

8K DisplayPort 1.4 Repeater

Quick Installation Guide

DP-14R integrates a point-to-point connection DisplayPort Repeater to simplify system equipment; and lower cost for applications requiring single DisplayPort input and output device in personal computing system and other emerging digital appliances.

Feature

- Supports UHD resolutions up to 7680 X 4320 @60Hz & 3840 X 2160 @144Hz 4:2:2 10bit
- Supports data rates up to 8.1 Gbps / lane or 32.4 Gbps total
- Fully compliant with DisplayPort specification 1.4 HBR3, HDCP 2.3, HDR, DPCP
- Supports 4k @144Hz (max. length: 2m in; 10m out); 8K @30Hz (max. length: 2m in; 10m out)
- Enables cascading 5 levels at 4K 144Hz*
- Supports DP++ Dual Mode, compatible with HDMI, DVI or VGA adapters.

Specification

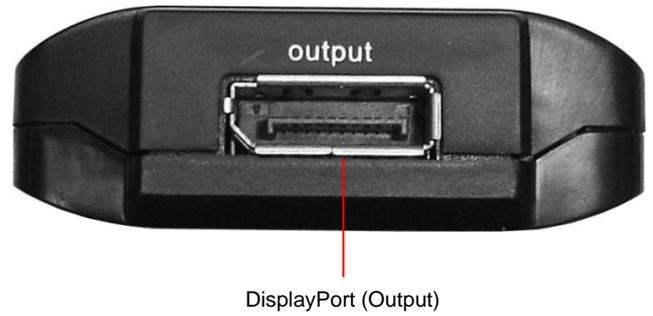
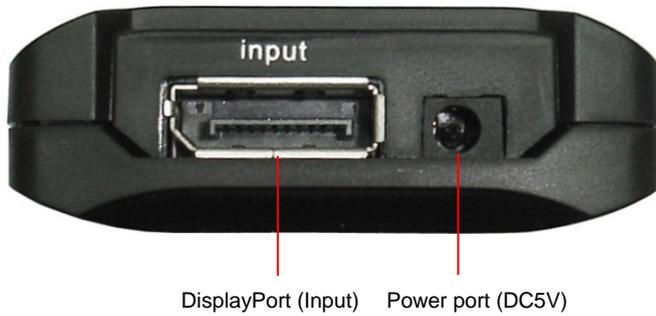
Model No.	DP-14R	
Connectors	Input	DisplayPort 20 Pin Female
	Output	
UHD Resolution	7680 X 4320 @60Hz	
Environment	Operating Temp.	5 °C ~ 40 °C
	Storage Temp.	-20 °C ~ 60 °C
	Humidity	0~80% RH, Non-condensing
Power Supply	5VDC 1A	
LED	1	
Housing	Plastic	
Dimension (L x W x H)	55 x 54 x 20 mm	

*Remarks: The cascading length depends on the cable quality. Strongly recommends using the certified DP cables.

Package Contents

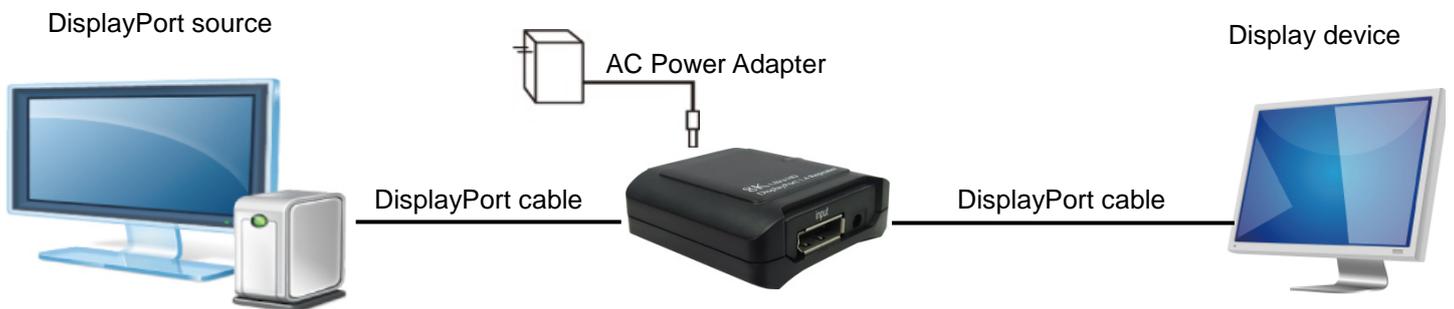
1. 8K DisplayPort 1.4 Repeater
2. 5VDC Power adapter

Physical Diagram

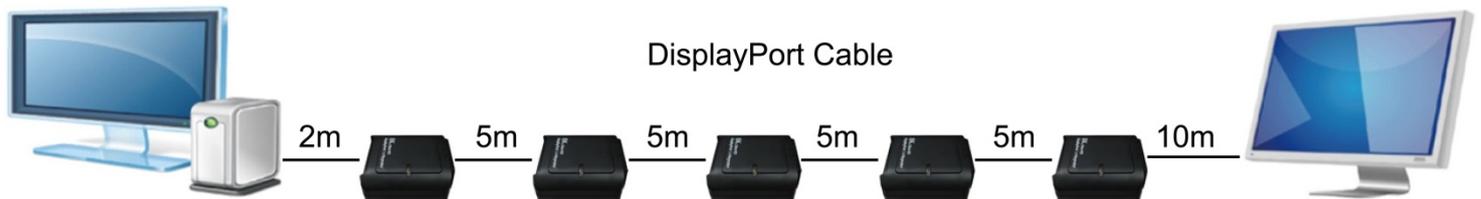


Connecting

Typical Application



The 8K DisplayPort 1.4 Repeater is installed between the DisplayPort source and a connected DisplayPort monitor.



The 8K DisplayPort 1.4 Repeaters are installed and cascading 5 levels in max. 32m between the DisplayPort source and a connected DisplayPort monitor

Installation

1. Connect the DisplayPort source (for example, a computer graphics source) to the Input connector.
2. Connect the Output connector to a DisplayPort acceptor (for example, a DisplayPort display).
3. Connect the 5V DC power adapter to the power jack on the **8K DisplayPort 1.4 Repeater** and connect the adapter to the mains electricity.

Note: The LED indicator should illuminate to implement successfully a proper power connection. If the LED indicator does not illuminate, please verify the power connection.

4. Turn on the power to the video sources and connected monitor.
5. Use your video cards display settings screen to make adjustments to the way video is displayed on the connected monitor.

Note: The DisplayPort Repeater is backward compatible with most DisplayPort 1.4 equipment running current graphics drivers, with the feature set being limited to that of your equipment (e.g. you may be limited to displaying in Clone / Mirror mode only). Compatibility with older graphics cards is not guaranteed.

When displaying video resolutions is configured to 8K @30Hz or 4K @144Hz, the distance between the DisplayPort Repeater and the monitor should be limited in 12m. (max. length: 2m in; 10m out); cascading 5 levels at 4K @144Hz, in 32m. (max. length: 2m in; 30m out).

Troubleshooting

If you are unable to get an acceptable image after following the installation instructions, try the troubleshooting tips below.

- 1.** Is your equipment running the latest graphics driver? If not, download the latest graphics drivers for your equipment. Backward compatible with most DisplayPort 1.4 equipment running current graphics drivers, with the feature set being limited to that of your equipment (e.g. you may be limited to displaying in Clone / Mirror mode only). Compatibility with older graphics cards is not guaranteed.
- 2.** Is the external power supply that came with the product connected and plugged into a working power source? For the product to function properly, it must be connected to and receiving power from the external power supply.
- 3.** Were the power to the DisplayPort source turned off prior to installation? If not, restart your computer/video source.
- 4.** What resolution are you trying to reach? The 8K DisplayPort 1.4 Repeater is tested to support video resolutions up to 8K @60Hz. If you are not able to get an acceptable image, try lowering your computer's video resolution or adjusting the refresh rate.
- 5.** What length cables are you using? The maximum cable lengths that can be used between the source and the 8K DisplayPort 1.4 Repeater; and between the 8K DisplayPort 1.4 Repeater and the monitor, is limited in the Installation section of this manual.
- 6.** What type of cabling are you using? Inferior cabling can result in poor performance, so it is important that you use cables that can support the video resolution you are trying to obtain.
- 7.** Test your cables to ensure they are working properly. For example, connect your DisplayPort cables between a source and monitor that you know works to see if the cable is functioning.

Regulatory Compliance

Disclaimer

Information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential, or other damages.

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CE Certification

This equipment complies with the requirements relating to electromagnetic compatibility. It has been manufactured under the scope of RoHS compliance.

FCC Compliance Statement

This equipment generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

You are cautioned that changes or modification not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation



WEEE (Waste of Electrical and Electronic Equipment),
Recycling of Electronic Products

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.

Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.