

DIGITUS WIRELESS HDMI Extender / Splitter Set User Manual

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DIGITUS WIRELESS HDMI Extender / Splitter Set



Package Content DS-55314:

- Main Units: 1x TX, 1x RX
- 2x Power Adapter (DC 5V/2A)
- 4x Mounting Bars
- 1x IR TX Cable, 1x IR RX Cable
- 1x 3.5 mm Male to Male Cable



Introduction

The Wireless HDMI® Extender / Splitter Set wirelessly transmits your high-resolution HDMI® video and audio signals up to a distance of 100 m (1:1 connection, unrestricted view). The operation of the Extender Set is kept

very simple by real Plug & Play, you connect source and receiver device to the set and can start immediately. In addition, you can control the devices at the location of the signal source with your existing infrared remote control from the receiver module. Two infrared connection cables are included in the set, which you can connect to the transmitter and receiver. Furthermore you have the possibility to extend this set to up to 4 receivers (DS-55315), these are optionally available. For example, you can output the signal from a set-top box to up to 4 different TV sets simultaneously and even control the box from any receiver. Save yourself the trouble of laying HDMI® cables and use this easy-to-use Wireless HDMI® Extender / Splitter System.

Features

- Wireless transmission of HDMI® signals over a distance of up to 100 m (1:1 connection, unrestricted visibility)
- The set can be extended to up to 4 receiver units (DS-55315) and offers splitter functionality with additional receivers
- Supports point-to-point and multicast transfer
- Distribute your HDMI® signal to up to 4 TVs/monitors
- IR input and output for transmitting remote control signal to source device
- Additional HDMI® output (loop-out) on the transmitter module for connection of an external monitor
- Plug & Play no software or drivers required
- Transmission of HDMI® signals in Full HD with max. resolution of 1080p / 60 Hz
- · Supports 2D signal processing
- HDMI® version: 1.3HDCP version: 1.3
- Transmission latency: 150 200 ms

Frequency Range & Maximum Transmit Power

Frequency range:

Channel: 153

Core frequency: 5765 MHz Range: 5.755 GHz ~ 5.775 GHz

Bandwidth: 20 MHz

Transmission power: 14.0 dBm max. SW (software) Version: V1.0.0.5 HW (hardware) Version: V1.1

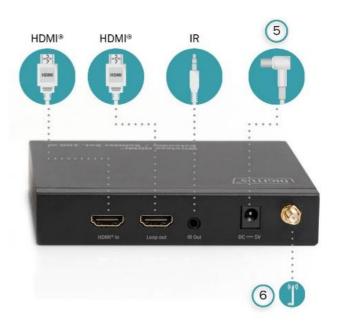
Interfaces Introduction

Receiver Unit:



Sender Unit:





- 1. Power indicator
- 2. Data transmission status
- 3. Reset button
- 4. Wireless connection status
- 5. Power supply
- 6. Antenna
- 1. HDMI® In: Connect to input sources (PC, Notebook, Set-Top-Box, SAT Receiver, etc.) via HDMI® cable
- 2. HDMI® Out: Connect to output devices (TV, monitor, etc.) via HDMI®
- 3. Power Supply: DC 5V/2A In
- 4. HDMI® Loop Out: HDMI® Loop Out port for local TV/display
- 5. Reset: Settings reset button
- 6. IR In: IR signal input port
- 7. IR Out: IR signal output port
- 8. Power: Power LED indicator
- 9. Link:

No Connection: Continuous lightning Connected: Quickly flashing light

10. Status:

No video signal connection: Slowly flashing light Video signal connection: Quickly flashing light

Important: If long press "Reset" button for 10 seconds on the receiver unit, the receiver setups will be erased. User can rebuild the settings by following "Installation for DS-55315 (receiver unit)" DS-55134 Sender and Receiver units are default paired. No settings needed.

Installation for DS-55314 (Set)

- 1. Install mounting ears if needed
- 2. Connect Sender (TX) unit with HDMI® source and IR TX cable
- 3. Connect Receiver (RX) unit with HDMI® TV/display and IR RX cable
- 4. Supply power to both Sender and Receiver units
- 5. The Power LED on both sides will light on
- 6. The Status LED flashes slowly and waiting for pairing
- 7. Display of the receiver shows "Searching TX"
- 8. When Link and Status LED flash quickly, installation is completed
- 9. If a local display is needed, connect another screen to the Sender unit anytime

Note: 3.5mm audio cable is used only when Sender and Receiver pair settings is needed

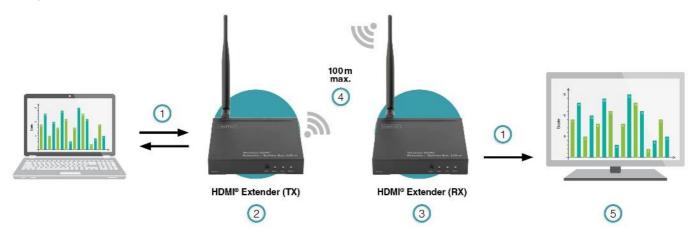
Installation for DS-55315 (additional Receiver)

- 1. Find 3.5mm male to male audio cable from accessory
- 2. Connect the sender and receiver with the audio cable via IR port
- 3. Connect sender unit with input device, connecting the receiver unit with a display
- Supply power on both sender and receiver
 Long press the "Reset" button for 10 second on the Receiver.
 The display shows "searching TX"
- 5. Short press the "Reset" button on both sender and receiver unit to match the sender and receiver
- 6. The Link and Status LED both will flash quickly. Settings completed

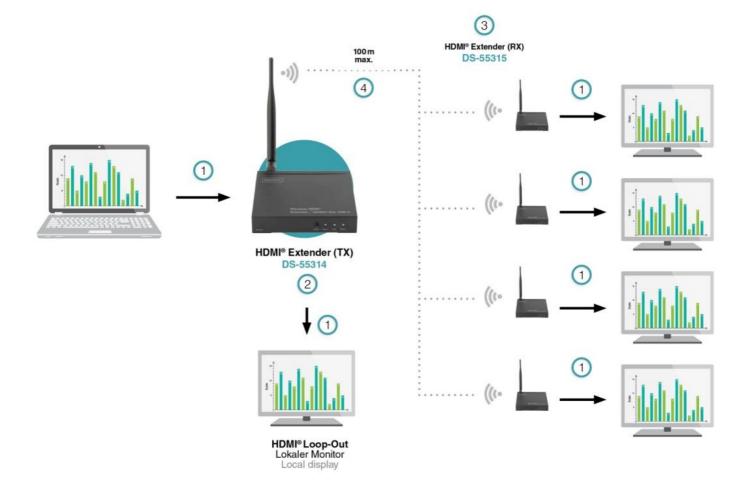
Note: If you wish to connect more receivers, please repeat above steps to match up to 4 receivers

Connection Diagram

Example 1:1 connection:



Example 1:4 connection:



- 1. HDMI® Cable
- 2. Transmitter
- 3. Receiver
- 4. Distance
- 5. Monitor / Beamer

Specification

DIGITUS® Model Number	DS-55134 (Set)	DS-55135 (Receiver)
HDMI® Input Port	1x HDMI®	Not available
HDMI Output Port	TX: 1x HDMI® RX: 1x HDMI®	1x HDMI®
Wireless Extension Distance	1 to 1 connection: up to 100 m 1 to 2 connection: up to 75 m 1 to 3 connection: up to 55 m 1 to 4 connection: up to 35 m	

Frequency Band Range	5 GHz	
Wireless Standard	802.11a	
Vertical Frequency Range	50/60 Hz	
Compress Format	H.264	
IR Frequency Range	20-60 KHz	
Interlaced Resolutions (50 & 60 Hz)	480i, 576i, 1080i	
Progressive Resolutions (50 & 60 Hz)	480p, 576p, 720p, 1080p	
Operating Temperature	0 °C to 50 °C	
Storage Humidity	5 % to 90 % RH non-condensation	
Power Supply	DC 5V/2A	
Power Consumption (max.)	TX: 3.5 W, RX: 3 W	
Dimensions (L x W x H) 1 unit	130 x 100 x 25.5 mm	
Net Weight	TX: 144 g, RX: 145 g	
Housing material	Metal	

Note

- 1. The transmission distance in obstructed areas cannot be determined generally and depends on the specific environment.
- 2. Walls, glass, etc. can cause the signal coverage to be shorter or disrupted.
- 3. The max. transmission distance (100 m) is reliant on optimum conditions. Other devices in the vicinity using the 5 GHz band (WiFi networks or other wireless video transmitters) can lead to interference and a significant decrease of the transmission distance or picture stability.
- 4. Make sure your input AC voltage is compliant to the adapter specifications.
- 5. Only use the power adapters provided with the DS-55314, DS-55315.
- 6. If you use your own adapter, make sure the power output is 5V DC, 2A.

Troubleshooting

Problems	Causes	Solutions
No signal output after correct connection in the same room	Maybe the sender and receiver are not paired correctly	To rebuild Sender and Receiver connection: Please follow the setup procedure from "Installation for DS-55315 (receiver unit)"
2. No signal output after correct c onnection in different rooms	The distance can't reach 100m due to the signal loss via pass t hrough the solid walls.	When pass through a solid wall (thicknes s under 30 cm), the signal will loss 30 % of the original signal and the distance will shorter than 70 m; if pass through two or more solid wall, the distance will shorter than 20 m. Please get shorter distance at pass through solid wall application
3. The video transmission is not s table or the distance is shorter th an described	Maybe there have some same band Interference sources at 5 GHz effect the extender's signa I transmission.	Please place the product closer when there have same band Interference sources or remove the Interference sources

Important safety instructions

Please read the following safety instructions carefully before installation and operation:

- 1. Observe all warnings and instructions concerning this device
- 2. Do not expose the device to rain, moisture, vapours or liquids
- 3. Do not insert any objects into the device
- 4. Do not attempt to repair the unit yourself or open the cabinet. Risk of electric shock!
- 5. Ensure adequate ventilation to prevent damage due to overheating
- 6. Turn off the power supply and make sure the environment is safe before installation
- 7. In the event of thunderstorms, there is a risk of lightning strike and damage to connected electrical equipment due to overvoltage
- 8. Do not install this device during a thunderstorm
- 9. Disconnect the device from the connected electrical appliances during a thunderstorm
- 10. Use the device inside buildings only
- 11. Return the device to your dealer in case of repair
- 12. Dust, moisture, vapours and strong cleaning agents or solvents can damage the device
- 13. Disconnect the device from the power supply and the connected devices before cleaning
- 14. Clean the device with a lint-free cloth
- 15. To completely disconnect the system from the mains, the power supply unit must be unplugged from the socket. The power supply unit serves as a disconnecting device for separating the system from the mains.
- 16. Use a shielded HDMI cable with a maximum length of 2m which has two ferrit filter (input/output) to operate the product.

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Documents / Resources



<u>DIGITUS WIRELESS HDMI Extender / Splitter Set</u> [pdf] User Manual DS-55314, DS-55315, DIGITUS

References

- ASSMANN Electronic GmbH | Germany
- A ASSMANN Electronic GmbH | Germany