

# IPKX-A430-DH100 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/](https://www.dsgio.com/ipkvm_extenders/), select your model and go to the 'Downloads' tab to download the latest product documentation.

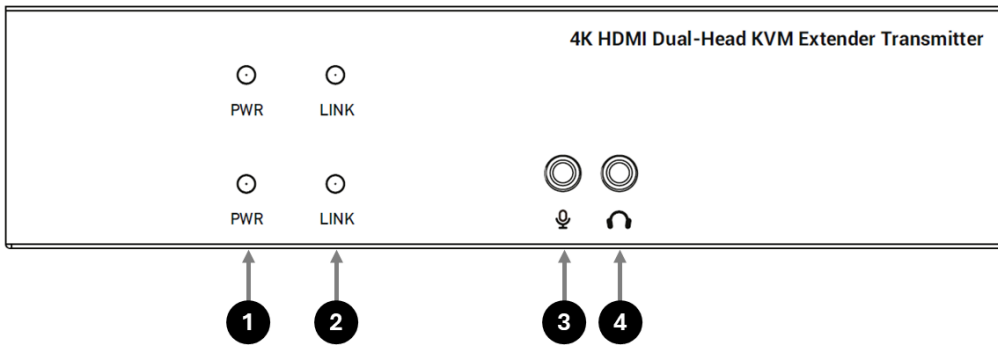
## 1 Check the Package Contents

### IPKX-A430-DH100 Kit

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

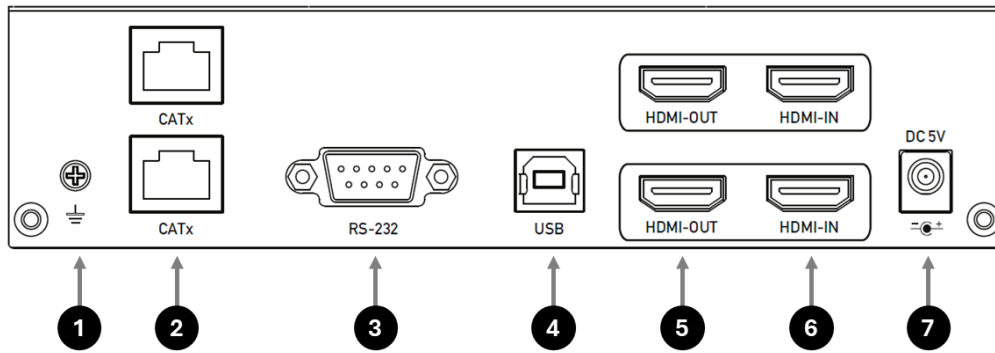
## 2 Transmitter (TX) Front and Rear Panel

### IPKX-A430-DH100 (TX) Front Panel:



No.	Feature	Function
1	PWR LED Indicators	LED indicators light <b>Red</b> when the unit is powered up. <b>Blinking</b> indicates initialising state. Top Indicator represents the power status of the Dual Head secondary video.
2	LINK LED Indicators	LED Indicators light <b>Green</b> when the connection link between TX and RX units is Ok. <b>Blinking</b> indicates searching state. Indicator is <b>Off</b> when there is no link between TX and RX. Top Indicator represents the second link status of the Dual Head secondary video connection.
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.

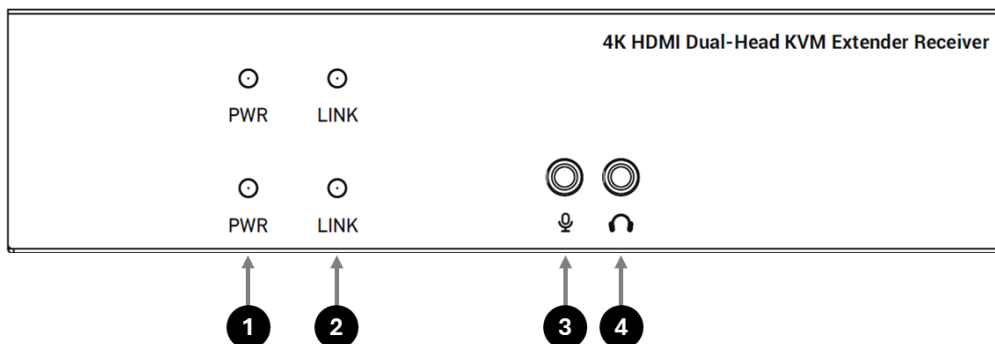
### IPKX-A430-DH100 (TX) Rear Panel:



No.	Feature	Function
1	Ground Screw	Links to ground.
2	CATx Link Ports	RJ-45 CATx Ports for 2 x LAN cables connection between TX and RX. Top CATx Port for connection of the secondary video between the Dual Head 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 Ports	Connect to local HDMI displays. Top HDMI Out Port for connection to local extended HDMI Display of the Dual Head TX. <b>Note:</b> The local displays must have the same specifications as the remote displays at RX.
6	HDMI In Ports	Connect to Main and Extended graphics ports of the HDMI Source. Top HDMI In Port connects to extended video port (display 2) of the Source.
7	Power Port	Connects to DC 5V/2A Power Supply

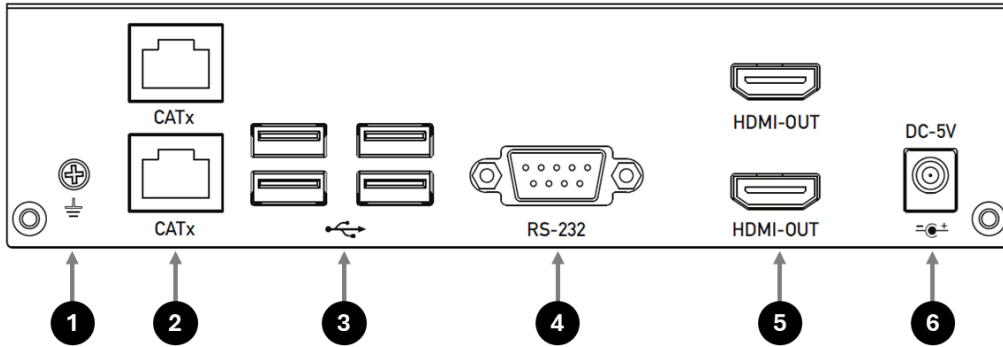
### 3 Receiver (RX) Front and Rear Panel

#### IPKX-A430-DH100 (RX) Front Panel:



No.	Feature	Function
1	PWR LED Indicators	LED indicators light <b>Red</b> when the unit is powered up. <b>Blinking</b> indicates initialising state. Top Indicator represents the power status of the Dual-Head secondary video.
2	LINK LED Indicators	LED Indicators light <b>Green</b> when the connection link between TX and RX units is Ok. <b>Blinking</b> indicates searching state. Indicator is <b>Off</b> when there is no link between TX and RX. Top Indicator represents the second link status of the Dual-Head secondary video connection.
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-DH100 (RX) Rear Panel:**



No.	Feature	Function
1	Ground Screw	Links to ground.
2	CATx Link Ports	RJ-45 CATx Port for 2 x LAN cables connection between TX and RX. Top CATx Port for connection of the extended video between the Dual Head 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 Ports	Connect to remote main and extended HDMI displays. Top HDMI Out Port for connection to extended HDMI Display (display 2) of the Dual Head 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 two CAT 5e or CAT 6 cables to create a point-to-point extender solution. This is a plug-and-play system that requires no configuration or software drivers.

**IMPORTANT NOTES**

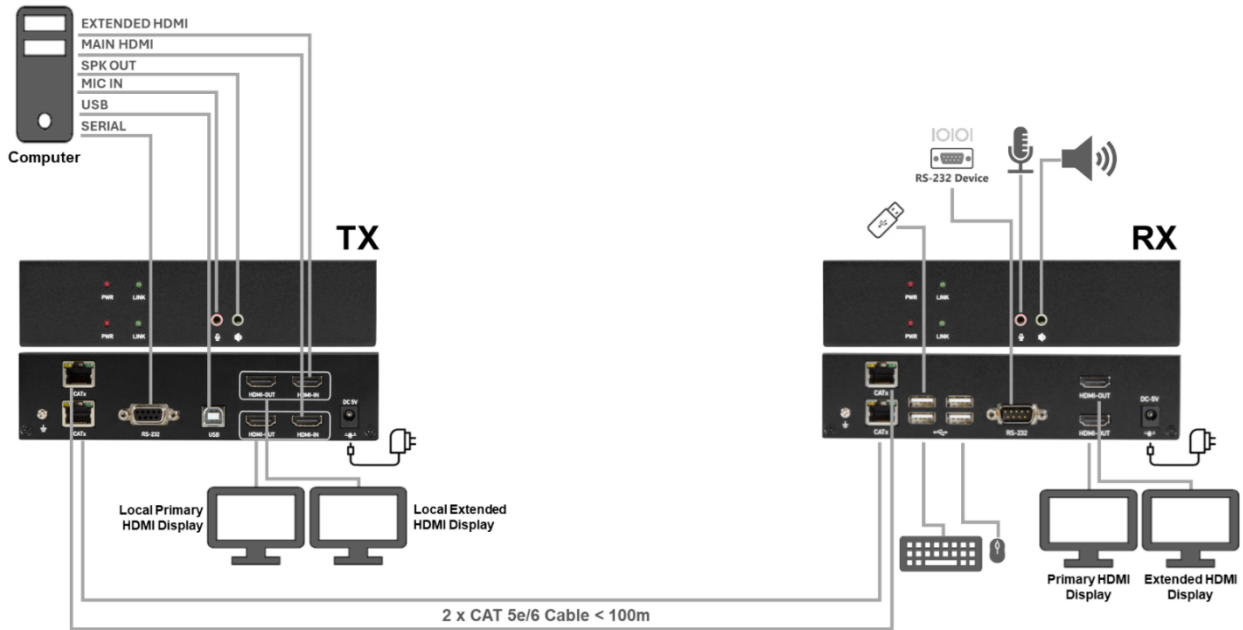
- Material Quality:**

  - Use high-quality TIA/EIA-568 compliant CAT 5e/6 LAN cables 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.
- CATx Link Ports Bandwidth:** The two RJ-45 Ports have a bandwidth of 1 Gbps each.
- 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 displays. Thus, proper powering up sequence is recommended after connecting the equipment.

  - Power on the extenders first
  - Next, power on the displays
  - Lastly, power on the computer/source device

## CONNECTION DIAGRAM

### 4K30 Dual Head HDMI IP KVM Extender ( IPKX-A430-DH100 )



## 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.
- Do likewise for the secondary video, ensure that you are connecting the extended graphics port of the source device to the **top HDMI IN** port on the **TX** unit.

### 2. Connect the Displays (TX Unit):

- Attach an HDMI cable from the **HDMI OUT** port on the **TX** unit to a HDMI display.
- Do likewise for the secondary video, ensure that you are connecting the **top HDMI OUT** port on the **TX** unit to the second display.

### 3. Connect the Displays (RX Unit):

- Attach another HDMI cable from the **HDMI OUT** port on the **RX (Receiver)** unit to the main HDMI display.
- Do likewise for the secondary video, ensure that you are connecting the **top HDMI OUT** port on the **RX** unit to the extended display.

### 4. Connect USB Devices:

- Using a USB type A-B cable, connect the USB ports 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. CATx Connections:

- Use two **CAT5e/6** cables to connect the **CATx Link** ports on the **TX** and **RX** units.
- Ensure that the **bottom CATx Link Port** on **TX** unit is connected to **bottom CATx Link Port** on **RX** unit. Similarly, the **top CATx Link Port** on **TX** unit is connected to **top CATx Link Port** on **RX** unit for the secondary video.

## 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 LAN cable.
3. Ensure the input source on your display (TV, monitor, etc.) is set to HDMI.
4. Check the video output settings in the PC BIOS and OS/graphics software configuration.
5. Test the video source by connecting it directly to the displays.

If the main and extended video are not on correct display, check the following:

1. Verify the Display Settings in Windows OS and the graphics software. Ensure the Main Display (Display 1) and Extended Display (Display 2) are arranged correctly in the software setting's layout.
2. Ensure the main boot screen configured in PC BIOS is the main display (display 1) for the extender.
3. Verify that all HDMI cables are correctly connected. Main graphics port of Source/Main Display 1 is connected to **bottom** HDMI IN and OUT of the extenders. Secondary graphics port of Source/Extended Display 2 is connected to **top** HDMI IN and OUT of the extenders.
4. Verify that the CATx cables are correctly connected. Top CATx Link Port of TX connects to Top CATx Link Port of RX unit, and Bottom CATx Link Port of TX connects to Bottom CATx Link Port of RX unit respectively.

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