



4K Wireless HDMI® KVM Extender Set, 150 m



Quick Installation Guide

DS-55328

Table of Contents

1. Safety Instructions	3
2. Introduction	4
3. Main Features	4
4. Package Contents.....	5
5. Product Specifications.....	5
5.1 Transmitter Specifications	5
5.2 Receiver Specifications	7
6. Product Overview	9
6.1 Transmitter Overview	9
6.2 Receiver Overview	10
7. Connection Instruction	11
8. Installation Guide	12
8.1 Connecting the transmitter.....	12
8.2 Connecting the HD receiver	13
8.3 Two streaming modes.....	14
8.3.1 One TX to one RX mode	14
8.3.2 One TX to multiple RX mode	14
8.4 Connecting infrared return	15
8.5 Testing the IR return function	16
8.6 Connecting the USB extension	17
8.7 Testing the USB extension function	18
9. Questions and answers	18

1. Safety Instructions

Please read the following safety instructions carefully before commissioning:

Observe all warnings and instructions concerning the device

1. Do not expose the device to rain, moisture, vapors or liquids
2. Do not insert objects into the device
3. Do not attempt to repair the unit yourself or open the housing. You risk electric shock!
4. Provide sufficient ventilation to avoid damage due to overheating
5. Make sure that the unit is switched off and in a safe environment before starting up the unit
6. During thunderstorms, damage can occur to connected electrical equipment due to overvoltage caused by lightning strikes
7. Do not operate the device during thunderstorms
8. Disconnect the device from connected electrical devices during thunderstorms
9. Use the device only inside buildings
10. Return the device to your dealer in case of repair
11. Dust, humidity, vapors and strong cleaning agents or solvents can cause damage to the unit

Disconnect the device from the power supply and connected devices before cleaning.

13. Clean the device with a dust-free cloth
14. Use only the supplied power supply for operation
15. To completely disconnect the system from the power supply, you must unplug the power supply from the power outlet. You can disconnect the device from the power supply via the power supply unit.

2. Introduction

The 4K Wireless HDMI KVM Extender Set transfers your HDMI video and audio signals in UHD 4K/30 Hz without a cable over a distance of up to 150 m (unobstructed view). This consists of a transmitter and receiver unit. Thanks to KVM functionality, the mouse/keyboard can be connected to the receiver unit, which makes it possible to control the signal source directly on the output device. Using the HDMI loop-out to the transmitter unit, a local monitor can be connected in order to control the output to the receiver. The Extender Set can be extended on up to 4 screens (output devices) - additional receiver available separately: DS-55329.

3. Main Features

- Wireless HDMI signal transmission up to 150 m (with unobstructed view)
- Point-to-multipoint connection - 1x transmitter (source) + up to 4x receivers (output device)
- Additional receiver units available separately: DS-55329
- Supports wireless AV signal transmission with resolutions up to 4K UHD (2160p / 30 Hz)
- Easy operation and handling thanks to Plug & Play - Just plug in and get started, no driver or software required
- Touch Screen Back Control - Supports touch screen panels (via USB connection on the receiver)
- Power supply via USB-C connection + power adapter (included)
- AES 128 bit encryption
- WPA2 protocol
- HDMI 2.0 / HDCP 2.2

4. Package Contents

- 1x Transmitter unit
- 1x Receiver unit
- 2x USB Power adapter (DC 5V/2A)
- 2x USB-A to USB-C cable (1.5 m)
- 2x HDMI connection cable (1.5 m)
- 1x USB-A to Micro-USB cable (0.8 m)
- 1x IR transmitter cable (1.2 m)
- 1x QIG

5. Product Specifications

5.1 Transmitter Specifications

Specifications	Details
HDMI in Version	HDMI 2.0
HDCP Version	HDCP 2.2
Input Resolution	4096x2160/60fps, 4096x2160/30fps, 3840x2160/60fps, 3840x2160/30fps, 1080p/60fps, 1080p/30fps, 1080p/24fps, 1080i/50fps, 1080i/60fps, 720p/30fps, 720p60fps, 480p/60fps
HDMI® Loop-out	Maximum 4K60
Transmission Resolution	Maximum 4K30
Latency	About 100 ms latency
Audio Format	PCM
Audio Channel	2 channels
IR Extended Function	Supports 38 KHz to 56 KHz wide frequency

USB KVM	Supports mouse/keyboard/touch panel back control
Wireless Standard	IEEE 802.11b/g/n/ac, 2.4G/5GHz, 2T2R
Platform Supported	Any devices that support HDMI port
Distance	About 150 meters in the clear line of sight
Throughput	Up to 866 Mbps
Frequency	5150-5350MHz, 5470-5725MHz, 5725-5850MHz, 5850-5925MHz The specific frequency bands utilized are upon the legal regulations by each country
Bandwidth	Supports 20 MHz, 40 MHz, 80 MHz
WiFi PA	About 17 dBm
Auto Pairing & Auto Connection	Automatically establish connection with the most favorable Wi-Fi channel accessible to guaranteeing exceptional wireless performance
High Sensitive Antennas	2x External high sensitive antennas provide stable wireless connections and optimal coverage
I/O Ports	1x HDMI in 2.0 1x HDMI out 2.0 1x USB-C 1x Micro-USB 1x IR out 1x Power Button 1x Reset Button
LED	2x blue LED
Power Supply	DC 5V/2A
Power Consumption	About 5 W

Dimensions	154*77.5*21 mm
Weight	330 g
Operating Temperature	0 °C to +40 °C
Storage Temperature	-10 °C to +60 °C
Operating Humidity	10 % to 80 % relative humidity

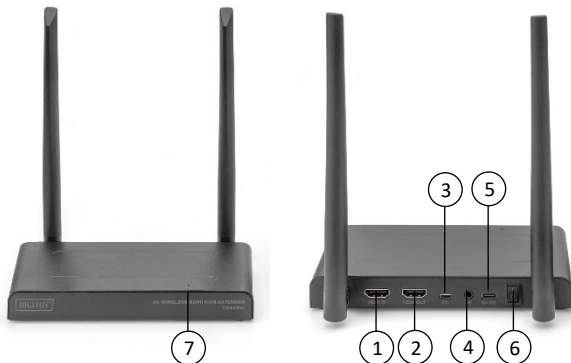
5.2 Receiver Specifications

Specifications	Details
HDMI® out Version	HDMI 2.0
HDCP Version	HDCP 2.2
Output Resolution	4096x2160/60fps, 4096x2160/30fps, 3840x2160/60fps, 3840x2160/30fps, 1080p/60fps, 1080p/30fps, 1080p/24fps, 1080i/50fps, 1080i/60fps, 720p/30fps, 720p60fps, 480p/60fps
Transmission Resolution	Maximum 4K30
Latency	About 100 ms latency
Audio Format	PCM
Audio Channel	2 channels
IR Extended Function	Supports 38 KHz to 56 KHz wide frequency
USB KVM	Supports mouse/keyboard/touch panel back control
Wireless Standard	IEEE 802.11b/g/n/ac, 2.4G/5GHz, 2T2R
Platform Supported	Any devices that support HDMI port
Distance	About 150 meters in the clear line of sight
Throughput	Up to 866 Mbps

Frequency	5150-5350MHz, 5470-5725MHz, 5725-5850MHz, 5850-5925MHz The specific frequency bands utilized are upon the legal regulations by each country
Bandwidth	Supports 20 MHz, 40 MHz, 80 MHz
WiFi PA	About 17 dBm
Auto Pairing & Auto Connection	Automatically establish connection with the most favorable Wi-Fi channel accessible to guaranteeing exceptional wireless performance
High Sensitive Antennas	2x External high sensitive antennas provide stable wireless connections and optimal coverage
I/O Ports	1x HDMI out 2.0 1x USB-C 1x IR 2x USB 1x Power Button 1x Reset Button
LED	2x blue LED
Power Supply	DC 5V/2A
Power Consumption	About 5W
Dimensions	154*77.5*21 mm
Weight	330 g
Operating Temperature	0 °C to +40 °C
Storage Temperature	-10 °C to +60 °C
Operating Humidity	10 % to 80 % relative humidity

6. Product Overview

6.1 Transmitter Overview



1. HDMI in: Connect with the video source
2. HDMI® out: Connect with display for Pass-through (Loop Out)
3. Micro USB: Connect with USB of video source KVM function
4. IR Port: Connect with IR probe of video source for IR extended function
5. USB-C™: Connect with 5V/2A power adapter
6. Switch: Turn on/off the product
7. LED Indicator

6.2 Receiver Overview



1. HDMI® out: Connect with display
2. USB: Connect with mouse and keyboard for USB KVM function, you can also connect with touch panel USB port for touch panel back control
3. Reset: Reset to factory
4. USB-C: Connect with 5V/2A power adapter
5. Switch: Turn on/off the product
6. IR Window: IR extended function
7. LED indicator

7. Connection Instruction

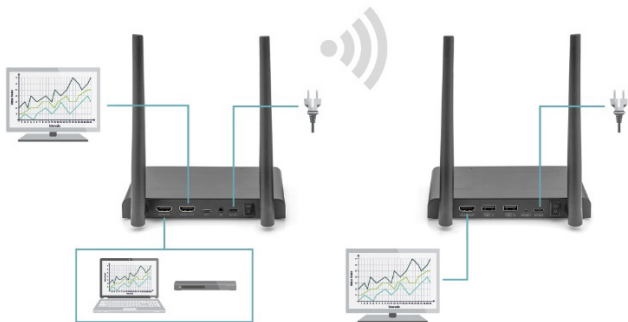
The wireless HDMI extender kit includes one transmitter and one receiver, which are paired before shipment. Normally you don't need to pair them again.

However, if you buy additional receiver, you need to follow the instruction below to pair the new receiver with the transmitter.

- 1) Power on transmitter (if necessary, deactivate already paired receivers beforehand, disconnect them from the power supply)
- 2) Power on the receiver until it's on the main menu.
- 3) Press the receiver's reset button and hold for 5 seconds until the LED is flashing fast.
- 4) Wait around 30 seconds, the transmitter and receiver will pair automatically.



8. Installation Guide



8.1 Connecting the transmitter

The transmitter sends the video signal wirelessly to the receiver in another room. Therefore, place the transmitter near your HDMI source

1. Connect the power adapter to the connector marked "5V" and insert the plug into the wall socket.
2. Use an HDMI cable to connect the HDMI source to the HDMI port marked "HDMI IN" on the TX (transmitter).
3. Optional: To continue watching TV in this room as well, use an HDMI cable (not supplied) to connect a TV to the HDMI® port marked "HDMI® OUT".

LED indicator of TX	Description
Red	TX system is booting on
Blue	Connected
Purple	No video input signal

8.2 Connecting the receiver

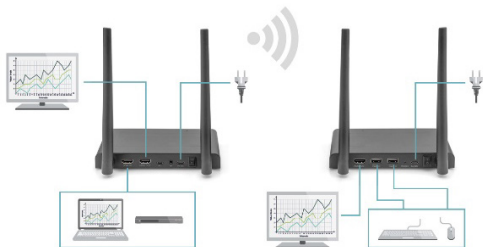
1. Connect the power adapter to the connector marked "5V" and insert the plug into the wall socket.
2. Place the receiver in the room (bedroom, study, or other room) where you want to connect the second TV or projector.
3. Use an HDMI cable to connect your TV or projector to the HDMI port marked "HDMI® OUT" on the receiver.

LED indicator of RX	Description
Flashing blue	Waiting for connection
Static blue	Connected

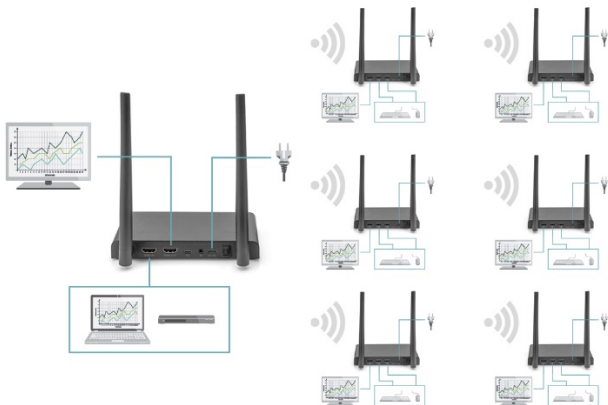
8.3 Two streaming modes

8.3.1 1x TX – 1x RX mode (Point-to-Point)

Normally, when you connect TX and RX by following above step, the TX and RX will connect automatically.



8.3.2 1x TX to 4x RX max. mode (Point-to-Multipoint)

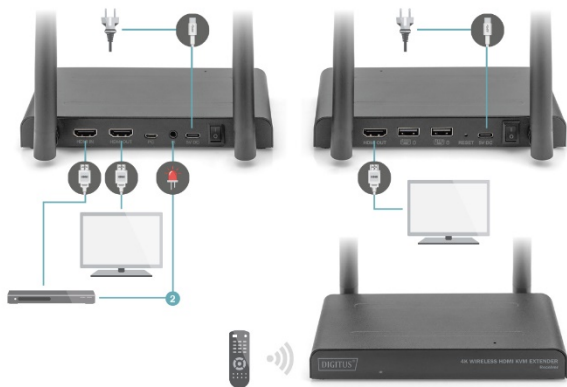


The 4K Wireless HDMI KVM Extender Set also supports multicast function, which means video transmission from one transmitter is streamed to a group of receivers simultaneously. One transmitter can support up to 4 receivers.

If you buy a new receiver, after power on the receiver, the transmitter will recognize and stream the video to the second receiver automatically.

If the transmitter and new receiver are not paired automatically, please pair the TX and RX firstly, please check “Pairing a transmitter and receiver” process.

8.4 Connecting infrared return



The 4K Wireless HDMI KVM Extender Set has a Built in "infrared return" that enables continued operation of the connected HDMI sources from another room.

For example, operate your HDMI source downstairs from your bedroom (location of second TV).

The IR cable receives the commands sent by the IR receiver and forward it to your connected HDMI sources.

Connect the IR cable (2) to the transmitter's connector marked "IR". Make sure that the LED of the IR cable is attached exactly over the HDMI source's infrared sensor (with some equipment, this needs to be done very precisely). The exact position can be found easily by shining a torch on the front panel, searching for the IR sensor window.

Please experiment with correct placement before final attachment of the IR LED.

Please note! The adhesive strip may cause discoloration on certain surfaces or leave adhesive residues after removal.

8.5 Testing the IR return function

Once you have connected the IR cable according to the above description, it is recommended to test the function first.

1. Aim your remote control towards the IR On the front side of receiver and send a command.
2. The IR Receiver will now send this command to the transmitter through the receiver.
3. The transmitter will forward this command to the IR on the transmitter. The IR then forwards the command to the HDMI source.
4. The HDMI source should now execute the function associated with the command sent by your remote control.

8.6 Connecting the USB extension



In addition to an infrared return feature, the 4K Wireless HDMI KVM Extender Set also features a built-in USB extension function. This helps you to continue to operate connected HDMI sources, such as a Desktop PC or laptop, from another room, using a mouse and/or keyboard.

1. Transmitter

Using the included USB cable, connect your PC or laptop to the Micro USB socket marked “USB” on the transmitter.

2. Receiver

Connect your mouse and/or keyboard to the connectors marked “USB” on the receiver.

8.7 Testing the USB extension function

Once you have connected the Micro USB cable and your mouse/keyboard according to the above description, it is recommended to test the feature first.

1. Take your mouse/keyboard and use one of the functions.
2. The receiver will now send this function to the transmitter. The transmitter will now forward this function to the Media Center PC or laptop.
3. The Desktop PC or laptop should now execute the function of your mouse/keyboard.

9. Questions and answers

Q1. No (or poor) image and sound on TV or projector.

Move the transmitter and the receiver in the same room to test if the connection works well, and please make sure all below setting are correct.

- 1) Ensure that the power of the transmitter and receiver is properly connected. Ensure that all HDMI cables are connected properly or replace them.
- 2) Ensure that the HDMI source is turned ON and the correct HDMI input is selected on the TV.
- 3) Ensure that the HDMI source is set to a correct video resolution. If necessary, consult the user manual of your HDMI source.
- 4) Disconnect the power adapters from the wall socket and reconnect them to reboot the 4K Wireless HDMI KVM Extender Set.

If the transmitter and receiver still no connection, please follow the below step for pairing.

- 1) Power on the transmitter.
- 2) Power on the receiver till it's on the main screen.
- 3) Press the receiver's reset button and hold for 5 seconds till the LED is flashing fast.
- 4) Wait around 30 seconds, the transmitter and receiver will be paired automatically.

Q2. No or bad connection between the transmitter and receiver.

- 1) Move the HD transmitter and/or the receiver from the immediate vicinity of the connected HDMI sources and Wi-Fi equipment. These may affect the range.
- 2) Slightly adjusting the position of the transmitter and/or receiver may already help.
- 3) Too much distance or obstacle between transmitter and receiver. Try using shorter distances.
- 4) Disconnect the power adapters from the wall socket and reconnect them to reboot the 4K Wireless HDMI KVM Extender Set.

Q3. I do have picture, but no (or bad) sound.

The 4K Wireless HDMI KVM Extender Set supports up to 2CH PCM stereo.

Check the audio setting in the settings menu of the connected HDMI® source and manually set it to 2CH PCM stereo when the automatic setting does not work.

Q4. The IR blaster doesn't work.

- 1) Make sure to use the original remote control of the video source.
 - 2) Please stick the IR emitter probe in the surface of IR window of the source device, if you are not sure the correct position of IR window of source device,
 - 3) please refer to the manual of source device.
 - 4) Please point the remote control to the IR receiver probe with 5 meters directly.
 - 5) The IR extender cable based on 20KHz-60KHz remote signal protocol, which support most of the IR remote in the market, for special standard or old remote may not supported.
- The transmission distance with a restricted visual range cannot be determined generally and depends on the specific circumstances where installed
 - Walls, glass etc. shorten the signal range or cause signal losses

Frequency Range & Maximum Transmit Power

DS-55328

WiFi Standard: IEEE 802.11.b/g/n/ac 5.8G

Channel: 36/40/44/48

Core Frequency: 5150-5350MHz ; 5470-5725MHz; 5725-5850MHz ;
5850-5925MHz

(The specific frequency bands utilized are upon the legal regulations
by each country)

Bandwidth: Support 20MHz, 40MHz, 80Mhz

Transmitter power: 17dBm

SW version:

TX :5.0.7

RX : 4.0.7

HW version:

TX: V11TX-4K60-V1

RX: V11RX-4K60-V1

DS-55329

WiFi Standard: IEEE 802.11.b/g/n/ac 5.8G

Channel: 36/40/44/48

Core Frequency: 5150-5350MHz ; 5470-5725MHz; 5725-5850MHz ;
5850-5925MHz

(The specific frequency bands utilized are upon the legal regulations
by each country)

Bandwidth: Support 20MHz, 40MHz, 80Mhz

Transmitter power: 17dBm

SW version:

RX: 4.0.7

HW version:

RX: V11RX-4K60-V1

Disclaimer

The terms HDMI and HDMI High-Definition Multimedia interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Hereby ASSMANN Electronic GmbH declares that the Declaration of Conformity is part of the shipping content. If the Declaration of Conformity is missing, you can request it by post under the below mentioned manufacturer address.

www.assmann.com

Assmann Electronic GmbH
Auf dem Schüffel 3
58513 Lüdenscheid
Germany

