format (*1)</td>
<td>VGA / XGA / QXGA (1280x768) / WXGA (1280x800) / Quad-VGA / SXGA / WXGA (1366x768) / WXGA (1600x1200) / SXGA+ / WXGA+ / WXGA++ / UXGA / WSXGA+ / VESAHD / WUXGA / QWXGA&lt;br&gt;For VESAHD/WUXGA/QWXGA, only Reduced Blanking is supported. 480p / 576p / 720p / 1080i / 1080p</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Digital&lt;br&gt;Multi-channel LPCM up to 8 channels&lt;br&gt;Sampling frequency: 32 kHz to 192 kHz, Sample size: 16 bit to 24 bit&lt;br&gt;Reference level: -20 dBFS, Max. output level: 0 dBFS</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>RJ-45 (*2)</td>
</tr>
<tr>
<td><strong>Cable</strong></td>
<td>CAT 5E HDC, Cat6e UTP/STP, Cat6 UTP/STP (*568A/T568B straight-through)</td>
</tr>
<tr>
<td><strong>Maximum transmission distances</strong></td>
<td>328 ft. (100 m), 492 ft. (150 m) (Long reach mode is used) (*3)</td>
</tr>
<tr>
<td><strong>Functions</strong></td>
<td>Scan Converter&lt;br&gt;Motion adaptive interlaced/progressive conversion, Aspect ratio control, Picture adjustment (brightness, contrast, image position, image size, etc.), Seamless Switching</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>Videowall output, Lip Sync (Max. 256 ms.), Anti-snow, Connection Reset (*4)</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Power consumption&lt;br&gt;About 40 Watts</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>1.8 lbs (0.8 kg)</td>
</tr>
<tr>
<td><strong>Temperature</strong></td>
<td>Operating: 32°F to 104°F (0°C to +40°C)&lt;br&gt;Storage: -4°F to +16°F (-20°C to +8°C)</td>
</tr>
<tr>
<td><strong>Humidity</strong></td>
<td>Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

---

*1 Input resolution: VGA to QWXGA and 480/480p/576i/576p/720p/1080i/1080p are supported.

*2 RJ-45 (HDBaseT connector) is only for extending digital video and audio signals over a Cat5e/Cat6 cable. Use it with IDK’s HDBaseT Products. Do not use for LAN devices.

*3 The maximum transmission distance was obtained when IDK’s CAT 5E HDC cable was used. The distance may not be extended with some device combinations, cabling method, or other manufacturer’s cable. Video may be disturbed or may not be output even if signals are within the range mentioned above.

*4 For digital systems, some problems, such as an HDCP authentication error, can often be recovered by physically disconnecting and reconnecting the digital cables. However, the Connection Reset feature will fix these problems automatically without the need to physically plug and unplug the cables. It creates the same condition as if the cable were physically disconnected and reconnected. This feature only works for the FDX-S’s output. If other devices are connected between the FDX-S’s output and sink device, this feature may be invalid.
The FDX-SAB4A is an analog audio board with four unbalanced inputs and four balanced/unbalanced outputs. Input embedded audio signals are converted into analog audio signals, and multi-channel LPCM signals are downmixed to two-channel audio signals. Four stereo audio signals can be input, digitized and embedded to selected video output channels. For analog audio output, the balanced audio provides noise-resistant transmission over significant distance. The Lip Sync feature provides the user with a means to control time alignment between the video and audio.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input</strong></td>
<td>4 inputs</td>
</tr>
<tr>
<td>Analog audio</td>
<td>Unbalanced Stereo LR</td>
</tr>
<tr>
<td></td>
<td>Input impedance: 24 kΩ</td>
</tr>
<tr>
<td></td>
<td>Reference level: -10dBu, Max. input level: +10dBu</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>4 outputs</td>
</tr>
<tr>
<td>Analog audio</td>
<td>Balanced/Unbalanced Stereo LR</td>
</tr>
<tr>
<td></td>
<td>Output impedance: 100 Ω balanced/50 Ω unbalanced</td>
</tr>
<tr>
<td></td>
<td>Reference level: -10dBu, Max. output level: +10dBu</td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td>Input : 4 captive screw (3-pin)</td>
</tr>
<tr>
<td></td>
<td>Output : 4 captive screw (5-pin)</td>
</tr>
<tr>
<td><strong>Function</strong></td>
<td>Lip Sync (Max. 256 ms.)</td>
</tr>
<tr>
<td><strong>General</strong></td>
<td>Power consumption: About 9 Watts</td>
</tr>
<tr>
<td></td>
<td>Weight: 1.3 lbs. (0.6 kg)</td>
</tr>
<tr>
<td></td>
<td>Temperature: Operating: 32°F to 104°F (0°C to +40°C)</td>
</tr>
<tr>
<td></td>
<td>Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td></td>
<td>Humidity: Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

### Panel
The FDX-SOA12A is an 12-output unbalanced audio board designed for FDX-S series Modular Matrix Switchers. Input embedded audio signals are converted into analog audio signals, and multi-channel LPCM signals are downmixed to two-channel audio signals. The Lip Sync feature provides the user with a means to control time alignment between the video and audio.

**Specification**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>12 outputs</td>
</tr>
<tr>
<td></td>
<td>Unbalanced Stereo LR</td>
</tr>
<tr>
<td></td>
<td>Output impedance: 50 Ω</td>
</tr>
<tr>
<td></td>
<td>Reference level: -10dBu, Max. output level: +10dBu</td>
</tr>
<tr>
<td>Connector</td>
<td>Captive screw (3-pin)</td>
</tr>
<tr>
<td>Function</td>
<td>Lip Sync (Max. 256 ms.)</td>
</tr>
<tr>
<td>General</td>
<td>Power consumption: About 18 Watts</td>
</tr>
<tr>
<td></td>
<td>Weight: 1.3 lbs. (0.6 kg)</td>
</tr>
<tr>
<td></td>
<td>Temperature: Operating: 32°F to 104°F (0°C to +40°C)</td>
</tr>
<tr>
<td></td>
<td>Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td></td>
<td>Humidity: Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

**Panel**

- All specifications and drawings are subject to change without notice. All other company and product names mentioned in this document are either registered trademarks or trademarks of their respective owners. In this document, the “®” or “™” marks may not be specified.

IDK Corporation
The FDX-SAB64D is a Dante network audio board designed for FDX-S series Modular Matrix Switchers. Dante network audio signals are converted into digital audio signals and embedded to desired video output channels. Input embedded audio signals are converted to up to 64-channel Dante protocol. Digital audio signal with embedded Multi-channel LPCM audio signals are downmixed to two-channel audio signals.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>1 input Dante network audio Format: Dante protocol Sampling frequency: 48 kHz, Sample size: 24 bit Maximum audio input channel: 64 channels (32 stereo audio channels)</td>
</tr>
<tr>
<td>Output</td>
<td>1 output Dante network audio Format: Dante protocol Sampling frequency: 48 kHz, Sample size: 24 bit Maximum audio output channel: 64 channels (32 stereo audio channels)</td>
</tr>
<tr>
<td>Connector</td>
<td>2 RJ-45 (Primary/Secondary) (*1)</td>
</tr>
<tr>
<td>General</td>
<td>Power consumption: About 11 Watts Weight: 1.3 lbs. (0.6 kg)</td>
</tr>
<tr>
<td></td>
<td>Temperature Operating: 32°F to 104°F (0°C to +40°C) Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td></td>
<td>Humidity Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

*1 These RJ-45 connectors are only for Dante format.

### Panel
The FDX-SRP08 is a redundant power supply unit that includes two independent power connectors for FDX-S08 and FDX-S08U. In case one of power supplies fails, the other one supplies power, ensuring a proper and reliable operation.

### Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>100 - 240 VAC ±10%, 50 Hz/60 Hz ±3 Hz, 2 power connectors</td>
</tr>
<tr>
<td>Weight</td>
<td>4 lbs. (1.8 kg)</td>
</tr>
<tr>
<td>Temperature</td>
<td>Operating: 32°F to 104°F (0°C to +40°C)  Storage: -4°F to +176°F (-20°C to +80°C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>Operating/Storage: 20% to 90% (Non Condensing)</td>
</tr>
</tbody>
</table>

### Panel

![Panel Diagram]