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# PRODUCT CATALOG





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All products are subject to availability.

Values converted from meters, grams, and other units are rounded off. More detailed information is available on the individual product datasheets.

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## 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.













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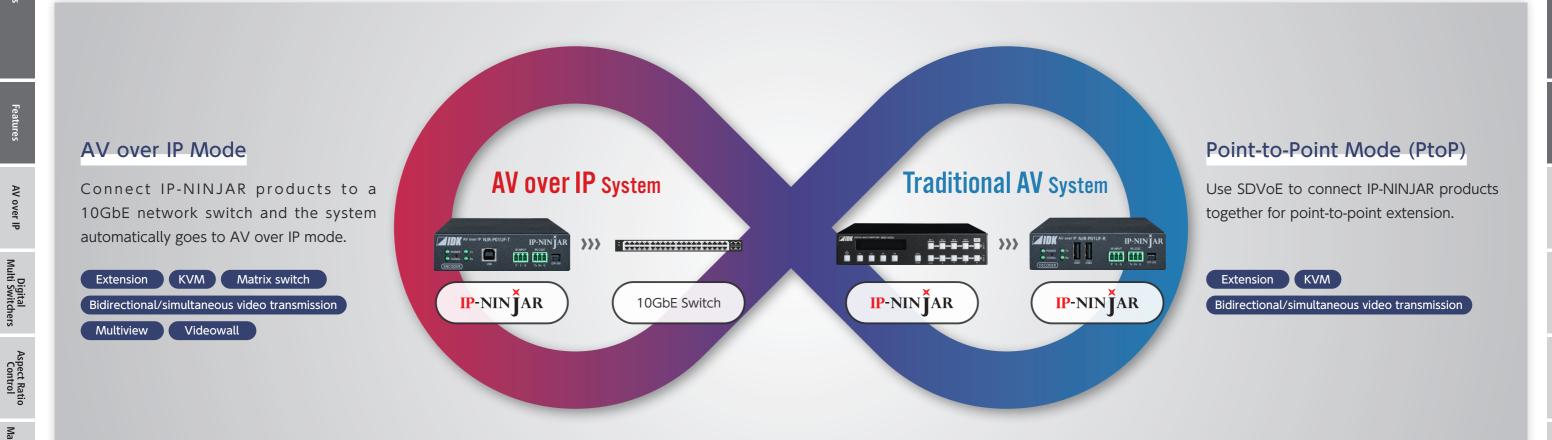
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AV over IP

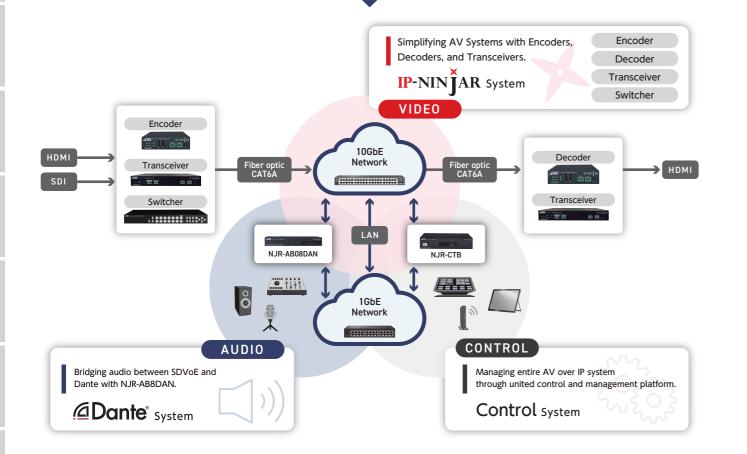
# IP-NIN AR

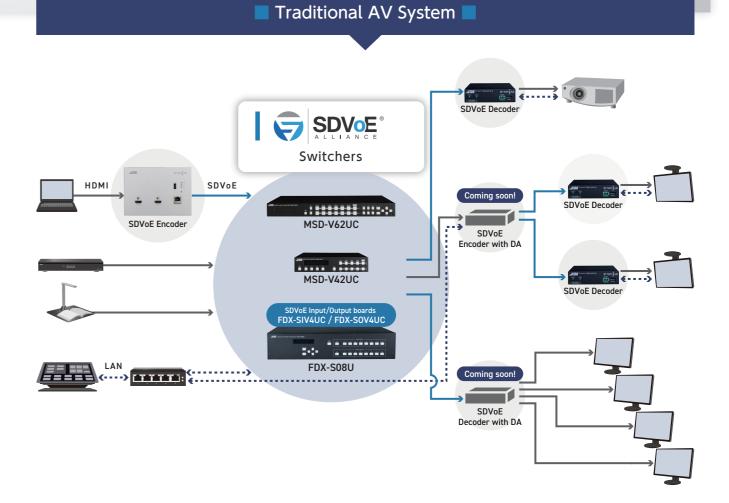
## AV over IP/Traditional AV Hybrid solution









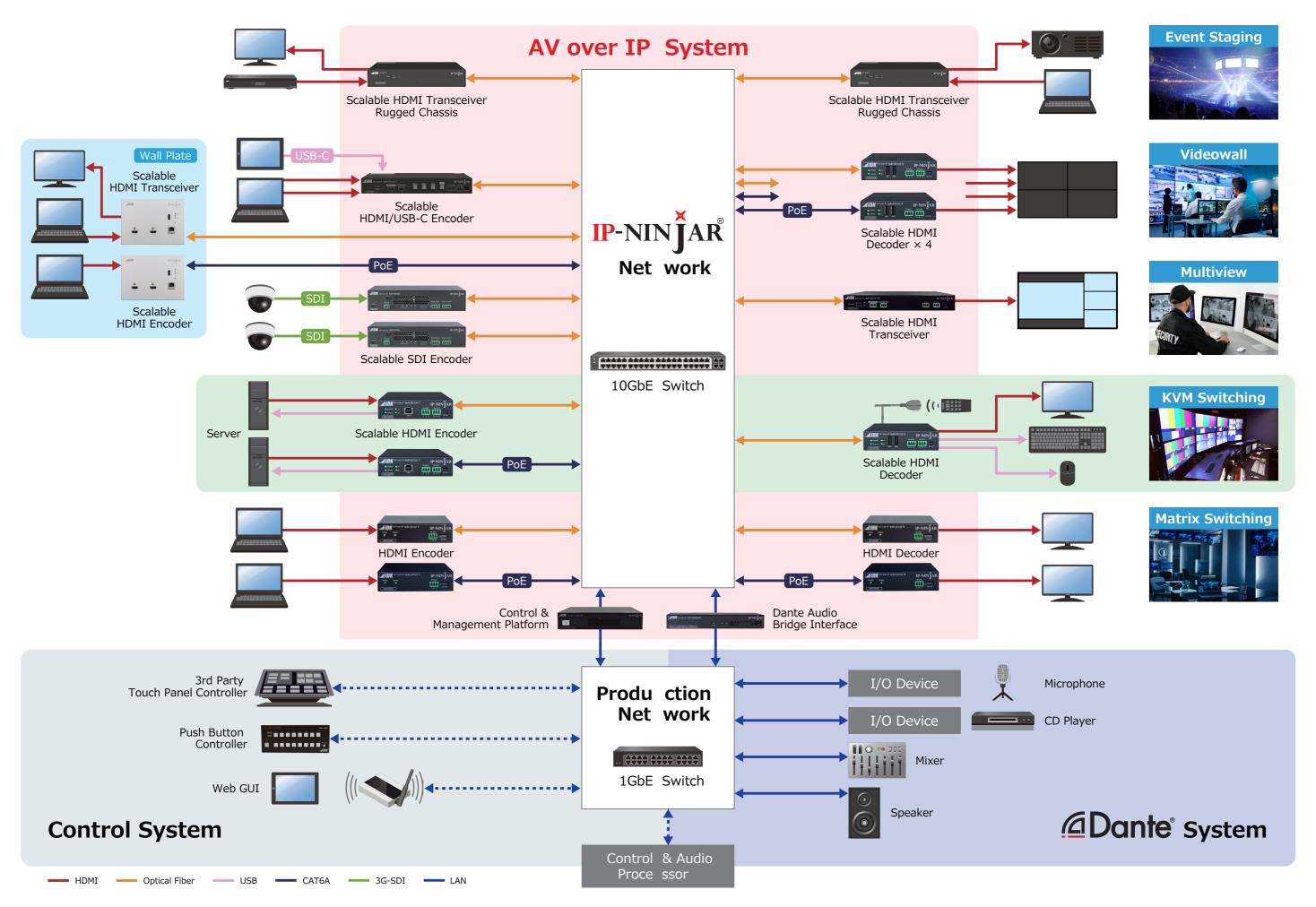


IP-NIN XAR®

# Hardware

## **Network AVC solution**



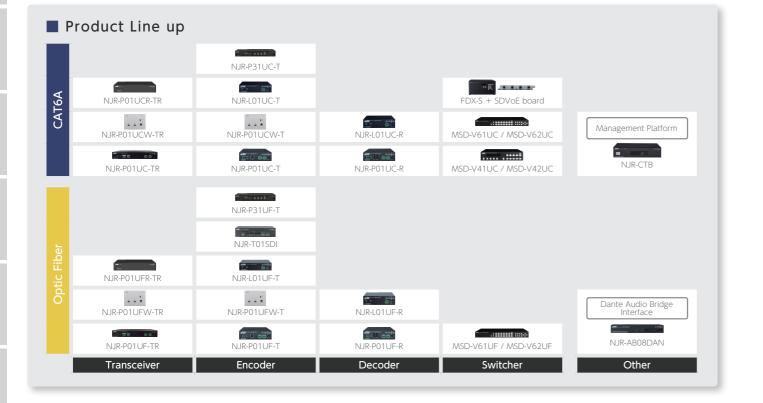


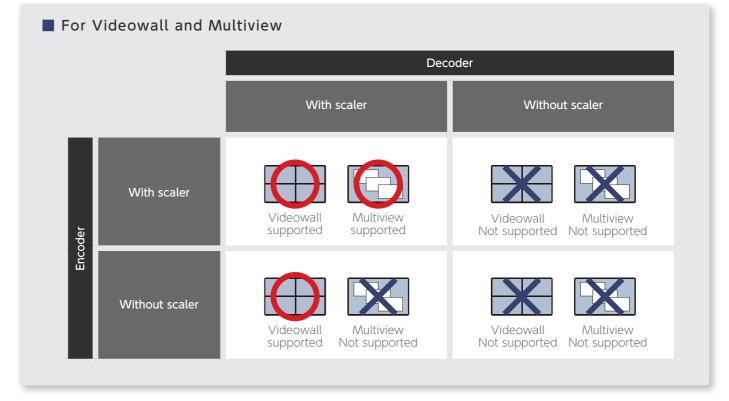
## Wide line up meets the various system needs



		Sol	ution		Product type		Video	Reso	lution	НС	Video HDCP extension cable				Się	gnal			
Model number	Features	AV over IP	Point to Point	Encoder	Decoder	Transceiver	scaler	4K@60 (4:4:4)	1080p	2.2	1.4	Fiber optic cable	CAT	Digital video	Digital audio	Analog audio	RS-232C	LAN	Others
NJR-P01UF-TR NJR-P01UC-TR	Bidirectional/simultaneous video transmission	<b>✓</b>	<b>✓</b>	N/A	N/A	<b>✓</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	USB HID
NJR-P01UFW-TR NJR-P01UCW-TR	Bidirectional/simultaneous video transmission Wallplate model	<b>✓</b>	<b>✓</b>	N/A	N/A	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	1	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	USB HID
NJR-P31UF-T NJR-P31UC-T	HDMI/USB-C Encoder	<b>✓</b>	<b>✓</b>	<b>√</b>	N/A	N/A	<b>/</b>	/	<b>✓</b>	HDMI only	HDMI only	/	<b>✓</b>	√ Input: HD	✓ MI/USB-C	<b>/</b>	<b>✓</b>	<b>✓</b>	USB HID
NJR-P01UF-T/R NJR-P01UC-T/R	Encoder/Decoder	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	N/A	<b>✓</b>	/	<b>✓</b>	<b>✓</b>	<b>✓</b>	/	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	USB HID
NJR-P01UFW-T NJR-P01UCW-T	Encoder Wallplate model	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	N/A	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	USB HID
NJR-L01UF-T/R NJR-L01UC-T/R	Encoder/Decoder Simple, Low-Cost model	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	/	<b>✓</b>	N/A
NJR-T01SDI	3G/HD/SD-SDI	<b>✓</b>	<b>✓</b>	<b>√</b>	N/A	N/A	✓	N/A	<b>✓</b>	N/A	N/A	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A
NJR-P01UFR-TR NJR-P01UCR-TR	Bidirectional/simultaneous video transmission Rugged Chassis	<b>✓</b>	<b>✓</b>	N/A	N/A	<b>✓</b>	<b>✓</b>	/	<b>✓</b>	/	<b>✓</b>	<b>/</b>	<b>✓</b>	<b>/</b>	<b>✓</b>	/	N/A	<b>✓</b>	N/A
NJR-AB08DAN	Dante Audio Bridge Interface	<b>✓</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>/</b>	N/A	N/A	<b>✓</b>	N/A	N/A	N/A	Dante
NJR-CTB	Management Platform	<b>✓</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSD-V41UC MSD-V42UC	Digital Multi Switcher SDVoE output CAT model	<b>✓</b>	<b>✓</b>	<b>√</b>	N/A	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A
MSD-V61UF MSD-V62UF	Digital Multi Switcher SDVoE output Fiber model	<b>/</b>	<b>✓</b>	<b>✓</b>	Optional	N/A	<b>✓</b>	1	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	/	<b>✓</b>	N/A
MSD-V61UC MSD-V62UC	Digital Multi Switcher SDVoE output CAT model	<b>✓</b>	<b>✓</b>	<b>✓</b>	Optional	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A
FDX-SIV4UC FDX-SOV4UC	Digital Matrix Switcher SDVoE I/O Slotboard for FDX-S	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	N/A	/	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	<b>✓</b>	<b>✓</b>	<b>✓</b>	N/A	/	<b>✓</b>	N/A

<sup>\*</sup> The FDX-SIV4UC and FDX-SOV4UC can be used in combination with FDX-S series.





AV over IP Digital Aspect Ratio Modular Multi Switchers Control Matrix Switchers

Extenders

Digital Multi Switchers

Aspect Ratio Control

Controllers

Aspect Ratio Control

Modular Matrix Switchers

Others

The NJR-P01UF-TR and NJR-P01UC-TR are an transceiver for transmitting and receiving 4K@60 HDMI signals simultaneously over a 10GbE AV over IP network via fiber optic cables or twisted pair cables. Bidirectional RS-232C communication, LAN, USB (HID) such as KVM can be carried over the same fiber optic cable or twisted pair cable for extension. Additionally, via the NJR, the NJR-CTB can be controlled using an IR cable (IR-P01-R) and recommended remote controller. The

NJR-P01UC-TR can be powered via PoE-supported 10GbE switch over a twisted pair cable; this

feature eliminates the need for AC adapter. This product can be used in combination with IDK's other SDVoE supported products.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 300 m (Multimode fiber)
- •Up to 10 km (Singlemode fiber) •Up to 100 m (CAT6A)
- Transmitting and receiving signals simultaneously Control from IR controller

Dimensions	8.3 (W) $\times$ 1.2 (H) $\times$ 5.5 (D)" (210 (W) $\times$ 30 (H) $\times$ 140 (D) mm) (Excluding connectors and the like)
Power consumption	14 W (Fiber model) PoE: 17 W, DC 12 V: 17 W (CAT model)
Weight	2.2 lbs. (1.0 kg)

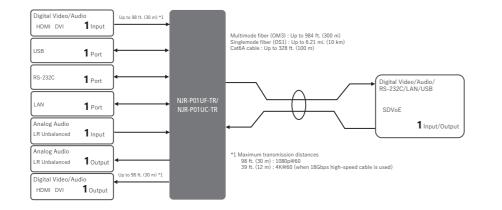
# NJR-P01UF-TR NJR-P01UC-TR

4K@60 HDMI Transceiver (Fiber model)/(CAT model) NJR-P01UF-TR/NJR-P01UC-TR

	400 1111 000	CED 140C1D
Model Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceiver: Singlemode fiber



#### Connection Diagram



## 4K@60 Wallplate HDMI Transceiver (Fiber model)/(CAT model) | NJR-P01UFW-TR/NJR-P01UCW-TR

The NJR-P01UFW-TR and NJR-P01UCW-TR are an wallplate type transceiver for transmitting and receiving 4K@60 HDMI signals simultaneously over a 10GbE AV over IP network via fiber optic cables or twisted pair cable. Using a twisted pair cable video can be extended up to 328 ft. (100 m). Bidirectional RS-232C communication, LAN, USB (HID) data can be carried over the same fiber optic cable or twisted pair cable for extension. The NJR-P01UCW-TR is PoE enabled and can draw its power directly from a PoE supported 10GbE network switch which eliminates the need for a separate or external power supply.

This product can be used in combination with IDK's other SDVoE supported products.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 300 m (Multimode fiber)
- •Up to 10 km (Singlemode fiber) •Up to 100 m (CAT6A) •Videowall and Multiview
- •Transmitting and receiving signals simultaneously •LAN/RS-232C/USB transmission •DC 12 to 48 V power input (Fiber model) •PoE+ (IEEE 802.3at) (CAT model)

#### General

Dimensions	$6.4$ (W) $\times$ 4.5 (H) $\times$ 2.1 (D)" (162 (W) $\times$ 114.3 (H) $\times$ 52.8 (D) mm) (Excluding connectors and the like)
Power consumption	12 W (Fiber model) PoE: 14 W, DC 5 V: 14 W (CAT model)
Weight	1.8 lbs. (0.8 kg)

# NIR-PO1LICW-TR

SFP+ transceiver: SFP+ transceiver

SFP-L10GLR

10G-MM-SFP

NIR-P01LIFW-TR

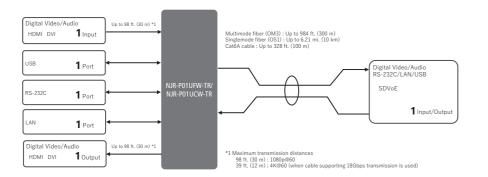




NIR-PO1LIFW-TR-R

NIR-PO1LICW-TR-R

#### **Connection Diagram**



## The NJR-P31UF-T and NJR-P31UC-T are an AV over IP product for transmitting video signals and control signals such as RS-232C. LAN. and USB that can be carried over the same fiber optic cable

or twisted pair cable. The NJR-P31UF-T and NJR-P31UC-T can transmit and support video signals up to 4K@60(4:4:4). The encoder includes auto-switching between one (1) USB-C and two (2) HDMI inputs that can be transmitted over fiber optic or CAT6A. The USB-C input supports Alt-Mode USB-C video from PC's and tablets.

This product can be used in combination with IDK's SDVoE supported products.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 300 m (Multimode fiber)
- •Up to 10 km (Singlemode fiber) •Up to 100 m (CAT6A)
- •USB Type-C DisplayPort Alternate Mode input •Control from IR controller

#### General

Dimensions	8.3 (W) $\times$ 1.2 (H) $\times$ 5.5 (D)" (210 (W) $\times$ 30 (H) $\times$ 140 (D) mm) (Excluding connectors and the like)
Power consumption	PoE: TBD, DC 12 V: TBD
Weight	TBD

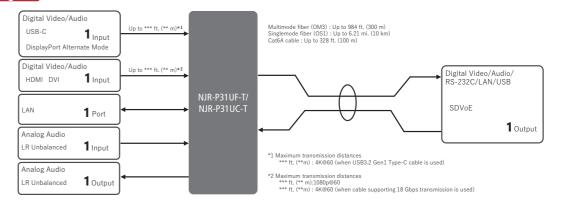


4K@60 HDMI/USB-C Encoder (Fiber model)/(CAT model) with 3 Inputs and 1 Output | NJR-P31UF-T/NJR-P31UC-T 4K

Model Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceiver: Singlemode fiber



#### **Connection Diagram**



## 4K@60 HDMI Encoder/Decoder (Fiber model)/(CAT model) NJR-P01UF/NJR-P01UC



The NJR-P01UF and NJR-P01UC are an AV over IP solution for high definition signal transmission via fiber optic cables or category cables. This 4K solution leverages 10 Gb Ethernet switches and enables signal management of 4K@60 (4:4:4) signals with zero frame latency. USB HID class is also supported for KVM extension application. Additionally, via the NJR-P01UF and NJR-P01UC, the NJR-CTB can be controlled using an IR cable (IR-P01-R) and recommended remote controller. The NJR-P01UF and NJR-P01UC feature LAN/RS-232C bidirectional communication. The NJR-P01UC can be powered from PoE-supported 10 GbE switch over a Category cable; this feature eliminates the need for AC adapter.

This product can be used in combination with IDK's SDVoE supported products.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 300 m (Multimode fiber)
- •Up to 10 km (Singlemode fiber) •Up to 100 m (CAT6A) •Seamless (freeze)/KVM switching •Videowall and Multiview
- •DC 12 to 48 V power input •PoE+ (IEEE 802.3at) (CAT model)

Dimensions	4.2 (W) $\times$ 1.1 (H) $\times$ 7.1 (D)" (106 (W) $\times$ 28 (H) $\times$ 180 (D) mm) (Fiber model) 4.2 (W) $\times$ 1.1 (H) $\times$ 7.9 (D)" (106 (W) $\times$ 28 (H) $\times$ 200 (D) mm) (CAT model) (Quarter rack wide, thin type) (Excluding connectors and the like)
Power consumption	About 8 W (NJR-P01UF-T), About 10 W (NJR-P01UF-R) About 11 W (NJR-P01UC-T), About 13 W (NJR-P01UC-R)
Weight	1.5 lbs. (0.7 kg) (Fiber model), 1.8 lbs. (0.8 kg) (CAT model)

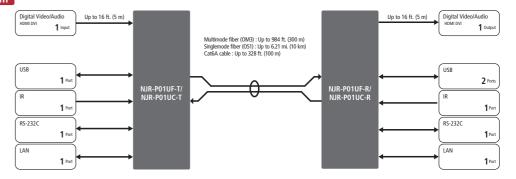


Model Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceiver: Singlemode fiber





### **Connection Diagram**



Aspect Ratio Control

Modular Matrix Switchers

Extenders

The NJR-P01UFW-T and The NJR-P01UCW-T are an AV over IP wallplate encoder for high definition signal transmission via fiber optic cables or category cables. This 4K solution leverages 10 Gb Ethernet switches and enables signal management of 4K@60 (4:4:4) signals with zero latency. The NJR-P01UFW-T and NJR-P01UCW-T features RS-232C bidirectional communication, LAN transmission, and KVM extension. The NJR-P01UCW-T can be powered from PoE-supported 10GbE

switch over a Category cable; this feature eliminates the need for AC adapter. This product can be used in combination with other IDK's SDVoE supported products.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 300 m (Multimode fiber) •Up to 10 km (Singlemode fiber) •Up to 100 m (CAT6A)
- •Seamless (freeze)/KVM switching •Videowall and Multiview
- •DC 12 to 48 V power input (Fiber model) •PoE+ (IEEE 802.3at) (CAT model)

Dimensions	$6.4$ (W) $\times$ 4.5 (H) $\times$ 2.1 (D)" (162 (W) $\times$ 114.3 (H) $\times$ 52.8 (D) mm) (Excluding connectors and the like)
Power consumption	9 W (Fiber model) PoE: 12 W, DC 5 V: 12 W (CAT model)
Weight	1.8 lbs. (0.8 kg)



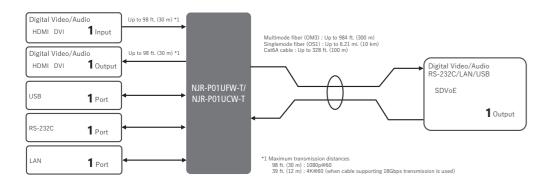
4K@60 Wallplate HDMI Encoder (Fiber model)/(CAT model) | NJR-P01UFW-T/NJR-P01UCW-T 4K

Model Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceiver: Singlemode fiber





### Connection Diagram



## 4K@60 HDMI Encoder/Decoder (Fiber model)/(CAT model) NJR-L01UF/NJR-L01UC

The NJR-L01UF and NJR-L01UC are an AV over IP encoder/decoder set for transmitting HDMI signals via fiber optic cables or twisted pair cable (CAT6A). The NJR supports video resolutions up to 4K@60 (4:4:4), and is HDCP 2.2 compliant.

This product can be used in combination with IDK's SDVoE supported products.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 300 m (Multimode fiber)
- •Up to 10 km (Singlemode fiber) •Up to 100 m (CAT6A)
- LAN and RS-232C transmission

#### General

Dimensions	4.2 (W) $\times$ 1.1 (H) $\times$ 4.7 (D)" (106 (W) $\times$ 28 (H) $\times$ 120 (D) mm) (Excluding connectors and the like)
Power consumption	About 7 W (Fiber model) About 9 W (CAT model)
Weight	1.1 lbs. (0.5 kg)



Multimode fiber

FP+ transceiver: SFP+ transceiver

Sinalemode fiber

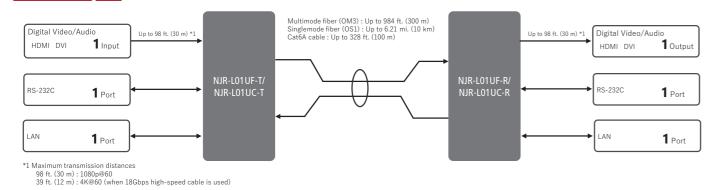


NJR-L01UC-T

1UF	NJR-L01U
製製	

	NJR-L01UC
]	

#### Connection Diagram



## 3G/HD/SD-SDI Encoder | NJR-T01SDI

The NJR-T01SDI is a 3G/HD/SD-SDI input-compliant AV over IP encoder. It transmits SDI input signals and audio for a long-haul transmission over fiber optic cables. The NJR-T01SDI features local monitor output which enables video recording and preview output using an HDMI monitor. It also offers RS-232C bidirectional communication and 1G network transmission. This product can be used in combination with other IDK's SDVoE supported products

#### Features

- •3G/HD/SD-SDI •3G-SDI Level B •Up to 1080p •1×3 DA (HDMI, SDI, and SDVoE)
- •Zero frame latency •Seamless switching (freeze) •Videowall and Multiview

#### General

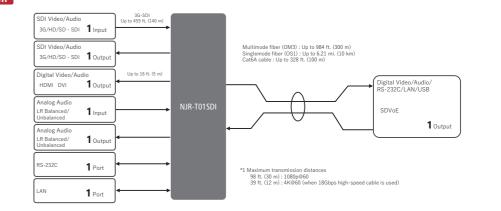
Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 5.5 (D)" (210 (W) $\times$ 44 (H) $\times$ 140 (D) mm) (Half rack wide, 1U high) (Excluding connectors and the like)
Power consumption	About 15 W
Weight	2.9 lbs. (1.3 kg)



Model Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceiver: Singlemode fiber



#### Connection Diagram



## 4K@60 HDMI Transceiver, Rugged Chassis (Fiber model)/(CAT model) NJR-P01UFR-TR/NJR-P01UCR-TR

The NJR-P01UFR-TR and NJR-P01UCR-TR are an transceiver for transmitting and receiving 4K@60 HDMI signals simultaneously over a 10GbE AV over IP network via fiber optic cables or twisted pair cables. The transceiver incorporates robust Neutrik connectors and a ruggedized chassis to accommodate event/staging market needs. PoE that provides power to PoE-supported devices via

a single twisted pair cable is also supported.

This product can be used in combination with IDK's other SDVoE supported products.

#### Features

- •Rugged chassis for Event/Staging •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 300 m (Multimode fiber) •Up to 10 km (Singlemode fiber) •Transmitting and receiving signals simultaneously •Neutrik connectors

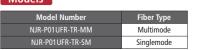
## General

	Dimensions	9.7 (W) $\times$ 1.7 (H) $\times$ 11.4 (D)" (246 (W) $\times$ 44 (H) $\times$ 290 (D) mm) (Excluding connectors and the like)
	Power consumption	About 14 W (Fiber model) PoE: 17 W, AC 100 V - 240 V: 17 W (CAT model)
Ī	Weight	TBD



#### Models

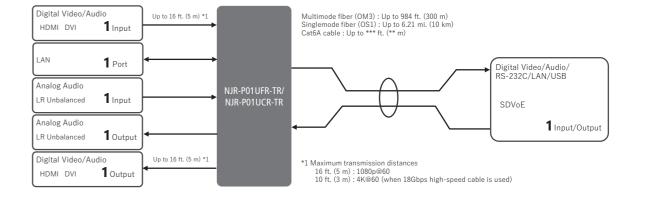
	.	
(W) $\times$ 1.7 (H) $\times$ 11.4 (D)" (246 (W) $\times$ 44 (H) $\times$ 290 (D) mm) (Excluding nectors and the like)		N
ut 14 W (Fiber model) 17 W, AC 100 V - 240 V: 17 W (CAT model)		







#### Connection Diagram



Modular Matrix Switchers

Extenders

Dante Audio Bridge Interface | NJR-AB08DAN

The NJR-AB08DAN transcodes audio signal directly between the IP-NINJAR and Dante protocol environments. Audio signal transport is enabled from NJR encoders to Dante devices and from Dante device to NJR decoders. The NJR-AB08DAN can receive up to four audio streams from IP-NINJAR encoders and output up to eight channels in Dante protocol. The bridge can also accept up to 8-channel audio from Dante sources, outputting IP-NINJAR protocol in up to four audio streams. Audio can be set from the NJR-CTB.

This product can be used in combination with IDK's SDVoE supported products.

#### Features

- •SDVoE from/to Dante bridge •De-embedding up to 8 ch. Dante audio
- Embedding up to 8 ch. Dante audio Receiving up to 4 SDVoE streams simultaneously
   Channels are expandable by adding multiple units

#### General

Dimensions	8.3 (W) $\times$ 1.2 (H) $\times$ 3.9 (D)" (210 (W) $\times$ 30 (H) $\times$ 100 (D) mm) (Half rack wide, thin type) (Excluding connectors and the like)
Power consumption	About 10 W
Weight	1.5 lbs. (0.7 kg)



Model Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceive Singlemode fiber



Model Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceiver Singlemode fiber

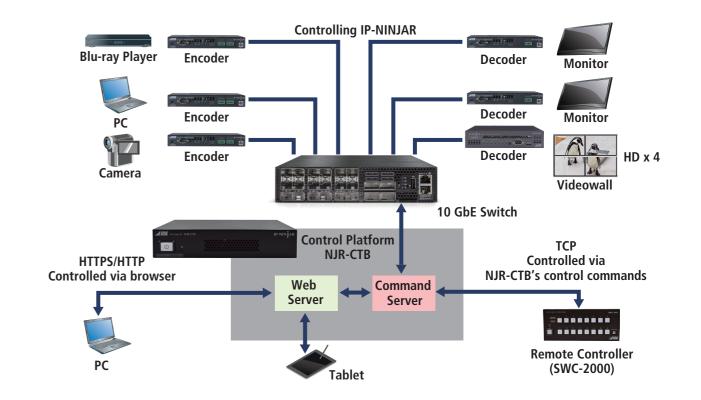




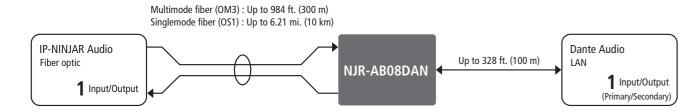
#### General

Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 5.9 (D)" (210 (W) $\times$ 42 (H) $\times$ 150 (D) mm) (Excluding connectors and the like)
Power consumption	About 18 W
Weight	2.4 lbs. (1.1 kg)

IP-NINJAR Management Platform NJR-CTB



#### Connection Diagram



Modular Matrix Switchers

IDK's MSD-Series products solve a variety of ProAV market demand.

# DIGITAL MULTI SWITCHER

Video

**Audio** 

## Control

																						331111131							
			Resolution		HD	СР	SD	VoE		HDBase <sup>1</sup>	т	Analog	Aud		Automatic 8. 8		Connection	Anti-	Sig			Power	DCD		WEB	Control IN	Coi O	ntrol OUT	LAN Pass
Series / N	Лodel	4K@60 (4:4:4)	4K@30	1080p	2,2	1.4	Input	Output	Input	Output	РоН	Input	Bitmap	Switching				Snow	Un- balanced	Balanced	Dante	Power Amp	DSP	Lip Sync	WEB GUI	LAN RS-232C	Contact Closure	LAN	Through
	MSD-V6UF SDVoE Output Fiber model	✓	✓	✓	✓	✓	Optional	✓	Optional	N/A	In: Optional Out: N/A	N/A	✓	✓	✓	✓	✓	✓	✓	✓	Optional	N/A	N/A	<b>√</b>	✓	✓	✓	✓	<b>✓</b>
MSD-V6 Series	MSD-V6UC SDVoE Output CAT model	✓	✓	✓	✓	✓	Optional	✓	Optional	N/A	In: Optional Out: N/A	N/A	✓	✓	✓	✓	✓	✓	✓	✓	Optional	N/A	N/A	✓	✓	✓	✓	✓	✓
	MSD-V6UT HDBaseT Output model	✓ *	✓	✓	<b>✓</b>	✓	Optional	N/A	Optional	✓	In: Optional Out: N/A	N/A	✓	✓	<b>✓</b>	✓	<b>✓</b>	✓	✓	<b>✓</b>	Optional	N/A	N/A	✓	✓	<b>√</b>	✓	<b>√</b>	<b>√</b>
	MSD-V4U Standard model	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	✓	✓	<b>✓</b>	✓	<b>✓</b>	N/A
MSD-V4 Series	MSD-V4UC SDVoE Output CAT model	<b>✓</b>	✓	✓	✓	✓	N/A	✓	N/A	N/A	N/A	N/A	✓	✓	<b>✓</b>	✓	<b>√</b>	<b>√</b>	✓	N/A	N/A	N/A	N/A	<b>√</b>	✓	✓	✓	<b>√</b>	<b>√</b>
	MSD-V4UT HDBaseT Output model	✓ *	✓	✓	<b>✓</b>	✓	N/A	N/A	N/A	✓	N/A	N/A	✓	✓	✓	✓	<b>✓</b>	✓	✓	N/A	N/A	N/A	N/A	✓	✓	<b>✓</b>	✓	✓	<b>✓</b>
MSD-S5 Se	eries	N/A	N/A	✓	N/A	✓	N/A	N/A	N/A	✓	N/A	✓	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	✓	✓	✓	✓	✓	<b>√</b>
MSD-S7 Se	eries	N/A	N/A	✓	N/A	✓	N/A	N/A	N/A	✓	N/A	✓	✓	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	✓	✓	✓	✓	✓	✓
MSD-701A	AMP	N/A	N/A	✓	N/A	✓	N/A	N/A	✓	✓	In: ✓ Out:N/A	✓	✓	✓	✓	✓	✓	✓	✓	✓	N/A	✓	✓	✓	✓	✓	✓	✓	<b>√</b>
MSD-62 Se	eries	N/A	✓	✓	N/A	✓	N/A	N/A	✓	✓	In: ✓ Out:N/A	✓	✓	✓	✓	✓	✓	✓	<b>✓</b>	<b>✓</b>	In: N/A Out:Optional	N/A	N/A	✓	✓	<b>✓</b>	✓	✓	<b>√</b>
MSD-402		N/A	N/A	<b>✓</b>	N/A	✓	N/A	N/A	✓	✓	N/A	N/A	✓	✓	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	In: N/A Out: ✓	In: N/A Out: ✓	N/A	N/A	N/A	N/A	✓	<b>√</b>	N/A	N/A	<b>√</b>

\* HDBaseT output: Up to 4K@60 (4:2:0)

## **HDCP**

A digital copy protection form developed by Intel. IDK's 4K@60 (4:4:4) products support HDCP 2.2 and HDCP 1.4 while up to 4K@30 products support HDCP 1.4.

#### **SDVoE**

Software Defined Video over Ethernet. An AV over IP platform for 4K video distribution and control.

#### **HDBaseT**

A connectivity standard defined by the HDBaseT Alliance. This signal extension technology is for transporting HDMI audio, video, Ethernet, DC power, and control signals via twisted pair cable.

#### **Bitmap**

BITMAP images can be registered to a switcher. Display mode, size, position, transparent display, background color can be

#### **Automatic Switching**

Automatically switches video when video input is detected. It increases usability for conference systems.

#### PinP

Picture-in-picture, displays multiple video signals simultaneously on a single screen.

#### switching. Users do not see any distortion.

Seamless switching

Provides a smooth video

The MSD series displays a black frame between switching.

#### **Connection reset**

Fixes unexpected HDCP authentication errors that otherwise must be recovered by physically disconnecting and reconnecting the digital cables between the MSD's output and sink devices.

#### **Anti-Snow**

Automatically fixes snow that is a specific symptom of HDCP-compliant signals and mainly occurs at start-up.

#### **Dante**

An audio over IP standard defined by Audinate. It delivers uncompressed, low latency, high resolution, multi-channel digital audio distribution over IP networks.

#### Power Amp / DSP

Products with Power amplifier or Digital Signal Processor provide audio processing, such as feedback suppressor, equalizer, and power amplifier.

### **Lip Sync**

Matches lip movements in a picture (video) with voice (audio).

#### **WEB GUI**

All configuration and setup are accessible via web browser.

### **Control IN**

Controls switchers from a control processor either by LAN or RS-232C.

## **Control OUT**

Controls external devices over LAN, RS-232C, or contact closure.

#### LAN Pass Through

Shows status of connected devices via LAN (SDVoE, HDBaseT) .

Modular Matrix Switchers

Extenders

Distribution Amplifiers

AV over IP

4K@60 Digital Multi Switcher with 6 Inputs and 1/2 Outputs, (SDVoE Output Fiber model)/(SDVoE Output CAT model)/(HDBaseT Output model)

MSD-V6 Series

The MSD-V6 series digital presentation switcher with built-in scalers and scan converters can send and receiving UHD video resolutions in a variety of protocols including AV over IP (SDVoE) and

With six (6) HDMI/DVI video inputs, this MSD-V6 can accept a wide variety of video formats, including HDCP content. Input video signals are output as HDMI signals at up to 4K@60, and these signals can be output simultaneously to optional 10GbE CAT(SDVoE)/10GbE FIBER(SDVoE)/ HDBaseT for video extension.

The MSD-V6 includes six (6) HDMI and two (2) analog audio inputs. For audio output, both digital and analog audio are supported and can be distributed simultaneously as well as embedded/deembedded for breakaway audio routing. Up to four (4) Dante inputs and four (4) Dante outputs

The MSD-V6 can be configured and controlled remotely using RS-232C or LAN.

External devices can be controlled via RS-232C, LAN, CEC, or contact closure by registering control

#### Features

- •6 inputs and 1/2 outputs •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2
- •Embedding/De-embedding Dante audio •Picture-in-Picture (2-window)
  •Control external device •SDVoE/HDBaseT direct input option

#### General

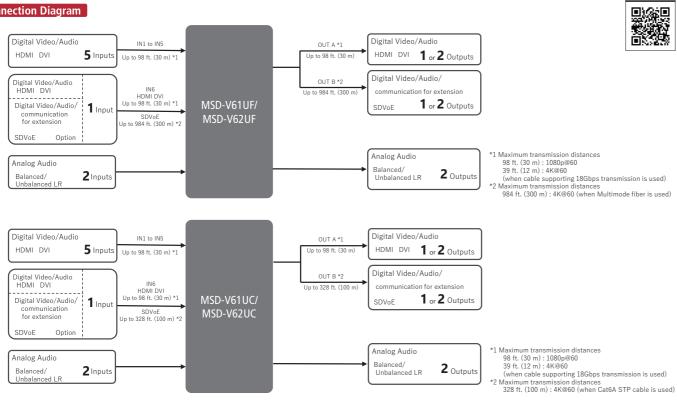
Dimensions	16.9 (W) $\times$ 1.7 (H) $\times$ 13.8 (D)" (430 (W) $\times$ 44 (H) $\times$ 350 (D) mm) (Excluding connectors and the like)
Power consumption	56 W ~ 59 W (MSD-V61U) 68 W ~ 76 W (MSD-V62U)
Weight	10.4 lbs. (4.7 kg) (MSD-V61U) 10.6 lbs. (4.8 kg) (MSD-V62U)

# MSD-V62UF MSD-V62UC

Models		*1*2	*1			
Model Number	Digital input	SDVoE input	HDBaseT input	HDMI output	SDVoE output	HDBaseT output
MSD-V61UF	6	1	0	1	1	0
MSD-V62UF	6	1	0	2	2	0
MSD-V61UC	6	1	0	1	1	0
MSD-V62UC	6	1	0	2	2	0
MSD-V61UT	6	0	1	1	0	1
MSD-V62LIT	6	Λ	1	2	n	2

\*1 Option \*2 For SDVoE fiber model, an SFP+ optical transceiver is required(option).

#### **Connection Diagram**



Digital Video/Audio HDMI DVI <b>5</b> Inputs	IN1 to IN5  Up to 98 ft. (30 m) *1		OUT A *1 Up to 98 ft. (30 m)	Digital Video/Audio HDMI DVI 1 or 2 Outputs
Digital Video/Audio HDMI DVI  Digital Video/Audio/ communication for extension HDBaseT Option  Analog Audio Balanced/ Unbalanced LR	HDMI DVI Up to 98 ft. (30 m) *1 SDVoE Up to 328 ft. (100 m) *2	MSD-V61UT/ MSD-V62UT	OUT B *2 Up to 328 ft. (100 m)	Digital Video/Audio/ communication for extension HDBaseT 1 or 2 Outputs  Analog Audio Balanced/ Unbalanced LR 2 Outputs

## MSD-V6 Series option unit

Category	I/O	Model Number	Option Unit	Maximum Formats	No. of Ports	
SDVoE option Fiber model	Input	MSD-VIV1UF	10GbE Tx Rx  SFP+ optical transceiver is sold separately.	4K@60 (4:4:4) 4K* <sup>1</sup>	1	
SDVoE option CAT model	Input	MSD-VIV1UC	10GbE Tx Rx	4K@60 (4:4:4) 4K* <sup>1</sup>	1	
HDBaseT option	Input	MSD-VIV1UT	[POH] HDBaseT LINK	4K@60 (4:2:0) 4K* <sup>1</sup>	1	
Dante audio option	Input Output	MSD-VAB4D	<b>△Dante</b>	-	1	

<sup>\*1</sup> For WQHD/WQXGA, only Reduced Blanking is supported.

#### Optional

lodel Number	10G-MM-SFP	SFP-L10GLR
Description	SFP+ transceiver: Multimode fiber	SFP+ transceiver: Singlemode fiber

Maximum transmission distances 328 ft. (100 m) : 4K@60 (when Cat.5E HDC cable is used)

Modular Matrix Switchers

AV over IP

4K@60 Digital Multi Switcher with 4 Inputs and 1/2 Outputs, (SDVoE Output model)/(HDBaseT Output model)

MSD-V4 Series

The MSD-V4 series is a digital presentation switcher with built-in scalers and scan converters

capable of sending and receiving UHD video resolutions.

With four (4) HDMI/DVI video inputs, the series can accept a wide variety of video formats. Input video signals are output as HDMI signals at up to 4K@60 (4:4:4). The MSD-V41UC/V42UC and MSD-V41UT/V42UT distribute signals in HDMI format and either 10GbE (SDVoE) or HDBaseT

With four (4) HDMI and one (1) analog audio inputs, input audio signals are distributed in digital audio and analog audio simultaneously.

The MSD-V4 series can be configured remotely using RS-232C or LAN.

External devices can be controlled via RS-232C, LAN, CEC, or contact closure by registering control

#### Features

- •6 inputs and 1/2 outputs •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2
- Embedding/De-embedding Dante audio Picture-in-Picture (2-window)
- Control external device •SDVoE/HDBaseT direct input option

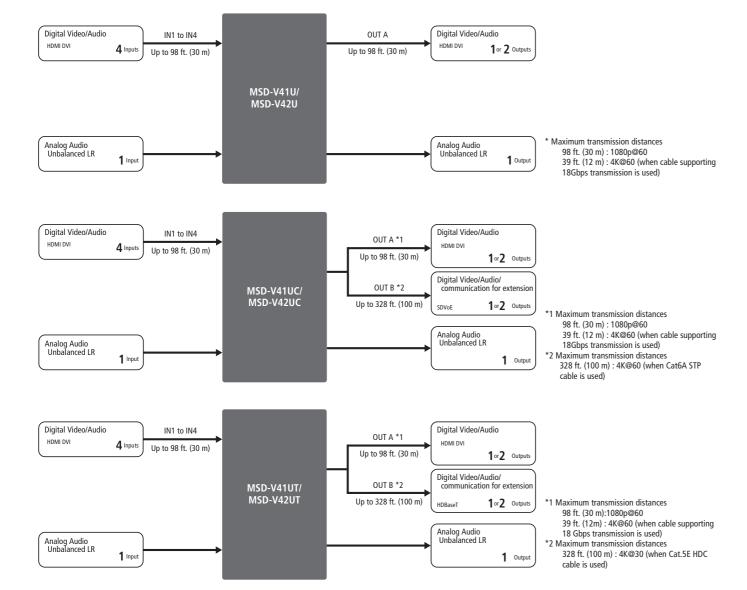
Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 9.8 (D)" (210 (W) $\times$ 42 (H) $\times$ 250 (D) mm) (Excluding connectors and the like)
Power consumption	28 W ~ 33 W (MSD-V41U) 35 W ~ 44 W (MSD-V42U)
Weight	3.7 lbs. (1.7 kg) (MSD-V41U, MSD-V41UT), 4 lbs. (1.8 kg) (MSD-V41UC, MSD-V42U, MSD-V42UT), 4.2 lbs. (1.9 kg) (MSD-V42UC)

# MSD-V42II

Model Number	Digital input	HDMI output	SDVoE output	HDBaseT output
MSD-V41U	4	1	0	0
MSD-V42U	4	2	0	0
MSD-V41UC	4	1	1	0
MSD-V42UC	4	2	2	0
MSD-V41UT	4	1	0	1
MACD MACHIT		2	•	_



#### Connection Diagram



## Digital Multi Switcher with Integrated Audio Power Amplifier 7 Inputs & 1 Output | MSD-701AMP

The MSD-701AMP is a seven-input digital presentation switcher with built-in audio power

The seven digital and two analog inputs accept a wide variety of video formats including HDMI, DVI, HDBaseT, Composite video, RGB, and YPbPr. Input video signals are converted to HDBaseT and HDMI signals at up to QWXGA or 1080p. Two selected input video signals can be displayed on a single screen in picture-in-picture or side-by-side layout.

Up to three audio can be mixed: one of digital audio/analog audio, one mic, and one line. Audio is output to digital connectors, an analog connector, and two speakers. Enhanced audio features include compressing, limiter, and seven-band equalizer for mic input and tone controls for speaker

The MSD-701AMP can be configured remotely from RS-232C and LAN. External devices can be controlled via RS-232C, LAN, CEC, or contact closure by registering control commands. Additionally, the MSD-701AMP includes key security lockout and button caps to prevent accidental or inappropriate changes.

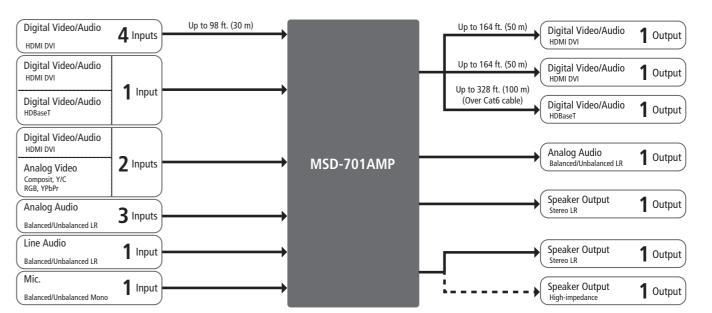
#### Features

- •7 inputs and 1 output •Up to 1080p/QWXGA(RB) •HDCP 1.4
- •Multi-format inputs •1×3 DA (2×HDMI and 1×HDBaseT)
- Built-in DSP and Power Amp. Control external device

Dimensions	$16.9\times3.5\times13.8''$ (430 (W) $\times$ 88 (H) $\times$ 350 (D) mm) (2U high) (Excluding connectors and the like)
Power consumption	About 108 W (1/8 MAX power)
Weight	17 lbs. (7.7 kg)







\*Maximum transmission distances

Up to 328 ft. (100 m): QWXGA, 1080p

Up to 492 ft. (150 m) : 1080p (24 bit) in Long reach mode

For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum

if using with IDK's HDBaseT products supporting 328 ft. (100 m) transmission.



Modular Matrix Switchers

Distribution Amplifiers

AV over IP

## Digital Multi Switcher with 5 Inputs & 1/2 Outputs | MSD-S5 Series

The MSD-S51 and MSD-S52 are a digital presentation switcher with five inputs and one/two

For video, five digital and one analog inputs accept a wide variety of video formats including HDMI, DVI, Composite video, Y/C, RGB, and YPbPr. Input video signals are output to HDBaseT and HDMI signals simultaneously at up to QWXGA or 1080p. Two selected input video signals can be displayed on a single screen in picture-in-picture or side-by-side layout. The overlay bitmap function is also supported.

The MSD-S51 and MSD-S52 include five digital and three analog audio inputs and outputs audio to both of digital and analog connectors. Audio level of each input/output can be set individually.

The Lip Sync function adjusts the gap between video and audio.

The MSD-S51 and MSD-S52 can be configured remotely from RS-232C and LAN while external devices can be controlled via RS-232C, LAN, CEC, or contact closure by registering control commands. The waiting function helps you to send external commands after cooling time passes as power supply control of projectors or the like. External control commands can be executed from front buttons, RS-232C, or LAN; they can also be executed when input channel selection buttons or power supply button is operated

#### Features

- •5 inputs and 1/2 outputs •Up to 1080p/QWXGA(RB) •HDCP 1.4
- •Multi-format inputs •1×2 DA (HDMI and HDBaseT)
- Picture-in-Picture (2-window) Automatic input detection and switching

## General

Dimensions	16.9 (W) $\times$ 1.7 (H) $\times$ 11.8 (D)" (430 (W) $\times$ 44 (H) $\times$ 300 (D) mm) (1U high) (Excluding connectors and the like)
Power consumption	About 33 W (MSD-S51) About 44 W (MSD-S52)
Weight	9 lbs. (4.1 kg)

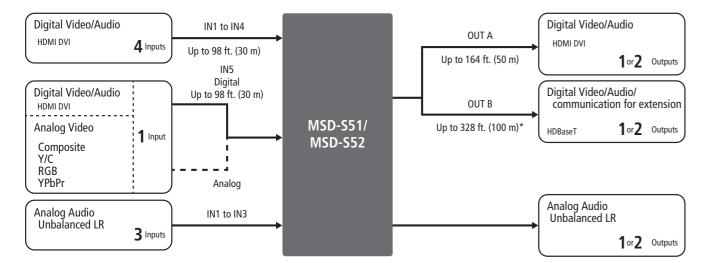
# MSD-S52

#### Models

Model Number	Digital input	Universal input	HDMI output	HDBaseT outpu
MSD-S51	4	1	1	1
MSD-S53	1	1	2	2



#### Connection Diagram



\*Maximum transmission distances

Up to 328 ft. (100 m): OWXGA, 1080p

Up to 492 ft. (150 m): 1080p (24 bit) in Long reach mode

For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum

if using with IDK's HDBaseT products supporting 328 ft. (100 m) transmission.

## Digital Multi Switcher with 7 Inputs & 1/2 Outputs | MSD-S7 Series

The MSD-S71 and MSD-S72 are a digital presentation switcher with seven inputs and two outputs. For video, seven digital and two analog inputs accept a wide variety of video formats including HDMI, DVI, Composite video, Y/C, RGB, and YPbPr. Input video signals are output to HDBaseT and HDMI signals simultaneously at up to QWXGA or 1080p. Two selected input video signals can be displayed on a single screen in picture-in-picture or side-by-side layout. The overlay bitmap function is also supported.

The MSD-S71 and MSD-S72 include five digital and three analog audio inputs and outputs audio to both of digital and analog connectors. Audio level of each input/output can be set individually. The Lip Sync function adjusts the gap between video and audio.

The MSD-571 and MSD-572 can be configured remotely from RS-232C and LAN while external devices can be controlled via RS-232C, LAN, CEC, or contact closure by registering control commands. The waiting function helps you to send external commands after cooling time passes as power supply control of projectors or the like. External control commands can be executed from front buttons, RS-232C, or LAN; they can also be executed when input channel selection buttons or power supply button is operated

•7 inputs and 1/2 output •Up to 1080p/QWXGA(RB) •HDCP 1.4

• Picture-in-Picture (2-window) • Automatic input detection and switching

• Multi-format inputs •1×2 DA (HDMI and HDBaseT)

Model Number	Digital input	Universal input	HDMI output	HDBaseT output
MSD-S71	5	2	1	1
MSD-S72	5	2	2	2

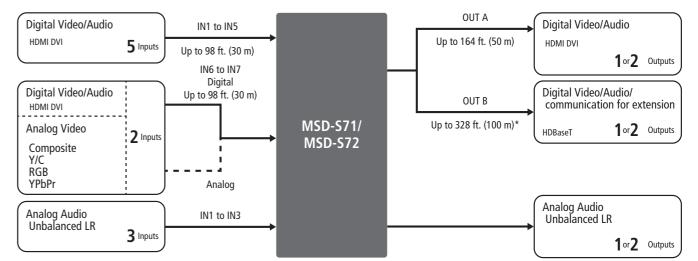


#### General

Features

Dimensions	16.9 (W) $\times$ 1.7 (H) $\times$ 11.8 (D)" (430 (W) $\times$ 44 (H) $\times$ 300 (D) mm) (1U high) (Excluding connectors and the like)
Power consumption	About 36 W (MSD-S71) About 48 W (MSD-S72)
Weight	9 lbs. (4.1 kg)

#### **Connection Diagram**



\*Maximum transmission distances Up to 328 ft. (100 m): QWXGA, 1080p Up to 492 ft. (150 m): 1080p (24 bit) in Long reach mode For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum if using with IDK's HDBaseT products supporting 328 ft. (100 m) transmission.

Modular Matrix Switchers

Extenders

Distribution Amplifiers

Digital Multi Switchers Aspect Ratio Control

## 4K Digital Multi Switcher with 8 Inputs & 3/4 Outputs MSD-62 Series

The MSD-62 series is a high-performance digital multi switcher with a scan converter and up to 8 inputs and 3/4 outputs.

For video input, 8 digital and 2 analog inputs are included and the following signals are supported: HDMI, DVI, HDBaseT, composite video, Y/C, analog RGB, and analog YPbPr signals. HDBaseT input supports Power over HDBaseT (PoH) that can power the connected devices. Input video signals are converted to HDMI/DVI or HDBaseT signals and output at a resolution up to

For audio input, 8 digital and 2 analog inputs are included. Selected audio signals are output to digital audio, and 1 of 3/4 digital audio outputs can be selected to be output as analog audio. The lip sync function corrects the gap between the video and audio.

This switcher also has RS-232C and LAN ports as communication ports for control to enable you to

set menus remotely. You can also control external devices that are connected to the MSD-6203 over RS-232C, LAN, CEC, or contact closure by registering external control commands. The waiting function helps you to send external commands after cooling time passes as power supply control of projectors or the like. External Control commands can be executed from front keys, RS-232C, or LAN; they can also be executed when input channel selection keys or power supply key is operated.

Dante output is available as an optional extra. With the network audio, 64-channel at 48 kHzsample frequency audio can be delivered over a LAN cable.

#### Features

- •8 inputs and 3/4 outputs •Up to 1080p/QWXGA(RB) •4K@30 mode is available
- •HDCP 1.4 •Multi-format inputs •Switch selectable output (HDMI/HDBaseT) •De-embedding up to 64 ch. Dante audio •Control external device

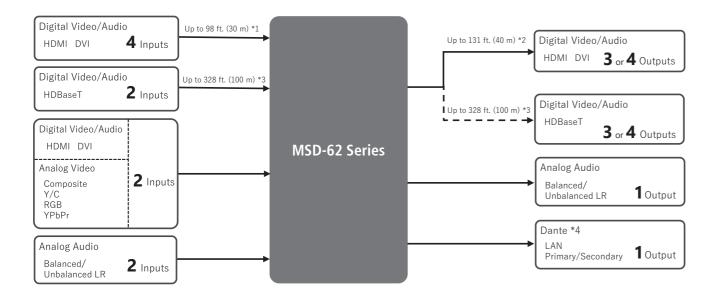
Centeren	
Dimensions	16.9 (W) $\times$ 3.5 (H) $\times$ 15.7 (D)" (430 (W) $\times$ 88 (H) $\times$ 400 (D) mm) (2U high) (Excluding connectors and the like)
Power consumption	About 121 W (MSD-6203, MSD-6204) About 129 W (MSD-6203 Dan, MSD-6204 Dan)
Weight	14.8 lbs. (6.7 kg) (MSD-6203, MSD-6204) 15.4 lbs. (7 kg) with Dante (optional) (MSD-6203 Dan, MSD-6204 Dan)

# 0-0-0-0-0-0-0-0-0 0-0-0-0-0-0-0-0-0 0-0-0-0-0-0-0-0-0 MSD-6204 Dan

Model Number	4K UHD input	HDBaseT input	Digital input	Universal input	HDMI output	HDBaseT outpu
MSD-6203 / MSD-6203 Dan	1	2	3	2	3	3
MSD-6204 / MSD-6204 Dan	1	2	3	2	4	4



#### **Connection Diagram**



- \*1 Maximum transmission distances Up to 98 ft. (30 m) : 1080p@60 Up to 66 ft. (20 m) : 4K@30 (IN1 only)
- \*2 Maximum Transmission distances Up to 131 ft. (40 m): 1080p@60
- Up to 98 ft. (30 m): 4K@30 \*3 Maximum Transmission distances
- Up to 328 ft. (100 m): 4K@30 Up to 492 ft. (150 m): 1080p (24bit) in Long reach mode
- For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum
- if using with IDK's HDBaseT products supporting 328 ft. (100 m) transmission.
- \*4 Dante output is optional.

## Digital Multi Switcher with 4 Inputs & 2 Outputs | MSD-402

The IDK MSD-402 is a high-performance digital multi switcher with a scan converter and 4 inputs and 2 outputs. For video input, 2 HDMI /DVI inputs and 2 HDBaseT inputs are included. Input video signals are converted to HDMI/DVI or HDBaseT signal and output at a resolution up to QWXGA or 1080p. For audio input, 4 digital inputs are included. Selected audio signals are output as digital and analog audio. Audio levels of each input and output can be set individually. The IDK MSD-402 also has RS-232C and LAN ports as communication ports for controlling remotely. Bidirectional LAN communication is supported for HDBaseT input/output. If IDK's HDC-TH200 is connected to an HDBaseT input of the MSD-402, analog video signals can be input, and input channel can be

#### Features

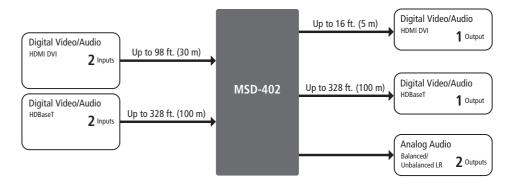
- •4 inputs and 2 outputs •Up to 1080p/QWXGA(RB) •HDCP 1.4
- •Built-in Scan Converter/Scaler •Seamless switching (black frame)
- Picture-in-Picture (2-window) Automatic input detection and switching

#### General

Dimensions	$8.3 \times 1.7 \times 9.8$ " (210 (W) $\times$ 44 (H) $\times$ 250 (D) mm) (EIA 1U high, half rack wide) (Excluding connectors and the like)
Power consumption	About 29 W
Weight	4.2 lbs. (1.9 kg)



#### Connection Diagram



## Aspect Ratio Control

The MSD 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.

lunut cional	Monitor/Projector aspect			t	
Input signal	4:3	5 : 4	5:3	16 : 9	16 : 10
Video signal 4 : 3					
Video signal 5 : 4					
Video signal 5 : 3					
Video signal 16 : 9					
Video signal 16 : 10					
Video signal 14 : 9					hund color can be changed

Background color can be changed.

— FDX Series

# **Modular Matrix Switcher Selection guide**

Category	Main Unit			Redundant Pov	ver Supply Unit	
Model number	FDX-S64U	FDX-S32U	FDX-S16U	FDX-S08U	FDX-SRP 08/16/32	FDX-SRP64
Product	*	*	** ::			
Diagram	64 In Out	32 In Out	16 In Out	8 Out	44	44
Maximum Formats	4K@60(4:2:0)	4K@60(4:4:4)	4K@60(4:4:4)	4K@60(4:4:4)	-	_
HDCP	1.4 / 2.2	1.4 / 2.2	1.4 / 2.2	1.4 / 2.2	_	_
Video I/O	Up to 64ch	Up to 32ch	Up to 16ch	Up to 8ch	-	_
Digital Audio I/O	Up to 64	Up to 32	Up to 16	Up to 8	_	_
Number of	Input 16	Input 8	Input 4	Input 2	_	_
Video Slots	Output 16	Output 8	Output 4	Output 2		
Number of Audio Slots	2	1	1	1	_	_
Control Input	LAN RS-232C	LAN RS-232C	LAN RS-232C	LAN RS-232C	_	_

Input Board					Category
FDX-SIV4UH	FDX-SIV4UC	FDX-SIV4UT	FDX-SIV4US	FDX-SIV4S	Model number
<u>,                                    </u>		a • • • •	*FDX-S64U: Up to 6G-SDI.	, o-s o-s_o-o o-o <sup>s</sup>	Product
ндмі 🚆 4К	SDVOE: 4K	€HDBT 4K	12G-SDI <b>4K</b>	3G-SDI # 2K	Diagram
4K 4K@60(4:4:4)	4K 4K@60(4:4:4)	4K 4K@60(4:2:0)	4K@60(4:2:2)	1080p	Maximum Formats
1.4 / 2.2	1.4 / 2.2	1.4 / 2.2	_	_	HDCP
4	4	4	4	4	Video Input
_	_	_	Loop through 4	Loop through 4	Video Output
Digital 4	Digital 4	Digital 4	Digital 4	Digital 4	Audio Input
_	_	_	Digital 4	Digital 4	Audio Output
_	_	_	_	_	Scaling
_	_	_	_	_	Videowall
-	-	-	-	-	Multiview
30m:1080p@60 20m:4K@60(4:2:0) 12m:4K@60(4:4:4)	100m	150m : Long reach mode 100m : HDBaseT	250m : HD-SDI 160m : 3G-SDI 80m : 6G-SDI 80m : 12G-SDI	300m : SD-SDI 240m : HD-SDI 140m : 3G-SDI	Maximum Transmission Distance
_	IP-NIN ŠAR <sup>®</sup>	<b>CHDB.T</b> <sup>™</sup>	12G-SDI	3G-SDI	System
-	SDVOE °	_	-	_	Solution

- FDX Series

# **Modular Matrix Switcher Selection guide**

Category	Output Board					
Model number	FDX-SOV4UH	FDX-SOV4UC	FDX-SOV4UT	FDX-SOV4US	FDX-SOV2UHS	FDX-SOV1UHM
Product	grid rid sid sid sid s	<u>. * * * *</u> *	, <del>, , , , ,</del>	3 F F 5 5 5	a.2 .2	*FDX-S64U is not supported.
Diagram	4к номі	4K SDVOE	4K CHOBT	4K 12G-SDI	HDMI SCAN CONVERTER	4K → HDMI MULTI VIEW
Maximum Formats	4K 4K@60(4:4:4)	4K 4K@60(4:4:4)	4K 4K@60(4:2:0)	4K@60(4:2:2)	WQXGA(RB) 4K(4096×2160)	WQXGA(RB) 4K(4096×2160)
HDCP	1.4 / 2.2	1.4 / 2.2	1.4 / 2.2	_	1.4 / 2.2	1.4 / 2.2
Video Input	-	-	_	-	_	_
Video Output	4	4	4	4	2	1
Audio Input	_	_	_	_	_	_
Audio Output	Digital 4	Digital <b>4</b>	Digital 4	Digital 4	Digital 2	Digital 1
Scaling	_	_	_	_	YES	YES
Videowall	_	_	_	_	YES	YES
Multiview	-	-	-	-	-	YES
Maximum Transmission Distance	30m:1080p@60 12m:4K@60(4:4:4)	100m	150m : Long reach mode 100m : HDBaseT	250m : HD-SDI 160m : 3G-SDI 80m : 6G-SDI 80m : 12G-SDI	30m:1080p@60 12m:4K@60(4:4:4)	30m:1080p@60 12m:4K@60(4:4:4)
System	-	IP-NINJAR	<b>CHDB.T</b> ™	12G-SDI	_	-
Solution	-	SDVOE®	_	_	_	_

Output	Board		Category		
FDX-SOV4HS	FDX-SOV4TS	FDX-SAB4A	FDX-SOA12A	FDX-SAB64D	Model number
<u> </u>			<b>***********</b> *************************	# ~ #	Product
2K HDMI SCAN CONVERTER	2K CHDBT SCAN CONVERTER	ANALOG AUDIO  4 In  4 Out	ANALOG AUDIO		Diagram
QWXGA(RB) 1080p	QWXGA(RB) 1080p	_	_	_	Maximum Formats
1.4	1.4	_	_	_	HDCP
_	-	-	-	-	Video Input
4	4	_	_	_	Video Output
_	_	Analog 4	_	Dante <b>64</b>	Audio Input
Digital 4	Digital 4	Analog 4	Analog 12	Dante 64	Audio Output
YES	YES	_	_	_	Scaling
YES	YES	_	_	_	Videowall
-	-	-	-	-	Multiview
40m	150m : Long reach mode 100m : HDBaseT	_	_	_	Maximum Transmission Distance
_	<b>CHDB</b> ™	_	_	<u>△</u> Dante <sup>a</sup>	System Solution
_	_	_	_	_	Solution

Aspect Ratio Control

Distribution Amplifiers

AV over IP

up to 4K@60. 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

The FDX-S08U is an HDCP 2.2-compliant modular digital matrix switcher that supports resolutions

The FDX-S08U 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.

#### Features

•Up to 8 inputs (2 input boards) •Up to 8 outputs (2 output boards)

embedded to desired output video channels.

•Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Customizable I/O boards

#### Videowall and Multiview Analog and Dante audio input/output boards

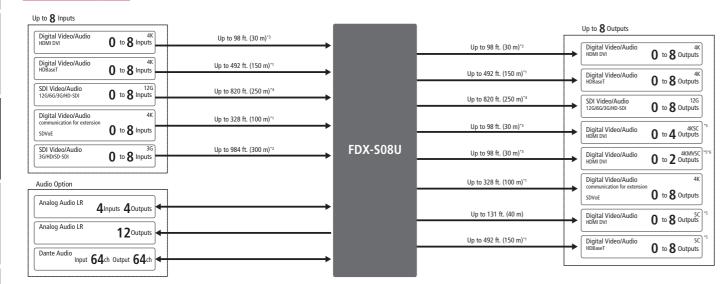
#### General

Dimensions	16.9 (W) × 3.5 (H) × 15.7 (D)" (430 (W) × 88 (H) × 400 (D) mm)
Dimensions	(2U high) (Excluding connectors and the like)
Power consumption	About 17 W
Weight	20.5 lbs. (9.3 kg) (With redundant power supply: 21.4 lbs. (9.7 kg))





#### **Connection Diagram**



- 1 Maximum transmission distances 492 ft. (150 m): 1080p (24bit) in long reach mode 328 ft. (100 m): 4K@60 (FDX-SIV4UT / FDX-SOV4UT) QWXGA 1080p (FDX-SOV4TS)
- num transmission distances 984 ft. (300 m): SD-SDI (when L-5C2V coaxial cable is used) 787 ft. (240 m): HD-SDI (when L-5CFB coaxial cable is used)

transmission is used)

- 459 ft (140 m): 3G-SDI (when I-5CFR coaxial cable is used)
- 98 ft. (30 m): 1080p@60 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps
- 4 Maximum transmission distances
- 820 ft. (250 m): HD-SDI (when L-5CFB coaxial cable is used) 524 ft. (160 m): 3G-SDI (when L-5CFB coaxial cable is used)
- 262 ft. (80 m): 6G-SDI (when L-5CFB coaxial cable is used) 262 ft. (80 m): 12G-SDI (when L-5.5CUHD coaxial cable is used)

## 4K@60 Modular Matrix Switcher with 16 Inputs & 16 Outputs FDX-S16U

The FDX-S16U is an HDCP 2.2-compliant modular digital matrix switcher that supports resolutions up to 4K@60. It provides up to 16 inputs and 16 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-S16U 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.

#### Features

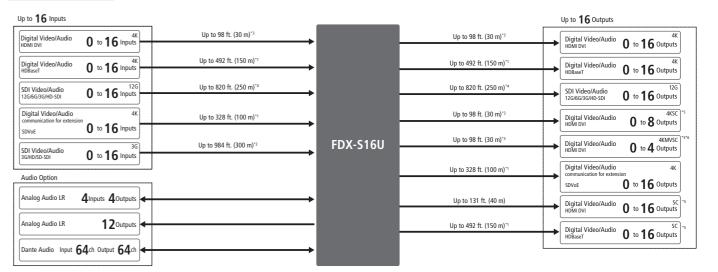
- •Up to 16 inputs (4 input boards) •Up to 16 outputs (4 output boards)
- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Customizable I/O boards
- Videowall and Multiview Analog and Dante audio input/output boards

#### General

Dimensions	16.9 (W) $\times$ 5.2 (H) $\times$ 15.7 (D)" (430 (W) $\times$ 132 (H) $\times$ 400 (D) mm) (3U high) (Excluding connectors and the like)
Power consumption	About 30 W
Weight	26.9 lbs. (12.2 kg) (With redundant power supply: 28.9 lbs. (13.1 kg))







- \*1 Maximum transmission distances 492 ft. (150 m): 1080p (24bit) in long reach mode 328 ft. (100 m): 4K@60 (FDX-SIV4UT / FDX-SOV4UT)
- QWXGA 1080p (FDX-SOV4TS) <sup>2</sup> Maximum transmission distances 984 ft. (300 m): SD-SDI (when L-5C2V coaxial cable is used)
- 787 ft. (240 m): HD-SDI (when L-5CFB coaxial cable is used) 459 ft. (140 m): 3G-SDI (when L-5CFB coaxial cable is used)
- 98 ft (30 m): 1080n@60
- 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)
- \*4 Maximum transmission distances 820 ft. (250 m): HD-SDI (when L-5CFB coaxial cable is used) 524 ft. (160 m): 3G-SDI (when L-5CFB coaxial cable is used) 262 ft. (80 m): 6G-SDI (when L-5CFB coaxial cable is used)
- 262 ft. (80 m): 12G-SDI (when L-5.5CUHD coaxial cable is used)
- SC: Scan converter board 6 MV: Multi-view board



Aspect Ratio Control

Distribution Amplifiers

**Others** 

AV over IP

The FDX-S32 is an HDCP-compliant modular digital matrix switcher that supports resolutions up to 4K@30. It provides up to 32 inputs and 32 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-S32 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.





FDX-S32U

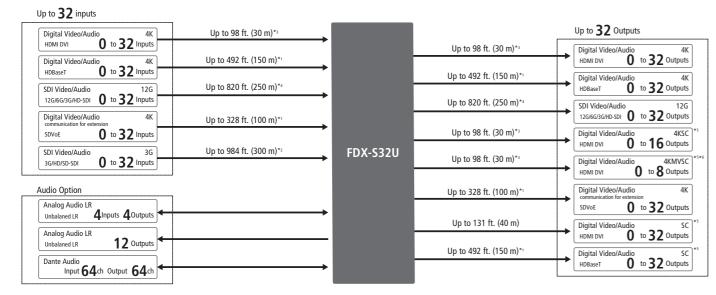
Features

Jellerai	
Dimensions	16.9 (W) $\times$ 8.7 (H) $\times$ 15.7 (D)" (430 (W) $\times$ 221 (H) $\times$ 400 (D) mm) (5U high) (Excluding connectors and the like)
Power consumption	About 42 W
Weight	32.8 lbs. (14.9 kg) (With redundant power supply: 35.9 lbs. (16.3 kg))

•Up to 32 inputs (8 input boards) •Up to 32 outputs (8 output boards) •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Customizable I/O boards

• Videowall and Multiview • Analog and Dante audio input/output boards

## **Connection Diagram**



- 492 ft. (150 m): 1080p (24bit) in long reach mode 328 ft. (100 m): 4K@60 (FDX-SIV4UT / FDX-SOV4UT) QWXGA 1080p (FDX-SOV4TS) \*2 Maximum transmission distances
- 984 ft. (300 m): SD-SDI (when L-5C2V coaxial cable is used) 787 ft. (240 m): HD-SDI (when I -5CFB coaxial cable is used)
- 459 ft. (140 m): 3G-SDI (when L-5CFB coaxial cable is used) Maximum distances
- 98 ft. (30 m): 1080p@60 39 ft. (12 m): 4K@60 (when cable supporting 18 Gbps transmission is used)

- 262 ft. (80 m): 12G-SDI (when L-5.5CUHD coaxial cable is used)

## 820 ft. (250 m): HD-SDI (when L-5CFB coaxial cable is used) 524 ft. (160 m): 3G-SDI (when L-5CFB coaxial cable is used)

- 262 ft. (80 m): 6G-SDI (when L-5CFB coaxial cable is used)
- \*6 MV: Multi-view board

## 

The FDX-S64 is an HDCP-compliant modular digital matrix switcher that supports resolutions up to 4K@30. It provides up to 64 inputs and 64 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-S64 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.

#### Features

- •Up to 64 inputs (16 input boards) •Up to 64 outputs (16 output boards)
- •Up to 4K@30/4K@60 (4:2:0) •HDCP 1.4/2.2 •Customizable I/O boards
- Videowall Analog and Dante audio input/output boards

Dimensions	16.9 (W) $\times$ 17.4 (H) $\times$ 15.7 (D)" (430 (W) $\times$ 443 (H) $\times$ 400 (D) mm) (10U high) (Excluding connectors and the like)
Power consumption	About 82 W $^*\text{AC}$ 200 V is required for some combination of boards. Please contact us for details.
Weight	56.4 lbs. (25.6 kg) (With redundant power supply: 64.8 lbs. (29.4 kg))

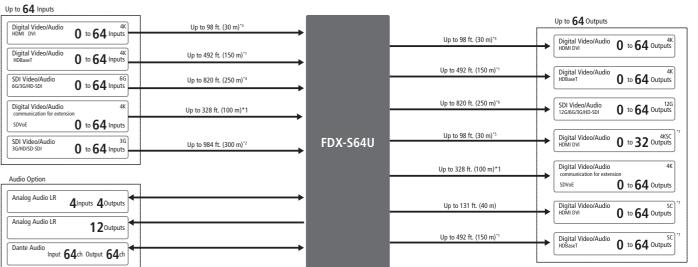






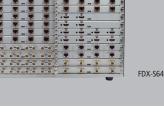
#### Connection Diagram

## Up to **64** Inputs



- 492 ft. (150 m): 1080p (24bit) in long reach mode 328 ft. (100 m): 4K@60 (FDX-SIV4UT / FDX-SOV4UT) QWXGA 1080p (FDX-SOV4TS)
- 984 ft. (300 m): SD-SDI (when L-5C2V coaxial cable is used) 787 ft. (240 m): HD-SDI (when L-5CFB coaxial cable is used) 459 ft. (140 m): 3G-SDI (when L-5CFB coaxial cable is used)
- <sup>3</sup> Maximum distances 98 ft. (30 m): 1080p@60 66 ft. (20 m): 4K@60 (4:2:0)

- \*4 Maximum transmission distances 820 ft. (250 m): HD-SDI (when L-5CFB coaxial cable is used) 524 ft. (160 m): 3G-SDI (when L-5CFB coaxial cable is used)
- 262 ft. (80 m): 6G-SDI (when L-5CFB coaxial cable is used) 5 Maximum distances
- 98 ft. (30 m): 1080p@60 39 ft. (12 m): 4K@60 (4:4:4) (when cable supporting 18 Gbps
- transmission is used) num transmission distances 820 ft (250 m): HD-SDI (when I-5CFR coaxial cable is used) 524 ft. (160 m): 3G-SDI (when L-5CFB coaxial cable is used) 262 ft. (80 m); 6G-SDI (when L-5CFB coaxial cable is used)
- 262 ft. (80 m): 12G-SDI (when L-5.5CUHD coaxial cable is used) 17 SC: Scan converter board



Aspect Ratio Control

Modular Matrix Switchers

Controllers

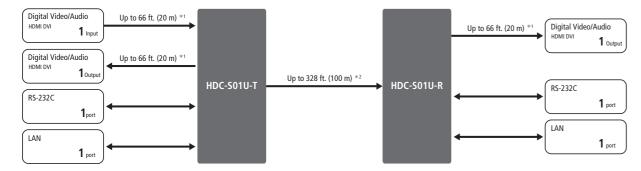
The HDC-S01U-T (transmitter)/HDC-S01U-R (receiver) is an HDBaseT extender for sending HDMI signals up to 328 ft. (100 m) over a Category (CAT) cable without compression or processing. The HDC-S01U-T/R supports video signals at resolutions up to 4K@60 (4:4:4) and is HDCP 2.2 compliant. With Long reach mode, 1080p (24 bit) video signal can be transmitted up to 492 ft (150 m). HDBaseT signal is encrypted robustly by copyright protection technology. Integrator-friendly features include bidirectional RS-232C and 1GbE LAN communication allowing control commands and status to be sent and monitored. Additionally, the HDC-S01U-T includes a local HDMI output connector for real-time video monitoring.

- •No-compressed video transmission •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 100 m (CAT6A U/FTP AWG23) •LAN and RS-232C transmission
- •No substantive transmission delay •1×2 DA (HDMI and HDBaseT) (HDC-S01U-T)

Dimensions	4.2 (W) $\times$ 1.1 (H) $\times$ 3.9 (D)" (106 (W) $\times$ 28 (H) $\times$ 100 (D) mm) (Excluding connectors and the like)
Power consumption	About 7 W
Weight	0.9 lbs (0.4 kg)







- \*1 Maximum transmission distances
- 66 ft. (20 m):1080p@60
- 26 ft. (8 m),39 ft. (12m): 4K@60 (4:4:4) (when cable supporting 18 Gbps transmission is used)
- <sup>2</sup> Maximum transmission distances
- 328 ft. (100 m) : 4K@60 (4:4:4) (when CAT6A (U/FTP,23AWG) cables is used)

## 4K@60 HDBaseT Extender | HDC-H100

The IDK HDC-TH100-D/HDC-RH100-D are extender for a long-haul transmission of HDMI signal over one single category cable. The image quality will not be deteriorated, since video signal is transmitted at a resolution up to 4K@60 without compression. You can also control external devices that are connected to the HDC-TH100-D/HDC-RH100-D over RS-232C and LAN by registering external control commands. Input video signal is converted to HDBaseT signal and sent up to 328 ft. (100 m)

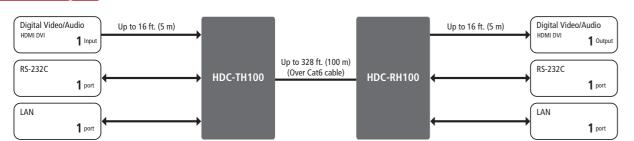
#### Features

- •No-compressed video transmission •Up to 4K@30/4K@60 (4:2:0)
  •HDCP 1.4/2.2 (pass-through) •Up to 100 m (CAT5e/CAT6) •Up to 150 m (Long Reach Mode)
  •LAN and RS-232C transmission •No substantive transmission delay

Dimensions	4.2 (W) $\times$ 1.1 (H) $\times$ 3.9 (D)" (106 (W) $\times$ 27.5 (H) $\times$ 100 (D) mm) (Quarter rack wide, thin type) (Excluding connectors and the like)		
Power consumption	About 4 W		
Weight	0.4 lbs. (0.2 kg)		



#### **Connection Diagram**



## 4K@60 Wallplate HDBaseT Transmitter | HDC-TH100WPJ

The IDK HDC-TH100WPJ is a wall-mountable transmitter for a long-haul transmission of HDMI signal over one single twisted pair cable. The image quality will not be deteriorated, since video signal is transmitted at a resolution up to 4K@60 without compression. Input video signal is converted to HDBaseT signal and sent up to 328 ft. (100 m). PoH (Power over HDBaseT) is supported. Connecting a receiver supporting PoH power supply (PSE) function eliminates the need for a local power supply.

#### Features

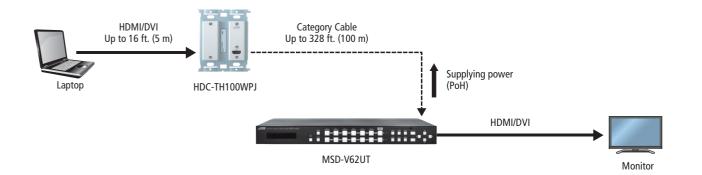
- •Japanese wall-box size •No-compressed video transmission
  •Up to 4K@30/4K@60 (4:2:0) •HDCP 1.4/2.2 (pass-through) •Up to 100 m (CAT5e/CAT6)
- •Up to 150 m (Long Reach Mode) •No substantive transmission delay

Dimensions	1.7 (W) $\times$ 4.2 (H) $\times$ 3.1 (D)" (43.2 (W) $\times$ 106.8 (H) $\times$ 78.9 (D) mm) (Excluding connectors and the like)
Power consumption	PoH power supplied (PD): About 4 W DC 12 V power supplied: About 3 W
Weight	0.4 lbs. (0.2 kg)





#### **Application Example**



## 4K@60 Wallplate HDBaseT Transmitter HDC-TH100WP



The IDK HDC-TH100WP is a wall-mountable transmitter for a long-haul transmission of HDMI signal over one single twisted pair cable. The image quality will not be deteriorated, since video signal is transmitted at a resolution up to 4K@60 without compression. Input video signal is converted to HDBaseT signal and sent up to 328 ft. (100 m). PoH (Power over HDBaseT) is supported. Connecting a receiver supporting PoH power supply (PSE) function eliminates the need for a local power supply

#### Features

- No-compressed video transmission •Up to 4K@30/4K@60 (4:2:0)

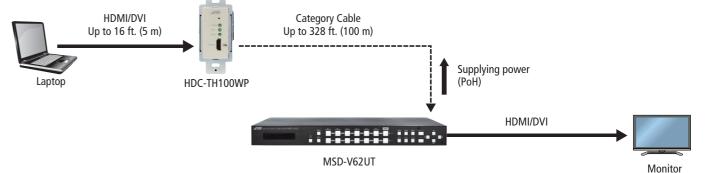
  HDCP 1.4/2.2 (pass-through) •Up to 100 m (CAT5e/CAT6)

  Up to 150 m (Long Reach Mode) •No substantive transmission delay

Dimensions	1.7 (W) $\times$ 4.2 (H) $\times$ 3.1 (D)" (43.2 (W) $\times$ 106.8 (H) $\times$ 78.9 (D) mm) (Excluding connectors and the like)
Power consumption	PoH power supplied (PD): About 4 W DC 12 V power supplied: About 3 W
Weight	0.4 lbs. (0.2 kg)







₽

over IP

Digital Multi Switchers

Aspect Ratio Control

The HDC-TH200 is an HDBaseT transmitter that features both HDMI/DVI and analog input signals It also acts as 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 HDBaseT

HDMI/Analog HDBaseT Transmitter with 2 Inputs & 1 Output | HDC-TH200

#### Features

•2×1 switching (HDMI/Analog) •No-compressed video transmission

receivers for video and audio extension to 328 ft. (100 m).

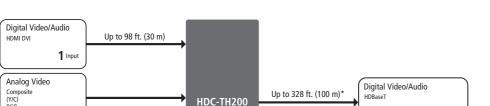
•Up to 1080p/QWXGA(RB) •HDCP 1.4 •Up to 100 m (CAT5e/CAT6) •LAN and RS-232C transmission •No substantive transmission delay

#### General

Dimensions	8.3 (W) $\times$ 1.1 (H) $\times$ 5.9 (D)" (210 (W) $\times$ 27.5 (H) $\times$ 150 (D) mm) (Half rack wide, thin type) (Excluding connectors and the like)
Power consumption	About 11 W
Weight	2 lbs. (0.9 kg)



#### **Connection Diagram**



\*For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum if using with IDK's HDBaseT products supporting 328 ft. (100 m) transmission.

1 Output

## 4K@60 HDBaseT Transceiver with 2 Inputs & 2 Outputs | HDC-TR121UHD



The HDC-TR121UHD is an HDBaseT extender with EDID emulator for sending HDMI, DVI, or HDBaseT input signals at up to 4K@60 over a Category cable without compression or processing. Input video signal is converted to HDMI and HDBaseT that can be transmitted up to 100 m (328 ft.); 1080p (24 bit) video signals can be sent up to 150 m (492 ft.) in Long reach mode. The HDMI OUT1 enables down conversion outputting 4K input video at 1080p automatically depending on sink device status. The two video inputs can be controlled by the front panel or an external controller. For video signal that is distributed to an HDMI/DVI and HDBaseT simultaneously, video/ audio can be off for each output. The HDC-TR121UHD also features Daisy chain for extending and distributing video, audio, and control signals. In addition, digital audio signals can be deembedded onto the analog output signals. It supports bidirectional RS-232C communication and LAN transmission. Internal Web pages provide system status for troubleshooting and device monitoring using a browser.

#### Features

•Transceiver model •2×1 switching (HDMI/HDBaseT)

Analog Audio

I Inhalanced I R

1 Port

- •1×2 DA (HDMI and HDBaseT) •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 100 m (CAT5e/CAT6) •Up to 150 m (Long Reach Mode)

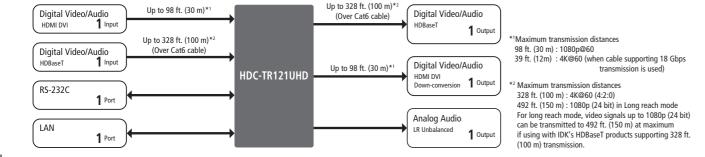
Dimensions	8.3 (W) $\times$ 1.2 (H) $\times$ 7.9 (D)" (210 (W) $\times$ 30 (H) $\times$ 200 (D) mm) (Half rack wide, thin type) (Excluding connectors and the like)
Power consumption	About 15 W
Weight	2.9 lbs. (1.3 kg)



HDC-TR121UHD

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#### **Connection Diagram**



## 4K@60 HDBaseT Transmitter with 2 Inputs & 3/5 Outputs HDC-TH221UHD/HDC-TH421UHD

The HDC-TH221UHD and HDC-TH421UHD are two-input receivers with EDID emulator for sending HDMI, DVI, and HDBaseT input signals at up to 4k@60 over a Category cable without compression or processing. Input video signals are converted to HDBaseT format and can be transmitted up to 100 m (328 ft.); 1080p (24 bit) video signals can be sent up to 150 m (492 ft.) in Long reach mode. The HDC-TH221UHD/HDC-TH421UHD includes one HDMI output and two/four HDBaseT outputs. The HDMI OUT1 enables down conversion outputting 4K input video at 1080p automatically depending on sink device status. The two video inputs can be controlled by the front panel or an external controller. For video signal that is distributed to an HDMI/DVI and HDBaseT simultaneously, video/audio can be off for each output. The HDC-TH221UHD/HDC-TH421UHD also features Daisy chain for extending and distributing video, audio, and control signals. In addition, digital audio signals can be de-embedded onto the analog output signals. It supports bidirectional RS-232C communication and LAN transmission. Internal Web pages provide system status for troubleshooting and device monitoring using a browser.

#### Features

- •2×1 switching (HDMI/HDBaseT) •1×3/5 DA (1×HDMI and 2/4×HDBaseT)
- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 100 m (CAT5e/CAT6)
- •Up to 150 m (Long Reach Mode) •Automatic down conversion (OUT1)

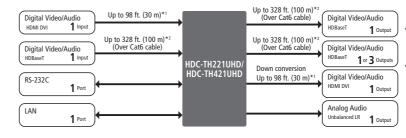
#### General

	Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 7.9 (D)" (210 (W) $\times$ 44 (H) $\times$ 200 (D) mm) (Half rack wide, 1U high) (Excluding connectors and the like)
	Power consumption	About 22 W (HDC-TH221UHD) About 31 W (HDC-TH421UHD)
	Weight	3.5 lbs. (1.6 kg)





#### Connection Diagram



98 ft. (30 m):1080p@60

39 ft. (12m): 4K@60 (when cable supporting 18 Gbps transmission is used) Maximum transmission distances

328 ft. (100 m): 4K@60 (4:2:0) 492 ft. (150 m): 1080p (24 bit) in Long reach mode For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum if using with IDK's HDBaseT products supporting 328 ft.

## 4K@60 HDBaseT Receiver with 2 Inputs & 3/5 Outputs

## HDC-RH221UHD/HDC-RH421UHD



The HDC-RH221UHD and HDC-RH421UHD are two-input receivers with EDID emulator for sending HDMI, DVI, and HDBaseT input signals at up to 4K@60 over a Category cable without compression or processing. Input video signals are converted to HDBaseT format and can be transmitted up to 100 m (328 ft.); 1080p (24 bit) video signals can be sent up to 150 m (492 ft.) in Long reach mode. The HDC-RH221UHD/HDC-RH421UHD includes two/four HDMI outputs and one HDBaseT output. The HDMI OUT1 enables down conversion outputting 4K input video at 1080p automatically or manually depending on sink device status. The two video inputs can be controlled by the front panel or an external controller. For video signal that is distributed to an HDMI/DVI and HDBaseT simultaneously, video/audio can be off for each output. The HDC-RH221UHD/HDC-RH421UHD also features Daisy chain for extending and distributing video, audio, and control signals. In addition, digital audio signals can be de-embedded onto the analog output signals. It supports bidirectional RS-232C communication and LAN transmission. Internal Web pages provide system status for troubleshooting and device monitoring using a browser.

#### Features

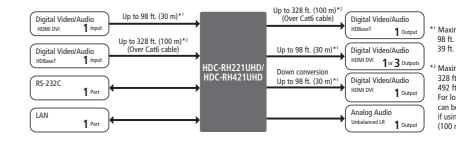
- •2×1 switching (HDMI/HDBaseT) •1×3/5 DA (2/4×HDMI and 1×HDBaseT) •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Up to 100 m (CAT5e/CAT6)
- •Up to 150 m (Long Reach Mode) •Daisy Chaining

	General		
	Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 7.9 (D)" (210 (W) $\times$ 44 (H) $\times$ 200 (D) mm) (Half rack wide, 1U high) (Excluding connectors and the like)	
	Power consumption	About 20 W (HDC-RH221UHD) About 24 W (HDC-RH421UHD)	
	Weight	3.5 lbs. (1.6 kg)	





#### Connection Diagram



Maximum transmission distances 98 ft. (30 m): 1080p@60 39 ft. (12m) : 4K@60 (when cable supporting 18 Gbps

transmission is used) Maximum transmission distances 328 ft. (100 m): 4K@60 (4:2:0)

492 ft. (150 m): 1080p (24 bit) in Long reach mode For long reach mode, video signals up to 1080p (24 bit) can be transmitted to 492 ft. (150 m) at maximum if using with IDK's HDBaseT products supporting 328 ft

Aspect Ratio Control

AV over IP

HDBaseT Power Injector | HDC-P1502

The HDC-P1502 is a single port power injector that supplies power to a PoH transmitter and receiver, such as HDC-TH100WP (Wall-plate HDMI twisted pair cable transmitter). Since the injector provides power to a transmitter and receiver (up to 15 W per device) simultaneously by installing within the HDBaseT transmission line, it eliminates the need for a local power supply. The HDC-P1502 stops supplying power if detecting PoH incompliant, twisted pair cable's short, overload, and heat problem

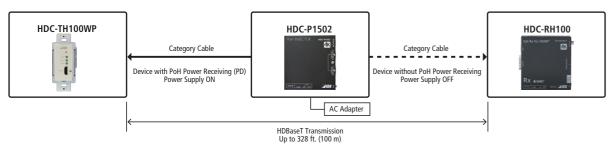
#### Features

- •PoH power injection •Up to 4K@30/4K@60 (4:2:0) •HDCP 1.4/2.2 (pass-through)
- •Up to 100 m (CAT5e/CAT6) •Up to 150 m (Long Reach Mode)
- •Automatic status detection and remove power •Supply power to Tx and Rx simultaneously

Dimensions	4.2 (W) $\times$ 1.1 (H) $\times$ 3.9 (D)" (106 (W) $\times$ 27.5 (H) $\times$ 100 (D) mm) (EIA quarter rack wide) (Excluding connectors and the like)
Power consumption	About 32 W
Weight	0.7 lbs. (0.3 kg)



#### **Application Example**



## HDMI Coaxial Cable Extender COS-100HD

The IDK COS-T100HD-B / COS-R100HD-B HDMI Coaxial Cable Extender is an extender for transmission of HDMI signals using a coaxial cable. The receiver supports Daisy Chain connection and bidirectional communication via RS-232C. The COS-100HD-B enables HDMI transmission using the existing coaxial cables. A digital audio input and an analog audio input are switch selectable.

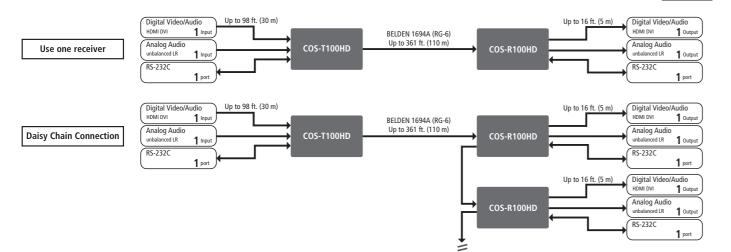
- •Up to 1080p/QWXGA(RB) •HDCP 1.4 •Up to 210 m (L-7CHD)
- •Input up to 30 m •EDID Emulation •Embedding analog audio •RS-232C transmission

Dimensions	$4.2 \times 1.1 \times 5.9$ " (106 (W) $\times$ 28 (H) $\times$ 150 (D) mm) (EIA quarter rack wide) (Excluding connectors and the like)		
Power consumption	About 6 W		
Weight	1.1 lbs. (0.5 kg)		



# 

#### **Connection Diagram**



## 4K@60 HDMI Distribution Amplifier with 1 Input & 2 to 8 Outputs VAC-S Series

The VAC-S series is a  $1\times2/4/6/8$  HDCP 2.2 compliant distribution amplifier for HDMI signals at resolutions up to 4K@60 (4:4:4). OUT1 includes a down converter that enables 4K input video signals to be converted automatically to 1080p if the sink device does not support 4K. It also features audio de-embed function. Output signal can be set to muted (black screen) or disabled for each channel separately. Input and output signals of VAC-S in the system can be monitored from WEB browser for problem analysis.

#### Features

- •1 input and 2/4/6/8 outputs •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2
- •EDID Emulation •De-embedding analog audio •WebGUI for unit setup •Unsolicited status feedback

#### General

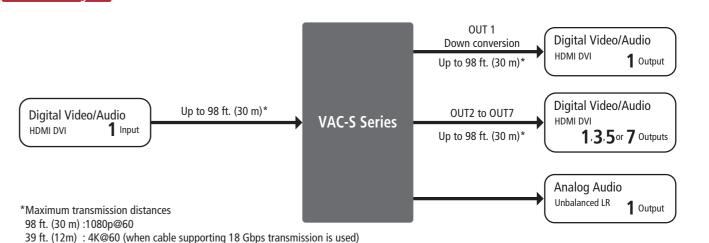
	Dimensions	4.2 (W) $\times$ 1.7 (H) $\times$ 5.9 (D)" (106 (W) $\times$ 42 (H) $\times$ 150 (D) mm) (VAC-S12U) model) (Quarter rack wide, thin type) (Excluding connectors and the like) 8.3 (W) $\times$ 1.2 (H) $\times$ 5.9 (D)" (210 (W) $\times$ 30 (H) $\times$ 150 (D) mm) (VAC-S14U) model) (Half rack wide, thin type) (Excluding connectors and the like) 8.3 (W) $\times$ 1.7 (H) $\times$ 5.9 (D)" (210 (W) $\times$ 42 (H) $\times$ 150 (D) mm) (VAC-S16U, VAC-S18U) (Half rack wide, 1U high) (Excluding connectors and the like)
	Power consumption	About 6 W (VAC-S12U), About 14 W (VAC-S14U), About 18 W (VAC-S16U), About 22 W (VAC-S18U)
	Weight	1.3 lbs. (0.6 kg) (VAC-S12U), 2.4 lbs. (1.1 kg) (VAC-S14U), 2.9 lbs. (1.3 kg) (VAC-S16U, VAC-S18U)



Model Number	input	output
VAC-S12U	1	2
VAC-S14U	1	4
VAC-S16U	1	6
VAC-S18U	1	8



#### Connection Diagram



Aspect Ratio Control

Modular Matrix Switchers

Extenders

Controllers

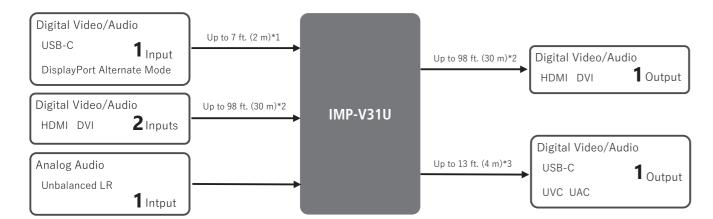
The IMP-V31U is an HDMI and USB-C switcher having three (3) inputs and two (2) distributed outputs. This IMP switcher includes two (2) HDMI and one (1) USB-C video inputs that will support up to 4K@60 video resolution. The selected input video signal can be distributed to both HDMI and USB-C video outputs simultaneously. The video signal from the USB-C output can be fed to a PC and be used to present content in various video conferencing applications. With built-in scan converter, the resolution from the USB-C video signal output can be selected from the connected PC. For audio input, the IMP-V31U provides two (2) HDMI, one (1) USB-C, and one (1) analog audio inputs. Analog audio can be mixed with digital audio of the selected input channel. The selected input audio signals are distributed to both HDMI and USB-C outputs. The switcher also includes RS-232C and LAN as communication ports that offer remote setting from WEB browser or

#### Features

- •3×1 switching (1×USB-C/2×HDMI) •1×2 DA (USB-C and HDMI) •Up to 4K@60 (4:4:4) •USB Type-C DisplayPort Alternate Mode input
- •USB Type-C USB Video Class output •USB Power Delivery •Embedding analog audio

Dimensions	$8.3\times1.2\times5.9$ " (210 (W) $\times$ 30 (H) $\times$ 150 (D) mm) (Excluding connectors and the like)
Power consumption	30 W
Weight	2.2 lbs. (1.0 kg)

#### **Connection Diagram**



\*1 Maximum transmission distances

7 ft. (2m): 4K@60 (when USB3.2 Gen1 Type-C cable is used)

\*2 Maximum transmission distances 98 ft. (30 m) :1080p@60

39 ft. (12m) : 4K@60 (when cable supporting 18 Gbps transmission is used)

\*3 Maximum transmission distances

13 ft. (4m) : 1080p@15 (when USB2.0 Type-C cable is used) 7 ft. (2m): 4K@30 (when USB3.2 Gen1 Type-C cable is used) 4K@60 HDMI Switcher with 2/4 Inputs and 1 Output IMP-S Series

The IMP-S series is an HDCP 2.2-compliant 4K@60 HDMI switcher with two/four inputs and one output. Digital audio of selected input channel can be de-embedded to analog audio. The switcher also includes RS-232C and LAN as communication ports that offer remote setting from WEB browser or control commands. Additionally, contact inputs/tally outputs enable the IMP-S series to be controlled from the PC I/O board and a control box.

#### Features

- •2/4 inputs and 1 output •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2
- •Automatic input detection and switching •Sequential input switching
- •Control from external controller •De-embedding analog audio

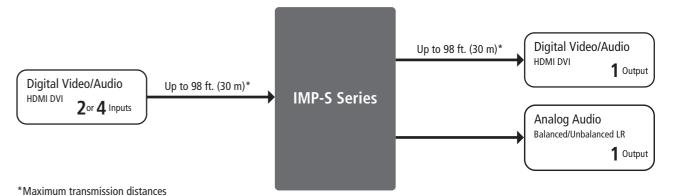
Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 5.5 (D)" (210 (W) $\times$ 42 (H) $\times$ 140 (D) mm) (Half rack wide, 1U high) (Excluding connectors and the like)
Power consumption	6 W (IMP-S21U) 7 W (IMP-S41U)
Weight	2.4 lbs. (1.1 kg)



Model Number	input	output
IMP-S21U	2	1
IMP-S41U	4	1



#### **Connection Diagram**



98 ft. (30 m) :1080p@60 39 ft. (12m): 4K@60 (when cable supporting 18 Gbps transmission is used)

## USB-C to HDMI Converter with 2 Inputs & 1 Output



The IFC-V21U converts DisplayPort Alternate Mode signals of USB-C to HDMI at resolutions up to 4K@60. The converter includes two inputs, one (1) USB-C and one (1) HDMI, and a single HDMI output. One of the inputs is output in HDMI format. Using the IFC-V21U provides a simple way to convert USB-C to HDMI and can be paired with IDK's wide variety of HDMI products.

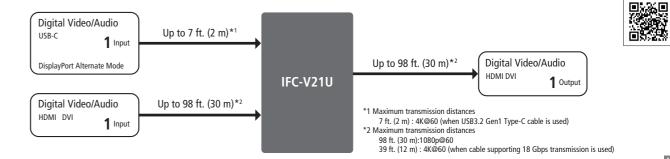
#### Features

- •USB Type-C to HDMI conversion •USB Type-C DisplayPort Alternate Mode
- •USB Power Delivery •Up to 4K@60 (4:4:4)
- EDID Emulation ◆CEC

	Dimensions	4.2 (W) $\times$ 1.1 (H) $\times$ 3.9 (D)" (106 (W) $\times$ 28 (H) $\times$ 100 (D) mm) (Excluding connectors and the like)	
	Power consumption	21 W	
	Weight	0.9 lbs. (0.4 kg)	



#### Connection Diagram



₽ over IP

Digital Multi Switchers

Aspect Ratio Control

Modular Matrix Switchers

AV over IP

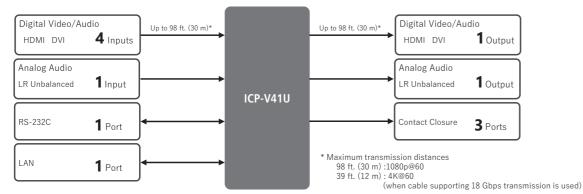
Aspect Ratio Control

The ICP-V41U is a multi-window processor that simultaneously displays up to four windows on a single screen with customizable window layouts. With four (4) HDMI video inputs, and a single HDMI scaled output, the ICP-V can support video resolutions, in and out, up to 4K@60 (4:4:4). Audio signals can be distributed simultaneously as well as embedded/de-embedded for breakaway audio routing. The ICP-V support both HDMI digital audio and analog audio in and out. The ICP-V can be configured and controlled remotely using RS-232C or LAN. External devices can be controlled via RS-232C, LAN, CEC, or contact closure by registering control commands. Features

- •4 inputs and 1 output •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2
- •4-window multiviewing •Flexible multiview layout patterns
- •Registering and recalling layout pattern

Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 9.8 (D)" (210 (W) $\times$ 42 (H) $\times$ 250 (D) mm) (Excluding connectors and the like)
Power consumption	31 W
Weight	3.7 lbs. (1.7 kg)

## Connection Diagram



## 4K@60 HDMI Frame Synchronizer/Scaler DFS-01UHD

The IDK DFS-01UHD is a digital frame synchronizer with a scan converter 1 input and 1 output. For video input, 1 digital input is included and HDMI or DVI signals can be input. Input video signals are converted to HDMI signals 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. This switcher also has a LAN port as communication ports for control to enable you to set menus remotely.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •180-degree video rotation
- Synchronized video output between DFS
- •Registering and recalling preset •Easy Videowall pattern creation via PC app

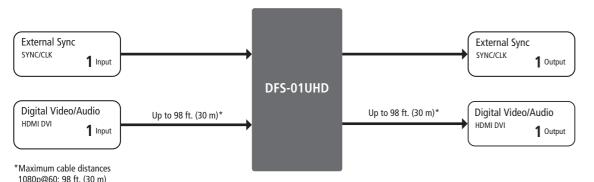
Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 9.8 (D)" (210 (W) $\times$ 44 (H) $\times$ 250 (D) mm) (EIA 1U high, half rack wide) (Excluding connectors and the like)
Power consumption	About 27 W
Weight	4.2 lbs. (1.9 kg)

4K@60 : 39 ft. (12 m) (when cable supporting 18 Gbps transmission is used)

# DFS-01UHD

DFS-01UHD

## **Connection Diagram**



## 4K@60 HDMI Audio Embedder/De-Embedder UHDS-01

The IDK UHDS-01 HDMI audio de-embedder/embedder supports HDCP 2.2 for HDMI output and 4K@60 having four times the resolution of full HD. The UHDS-01 HDMI converts the digital audio to analog audio, and it also can convert analog audio to digital audio in order to input HDMI

#### Features

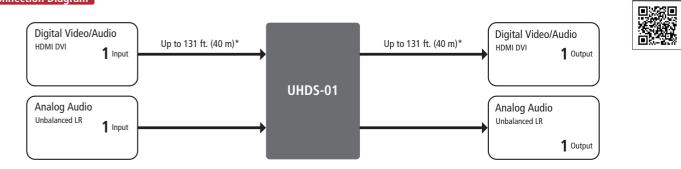
- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 •Embedding analog audio
- •De-embedding analog audio •EDID Emulation

#### General

Dimensions	$8.3 \times 1.7 \times 7.9'$ (210 (W) $\times$ 44 (H) $\times$ 200 (D) mm) (EIA 1U high, half rack wide) (Excluding connectors and the like)
Power consumption	About 8 W
Weight	3.3 lbs. (1.5 kg)



#### Connection Diagram



\* Maximum transmission distances 1080p@60:131 ft. (40 m) 4K@60 :39 ft. (12 m) (when cable supporting 18 Gbps transmission is used)

## 4K@60 HDMI EDID Emulator/Cable Equalizer DDC-03UHD

The IDK DDC-03UHD-A 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 which repairs input signal deteriorated by the transmission line) enable long-haul video transmission.

#### Features

- •Up to 4K@60 (4:4:4) •HDCP 1.4/2.2 (pass-through) •Input up to 12 m: 4K@60 (4:4:4)
- •Output up to 8 m: 4K@60 (4:4:4) •Input up to 30 m: 1080p •Output up to 20 m: 1080p

#### General

Dimensions	3.5 (W) $\times$ 0.9 (H) $\times$ 2.8 (D)" (88 (W) $\times$ 23 (H) $\times$ 70 (D) mm) (Excluding connectors and the like)
Power consumption	About 2 W
Weight	0.4 lbs. (0.2 kg)



#### Connection Diagram



\*1 Maximum cable distances

1080p@60: 98 ft. (30 m) 4K@60 : 39 ft. (12 m) (when cable supporting 18 Gbps transmission is used)

\*2 Maximum cable distances

1080p@60: 66 ft. (20 m) 4K@60 : 26 ft. (8 m) (when cable supporting 18 Gbps transmission is used)



Features

AV over IP

Digital Multi Switchers

Aspect Ratio Control

Modular Matrix Switchers

The PRV-100 creates and displays thumbnails for previewing HDMI input signals, and it encodes video signals into H.264 format and streams the encoded video. Unicast and multicast transmission are supported. The PRV-100 can be set and controlled from WEB browser.

#### Features

•Thumbnail previewing •Register up to 128 layouts •H.264 streaming output

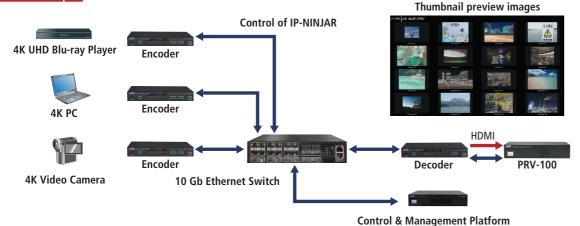
Thumbnail Previewer | PRV-100

#### General

Dimensions	8.3 (W) $\times$ 1.7 (H) $\times$ 5.9 (D)" 210 (W) $\times$ 44 (H) $\times$ 150 (D) mm (EIA 1U high, full rack wide) (Excluding connectors and the like)
Power consumption	About 18 W
Weight	3.3 lbs. (1.5 kg)



#### Application Example



## Power Distribution Unit with 5/12 V, 15 Outputs

The PD-S15 is a power distribution unit with 5 V and 12 VDC power. By using a dedicated DC power cable (sold separately), the PD-S15 supplies power to up to 15 IDK products which operate via an AC adapter.

#### Features

- •5 V/12 V multi-power supply •Up to 15 outputs
- •Overcurrent protection •Mountable to RM-SV series

Dimensions	4.2 (W) $\times$ 2.4 (H) $\times$ 5.9 (D)" (106 (W) $\times$ 61 (H) $\times$ 150 (D) mm) (Excludin connectors and the like)
Power consumption	About 6.5 W
Weight	1.8 lbs. (0.8 kg)

# **PD-S15**

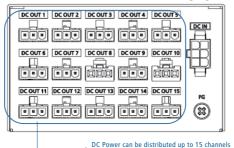
## Application Example











(Each output 5/12 VDC 3/5 A)

## Programmable Button Controller | SWC-2000

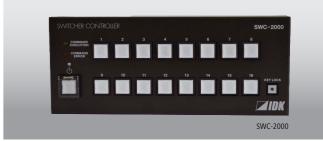
The SWC-2000 is a remote programmable button controller. Control command can be registered and linked to the buttons by using web browser. The SWC-2000 can control connected units which are connected via LAN or RS-232C. The SWC-2000 can be used on a desk or mounted to a rack.

#### Features

- •Generic controller for any external devices •Control external device
- •Registering up to 10 commands for each button •Button security lockout

#### General

Dimensions	8.5 (W) $\times$ 3.5 (H) $\times$ 1.6 (D)" (215 (W) $\times$ 88 (H) $\times$ 40.6 (D) mm) (Excluding connectors and the like)
Power consumption	About 3 W
Weight	1.8 lbs. (0.8 kg)





## Optional For SWC-2000

Product	SWC-2000	
Bracket drawing		
The number of units	1	2
Part number	RM-SWC2001	RM-SWC2002

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Aspect Ratio Control

Modular Matrix Switchers

## Native Application for Smartphone & Tablets | iq System

In keeping with the IDK's Pro-AV solutions to address a broad variety of market verticals that include: Education, Corporate, Entertainment, and Government applications we have developed iqSystem. The control system follows IDK's vertically integrated corporate structure where the entire IDK team operates closely together, encouraging both a spirit of inter-departmental cooperation and the ability to collaborate on our continuing pursuit of excellence.

iqSystem follows this same approach in working with entire product portfolio. From your iOS or Android device, you have the ability to interact with the devices on the network. iqSystem is available as a simple interface for BYOD (bring your own device) applications or as front end to the complete system management (controlling multiple devices) with access to the full menu of options within the specified device.

Available as an app from popular and easily accessible web stores, iqSystem is included with our most popular products and has the ability to be customized for

With our in-house production facilities, IDK can meet emerging market demands for additional features and enhanced performance more quickly than other Pro-AV

IDK's advanced R&D team develops and applies new and emerging technologies to drive the product design process.





#### iq + MOBILE DEVICE = SYSTEM CONTROL

- •Bring your own device (BYOD) iPhone, iPad & Android apps put you directly in
- •Elegant, simple and intuitive single layer "graphic language" makes any system
- •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

#### SWIPE • TAP • CONTROL

- •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
- •Input signal presence and system status indication
- Preset memory recall

- •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
- •Is entirely scalable control one device today and an entire system tomorrow
- •Intuitive, requiring only very casual user instruction
- •Creates a seamless, single layer system control experience
- •Select source & target device by name/icon

#### THE LANGUAGE OF SIMPLICITY

Video & Audio linked switch and control



Video & Audio unlinked switch and control



Audio volume adjustment and control



Input & output setting



#### **Standard Resolutions**

Resolution	General Name	Dot Clock	Horizontal Frequency	Vertical Frequency	Aspect Ratio
640×480	VGA	25.175 MHz	31.469 kHz	59.54 Hz	4:3
800×600	SVGA	40 MHz	37.879 kHz	60.317 Hz	4:3
1024×768	XGA	65 MHz	48.363 kHz	60.004 Hz	4:3
1280×720	720p (HDTV)	74.25 MHz	45 kHz	60 Hz	16:9
1280×768	WXGA	79.5 MHz	47.776 kHz	59.87 Hz	15:9
1280×800	WXGA	83.5 MHz	49.702 kHz	59.81 Hz	16:10
1280×960	Quad-VGA	108 MHz	60 kHz	60 Hz	4:3
1280×1024	SXGA	108 MHz	63.98 kHz	60.02 Hz	5:4
1300×768	WXGA	85.5 MHz	47.712 kHz	60.015 Hz	16:9
1366×768	WXGA	85.5 MHz	47.712 kHz	59.79 Hz	16:9
1400×1050	SXGA+	121.75 MHz	65.317 kHz	59.978 Hz	4:3
1440×900	WXGA+	106.5 MHz	55.935 kHz	59.887 Hz	16:10
1600×900 (RB)*	WXGA++	108 MHz	60 kHz	60 Hz	16:9
1600×1200	UXGA	162 MHz	75 kHz	60 Hz	4:3
1680×1050	WSXGA+	146.25 MHz	65.29 kHz	59.954 Hz	16:10
1920×1080	1080i (HDTV)	74.175 MHz	33.716 kHz	59.94 Hz	16:9
1920×1080	Interlace	74.175 MHz	67.5 kHz	59.94 Hz	16:9
1920×1080	1080p (HDTV)	148.5 MHz	66.587 kHz	60 Hz	16:9
1920×1080	CEA-861 standards	148.5 MHz	66.587 kHz	60 Hz	16:9
1920×1080 (RB)*	VESA CVT standards	138.5 MHz	67.158 kHz	59.934 Hz	16:9
1920×1080	VESA CVT standards	173 MHz	67.158 kHz	59.963 Hz	16:9
1920×1200 (RB)*	WUXGA	154 MHz	74.038 kHz	59.95 Hz	16:10
1920×1200	WUXGA	193.25 MHz	74.556 kHz	59.885 Hz	16:10
2048×1152 (RB)*	QWXGA	162 MHz	72.000 kHz	60.000 Hz	16:9
2560×1440 (RB)*	WQHD	241.5 MHz	88.787 kHz	59.951 Hz	16:9
2560×1600 (RB)*	WQXGA	268.5 MHz	98.713 kHz	59.972 Hz	16:10
3840×2160	4K UHDTV HDMI 1.4b standards	297 MHz	67.5 kHz	30 Hz	16:9
4096×2160	4K Digital Cinema SMPTE standards	297 MHz	54 kHz	24 Hz	17:9 (approx.
4096×2160 (RB)*	4K VESA DMT standards	556.774 MHz	133.32 kHz	60 Hz	17: 9 (approx.
3840×2160	4K UHDTV HDMI 2.0 standards	594 MHz	135 kHz	60 Hz	16:9
4096×2160	4K HDMI 2.0 standards	594 MHz	135 kHz	60 Hz	17:9 (approx.

<sup>\*(</sup>RB) = Reduced Blanking

over IP

Digital Multi Switchers

Aspect Ratio Control

Modular Matrix Switchers

Distribution Amplifiers

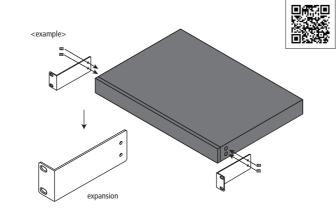
**Others** 

## **EIA Rack Mounting Hardware/Offset Bracket**

Rack Mounting Offset Bracket

RM-OFS100





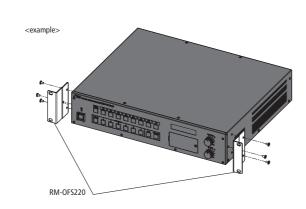
The RM-OFS100 provides clearance for the front panel.

This is designed to permit mounting the 1U devices from the rack mounting surface with a cable connected.

#### RM-OFS220

for MSD-701AMP



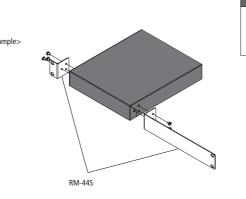


## Rack Mounting Hardware for half-rack width products

#### **RM-44S**

for 1 half-rack width products



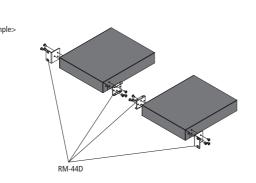


RM-44S is for 1 half-rack product.

#### RM-44D

for 2 half-rack width products





RM-44D is for 2 half-rack products.

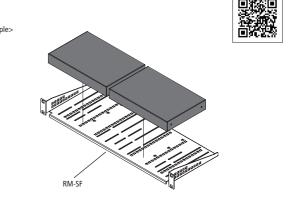
## **EIA Rack Mounting Hardware/Offset Bracket**

Rack Mounting Hardware for half & quarter-rack width products

#### RM-SF

Full-rack width tray, (180 mm) depth





RM-SF is for 4 quarter-rack products, 2 thin type half-rack products with 7.1 in. (180 mm) depth.

#### RM-SFL

Full-rack width tray, (315 mm) depth

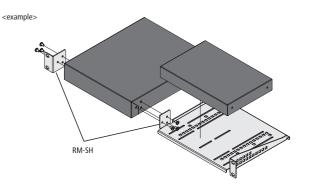


RM-SFL is for 4 quarter-rack products, 2 thin type half-rack products with 12.4 in. (315 mm) depth.

#### RM-SH

Harf-rack width tray

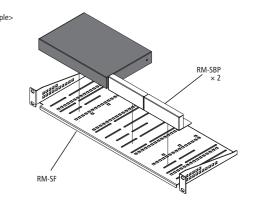




RM-SH is for combination of half-rack width and Thin type half-rack width or quarter-rack width.

#### RM-SBP Blank panel





RM-SBP is quarter-rack blank panel.

3

Aspect Ratio Control

Modular Matrix Switchers

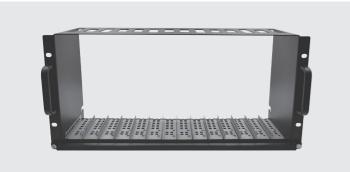
Distribution Amplifiers

## **EIA Rack Mounting Hardware/Multi-unit Rackmount Chassis**

#### Multi-unit Rackmount Chassis

#### RM-SV5

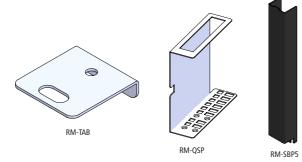
for Half-rack width size



For products with a height of 30 mm, up to 14 units can be rack-mounted.

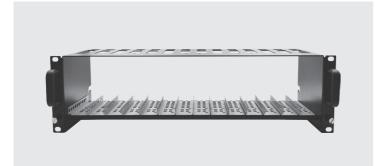
#### Optional

Standard bracket	RM-TAB
Bracket for EIA 1/4 width products	RM-QSP
Blank panel	RM-SBP5



#### RM-SV3

for Quater-rack width size



For products with a height of 30 mm, up to 14 units can be rack-mounted.

#### Optional

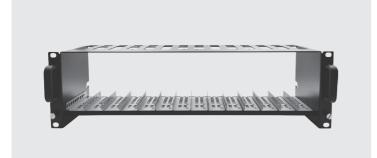
Bracket for HDC-H100/COS-100HD	RM-TAB-BM
Blank panel	RM-SBP3





#### RM-SV3-BM

for HDC-H100/COS-100HD



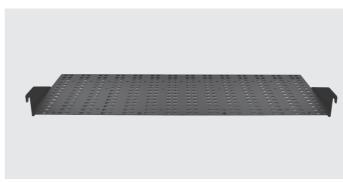


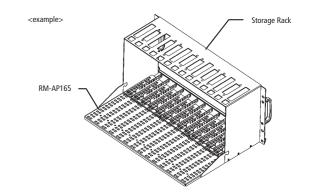
## **EIA Rack Mounting Hardware/FAN Unit**

#### Multi-unit Rackmount Chassis

#### RM-AP165

Rear space expansion tray

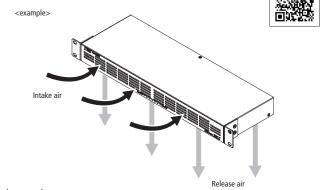




The RM-AP165 provides extra space in the rear side of rhe RM-SV series.

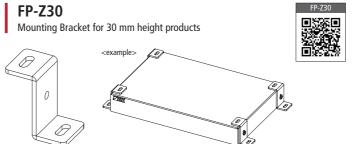
## RF-4

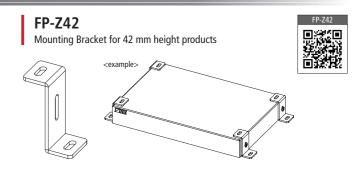


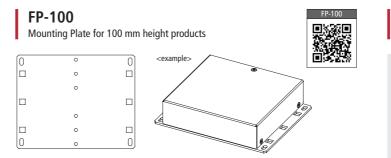


The RF-4 is a cooling fan unit that can be mounted to the rack to avoid rise in internal rack temperature.

## Mounting Bracket















Standard Resolutions

Mounting Hardwar