

KVM Extender

4K30 Dual Head HDMI KVM Extender over Fiber with Dual Audio, Dual USB 2.0, IR, RS-232 Extension, SM 20Km

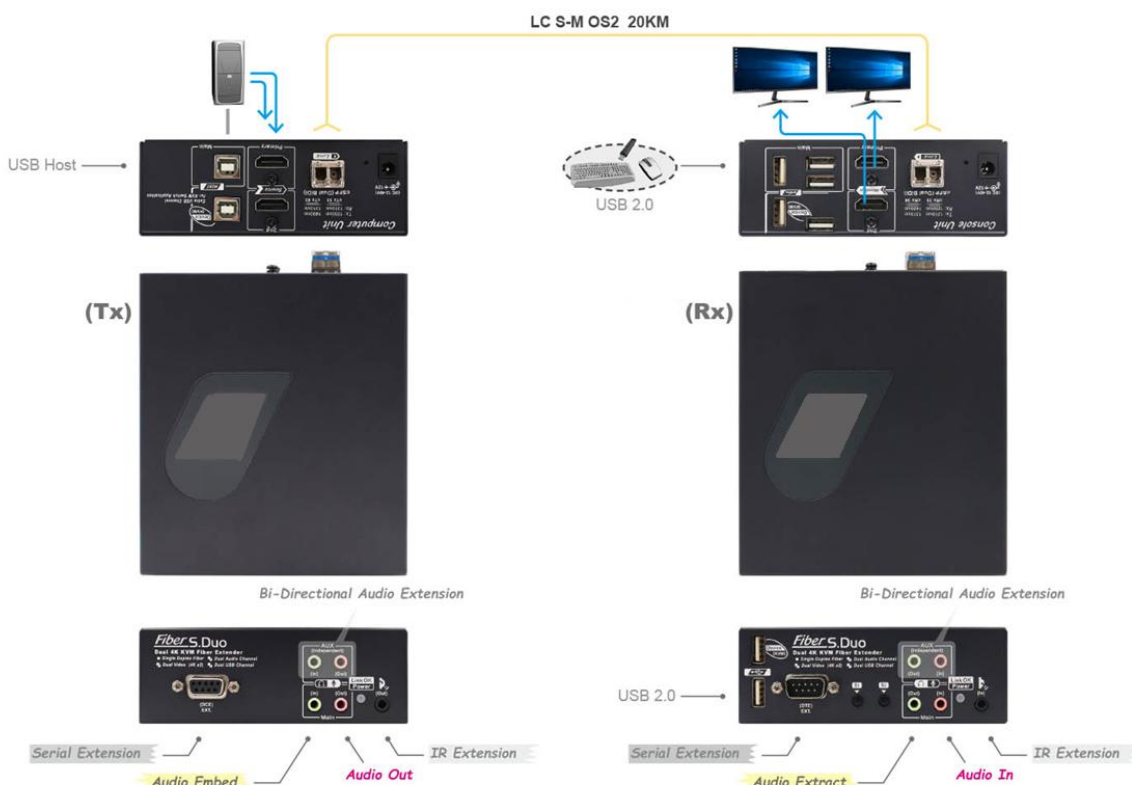
Model: IPXF-H430-DH20KF

PRODUCT OVERVIEW

The Dual Head HDMI KVM Extender consists of a transmitter (USB host) and a receiver (USB device) and extends dual HDMI, bidirectional audio, USB 2.0, IR, and RS-232 signals up to 20 km over single-mode fiber cables. Its unique audio



embedding and audio extraction features are specifically designed for video editing and content creation. The HDMI dual-monitor support allows for duplicate and extended display modes, enabling multi-monitor setups to expand workspaces across multiple screens.



Bidirectional Audio Extension

The bidirectional audio extension function allows independent audio transmission between the transmitter and receiver units. This 2-way audio feature is particularly valuable in PA systems,

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especially in emergency situations, as it enables real-time communication between the control center and server room, facilitating remote coordination and operational issue notifications.

Plug-and-Play USB 2.0 Peripheral Sharing

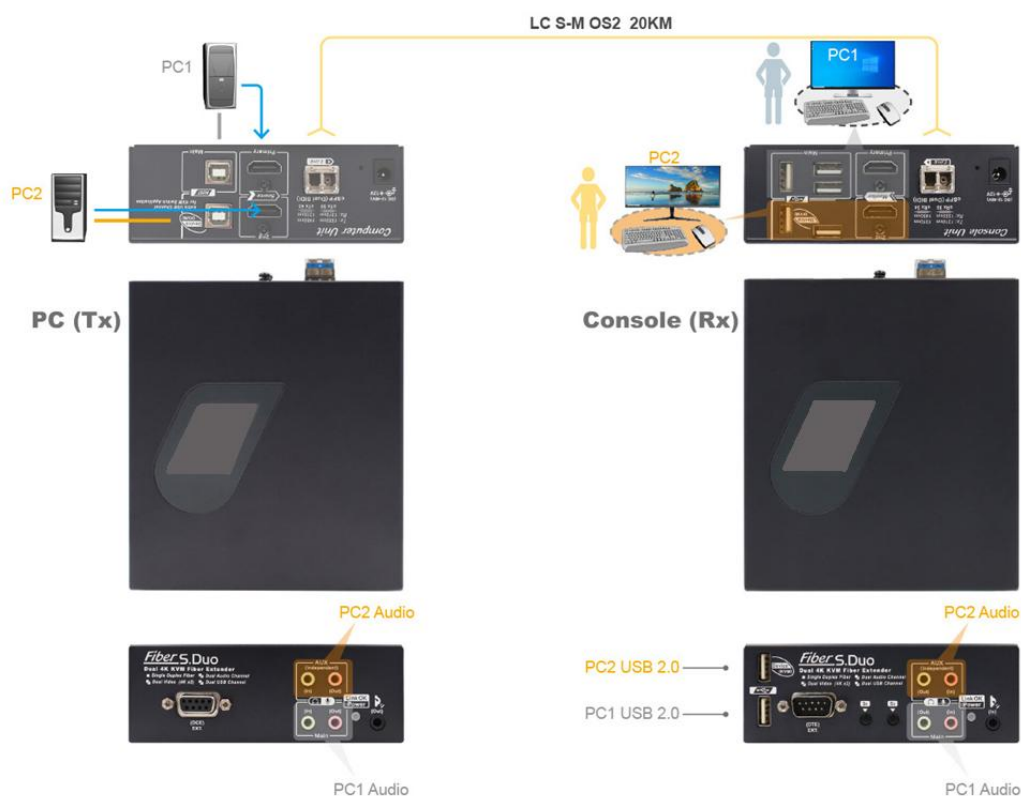
The HDMI Dual Monitor KVM Extender offers 3+1 / 2+1 USB 2.0 ports on the front and back of the receiver unit (RX), providing both long-term and temporary USB peripheral connections. It supports most popular operating systems, including Windows, macOS, Chrome OS, and Linux, without requiring software or driver installation.

Unique Audio Embedding & Extraction

The audio embedding function allows audio from a 3.5mm analogue stereo source to be embedded into an HDMI signal, while the audio de-embedding function extracts HDMI audio and outputs it as 3.5mm stereo audio. The Dual Head KVM Extender enables users to embed and extract audio in multiple ways, making it ideal for video editing, such as adding or removing voiceovers and background music to create more informative and dynamic content.

KVM Extender for 2 Computers

The Dual Head HDMI KVM Extender features a unique design that integrates two KVM extenders into one, enabling two operators to control two computers simultaneously while independently sharing of audio and USB peripherals.



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IR Extension

The IR extension function supports a full-frequency IR signals range from 38 kHz to 56 kHz. Additionally, the distance between the emitter head and the IR port on the unit can be extended, offering users a flexible and convenient way to install IR control systems. An IR extension cable (up to 3 meters) can be purchased separately.

Serial Extension with Selectable Baud Rate

The full-duplex data communication between the Tx and Rx units provides a cost-effective, hardware-based solution. The extender enables remote access and control of any TS-232 protocol device without requiring setup or configuration. This RS-232 serial extension is ideal for applications in digital signage, industrial and commercial offices, smart classrooms, and conference rooms.

KEY FEATURES

- Single connectivity solution enables reliable remote access to a dual-monitor computer up to 20 km, transmitting two video streams over a duplex fiber cable
- Dual-monitor support for popular resolutions up to 4K@30Hz (4:4:4)
- Dual USB extension provides two USB channels: one for keyboard/mouse control and the other for USB 2.0 devices
- Dual audio extension offers two audio channels: one for audio embedding/extraction and the other for independent audio extension applications
- Unique design for 2 Single Head computer extension, supporting 2 operators controlling 2 Single Head computers simultaneously with independent audio and USB peripheral sharing.
- IR extension from the console unit to the computer unit enables remote IR control of AV sources
- Serial extension with a selectable baud rate supports extensive control applications
- EDID pass-through ensures accurate monitor detection
- HDCP 1.4 compliance guarantees uninterrupted HDCP-protected video playback
- cSFP fiber link port provides isolation from EMI and electrical noise
- Plug-and-play operation with no driver or software required
- Supports Windows, macOS, Linux, and Chrome OS

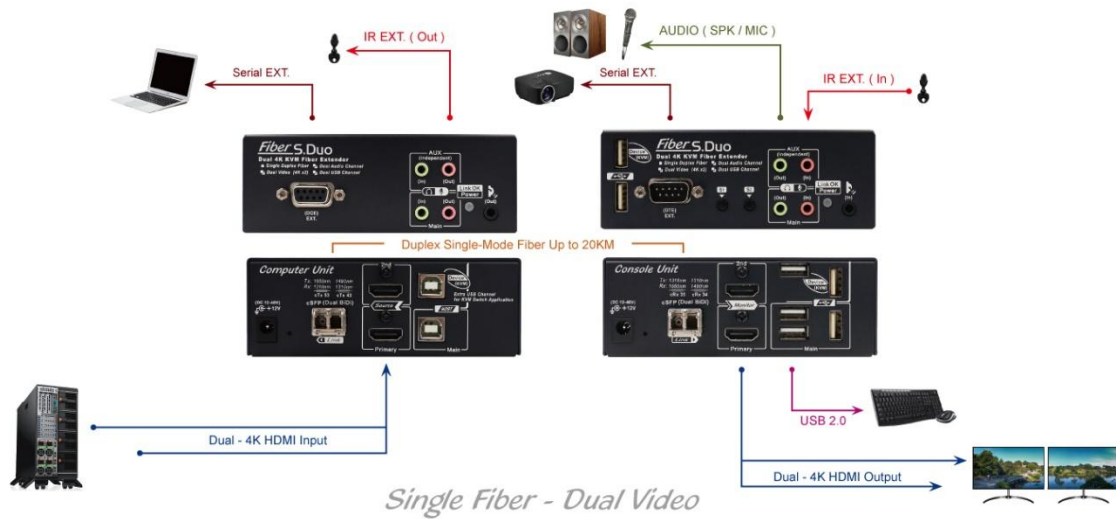
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PRODUCT SPECIFICATIONS

IPXF-H430-DH20KF	Transmitter	Receiver
Max Resolution	3840x2160@30Hz (4:4:4) x 2	
Video Interface	HDMI 1.4 x 1 (In 1) HDMI 1.4 x 1 (In 2)	HDMI 1.4 x 1 (Out 1) HDMI 1.4 x 1 (Out 2)
USB 2.0 Extension	USB 2.0 Type B x 1 (CH. 1) USB 2.0 Type B x 1 (CH. 2)	USB 2.0 Type A x 4 (CH. 1) USB 2.0 Type A x 3 (CH. 2)
Speaker Extension	(1) 3.5mm SPK Jack x 1 (In) – Audio Embed Function (2) 3.5mm SPK Jack x 1 (In)	(1) 3.5mm SPK Jack x 1 (Out) – Audio Extract Function (2) 3.5mm SPK Jack x 1 (Out)
Microphone Extension	3.5mm MIC Jack x 2 (Out)	3.5mm MIC Jack x 2 (In)
Serial Extension (9600 – 115200bps)	DB9 x 1 (RS-232 DCE)	DB9 x 1 (RS-232 DTE)
IR Extension	3.5mm x 1 (Out)	3.5mm x 1 (In)
Push Buttons	Reset x 1	Reset x 1 Function x 2
LED Indicators	Status x 1	Status x 1
HDCP Compliance	HDCP 1.4	
Fiber Link Port	cSFP x 1 (2 Channels) Tx : 1550/1490nm Rx: 1310nm	cSFP x 1 (2 Channels) Tx: 1310nm Rx : 1550/1490nm
LC Fiber Cable	Single-Mode Duplex LC Fiber x 1 (OS2 is recommended)	
Extension Range	Max 20Km	
Power Supply	DC 12V ~ 48V	
Operating Environment	Temperature 0 ~ 40°C, Humidity < 80%	
Storage Temperature	-20 ~ 60°C	
Material	Aluminium	
H x W x D (mm)	44 x 120 x 140	
Weight (g)	445	478

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CONNECTION DIAGRAM



Front and Rear View of the Transmitter and Receiver:



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PACKAGE CONTENTS

- 1 × IPXF-H430-DH20KF Transmitter Unit with Fiber Module
- 1 × IPXF-H430-DH20KF Receiver Unit with Fiber Module
- 2 × Power Adapter
- 1 × User Manual
- 2 × Foot Pad Set

(Optional)

- 1 × IR Extension Kit (Blaster + Sensor)

WARRANTY

- Standard 1-Year Limited Warranty, unless otherwise specified by Sales.
- Optional Advance Replacement Warranty is available upon request

ORDERING INFORMATION

Part Number	Descriptions
IPXF-H430-DH20KF	4K30 Dual Head HDMI KVM Extender over Fiber with Dual Audio, Dual USB 2.0, IR, RS-232 Extension, SM 20Km
(OPTIONAL)	
RXN-ACC-IRK	IR Extension Kit (Blaster and Sensor)
RXN-ACC-VESA	KVM Extender VESA/Wall-mount Kit

CONTACT INFORMATION

For more information, please visit our website or contact our customer service team:

- **Website:** www.dsgio.com
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