

**DisplayPort 2.0 AOC  
Hybrid Fiber Optic Cable  
8K60, 5-100m**



**User Manual**

**VER 1.0**

## **DP AOC hybrid-fiber connection cable, Standard DP port, 5-100m (16-328ft), UHD 8K@60Hz resolution, lossless transmission**

This DP UHD hybrid active optical cable (AOC) converts between DP signals and optical signals for optimal data transmission. It is ideally suited for transferring uncompressed video and audio data with high bandwidth over longer distances. The hybrid construction, which uses copper and fiber optic cable, prevents electromagnetic interference and ensures lossless signal transmission over long distances. The product supports UHD video resolutions of 8K@60Hz and 4K@144Hz (downward compatible with 8K@30Hz), and is compatible with the UHBR13.5 transmission mode, achieving a maximum video bandwidth of up to 54Gbps.

The optical fiber cable is lighter and thinner than the copper cable, giving this type of active cable the advantages of small diameter, small bending radius, light weight and flexible wiring, and it supports concealed installation in conduits. It is ideal for use in homes and conference rooms as well as within buildings. The simple Plug and Play installation is user-friendly; just plug it in and immediately enjoy optimal image quality.

This product supports VRR (Variable Refresh Rate), ensuring a smooth and seamless picture experience. It features high dynamic HDR, offering a wider dynamic range and more picture details, and supports features such as QFT (Quick Frame Transfer) and ALLM (Automatic Low-Latency Mode).

## Product Features

- ☆ Compliant with DP (DisplayPort) 2.0 specifications
- ☆ Support video resolution up to 8K@60Hz and 4K@144Hz (downward compatible with 8K@30Hz)
- ☆ Compatible with the UHBR13.5 transmission mode
- ☆ Data transfer rates up to 54Gbps
- ☆ HDR, HDR10, HDR10+, Dolby Vision, HLG pass-through
- ☆ Support VRR (Variable Refresh Rate), ensuring a smooth and seamless picture experience
- ☆ Support QFT (Quick Frame Transfer) and ALLM (Automatic Low-Latency Mode)
- ☆ Support HDR (High Dynamic Range), offering a wider dynamic range and more picture details
- ☆ Extend video and audio signals up to 5-100m (16-328ft)
- ☆ Hybrid construction using both copper and fiber to ensure long-distance lossless transmission
- ☆ With slim wire diameter (about 4.8mm), supporting pre-embedded conduit insertion, flexible and convenient wiring, and no need for external power supply
- ☆ With high-performance photoelectric conversion chip, the signal transmission is stable and reliable
- ☆ Gold-plated connectors and nylon-braided PVC for best plug resistance, oxidation resistance, and longevity
- ☆ Support HDR (High Dynamic Range) and 30/36-bit color depth, providing a wider color gamut and finer color transitions, suitable for film and television post-production and image processing
- ☆ With double shielding
- ☆ The source connector connects to the source device, and the display connector connects to the display device
- ☆ Plug and play, no software to be installed

# Product Specifications

Technical	
DP Compliance	DP 2.0
HDCP Compliance	HDCP 2.3
Video Bandwidth	Up to 54Gbps
Video Resolution	Up to 8K@60Hz, 4K@144Hz, backward compatible with 8K@30Hz, supporting UHBR13.5 mode
Color Depth	8/10/12-bit
Color Space	YUV 4:4:4
Optional Cable Length	5m / 10m / 15m / 20m / 25m / 30m / 35m / 40m / 50m / 60m / 70m / 80m / 90m / 100m
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input	1× Source [DisplayPort, male]
Output	1× Display [DisplayPort, male]
Mechanical	
Outer Diameter	4.8mm
Cable Color	Black
Conductor	Optical Fiber + Tinned Copper
Chip	Optoelectronic conversion chip
Jacket	PVC
Connector Casing	Metal Enclosure
Connector Color	Gold-plated
Power Supply	No need for external power supply
Applicable Devices	Smart box, set-top box, laptop, host computer, projector, monitor
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operating Humidity	20%~80% (Relative Humidity, non-condensing)
Storage Humidity	10%~90% (Relative Humidity, non-condensing)

# Connection Instructions



Source connector  
of the AOC cable



Display connector  
of the AOC cable



## Signal Source Devices



Smart box



Set-top box



Host computer



Laptop



## Display Devices



Monitor



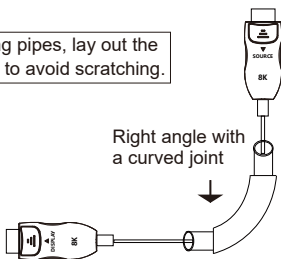
Projector

*Note: When wiring and connecting, be sure to connect the Source connector to the signal source device and the Display connector to the display device. Don't get it backwards.*

## Wiring Precautions

- When threading pipes at a 90° angle, please use a right angle with a curved joint, as shown in the following figure.

When threading pipes, lay out the cable carefully to avoid scratching.



- When threading pipes, it is suggested to lay out the cable in a slot. Please do not forcefully pull, twist, or knot the cable.
- Please do not beat, heavily impact, or smash the connector to avoid damaging the chip.



⊗ No Twisting

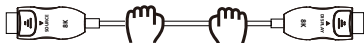
⊗ No Knotting

⊗ No Beating

⊗ No Smashing

- The tensile force does not exceed 10kg. Please do not pull the cable forcefully during wiring.
- The DP connector features a buckle to prevent accidental pulling/loosening. Please press the buckle first before plugging/unplugging. It is strictly prohibited to forcefully pull the cable body.

← The tensile force does not exceed 10kg. →



First press the buckle, then plug/unplug the connector.