

## Package Contents

- 1pc .... Active Optical USB Type-C Cable
- 1pc .... Installation Card
- 1pc .... User Guide

## Specifications

Mode 1	4-Lane DisplayPort 2.1 + USB 2.0
Mode 2	2-Lane DisplayPort 1.4 + USB 3.2
Power Delivery	Up to 60 Watts (20V/3A)
Mode 1 Resolutions	8K30Hz / 8K60Hz HDR + DSC
Mode 2 Resolutions	4K60Hz / 4K120Hz HDR + DSC
DP Alt-Mode Source	Required for video function
Tensile Strength	400N Momentary / 200N Static
Minimum Bend Radius	25mm Dynamic / 15mm Static
Operating Temperature	0°C to 50°C
Operating Humidity	10 to 80% RH (no condensation)
Power Supply	Min 3V Max 12V
Power Consumption	1.2W (typical) from 5V input
Plug Dimensions	45 x 11.5 x 13mm (LxWxH)
Cable Diameter	6.5mm / TPE Jacket
Weight	150g

Specifications are subject to change without notice. AVENCORE is a registered trademark of VIDORRA PTY LTD.  
USB Type-C® is a registered trademark of USB Implementers Forum. Other brands and product names are trademarks or registered trademarks of their respective holders. © Copyright 2025 Vidorra Pty Ltd. All rights reserved.

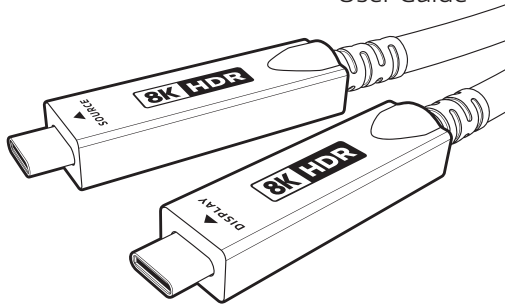
[WWW.AVENCORE.COM.AU](http://WWW.AVENCORE.COM.AU)

Please retain this manual for future reference

## CARBON SERIES

Active Optical USB Type-C®  
40Gbps • 60Watt PD

AV-Z-UC40  
User Guide



 **Avencore**®

*Better cables. Smarter gadgets.*

# Active Optical USB Type-C®

## 40Gbps • 60Watt PD

### △ Safety Information

- **Safety** - Risk of electric shock. No user-repairable parts inside. Do not open or modify.
- **Environment** - Do not operate the product in direct sunlight, dusty environments, or in wet, raining or damp conditions. Designed for indoor use only.

### Basic Operation

#### Connecting Devices

1. Connect the plug marked Source to the DP Alt-Mode compatible source device, e.g. Laptop, Computer, Smartphone, etc
2. Connect the plug marked Display to a USB Type-C Compatible Display video input socket

**Note:** Not all USB-C sockets are DP Alt-Mode enabled. Check for the **DP** or **⚡** icons on your source device, or in your source device user manual. If your display is not immediately recognised, check your display configuration settings.



USB-C with  
DP Alt-Mode  
Source



USB-C Display

**Note:** Cable orientation is not critical for data-only links

### Features

- Automatic Dual Specification
  - **Mode 1:** 40Gbps Video + USB 2.0 (480Mbps)
  - **Mode 2:** 16.2Gbps Video + USB 3.2 (20Gbps)
- Power Delivery up to 60W (20v/3A)
- Plug and Play. No Drivers. No External Power
- Supports High Dynamic Range (HDR10 & HLG)
- Display Stream Compression (DSC) Supported
- Requires DP Alt-Mode for Audio/Video Functions

### High Resolution Display Modes

Display Mode	Mode 1 40Gbps Video	Mode 2 16.2Gbps Video
8K 60	Yes (with DSC)	No
8K 30	Yes	Yes (with DSC)
5K 120	Yes (with DSC)	No
5K 60	Yes	Yes (with DSC)
4K 240	Yes (with DSC)	No
4K 120	Yes	Yes (with DSC)
4K 60	Yes	Yes
WQHD 240	Yes	Yes (with DSC)
FHD 240	Yes	Yes (with DSC)

The above resolutions are a guide only, depending on hardware.

**Note:** Mode selection is automatic based on your chosen resolution, refresh rate and bit-depth. If you are targeting USB 3.2 20Gbps (Mode 2), you may need to select a lower resolution that does not require DSC, e.g. 4K 60Hz (8-Bit)