



## Prestel UAC322-010

USB 3.2 Gen 2 A Male to C Male  
Active Optical Cable



**USER MANUAL**

## **USB 3.2 Gen 2 Type-A male to Type-C male active optical cable, data transfer rate up to 10Gbps, backward compatible with USB 3.1/3.0/2.0, 5-40m (16-131ft), lossless transmission**

This USB-A male to USB-C male AOC cable uses fiber optic for high-speed signals transmission and copper wire for low-speed signals transmission, solving the problem of traditional copper wire not being able to transmit signals over long distances. Moreover, fiber optic transmission of data can better resist electromagnetic and radio frequency interference, making it suitable for signal transmission over longer distances. Fiber optic cables are lighter and thinner than copper wires, giving this active cable the advantages of small diameter, small bending radius, light weight, and flexible and convenient wiring. It can be widely applied in various scenarios such as homes, conference rooms, and buildings. Plug and play, easy to install.

This product supports data transmission, with the maximum support of 10G and backward compatibility with USB 3.1/3.0/2.0. The advanced chip technology makes it possible for the completed USB signal spectrum to be transmitted.

## Product Features

- ☆ USB 3.2 Gen 2 Type-A male to Type-C male connector
- ☆ USB 3.2 Gen 2 10Gbps, backward compatible with USB 3.1/3.0/2.0
- ☆ Utilizes fiber optic + copper hybrid cable for long-distance lossless transmission.
- ☆ Excellent compatibility: Fully meets the requirements of USB-A and USB-C ensuring seamless integration with various devices and systems.
- ☆ Extended Length: Supports cable lengths of up to 40m (131ft), providing flexibility for different environments and applications.
- ☆ Equipped with a Micro USB power supply port (mainly used for equipment auxiliary power supply with power consumption  $>2W$ ).
- ☆ Zinc alloy shell, strong and durable.
- ☆ The transmission distance is 5-40m (16-131ft) without delay.
- ☆ With a wire diameter of 5.0mm, light weight, convenient wiring, supporting conduit installation

# Product Specifications

| Technical             |                                                                                                                                |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| USB Transfer Rate     | USB 3.2 Gen 2 10Gbps, backward compatible with USB 3.1/3.0/2.0                                                                 |
| Wave Length           | 850nm                                                                                                                          |
| Optional Cable Length | 5m (16ft) / 10m (33ft) / 15m (49ft) / 20m (66ft) / 25m (82ft) / 30m (98ft) / 35m (115ft) / 40m (131ft)                         |
| ESD Protection        | IEC 61000-4-2:<br>±8kV (Air-gap discharge) & ±4kV (Contact discharge)                                                          |
| Connection            |                                                                                                                                |
| Input                 | 1× Host [USB Type A, male]                                                                                                     |
| Output                | 1× Device [USB Type C, male]                                                                                                   |
| Mechanical            |                                                                                                                                |
| Outer Diameter        | 5.0mm                                                                                                                          |
| Cable Color           | Black                                                                                                                          |
| Conductor             | Optical Fiber + Tinned Copper                                                                                                  |
| Chip                  | Optoelectronic conversion chip                                                                                                 |
| Jacket                | PVC                                                                                                                            |
| Connector Casing      | Metal Enclosure                                                                                                                |
| Connector Color       | USB-A male connector: Nickel-plated<br>USB-C male connector: Gold-plated                                                       |
| Power Supply          | Standard USB-A port, 5V/900mA;<br>When power supply is insufficient, it supports external power supply via the Micro-USB port. |
| Working Voltage       | 5V±0.25                                                                                                                        |
| Applicable Devices    | <b>Host:</b> Desktop Computer, Laptop, miniPC, Game Console<br><b>Device:</b> Printer, Camera, VR Helmet, Hard Disk Drive      |
| 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



Host connector  
of the AOC cable



## Signal Source Devices



Laptop



mini PC



Desktop Computer



Game  
Console



## Display Devices



Camera



VR Helmet



Printer



Hard Disk Drive

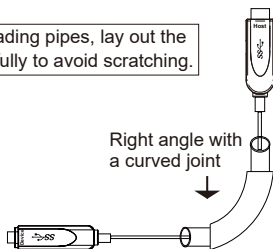


*Note: When wiring and connecting, make sure to connect the Host connector to the USB Host device and the Device connector to the USB Device device. Don't get it backwards.*

## 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

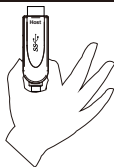
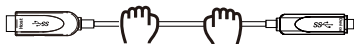


⊗ No Beating

⊗ No Smashing

- The tensile force does not exceed 10kg. Please do not pull the cable forcefully during wiring.
- When plugging/unplugging, please hold the zinc alloy part of the cable and do not pull the cable body.

← The tensile force does not exceed 10kg. →



Hold the zinc alloy part of the cable.