About us

IDK Corporation is headquartered in Kanagawa Japan with sales, fulfillment and service operations in USA, Europe and Asia. For over 30 years, our market leadership in Japan has emerged from our commitment to exceptional product quality and by putting our customers first-always.

IDK delivers world-class, state-of-the-art ProAV solutions for use in corporate, educational, entertainment, healthcare, retail, and government applications.

IDK strives to contribute to a more efficient, prosperous, effective and enjoyable planet with the highest-quality ProAV products. Our signal management solutions portfolio includes native-signal digital multi-switchers, AV over IP, signal extenders and signal splitters. These products enable our customers to create, control, monitor and manage their audiovisual systems.

As your trusted ProAV solutions partner, IDK is also committed to our environment. The entire IDK organization supports our social responsibility policy and we are continually conducting activities based on the 3R’s; Reduce, Reuse, and Recycle.

We are proud of the fact that all IDK products are designed, manufactured, tested and evaluated at our own facilities in JAPAN. The cost effectiveness and high degree of functionality of our “Japanese Quality Products” enables our enduring presence as the ProAV equipment leader; both in Japan and now, internationally.

We hope you will enjoy our 2020 product catalog and Olympic Summer Games that will be held in Tokyo!
To meet growing global demand for 4K video, IDK has developed a state of the art AV System Solution: IP-NINJAR is a game changing IP based, turnkey, high definition Audio/Video signal delivery solution. System Control, Signal Extension, Distribution, Seamless/KVM Switching, Videowall, and Multi-viewing capabilities are fully integrated into the platform. Boasting full format agility, true 40/60 4:4:4 HDR & HDCP 2.2 capabilities, edge-to-edge zero frame delay and unparalleled stability, the IP-NINJAR leverages off-the-shelf 10Gb Ethernet infrastructure to replace traditional baseband AV architectures. With an elegantly simple architecture, unlimited I/O and footprint scalability and individual node-level monitoring, the IP-NINJAR unleashes valuable signal management advantages for Pro AV and IT.

**IP-NINJAR System**

The NJR-CTB is an advanced management & control platform that opens up the possibility of your IP-NINJAR AV over IP system. The Web GUI helps customers to easily manage the system. The NJR-CTB enables to control IP-NINJAR system from 3rd party external controllers.

**Dante Network Audio Bridge:**

IP-NINJAR uses proprietary codecs to deliver audio, and it can route audio signals only in IP-NINJAR Network. NJR-AB08DAN provides ability to convert and bridge audio signals between Dante Audio and IP-NINJAR Audio.

**IP-NINJAR System Control from 3rd party external controller:**

IP-NINJAR Management & Control Platform NJR-CTB takes care all controls for IP-NINJAR endpoint units. To control IP-NINJAR system from 3rd party external control device, all commands to control the system send to NJR-CTB using provided simple IDK command lines.

**Control Bridge:**

Since IP-NINJAR endpoint units have RS-232C and LAN communication ports, by connecting IP-NINJAR Network and Control Network with proper network settings, you can control any devices which are connected to IP-NINJAR endpoint unit.

**IP-NINJAR Key Features**

- **Video/Audio:**
  - 4K@60 (4:4:4 or HDR) and HCP 1.4/2.2
  - Multi format input support: HDMI/3G-SDI
  - Zero frame latency with Standard Switching mode
  - 2-frame latency at maximum with Fast & Scale Switching mode
  - Digital/Analog audio breakaway switching and Audio De/Embedding
  - Point-to-Point extension, Videowall, and Multiview
  - KVM switching using external USB extenders

- **Features**
  - Breakaway switching for Video, Digital/Analog/Network Audio, USB, and RS-232C
  - "Tag" function for filtering devices in a system
  - Virtual Matrix set up to create different level of accessibility in a system
  - Videowall/Multiview configuration using preset patterns
  - Set up each device settings/link 3rd party USB extender to device for KVM switching
  - Monitoring devices online/offline, video & audio signals info., HDCP status & stream type
  - Alarm output using SNMP trap; Status alert sends to a system or registered email
  - Remote support & trouble shooting
  - Controlling all IP-NINJAR units on the network; Centralizing control from 3rd party controller
  - Breakaway switching for Video, Digital/Analog/Network Audio, USB, and RS-232C
  - KVM switching by linking 3rd party USB network extender

**NJR-CTB - Key Features**

- **Maintenance:**
  - User accounts & authorization management
  - Get system log, back up, and restore the system

- **Redundancy:**
  - Available for when connecting multiple NJR-CTB units in a system

- **Security:**
  - HTTPS encrypted communication
4K@60/HDCP 2.2 AV over IP Encoder/Decoder for HDMI (Optical model) | NJR-01UHD

The NJR-01UHD is an AV over IP solution for high-definition signal transmission via fiber optic cables. This 4K solution leverages 10 Gb Ethernet switches and enables signal management of 4K(4:4:4) signals with zero latency. RS-232C bidirectional communication and LAN transmission are also supported. The NJR-01UHD can be used with other IP-NINJA products. Using an NJR-T01SDI and an NJR-01UHD enables 4K signals to be displayed on four full HD sink devices. Conversely, using an NJR-T04HD with an NJR-R01UHD enables four full HD signals to be displayed on a sink device as 4K@60 signals.

Features
- Supports 4K@60 signals
- RJ45 connection to 10 Gigabit Ethernet
- Supports 10 Gb Ethernet switches
- Bidirectional RS-232C communication
- LAN transmission
- Supports AV over IP

Mounting
- Standard

Connection Diagram

4K@60/HDCP 2.2 AV over IP Network Extender, Rugged Chassis | NJR-W01UHD

The NJR-W01UHD is a point-to-point AV over IP solution for high-definition video transmission via fiber optic cables. This IP-NINJA product employs NJR’s robust connector and rugged lightweight chassis to accommodate overnighting market needs. The NJR-W01HD is a 3G/HD/SD-SDI input-capable encoder. It is designed to transport SDI input signals into a fiber optic cable for local and long-haul transmission over fiber optic cables. The NJR-T01SDI converts SDI input signals into HDMI signals and enables SDI signal management within the IP-NINJA system devices. The NJR-W01UHD is also capable of transporting 4K signals using an HDMI monitor. It also offers RS-232C bidirectional communication and 1G network transmission.

Features
- Supports 4K signals
- RJ45 connection to 10 Gigabit Ethernet
- Supports 10 Gb Ethernet switches
- Bidirectional RS-232C communication
- LAN transmission
- Supports AV over IP

Mounting
- Rugged Chassis

Connection Diagram
**Dante Audio Bridge Interface | NJR-AB08DAN**

The NJR-AB08DAN transcodes audio signal directly between the IP-NINJAR and Dante protocols. It enables audio signal transport in either direction from NJR encoders to Dante devices and from Dante devices to NJR decoders. The NJR-AB08DAN can receive up to four audio streams from IP-NINJAR encoders and output up to eight audio streams into Dante devices. The bridge can also accept up to eight audio streams from Dante devices and output up to four audio streams into IP-NINJAR encoders. This enables multiple streams to be transported directly between the IP-NINJAR and Dante protocols.

**Features**
- Transcoding audio signal between IP-NINJAR and Dante protocols
- Receiving up to four audio streams from IP-NINJAR encoders and outputting up to eight audio streams into Dante devices
- Receiving up to eight audio streams from Dante devices and outputting up to four audio streams into IP-NINJAR encoders
- Dante audio can be embedded to HDMI signal at IP-NINJAR encoder
- Dante audio can be de-embedded to analog audio signal at IP-NINJAR decoder
- Supports Dante Domain Manager
- Dante audio can be de-embedded to Dolby E 30-bit audio signal
- Dante audio can be de-embedded to analog audio signal at IP-NINJAR encoder or decoder
- Supports Dante version 2.0
- Dante Audio Bridge Interface Protocol
- Supports Dante Domain Manager
- Supports Dante version 2.0
- Dante Audio Bridge Interface Protocol
- Supports Dante Domain Manager
- Supports Dante version 2.0

**Connection Diagram**

**Application Example**

**IP-NINJAR Management & Control Platform | NJR-CTB**

The NJR-CTB is an advanced control box that expands the possibilities for IP-NINJAR units. It can control up to 9 NJR-04HD or IP-NINJAR encoders or decoders. The NJR-CTB is used to control and monitor IP-NINJAR encoders or decoders. It also supports Dante Domain Manager, Dante 2.0 version, and other proprietary protocols.

**Features**
- Recognizing and listing IP-NINJAR products automatically on network
- Device name setting in device registration
- Fanatic pattern registration
- Remote control from external devices
- AC adapter with locking mechanism
- IP-NINJAR encoders and decoders can be added and replaced
- Controllable through network using NJR-CTB
- Dante audio can be de-embedded to analog audio signal at IP-NINJAR encoder or decoder
- Dante audio can be de-embedded to Dolby E 30-bit audio signal
- Dante audio can be de-embedded to analog audio signal at IP-NINJAR encoder or decoder
- Supports Dante version 2.0
- Dante Audio Bridge Interface Protocol
- Supports Dante Domain Manager
- Supports Dante version 2.0

**Connection Diagram**

**Application Example**

**IP-NINJAR Power Distribution Unit | PDU-1209**

The PDU-1209 is a power distribution unit that provides power for up to nine compatible model devices (NJR-01UHD, NJR-T01UHD, NJR-04HD, NJR-CTB, and NJR-AB08DAN). The PDU-1209 has overcurrent protection. If the PDU-1209 detects a power failure or a fan failure, it will automatically shut down the power supply. It can be used remotely through the Management & Control Platform.
**Digital Multi Switcher with Integrated Audio Power Amplifier**  
**MSD-701AMP**

The MSD-701AMP is a seven-input digital presentation switcher with built-in audio power amplifiers. The seven digital and two analog inputs accept a wide variety of video formats including HDMI (YUV), HDBaseT, Composite video, RGB, and YPbPr. Input video signals are converted to HDBaseT and HDMI signals up to 328 ft. (100 m) or up to 164 ft. (50 m). Two selected input video signals can be displayed on a single screen in picture-in-picture or side-by-side layout.

Up to four audio inputs can be integrated into one of three analog audio, one mic, and one line. Audio is output for digital connectors, an analog connector, and two speakers. Enhanced audio features include compressing, limiting, and seven-band equalization for mic input and tone controls for speaker output.

The MSD-701AMP can be configured remotely from RS-232C, LAN, or serial line by registering control commands. Additionally, the MSD-701AMP includes key security lockout and button caps to prevent accidental or inappropriate changes.

**Features**

- Up to 164 ft. (50 m)
- Up to 98 ft. (30 m)
- 12 cross-routable. Audio levels of each input and output can be set individually.
- HDMI, and analog YPbPr. All video signal inputs are converted to HDMI or HDBaseT signals and output to digital connectors, an analog connector, and two speakers. Enhanced audio features include compressing, limiting, and seven-band equalization for mic input and tone controls for speaker output.

**Inputs**

- Video: HDMI, DVI, VGA, Composite, S-Video
- Audio: Analog, Digital

**Outputs**

- Video: HDMI, DVI, VGA, Composite, S-Video
- Audio: Analog, Digital

**Mounting**

- Standard
- Modular

**Others**

- Control command output (e.g. controlling projectors)
- CEC (Control sink device power)
- Contact closure
- Power distribution unit control
- Enhanced audio features include compressing, limiting, and seven-band equalization for mic input and tone controls for speaker output.

**Connection Diagram**

4K@60/HDCP 2.2 Digital Multi Switcher  
**MSD-701UHD/MSD-702UHD**

The MSD-701UHD and 702UHD are seven inputs and one/two outputs digital multi switcher with a scan converter. They are HDCP 2.2 compliant and support video resolutions up to 4K@60 (4:4:4). The MSD-701UHD and 702UHD include eight inputs in total: two HDMI + one HDBaseT for up to 328 ft. (100 m) transmission or up to 164 ft. (50 m) transmission through Cat6. Input signals are converted into up to 4K and distributed into HDMI and HDBaseT.

**Features**

- Up to 4K@60 (4:4:4) / HDCP 1.4-2.2
- Motion adaptive interpolated/progressive conversion
- Scan conversion
- Aspect ratio control
- Seamless switching with one black frame
- Audio breakaway for independent audio and video switching
- Crosspoint memory
- Last memory
- Connection Reset
- Button security lockout
- Control command output (e.g. controlling projectors)
- CEC (Control sink device power)
- Contact closure

**Inputs**

- Video: HDMI, DVI, VGA, Composite, S-Video
- Audio: Analog, Digital

**Outputs**

- Video: HDMI, DVI, VGA, Composite, S-Video
- Audio: Analog, Digital

**Mounting**

- RS-232C, LAN, CEC

**Others**

- Enhanced audio features include compressing, limiting, and seven-band equalization for mic input and tone controls for speaker output.

**Connection Diagram**
### MSD-7200UHD

The MSD-7200UHD series is nine inputs and one to four outputs digital multi switcher with a scan converter. They are HDCP 2.2 compliant and support video resolutions up to 4K@60 Hz. Three of the nine inputs support up to 4K@60 Hz; four for up to 4K@30 Hz; two for up to 1080p. Input signals are converted up to 4K and output as 1080p.

**Features**
- **Resolutions**
  - Matrix Switchers: Up to 328 ft. (100 m) over Cat6 cable
  - Multi Switchers: Up to 328 ft. (100 m) over Cat6 cable
- **Controllers**
  - AV over IP
  - Modular
  - Digital
  - and analog audio. Audio levels of each input and output can be set individually.
- **For audio input**, four digital inputs are included. Selected audio signals are output to digital audio.
- **Analog inputs can be input by using HDC-TH200 with the MSD**, and the configuration enables remote input.
- **HDMI/DVI or HDBaseT signals output at resolutions up to QWXGA or 1080p. Analog video signals** are converted into up to 4K and output as HDMI.

#### Connection Diagram

![Connection Diagram](image_url)

### MSD-501/MSD-502

The MSD-501 and MSD-502 are presentation switchers with a built-in scan converter and scaler. Input video signals are converted up to QWXGA or 1080p and divided into two outputs: HDMI/EU and HDBaseT signals.

For audio input, both digital and analog signals are supported and those signals can be converted from or to each other. The audio level of each input and output can be adjusted separately.

**Features**
- **Videos**
  - Up to 1080p/QWXGA (ReducedBlanking) +HDCP 1.4
  - Automatic signal input equalization
  - Input: Up to 98 ft. (30 m)
  - Output: Up to 164 ft. (50 m)
  - Up to 328 ft. (100 m) over Cat6 cable
  - Motion adaptive interlaced/progressive conversion
  - Scan conversion: XPanoramic input control (scan conversion with one black frame)
  - Digital signals: Scan conversion

**Others**
- **HDBaseT: LAN and CEC are supported**
- **Input channel automatic switching**
- **Front panel HDMI input connector**
- **Control command output (e.g. controlling projectors)**
- **RS-232C**
- **LAN**
- **Lip Sync**
- **Audio Downmix**
- **Aspect ratio control**
- **Seamless switching with one black frame**
- **Analog/Digital conversion**
- **EDID emulation**
- **CEC (Control sink device power)**
- **Seamless switching with one black frame**
- **Analog/Digital conversion**

**Models**

MSD-501
- Digital Multi Switcher
- Up to 1080p/QWXGA (ReducedBlanking) +HDCP 1.4
- Automatic signal input equalization
- Input: Up to 98 ft. (30 m)
- Output: Up to 164 ft. (50 m)
- Up to 328 ft. (100 m) over Cat6 cable
- Motion adaptive interlaced/progressive conversion
- Scan conversion: XPanoramic input control (scan conversion with one black frame)
- Digital signals: Scan conversion

MSD-502

### MSD-402

The MSD-402 is a high-performance digital multi switcher that provides four inputs and two outputs and has a built-in scan converter. For video input, two HDBaseT and two HDMI/EU are included. Input video signals are converted to HDMI/EU or HDBaseT signals output at resolutions up to QWXGA or 1080p. Analog video signals can be input by using HDC-TH200 with the MSD, and the configuration enables remote input channel switching.

For audio input, four digital inputs are included. Selected audio signals are output to digital and analog audio. Audio levels of each input and output can be set individually.

**Features**
- **Resolutions**
  - Up to 1080p/QWXGA (ReducedBlanking) +HDCP 1.4
  - Automatic signal input equalization
  - Input: Up to 98 ft. (30 m)
  - Output: Up to 164 ft. (50 m)
  - Up to 328 ft. (100 m) over Cat6 cable
  - Motion adaptive interlaced/progressive conversion
  - Scan conversion: XPanoramic input control (scan conversion with one black frame)
- **Others**
  - **HDBaseT: RS-232C, LAN, and CEC are supported**
  - **Input channel automatic switching**
  - **Front panel HDMI input connector**
  - **Control command output (e.g. controlling projectors)**
  - **RS-232C**
  - **LAN**
  - **Lip Sync**
  - **Audio Downmix**
  - **Aspect ratio control**
  - **Seamless switching with one black frame**
  - **Analog/Digital conversion**
  - **EDID emulation**
  - **CEC (Control sink device power)**
  - **Seamless switching with one black frame**
  - **Analog/Digital conversion**

**Models**

MSD-402
- Universal input
- Up to 164 ft. (50 m)

### MSD-701/MSD-702

The MSD-701 and MSD-702 are presentation switchers with a built-in scan converter and scaler. Input video signals are converted up to QWXGA or 1080p and divided into two outputs: HDMI/EU and HDBaseT signals.

For audio input, both digital and analog signals are supported and those signals can be converted from or to each other. The audio level of each input and output can be adjusted separately.

**Features**
- **Videos**
  - Up to 1080p/QWXGA (ReducedBlanking) +HDCP 1.4
  - Automatic signal input equalization
  - Input: Up to 98 ft. (30 m)
  - Output: Up to 164 ft. (50 m)
  - Scan conversion: XPanoramic input control (scan conversion with one black frame)
  - Digital signals: Scan conversion

**Models**

MSD-701
- Universal input
- Up to 164 ft. (50 m)

MSD-702
- Universal input
- Up to 164 ft. (50 m)
FDX2 Series | I/O boards

FDX2 boards

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Input/Output</th>
<th>Maximum Formats</th>
<th>No. of Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>4K@60 HDMI/DVI board</td>
<td>Input</td>
<td>FDX-IB-UH</td>
<td>4K@60  (4:4:4)</td>
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<td>Output</td>
<td>FDX-OB-UH</td>
<td>4K@60  (4:4:4)</td>
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<tr>
<td>4K@60 HDBaseT board</td>
<td>Input</td>
<td>FDX-IB-UT</td>
<td>4K@60  (4:2:0)</td>
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<td>Output</td>
<td>FDX-OB-UT</td>
<td>4K@60  (4:2:0)</td>
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<td>4K@30 HDMI/DVI board</td>
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<td>Output</td>
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<td>4K@30 HDBaseT board</td>
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<td>4K@30</td>
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<tr>
<td>3G/HD/SD-SDI board</td>
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<td>FDX-IB-SDI</td>
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<td>HDMI/DVI scan converter board</td>
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<td>HDBaseT scan converter board</td>
<td>Output</td>
<td>FDX-IB-FT</td>
<td>1080p*</td>
</tr>
</tbody>
</table>

* For WQHD/WQXGA, only Reduced Blanking is supported.
* For WUXGA/WQXGA, only Reduced Blanking is supported.
* 3G-SDI: Level A and Level B.
* 1080p and 1080i: Only 50 Hz and 59.94 Hz are supported.
* For 3G-SDI, 1080p/1080i, only 50 Hz and 59.94 Hz are supported.

Features

- **Maximum Formats:**
  - 4K@60 (4:4:4)
  - 4K@30
  - 1080p*

**FDX2-OB-UT**

- **Features:**
  - 1080p*

**FDX2-SB-FT**

- **Features:**
  - 4K@60/HDCP 2.2 Modular Matrix Switcher
  - Supports up to 32 inputs and 32 outputs.
  - Supports 4K@60 HDBaseT I/O board.
  - Supports up to 328 ft. (100 m) over Cat6 cable.
  - Supports x.v.Color.
  - Supports HDCP 2.2.
  - Supports video resolutions up to 4K@60 (4:4:4).

**FDX-32UHD**

- **Features:**
  - Supports up to 32 inputs and 32 outputs.
  - Supports 4K@60 HDBaseT I/O board.
  - Supports up to 328 ft. (100 m) over Cat6 cable.
  - Supports x.v.Color.
  - Supports HDCP 2.2.
  - Supports video resolutions up to 4K@60 (4:4:4).

**FDX-12UHD**

- **Features:**
  - Supports up to 12 inputs and 12 outputs.
  - Supports 4K@60 HDBaseT I/O board.
  - Supports up to 98 ft. (30 m) over Cat6 cable.
  - Supports x.v.Color.
  - Supports HDCP 2.2.
  - Supports video resolutions up to 4K@60 (4:4:4).

**FDX-32UHD**

- **Features:**
  - Supports up to 32 inputs and 32 outputs.
  - Supports 4K@60 HDBaseT I/O board.
  - Supports up to 328 ft. (100 m) over Cat6 cable.
  - Supports x.v.Color.
  - Supports HDCP 2.2.
  - Supports video resolutions up to 4K@60 (4:4:4).
The FDX-08 is a highly versatile matrix switcher for AV systems with up to 8 inputs and 8 outputs. This 8x8 matrix switcher can be used in a variety of applications that require routing of high-resolution digital video signals. The FDX-08 can be controlled remotely over RS-232C and LAN ports.

### Features
- **Input and Output**: 8x8 matrix switcher
- **Control**: RS-232C, LAN
- **Synchronization**: Supports digital frame synchronizer
- **Video Formats**: 3G-SDI, HDMI, DVI
- **Audio**: 8x8 matrix switcher for independent audio and video switching
- **Input/Output**: I/O board and CPU board can be replaced without removing from rack
- **Alarm Output**: Monitoring power source and fans
- **Preset Memory**: Last memory, Connection Reset
- **Audio Breakaway**: Enables independent audio and video switching
- **EDID Emulation**: Enables proper display of source signals
- **Transmission Distance**: Up to 131 ft. (40 m) for fiber optic, 984 ft. (300 m) for HDBaseT
- **Power Supply**: Redundant power supply (Optional)
- **RS-232C**: Transmission (HDBaseT/Optic output board)

### Connection Diagram
- **Inputs**: Up to 8
- **Outputs**: Up to 8
- **Fiber optic**: OM3: Up to 984 ft. (300 m), OM4: Up to 0.62 mi. (1 km)
- **HDBaseT**: Up to 6.21 mi. (10 km) (Optional)
- **SDI Loop-Through**: Connector for extended transmission
- **Audio Breakaway**: For independent audio and video switching
- **EDID Emulation**: Ensures correct display of source signals
- **RS-232C**: Transmission (HDBaseT/Optic output board)

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The FDX-32 is a highly versatile matrix switcher for AV systems with up to 16 inputs and 16 outputs. This 16x16 matrix switcher can be used in a variety of applications that require routing of high-resolution digital video signals. The FDX-32 can be controlled remotely over RS-232C and LAN ports.

### Features
- **Input and Output**: 16x16 matrix switcher
- **Control**: RS-232C, LAN
- **Synchronization**: Supports digital frame synchronizer
- **Video Formats**: 3G-SDI, HDMI, DVI
- **Audio**: 16x16 matrix switcher for independent audio and video switching
- **Input/Output**: I/O board and CPU board can be replaced without removing from rack
- **Alarm Output**: Monitoring power source and fans
- **Preset Memory**: Last memory, Connection Reset
- **Audio Breakaway**: Enables independent audio and video switching
- **EDID Emulation**: Enables proper display of source signals
- **Transmission Distance**: Up to 131 ft. (40 m) for fiber optic, 984 ft. (300 m) for HDBaseT
- **Power Supply**: Redundant power supply (Optional)
- **RS-232C**: Transmission (HDBaseT/Optic output board)

### Connection Diagram
- **Inputs**: Up to 16
- **Outputs**: Up to 16
- **Fiber optic**: OM3: Up to 984 ft. (300 m), OM4: Up to 0.62 mi. (1 km)
- **HDBaseT**: Up to 6.21 mi. (10 km) (Optional)
- **SDI Loop-Through**: Connector for extended transmission
- **Audio Breakaway**: For independent audio and video switching
- **EDID Emulation**: Ensures correct display of source signals
- **RS-232C**: Transmission (HDBaseT/Optic output board)
I/O boards

FDX boards

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Maximum Formats</th>
<th>No. of Ports</th>
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<tr>
<td>HDMI/DVI board</td>
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<tr>
<td>Input FDX-IB-DVI</td>
<td>1080p, QWXGA A</td>
<td>4</td>
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<tr>
<td>Output FDX-OB-DVI</td>
<td>1080p, QWXGA A</td>
<td>4</td>
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<tr>
<td>HDMI/1-D board</td>
<td></td>
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<tr>
<td>Input FDX-IB-HDC</td>
<td>1080p, QWXGA A</td>
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<td>Optic board</td>
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<tr>
<td>Input FDX-IB-OPF-MM</td>
<td>1080p, QWXGA A</td>
<td>2</td>
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<tr>
<td>Output FDX-OB-OPF-MM</td>
<td>1080p, QWXGA A</td>
<td>2</td>
</tr>
</tbody>
</table>

* For WUXGA/QWXGA, only Reduced Blanking is supported.
* For WUXGA, only Reduced Blanking in DVI mode is supported.
* The FDX-64 does not support 3G/HSD-SDI Board.
* 3G-SDI Level A and Level B720p: 23.98 Hz and 24 Hz are not supported.
* For VESA H/WUXGA/QWXGA, only Reduced Blanking is supported.
* For VESA4HD/WUXGA, only Reduced Blanking is supported.

FDX-UHD boards

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Maximum Formats</th>
<th>No. of Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI/DVI board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input FDX-IB-IH</td>
<td>4K/860 (4:4:4) 4k</td>
<td>4</td>
</tr>
<tr>
<td>Output FDX-OB-LH</td>
<td>4K/860 (4:4:4) 4k</td>
<td></td>
</tr>
<tr>
<td>HDMI/1-D board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input FDX-IB-UT</td>
<td>4K/860 (4:4:4) 4k</td>
<td>4</td>
</tr>
<tr>
<td>Output FDX-OB-UT</td>
<td>4K/860 (4:4:4) 4k</td>
<td></td>
</tr>
</tbody>
</table>

* For WUXGA/QWXGA, only Reduced Blanking is supported.

Standard Resolutions

<table>
<thead>
<tr>
<th>Resolution</th>
<th>General Name</th>
<th>Dot Clock</th>
<th>Horizontal Frequency</th>
<th>Vertical Frequency</th>
<th>Aspect Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480</td>
<td>VGA</td>
<td>25.175 MHz</td>
<td>31.469 kHz</td>
<td>59.34 Hz</td>
<td>4:3</td>
</tr>
<tr>
<td>800x600</td>
<td>SVGA</td>
<td>40 MHz</td>
<td>37.879 kHz</td>
<td>60.17 Hz</td>
<td>4:3</td>
</tr>
<tr>
<td>1024x768</td>
<td>XGA</td>
<td>65 MHz</td>
<td>48.963 kHz</td>
<td>60.95 Hz</td>
<td>4:3</td>
</tr>
<tr>
<td>1280x720</td>
<td>WUXGA*</td>
<td>72.75 MHz</td>
<td>55.75 kHz</td>
<td>60 Hz</td>
<td>16:9</td>
</tr>
<tr>
<td>1280x768</td>
<td>WUXGA</td>
<td>79.5 MHz</td>
<td>42.776 kHz</td>
<td>59.87 Hz</td>
<td>16:9</td>
</tr>
<tr>
<td>1280x800</td>
<td>UHD-WUXGA</td>
<td>83.5 MHz</td>
<td>40.702 kHz</td>
<td>59.81 Hz</td>
<td>16:10</td>
</tr>
<tr>
<td>1280x960</td>
<td>Quad-WUXGA</td>
<td>108 MHz</td>
<td>60 kHz</td>
<td>60 Hz</td>
<td>4:3</td>
</tr>
<tr>
<td>1920x1080</td>
<td>WUXGA</td>
<td>108 MHz</td>
<td>55.976 kHz</td>
<td>60 Hz</td>
<td>16:9</td>
</tr>
<tr>
<td>1920x1152</td>
<td>WUXGA</td>
<td>118.5 MHz</td>
<td>47.112 kHz</td>
<td>60.05 Hz</td>
<td>16:9</td>
</tr>
<tr>
<td>2048x1152</td>
<td>WUXGA</td>
<td>137.25 MHz</td>
<td>41.712 kHz</td>
<td>59.79 Hz</td>
<td>16:9</td>
</tr>
<tr>
<td>2560x1440</td>
<td>WUXGA</td>
<td>170 MHz</td>
<td>35.557 kHz</td>
<td>60 Hz</td>
<td>16:10</td>
</tr>
<tr>
<td>3840x2160</td>
<td>UHD-WUXGA</td>
<td>222.5 MHz</td>
<td>25.175 kHz</td>
<td>60 Hz</td>
<td>16:9</td>
</tr>
<tr>
<td>4096x2160</td>
<td>4K Digital 50 Hz DVI*</td>
<td>229.5 MHz</td>
<td>59.94 Hz</td>
<td>16:9</td>
<td></td>
</tr>
<tr>
<td>4096x2160</td>
<td>4K HDMI DVI*</td>
<td>230.75 MHz</td>
<td>60 Hz</td>
<td>16:9</td>
<td></td>
</tr>
</tbody>
</table>

Aspect Ratio Control

The FDX series products support aspect ratio control that is convenient for correcting a mismatch in aspect ratio between source video and display. The feature automatically detects the aspect ratio of source signals and the original aspect ratio can be preserved in a letter box or full screen mode.
The HDC-H100 is an extender for HDBaseT signals using a single category cable to transmit data over a long distance. The product supports 4K60 video signals, extending them digitally and for-ward. Bidirectional RS-232C and LAN communication are also supported.

**Features**

- **Video**
  - Up to 4K60 (4:2:0)
  - HDBaseT 1.4/A2
  - Transmission over Cat5e Capitol Cable
  - Up to 328 ft. (100 m)
  - HDMI/DVI over CAT5e STP cable
  - Up to 492 ft. (150 m) over CAT5e cable at 1080p (24 bit) in Long reach mode*
  - No actual extension delay (10 μs or less/328 ft. (100 m))
  - Transmission over Cat5e UTP cable
  - Up to 4K@60 (4:2:0) HDCP 1.4/2.2 (Pass-through)

- **Audio**
  - No virtual delay (10 μs or less/328 ft. (100 m))
  - *Using with IDK’s HDBaseT products supporting 238 ft. (72 m) transmission.

**Connection Diagram**

- Digital Video/Audio
  - Up to 16 ft. (5 m)
  - LAN
  - Up to 16 ft. (5 m)
  - RS-232C
  - 1 port

**HDMI/Analog HDBaseT Transmitter | HDC-TH200**

The HDC-TH200 is an HDBaseT transmitter that features both HDMI and analog input signals. It also supports a simple switcher, automatically sending and switching to an active input. The HDC-TH200 can also embed the analog video into the digital stream. Pair with any of IDK’s products.

**Features**

- **Video**
  - Up to 1080p/60Hz/60/CA (Reduced Blanking)  •HDBaseT 1.4
  - Transmission for NTSC, PAL, and SECAM signals
  - Automatic input signal equalization: Input: Up to 95 ft. (30 m)
  - Up to 492 ft. (150 m) in Long reach mode (1080p 60 Hz 24 bit or less)*

- **Audio**
  - No virtual delay (10 μs or less/328 ft. (100 m))
  - *Using with IDK’s HDBaseT products supporting 238 ft. (72 m) transmission.

**Connection Diagram**

- Digital Video/Audio
  - Up to 328 ft. (100 m)
  - RS-232C
  - 1 port

**HDC-TH100WP**

The HDC-TH100WP is a wall-mountable transmitter for a long haul transmission of HDMI signal over one single category cable. The image quality will not be deteriorated, since video signals are transmitted at a resolution up to 4K60 without compression.

**Features**

- **Video**
  - Up to 4K60 (4:2:0)  •HDBaseT 1.4/A2
  - Transmission over Cat5e Capitol Cable
  - Up to 328 ft. (100 m)
  - Input video signals are converted to HDBaseT signals and transmitted up to 328 ft. (100 m).
  - HDMI and DVI signals are transmitted up to 328 ft. (100 m).
  - Power (Over HDMI) is supported. Connecting to a receiver supporting PoH power supply (PoH) function eliminates the need for a local power supply.

- **Audio**
  - Up to 328 ft. (100 m) over CAT5e HDC/ Cat5e STP/Cat6 STP cable
  - Up to 492 ft. (150 m) over CAT5e cable at 1080p (24 bit) in Long reach mode*

**Connection Diagram**

- Digital Video/Audio
  - Up to 16 ft. (5 m)
  - RS-232C
  - 1 port
## Features

### Inputs
- Up to 4K60 (4:4:4) over 10Gb EtherCAT STP cable
- Up to 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)

### Outputs
- Down-conversion: HDMI, DVI
- Up to 328 ft. (100 m) over CAT5e UTP cable
- Up to 4K@60 over CAT5e UTP cable
- Up to 100 m (328 ft.) over long reach mode (1080p 60 Hz 24 bit or less)
- HDCP Transmission distance:
  - Up to 98 ft. (30 m)*
  - Up to 328 ft. (100 m)
- No virtual delay (10 μs or less/328 ft. (100 m))
- OUT1 supports down conversion (4K to 1080p)
- Daisy chain connection
- Anti-snow
- Transmission over Cat5e UTP cable*

### Input/Output
- Analog Audio
- LR Unbalanced

### Communication
- Point-to-point (bidirectional) and point-to-multipoint (unidirectional) RS-232C communication
- LAN

### Others
- AC adapter with locking mechanism
- EDID emulation
- WEB browser control
- Input channel automatic switching
- CEC (Pass-through)
- Connection Reset
- Button security lockout
- HDBaseT: RS-232C and LAN are supported
- EDID emulator

### Application Example

<table>
<thead>
<tr>
<th>HDC-T1050F</th>
<th>Category Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device with PoE Power Receiving</td>
<td>Power Supply ON</td>
</tr>
</tbody>
</table>

### Notes

* If using with 4K60 HDBaseT products supporting 18 Gbps transmission

---

## HDC-P1502

The HDC-P1502 is a simple power injector that supplies power to a PoE transmitter and receiver, such as the HDC-T1050F (plug-in HDBaseT category 6 cable transmitter). The HDC-P1502's PoE is capable of delivering 15.4 W per port for long range mode (1080p 60 Hz 24 bit or less). The HDC-P1502 supplies power to a transmitter and receiver simultaneously, with one port supporting 18 Gbps transmission and one port supporting 1080p 60 Hz 24 bit or less.

<table>
<thead>
<tr>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 4K60 (4:4:4): 4K@60 (Pass-Through)</td>
</tr>
<tr>
<td>Category cable transmission</td>
</tr>
</tbody>
</table>
| Up to 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)
| Supply power to transmitter and receiver simultaneously |
| AC adapter with locking mechanism |

<table>
<thead>
<tr>
<th>Notes</th>
</tr>
</thead>
</table>
| If using with 4K60 HDBaseT products supporting 18 Gbps transmission

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## Accessories

- **HDC-TR121UHD**
- **HDC-TH221UHD/HDC-TH241UHD**
- **HDC-RH221UHD/HDC-RH421UHD**

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## HDC-TH221UHD/HDC-TH241UHD

The HDC-TH221UHD and HDC-TH241UHD are two-input HDBaseT receivers with EDID emulator for sending HDMI, DVI, and HDBaseT input signals up to 4K60 over a Category cable without compression or processing. The HDC-TH221UHD and HDC-TH241UHD include two HDMI output and one HDBaseT output. The HDC-TH221UHD and HDC-TH241UHD also feature Daisy chain for chain extending and distributing video, audio, and control signals. In addition, digital audio signals can be de-embedded onto the analog output signals. The HDC-TH221UHD and HDC-TH241UHD support bidirectional RS-232C communication and LAN transmission.

### Features

- **HDC-TH221UHD**
  - Up to 4K@60 (4:4:4) over CAT5e UTP cable
  - Up to 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)

- **HDC-TH241UHD**
  - Up to 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)
- Daisy chain connection
- Anti-snow

### Input/Output

<table>
<thead>
<tr>
<th>Port</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HDMI DVI</td>
</tr>
<tr>
<td>2</td>
<td>HDBaseT</td>
</tr>
</tbody>
</table>

### Communication

- Point-to-point (bidirectional) and point-to-multipoint (unidirectional) RS-232C communication
- LAN

### Others

- AC adapter with locking mechanism
- EDID emulation
- WEB browser control
- Input channel automatic switching
- CEC (Pass-through)
- Connection Reset
- Button security lockout
- HDBaseT: RS-232C and LAN are supported

---

## HDC-RH221UHD/HDC-RH421UHD

The HDC-RH221UHD and HDC-RH421UHD are two-input HDBaseT receivers with EDID emulator for sending HDMI, DVI, and HDBaseT input signals up to 4K60 over a Category cable without compression or processing. The HDC-RH221UHD and HDC-RH421UHD include two HDMI output and one HDBaseT output. The HDC-RH221UHD and HDC-RH421UHD also feature Daisy chain for chain extending and distributing video, audio, and control signals. In addition, digital audio signals can be de-embedded onto the analog output signals. The HDC-RH221UHD and HDC-RH421UHD support bidirectional RS-232C communication and LAN transmission.

### Features

- **HDC-RH221UHD**
  - Up to 4K@60 (4:4:4) over CAT5e UTP cable
  - Up to 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)

- **HDC-RH421UHD**
  - Up to 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)
- Daisy chain connection
- Anti-snow

### Input/Output

<table>
<thead>
<tr>
<th>Port</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HDMI DVI</td>
</tr>
<tr>
<td>2</td>
<td>HDBaseT</td>
</tr>
</tbody>
</table>

### Communication

- Point-to-point (bidirectional) and point-to-multipoint (unidirectional) RS-232C communication
- LAN

### Others

- AC adapter with locking mechanism
- EDID emulation
- WEB browser control
- Input channel automatic switching
- CEC (Pass-through)
- Connection Reset
- Button security lockout
- HDBaseT: RS-232C and LAN are supported

---

## HDC-P1502

The HDC-P1502 is a simple port injector that supplies power to a PoE transmitter and receiver, such as the HDC-T1050F (plug-in HDBaseT category 6 cable transmitter). The HDC-P1502's PoE is capable of delivering 15.4 W per port for long range mode (1080p 60 Hz 24 bit or less). The HDC-P1502 supplies power to a transmitter and receiver simultaneously, with one port supporting 18 Gbps transmission and one port supporting 1080p 60 Hz 24 bit or less.

### Features

- Up to 4K60 (4:4:4): 4K@60 (Pass-Through)
- Category cable transmission
- Supply power to transmitter and receiver simultaneously
- AC adapter with locking mechanism
- Supply power to long range mode
- AC adapter with locking mechanism
- Up to 6 ports can be installed in a 1/4 rack

### Notes

* If using with 4K60 HDBaseT products supporting 18 Gbps transmission

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## Accessories

- **HDC-TR121UHD**
- **HDC-TH221UHD/HDC-TH241UHD**
- **HDC-RH221UHD/HDC-RH421UHD**
**HDMI Fiber Optic Cable Extender** **OPF-H1000**

The OPF-H1000 is an extender for long-haul transmission of HDMI signals over fiber optic cables. The input signals are transmitted pass-through and without compression so that the image quality can be kept.

**Features**
- Up to 1080p/1080i/720p (Reduced Blanking)
- HDCP 1.4 (Pass-through)
- Transmission distances: Multimode fiber (OM3): Up to 984 ft. (300 m) (OM4): Up to 0.62 mi. (1 km)
- Singlemode fiber (OS1): Up to 2.92 mi. (4.7 km), 6.21 mi. (10 km) (Optional)
- Spliceless connection
- Connectors: FDX series or other models of the OPF series.
- Use the transmitter and receiver in sets.

**Connection Diagram**

![Connection Diagram](image)

**HDMI Fiber Optic Cable Extender** **OPF-H1000D**

The OPF-H1000D is an extender for long-haul transmission of HDMI signals over a fiber optic cable. Daisy chain connection is also supported. The input signals are transmitted without compression so that the image quality can be kept.

**Features**
- Up to 1080p/1080i/720p (Reduced Blanking)
- HDCP 1.4 (Pass-through)
- Transmission distances: Multimode fiber (OM3): Up to 984 ft. (300 m) (OM4): Up to 0.62 mi. (1 km)
- Singlemode fiber (OS1): Up to 2.92 mi. (4.7 km), 6.21 mi. (10 km) (Optional)
- Spliceless connection
- Connectors: FDX series or other models of the OPF series.
- Use the transmitter and receiver in sets.

**Connection Diagram**

![Connection Diagram](image)

**4K HDMI Fiber Optic Cable Extender** **OPF-H2000**

The OPF-H2000 is an extender for long-haul transmission of 4K@60 HDMI video signals over fiber optic cables. The input signals are transmitted pass-through and without compression so that the image quality can be kept.

**Features**
- Up to 4K@60 (4:2:0)
- HDCP 1.4 (Pass-through)
- Transmission distances: Multimode fiber (OM3): Up to 984 ft. (300 m)
- Singlemode fiber (OS1): Up to 6.21 mi. (10 km)
- CEC (Pass-through)
- AC adapter with locking mechanism

**Connection Diagram**

![Connection Diagram](image)

**HDMI Coaxial Cable Extender** **COS-100HD**

The COS-100HD is an extender for long-haul transmission of HDMI signals over a coaxial cable. The receiver supports daisy chain connection. Use the transmitter and receiver in sets.

**Features**
- Up to 1080p/1080i/720p (Reduced Blanking)
- HDCP 1.4 (Pass-through)
- Transmission distances: Up to 98 ft. (30 m)
- Connectors: FDX series or other models of the OPF series.
- Use the transmitter and receiver in sets.

**Connection Diagram**

![Connection Diagram](image)
**Features**
- **Video**
  - Up to 4K@60 (4:4:4) • HDCP 1.4/2.2 • 3D • x.v.Color
  - Transmission distances: 1080p@60: Up to 98 ft. (30 m) • Up to 164 ft. (50 m)
- **Audio**
  - De-embedding
- **Others**
  - DDO emulation • RS-232C • DDC buffer • De-embedding

**Connection Diagram**

**HDMI Distribution Amplifier | VAC-5000HD/VAC-1000HD**

The VAC-5000HD and VAC-1000HD are 4K@60/HDCP 2.2 compliant HDMI distribution amplifiers for HDMI signals up to 1080p/QWXGA (Reduced Blanking). Input video signal can be distributed to up to 1080p@60: Up to 98 ft. (30 m) and 4K@60: Up to 39 ft. (12 m) when cable supporting 18 Gbps transmission is used.

**Features**
- **Video**
  - Up to 1080p/60 (4:4:4) • 1080p@60: Up to 131 ft. (40 m)
  - Transmission distances: 1080p@60: Up to 131 ft. (40 m)
- **Audio**
  - De-embedding
- **Others**
  - DDO emulation • RS-232C • DDC buffer • De-embedding

**Connection Diagram**

**HDMI Distribution Amplifier | VAC-2000UHD/VAC-4000UHD**

The VAC-2000UHD and VAC-4000UHD are 4K@60/HDCP 2.2 compliant HDMI distribution amplifiers for HDMI signals up to 4K@60 (4:4:4). Input video signal can be distributed into two/four HDMI output connectors and input audio can be de-embedded.

**Features**
- **Video**
  - Up to 4K@60 (4:4:4) • 1080p@60: Up to 98 ft. (30 m)
  - Transmission distances: 1080p@60: Up to 131 ft. (40 m)
- **Audio**
  - De-embedding
- **Others**
  - DDO emulation • RS-232C • DDC buffer • De-embedding

**Connection Diagram**

**ICP-401UHD**

The ICP-401UHD is a 4K@60/HDCP 2.2 compliant four-window video processor that can display multiple video sources on a single screen with customizable layout. Additionally, the LAN port enables you to control the ICP-401UHD remotely.
The DFS-01UHD is a digital frame synchronizer with a scan converter. For video input, HDMI or DVI signals can be input and output is converted and output at a resolution up to 4K@60. Audio volume can be controlled. The Lip Sync function corrects the gap between the video and audio. For video input, HDMI or DVI signals can be input. Input video signal is converted and output at a resolution up to 4K@30.*

*For 4K format and dot clock of 165 MHz or more, only 180-degree rotation is supported.

**Connection Diagram**

Digital Frame Synchronizer / Scaler | DFS-01UHD
---|---

**Features**
- **Video**: Up to 4K@60 (4:4:4) - HDCP 1.4 - Motion adaptive interlace/progressive conversion - Horizontal flip - Vertical flip - Aspect ratio control - Video rotation (by 90 degrees)**
- **Audio**: Volume adjustment - Lip Sync - External synchronization (4:4:4) for video wall - Anti-snow
- **Control Input**: LAN
- **Others**: Button security lockout - System check

**Connection Diagram**

**Digital Video/Audio**: HDMI DVI
**Input**: Up to 98 ft. (30 m)*
**Output**: Up to 98 ft. (30 m)*

**Thumbnail previewer** | PRV-100
---|---

**Features**
- **Thumbnail previewer**: Capturing and previewing up to 150 video channels periodically - Free thumbnail preview input
- **Encode**: H.264 encoder - Unicast or multicast transmission
- **External control**: WEB browser control - No need to install software - Up to 128 layouts can be registered
- **Others**: CEC (Pass-through) - Anti-snow - EDID emulation

**Application Example**

4K UHD Blu-ray Player
NJR-T01UHD
4K PC
4K Video Camera
4K@60: Up to 39 ft. (12 m)

**Connection Diagram**

Digital Video/Audio: HDMI DVI - 4K@60 : 39 ft. (12 m) (when cable supporting 18 Gbps transmission is used)
**Input**: Up to 131 ft. (40 m)*
**Output**: Up to 131 ft. (40 m)*

**4K@60/HDCP 2.2 Digital Frame Synchronizer/Scaler** | DFS-01HD
---|---

**Features**
- **Video**: Up to 4K@60 - 3D - Motion adaptive interlace/progressive conversion - Horizontal flip - Vertical flip - Aspect ratio control - Video rotation (by 90 degrees)**
- **Audio**: Volume adjustment - Lip Sync - External synchronization (4:4:4) for video wall - Anti-snow
- **Control Input**: LAN
- **Others**: Button security lockout - System check

**Connection Diagram**

Digital Video/Audio: HDMI DVI - 4K@60 : Up to 39 ft. (12 m)
**Input**: Up to 98 ft. (30 m)*
**Output**: Up to 98 ft. (30 m)*

The PRV-100 is a thumbnail preview for NJR-R01UHD output video. The PRV-100 video can be encoded to H.264 format and transmitted in unicast or multicast stream. The PRV-100 video can be encoded to H.264 format and transmitted in unicast or multicast stream. The PRV-100 video can be encoded to H.264 format and transmitted in unicast or multicast stream.
**DDC-03UHD**

The DDC-03UHD is a 4K@60 and HDCP 2.2 supported EDID emulator. It includes the built-in EDID to offer plug-and-play between a PC and monitor. The cable equalization for input and CDR (Clock Data Recovery) reclocks input signals degraded by HDMI cables to enable long-haul video transmission.

**Features**

- **Video**
  - Up to 4K@60 (4:4:4)
  - HDCP 1.4/2.2 (Pass-through)
  - HDR
  - 3D
  - x.v.Color
  - Automatic input signal equalization
  - Input: Up to 98 ft. (30 m) (1080p@60)
  - Up to 39 ft. (12 m) (4K@60) (when cable supporting 18 Gbps transmission is used)
  - EDID emulation
  - CEC (Pass-through)
  - EDID buffer
  - HDCP input enabled/disabled
  - Connection Reset pass-through

- **Audio**
  - Audio input enabled/disabled

**Others**

- AC adapter with locking mechanism

**Connection Diagram**

- DDC-03UHD

---

**iq System**

"iq System" is a native app for Smart Phones & Tablets, enabling intuitive control of IDK products. It is an excellent choice for conference rooms, classrooms, meeting spaces and beyond.

**Features**

- Up to 16 MOBILE DEVICE = SYSTEM CONTROL
  - Bring your own device (BYOD) - iPhone, iPad & Android apps put you directly in command
  - Elegant, simple and intuitive – single layer "graphic language" makes any system cohesive
  - Ready to use – no complicated programming
  - User-definable naming and icon selection
  - Advanced features supporting permissioning and workgroup definition
  - System control is provided simultaneously for multiple users and devices
  - Control third party equipment
  - Instant solution for AV system control – use your existing mobile devices
  - No need for third party control systems – no need for application specific hardware
  - Wireless, portable and can be enabled on multiple user’s devices or on “in-room” devices
  - Entirely scalable – control one device today and an entire system tomorrow

**BENEFITS**

- Instant solution for AV system control – use your existing mobile device
- No need for third party control systems – no need for application specific hardware
- Wireless, portable and can be enabled on multiple user’s devices or on “in-room” devices
- Entirely scalable – control one device today and an entire system tomorrow

**THE LANGUAGE OF SIMPLICITY**

- SWIPE • TAP • CONTROL
- Intuitive, requiring only very casual user instruction
- Create a seamless, single layer system control experience
- Select source & target device by name/icon
- Swipe to select display and review system status
- Graphically meaningful icons for immediate recognition of command types
- Tap to link or un-link video and audio sources
- Swipe to control presentation volume and input audio level settings
- Instant mute control
- Input signal presence and system status indication
- Instant retry strategy

**Programmable Button Controller**

The SWC-2000 is a remote programmable button controller. Control command can be registered and linked to the buttons by using web browser. The SWC-2000 can control connected units which are connected via LAN or RS-232C. The SWC-2000 can be used on a desk or mounted to a wall.

**Features**

- Remote controlling IDK products over LAN or RS-232C
- 16 control command buttons (Up to 10 commands per button)
- Button security locked
- Up to 32 commands can be registered over web browser
- Programmable LED flashing time
- EIA rack and tabletop mountable
EIA Rack Mounting Hardware

**Standard** For 1U, 2U, and 3U high products

1U, 2U, and 3U rack width products can be mounted to the rack using the mounting hardware that is supplied with the products.

**Optional** For MSD-501/502/701/702/801UHD/802UHD

Since these models have a connector on the front panel, stress may be put on the cable when the door is kept closed. This problem can be avoided using the optional brackets.

---

**Optional** For 1U, 2U, and 3U rack width products

1U, 2U, and 3U rack width products can be mounted to the rack using the mounting hardware that is supplied with the products.

**Optional** For 1U high, half rack wide products

**Optional** For thin type half rack wide products

**Optional** For 1U high, quarter rack wide products

---

**Bracket drawing**

<table>
<thead>
<tr>
<th>Rack height</th>
<th>1U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracket drawing</td>
<td>RM-OFS100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rack width</th>
<th>Thin type half-rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracket drawing</td>
<td>RM-SF</td>
</tr>
<tr>
<td>RM-SBP</td>
<td>RM-SF</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The number of units</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part number</td>
<td>RM-SF</td>
<td>RM-SF</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rack width</th>
<th>Quarter-rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracket drawing</td>
<td>RM-SF</td>
</tr>
<tr>
<td>RM-SBP</td>
<td>RM-SF</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The number of units</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part number</td>
<td>RM-SF</td>
<td>RM-SBP</td>
<td>RM-SBP</td>
<td>RM-SF</td>
</tr>
</tbody>
</table>
For Combination of different-size products

Optional

Optional

For SWC-2000

For half-rack wide and thin type half-rack wide products

The RM-SVS holds half-rack width and thin type half-rack width products side by side. Each product can be mounted or removed separately.

### Rack width

<table>
<thead>
<tr>
<th>Rack size</th>
<th>1 Half-rack + 1 Thin type half-rack</th>
<th>1 Half-rack + 2 Quarter-rack</th>
<th>1 Half-rack + 1 Quarter-rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bracket drawing</td>
<td>RM-SH</td>
<td>RM-SH</td>
<td>RM-SBP</td>
</tr>
<tr>
<td>The number of units</td>
<td>1 Half-rack unit (L: 1.73” (44 mm))</td>
<td>1 Half-rack unit (L: 1.73” (44 mm)) + 2 Quarter-rack</td>
<td>1 Half-rack unit (L: 1.73” (44 mm)) + 1 Quarter-rack + Quarter-rack blank panel</td>
</tr>
<tr>
<td>Part number</td>
<td>RM-SW2001</td>
<td>RM-SW2002</td>
<td>RM-SBP</td>
</tr>
</tbody>
</table>

### Part Numbers

- **RM-44S** For 1 half-rack product
- **RM-44D** For 2 half-rack products
- **RM-SF** For 4 quarter-rack products, 2 thin type half-rack products
- **RM-SBP** Quarter-rack blank panel
- **RM-SH** Combination of half-rack wide and thin type half-rack wide or quarter-rack wide
- **RM-SVS** For Thin type half-rack wide, half-rack wide
- **RM-OFS100** For MSD-501/502/701/702/801UHD/802UHD
- **FP-Z30** Mounting Bracket For thin type half-rack width
- **FP-100** Mounting Plate For 3.9 lb (100 mm)
- **FP140** Mounting Plate For 5.5 lb (140 mm)
- **RM-SWC2001, RM-SWC2002** For SWC-2000

Fans are optional.
<table>
<thead>
<tr>
<th>Headquarters</th>
<th>IDK America Inc.</th>
<th>IDK Europe GmbH</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-9-1 Chuo, Yamato,</td>
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<td>Lise-Meitner-Str. 6, D-40878</td>
</tr>
<tr>
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<td>Ratingen Germany</td>
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<tr>
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<td>TEL: +1-203-204-2445</td>
<td>TEL: +49-(0)2102-5783010</td>
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<tr>
<td>Email: <a href="mailto:idk.eng@idk.co.jp">idk.eng@idk.co.jp</a></td>
<td>Email: <a href="mailto:sales@idkav.com">sales@idkav.com</a></td>
<td>Email: <a href="mailto:info@idkav.eu">info@idkav.eu</a></td>
</tr>
</tbody>
</table>

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