# 24Gbps 4:4:4 60Hz over Active Optical HDMI Cable (10m/33ft | 15m/49ft | 20m/65ft)



# **Ouickstart Guide**

WyreStorm recommends reading through this document in its entirety to become familiar with the product's features prior to starting the installation process. This product has been released in 3 versions for the 10m/15m/20m lengths that have different level certifications. Version 3 of these lengths adds CL3/FT4 certification which is not available on the version 1 and 2.











# IMPORTANT! Installation Requirements

Cable is uni-directional. Follow the connector labeling and color coding to ensure proper operation of the cable.

# **Cable Distances**

CAB-HAOC-10

Optical HDMI Cable Performance Guide

0m	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
Oft	16ft	33ft	49ft	65ft	82ft	98ft	115ft	131ft	148ft	164ft
Н	<b>ID/4K</b> Tra	ansmissio	on							
CAR	-HAOC	2-20								

# Optical HDMI Cable Performance Guide

0m	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
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# **Wiring and Connections**



# IMPORTANT! Installation Requirements

The WyreStorm Active Optical cables are designed to transmit HDMI signals from the source to a display.

- · Follow the labeling and the diagrams for connection to ensure proper operation.
- Due to the core of the HAOC being fiber optic the cable cannot have a bend radius greater than 2cm/0.78in. Keep this mind when routing cables around objects and inside of walls.
- The cables have a max pull tension of 15kg/33lbs. Keep this in mind when routing the cable within cabinets or walls to avoid damaging the cable.

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# In The Box

1x CAB-HAOC-10, CAB-HAOC-15 or CAB-HAOC-20 Active Optical HDMI Cable 2x Reusable Cable Ties

1x Quickstart Guide (This Document)

## CAB-HAOC-15

### Optical HDMI Cable Performance Guide

0m	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m
0ft	16ft	33ft	49ft	65ft	82ft	98ft	115ft	131ft	148ft	164ft
H	ID/4K Tra	nsmissio	on							

# 2.0 cm

# **Basic Wiring Diagram**

# Source Connection Label: TX SOURCE Color: Silver Display Connection Label: TX DISPLAY Color: Metalic Gray WyreStorm Matrix CAB-HAOC-10: 10m CAB-HAOC-15: 15m HD/4K Source CAB-HAOC-20: 20m



# **Warranty Information**

WyreStorm Technologies LLC warrants that its products to be free from defects in material and workmanship under normal use for a period of five (5) years from the date of purchase. Refer to the Product Warranty page on wyrestorm.com for more details on our limited product warranty.



# **Specifications**

Transmission										
Transmission Encoding	Uncompressed AOC									
End to End Latency	10µs									
Maximum Transmission Bit Rate	24 Gbps (4-core, 6Gbps per	lane)								
Video		,								
HDMI	(v2.0b) TMDS   600MHz Max	kimum   (v2.1) FRL (Fixed Ra	te Link)   16b/18b enc	oding						
Input	1x HDMI: 19-pin type A Male		,							
Output		1x HDMI: 19-pin type A Male								
Maximum Data Rate	22.28 Gbps									
			CAB-HAOC-10	CAB-HAOC-15	CAB-HAOC-20					
Video Resolution (Max)	1920 x 1080p @120Hz 2560 x 1440p @144Hz 3840 x 2160p @60Hz 10bit HDR 4:2:0 3840 x 2160p @60Hz 12bit HDR 4:2:2 3840 x 2160p @60Hz 10bit HDR 4:4:4 3840 x 2160p @60Hz 10bit HDR RGB 5120 x 2880p @30Hz 10bit HDR 4:4:4		10m/33ft	15m/49ft	20m/65ft					
Supported Standards	DCI   Static HDR   HDR10+	Dolby Vision   HLG   SL-HDR1	1   PQ   BT.2020   BT.21	00						
Audio										
Audio Formats	2ch PCM   Multichannel LPC	:M   DTS-X   Dolby Atmos								
Maximum Sampling Rate	192KHz									
Maximum Audio Channels	32									
Audio Return Channel (ARC)	Supported									
Communication and Control										
HDCP	Pass-through, 2.3 Supported	1								
EDID	Pass-through, RX>TX									
Ethernet	100Mbps Supported									
Consumer Electronics Control (CEC)	Supported									
Auto Low Latency Mode (ALLM)	Supported									
Variable Refresh Rate (VRR)	Supported									
Installation Restrictions										
Max Bend Radius	2cm/0.78in									
Max Pull Tension	15kg/33lbs									
Orientation	Uni-directional - Observe sig	nal flow direction prior to ins	tallation							
Power										
Power Supply	Passive 4.5v~5.5v VCC (From	m Connected Source)								
Max Power Consumption	250mW									
Environmental										
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)	)   10% ~ 90%, non-condensi	ng							
Storage Temperature	-4°F to ~ 140°F (-20°C ~ +60	)°C)   10% ~ 90%, non-conde	nsing							
Maximum BTU	0.85 BTU/hr									
Impact	Low, free from single use pla	astic								
Dimensions and Weight (Connector Ho	ousing)									
Height	9mm/0.36in									
Width	19.8mm/0.78in									
Depth	39.5mm/1.56in									
Weight	NA									
	CAB-HAOC-10	CAB-HAOC-15		CAB-HAOC-20						
Cable Length (Connector to Connector)	10m/33ft	15m/49ft		20m/65ft						
Regulatory										
Safety and Emission	All lengths: CE   FCC   RoHS	CL3   FT4								

Note: WyreStorm reserves the right to change product specification, appearance or dimensions of this product at any time without prior notice.