

IPKX-A430-SH20KF Series Quick Start Guide

This guide will help you install and use your IP KVM Extender for the first time.

Visit https://www.dsgio.com/ipkvm_extenders/, select your model and go to the 'Downloads' tab to download the latest product documentation.

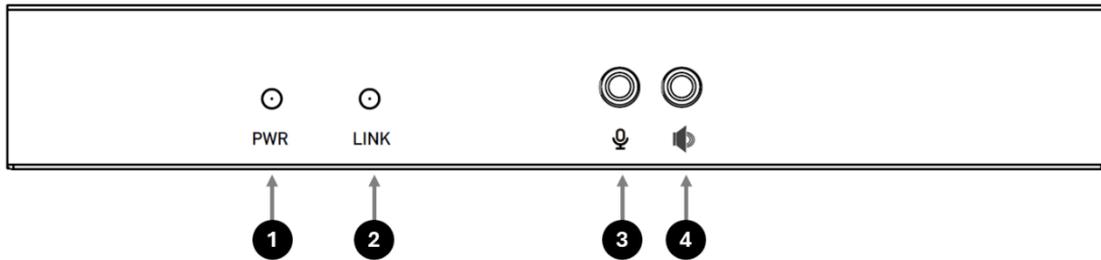
1 Check the Package Contents

IPKX-A430-SH20KF Kit

- 1 × Single Head HDMI Transmitter
- 1 × Single Head HDMI Receiver
- 1 × HDMI Cable
- 1 × 3.5mm Audio Cable
- 1 × USB-B to USB-A Cable
- 2 × 5V/2A DC Power Adapter
- 1 × Quick Start Guide
- 1 × L-Plate Brackets Set

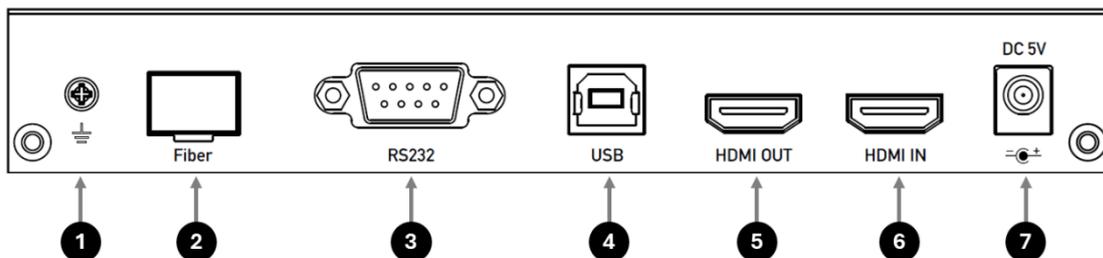
2 Transmitter (TX) Front and Rear Panel

IPKX-A430-SH20KF (TX) Front Panel:



No.	Feature	Function
1	PWR LED Indicator	LED indicator lights Red when the unit is powered up. Blinking indicates initialising state.
2	LINK LED Indicator	LED Indicator lights Green when the connection link between TX and RX units is Ok. Blinking indicates searching state. LED Indicator is Off when there is no link between TX and RX.
3	MIC IN Audio Port	Connects to analog audio input for audio extension.
4	SPK OUT Audio Port	Connects to analog audio output for audio extension.

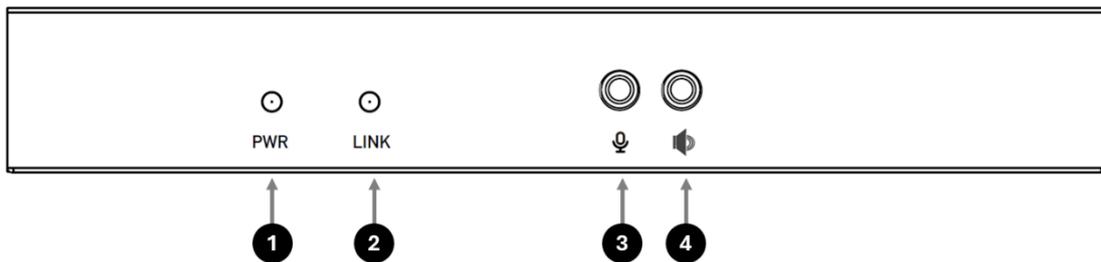
IPKX-A430-SH20KF (TX) Rear Panel:



No.	Feature	Function
1	Ground Screw	Links to ground.
2	Fiber Link Port	SFP Fiber Port for 1.25Gbps SFP Module, enabling fiber connection between TX and RX.
3	DB9 (Serial) Port	Connects to Source's RS-232 Serial Port for serial extension.
4	USB Type B Port	Connects to Source's USB Port for USB extension.
5	HDMI Out	Connects to a local HDMI display. Note: The local display must have the same specifications as the remote display at RX.
6	HDMI In	Connects to HDMI source for A/V extension over IP.
7	Power Port	Connects to DC 5V/2A Power Supply.

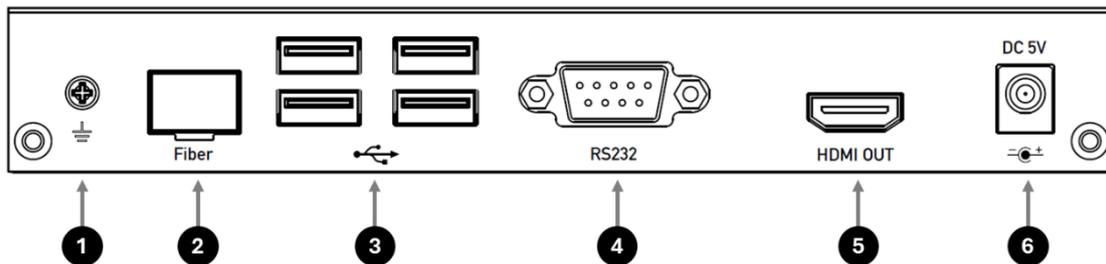
3 Receiver (RX) Front and Rear Panel

IPKX-A430- SH20KF (RX) Front Panel:



No.	Feature	Function
1	PWR LED Indicator	LED indicator lights Red when the unit is powered up. Blinking indicates initialising state.
2	LINK LED Indicator	LED Indicator lights Green when the connection link between TX and RX units is Ok. Blinking indicates searching state. LED Indicator is Off when there is no link between TX and RX.
3	MIC IN Audio Port	Connects to analog audio input for audio extension.
4	SPK OUT Audio Port	Connects to analog audio output for audio extension.

IPKX-A430- SH20KF (RX) Rear Panel:



No.	Feature	Function
1	Ground Screw	Links to ground.
2	Fiber Link Port	SFP Fiber Port for 1.25Gbps SFP Module, enabling fiber connection between TX and RX.
3	USB 2.0 Ports	Connect to USB devices such as keyboard, mouse, flash drive, etc.
4	DB9 (Serial) Port	Connects to remote device's RS-232 Serial Port for serial extension.
5	HDMI Out	Connects to remote HDMI display. Note: The local display must have the same specifications as the remote display at RX.
6	Power Port	Connects to DC 5V/2A Power Supply

4 Getting Started: Key Information and Connection Diagram

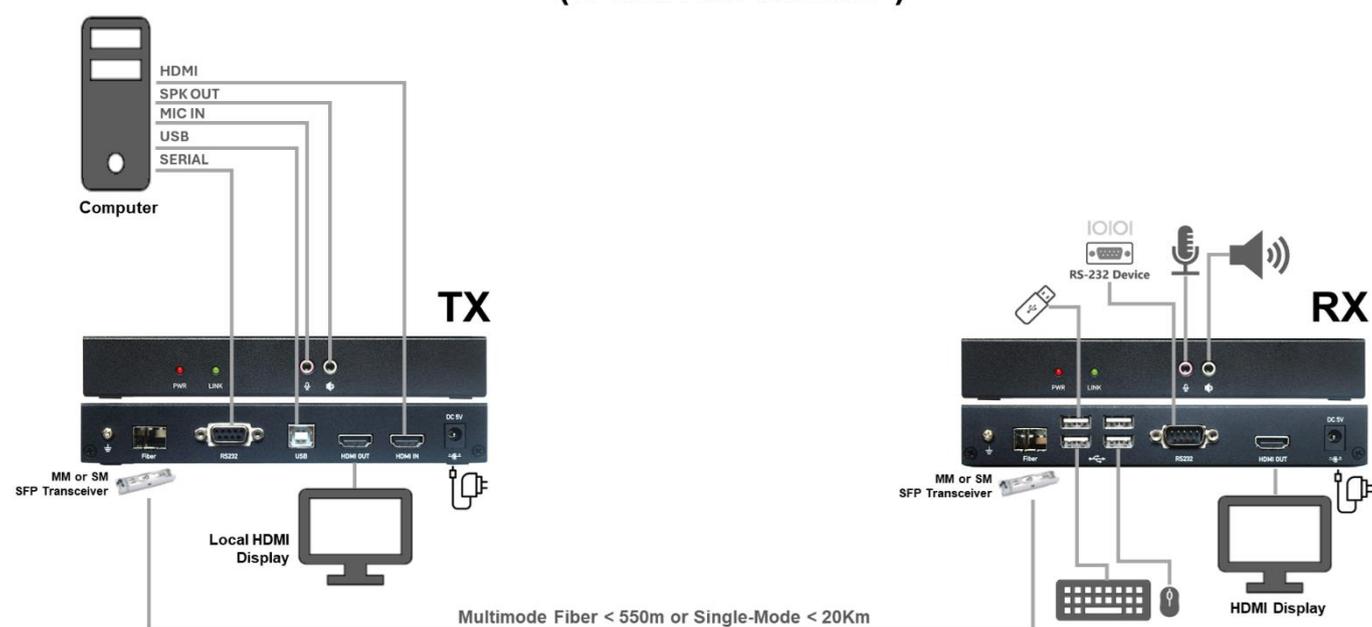
The Transmitter and Receiver units should be directly connected using a fiber optics cable to create a point-to-point extender solution. This is a plug-and-play system that requires no configuration or software drivers.

IMPORTANT NOTES

- **Material Quality:**
 - Use 1.25Gbps 850nm MM and 1310nm SM Transceivers that comply with SFP MSA and SFF-8472.
 - Use high-quality OM3 50/125 μ m and OS2 9/125 μ m TIA-568 compliant fiber cables with Duplex LC Connectors to ensure optimal transmission quality.
 - HDMI cables must meet minimum HDMI 1.4 specifications
 - USB cables must meet USB 2.0 specifications
- **Display Resolution:** The HDMI displays connected to the TX and RX units must support the same specifications notably the displays' optimal video resolution.
- **Fiber Link Port:** The SFP cage supports 1.25Gbps SFP Multimode or Single-Mode Transceivers.
- **Audio Note:** When connecting analog audio devices to the microphone or speaker ports on the TX or RX units, digital HDMI audio transmission will be disabled. Only analog LINE-IN/LINE-OUT audio extension will remain active as long as the ports are in use.
- **EDID Pass-through:** The extender supports EDID pass-through from remote display to the transmitter. Thus, proper powering up sequence is recommended after connecting the equipment.
 1. Power on the extenders first
 2. Next, power on the display(s)
 3. Lastly, power on the computer/source device

CONNECTION DIAGRAM

4K30 Single Head HDMI IP KVM Extender Over Fiber (IPKX-A430-SH20KF)



5 Set Up the Devices

Follow these steps to install the HDMI Extender:

1. **Connect the HDMI Source:**
 - Connect one end of an HDMI cable to the HDMI port on your source device (e.g., computer, server).
 - Connect the other end to the **HDMI IN** port on the **TX (Transmitter)** unit.
2. **Connect the Display (TX Unit):**
 - Attach an HDMI cable from the **HDMI OUT** port on the **TX** unit to a HDMI display.
3. **Connect the Display (RX Unit):**
 - Attach another HDMI cable from the **HDMI OUT** port on the **RX (Receiver)** unit to a second HDMI display.
4. **Connect USB Devices:**
 - Using a USB Type A-B cable, connect the USB 2.0 port on the source device to the **TX** unit.
 - Plug a USB keyboard, mouse, or other USB devices into the USB ports on the **RX** unit.
5. **Connect RS-232 Device:**
 - Use an RS-232 cable to connect the RS-232 ports between the source device and the **TX** unit.
 - Then, connect the **RS-232** device to the **RS-232** port on the **RX** unit.
6. **Connect Audio (Microphone/Speaker):**
 - Using the supplied microphone/speaker combo cable, connect the microphone and speaker ports of the source device to the **TX** unit.
 - Connect a microphone and speaker to the corresponding ports on the **RX** unit.
7. **Fiber Connection:**
 - Insert the SFP modules to the **TX** and **RX** units and connect the **Fiber Link** ports using an optical fiber cable. The two SFP modules must be of same brand, make and specifications.
8. **Power the Units:**
 - Plug the power adapter into the **DC jacks** on both the **TX** and **RX** units.

Troubleshooting: If no image appears on the screen, try the following:

1. Verify that all cables are securely connected.
2. Check that the PWR and LINK LED Indicators light up and not blinking. Test with another fiber cable.
3. Ensure the SFP modules are properly inserted into both the TX and RX units and match in specification.
4. The fiber cable ends must be connected with opposite polarity to ensure proper signal transmission.
5. Ensure the input source on your display (TV, monitor, etc.) is set to HDMI and HDMI 1.4 mode.
6. Check the video output settings in the PC BIOS and OS/graphics software configuration.
7. Test the video source by connecting it directly to the display.

Visit https://www.dsgio.com/ipkvm_extenders to download the latest product documentation.

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