

24Gbps 4:4:4 60Hz over Active Optical HDMI Cable with Detachable Head

15m/50ft | 20m/65ft | 30m/98ft | 40m/131ft | 50m/164ft



Specification Sheet



HDMI connection from Source Device

HDMI connection to Display Device

4K HDR 2160p 4:4:4 60 HDMI HDCP 2.3 ARC

WyreStorm - Powerful. Reliable. Simple.

Introduction

The WyreStorm HAOC is a next generation HDMI cable designed for the next generation of 4K and 5K HDR content. It offers a unique feature set in both delivering uncompressed HDMI content at up to 24Gbps and compatibility with emerging HDMI technologies such as ALLM (Auto Low Latency Mode) & VRR (Variable Refresh Rate) using the latest in optical transmission technology.

Now established as the most powerful form of HDMI extension, WyreStorm active optical cables offer the best of both worlds: pixel-perfect long distance transmission of content and native HDMI communication. This model features a detachable RX head and is certified for fire safety.

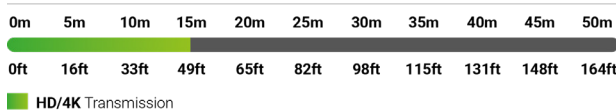
Key Features

- Uncompressed optical transmission of HDMI content up to 24Gbps:
 - 2K (2560 x 1440p) 4:4:4 8-bit at 144Hz
 - 4K (4096 x 2160p) 4:4:4 10-bit HDR at 60Hz
 - 5K (5120 x 2880p) 4:4:4 10-bit HDR at 30Hz
- Compatible with all current and emerging HDR standards at up to 60Hz:
 - HLG (Hybrid Log Gamma)
 - HDR-10 and HDR-10+
 - Dolby Vision
 - PQ (Perceptual Quantizer)
 - SL-HDR-1
- Ready for future HDCP 2.3 content encryption
- True native HDMI communication ensures CEC and ARC communication between compatible devices
- Supports emerging HDMI technologies such as ALLM (Auto Low Latency Mode) and VRR (Variable Refresh Rate)
- Perfect for use in environments with excessive EM or RF interference
- Kevlar protected communication cores
- High quality aluminum construction with low-profile 20mm/0.79" TX head
- Supplied coiled in box
- No single use plastic included* #SUPFree
- Available in 2m, 4m 6m & 8m lengths in Essentials range and 10-50m lengths available in WyreStorm Professional range of products

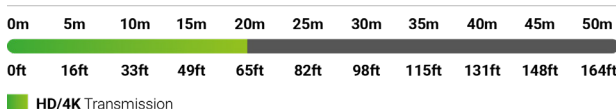
In the Box

- 1x Hybrid Active Optical Cable
- 2x Reusable Cable Ties
- 1x Type D-A HDMI Head converter
- 2x Retaining Screws for HDMI head
- 1x Micro USB power cable (back up only)
- 1x Quickstart Guide

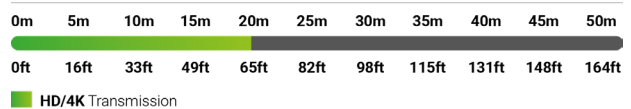
Optical HDMI Cable Performance Guide



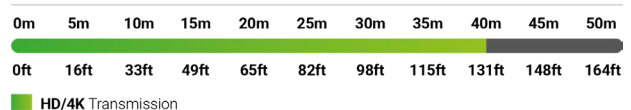
Optical HDMI Cable Performance Guide



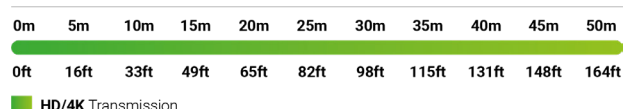
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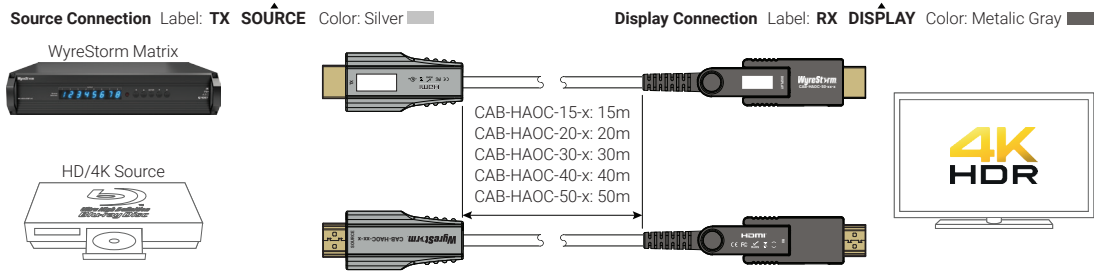
Optical HDMI Cable Performance Guide



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 Maximum (v2.1) FRL (Fixed Rate Link) 16b/18b encoding					
Input	1x HDMI: 19-pin type A Male					
Output	1x HDMI: 19-pin type D Male Type A Detachable Head					
Maximum Data Rate	22.28 Gbps					
Video Resolution (Max)		CAB-HAOC -15-x	CAB-HAOC -20-x	CAB-HAOC -30-x	CAB-HAOC -40-x	CAB-HAOC -50-x
	1920 x 1080p @120Hz					
	2560 x 1440p @144Hz					
	3840 x 2160p @60Hz 10bit HDR 4:2:0	15m/50ft	20m/65ft	30m/98ft	40m/131ft	50m/164ft
	3840 x 2160p @60Hz 12bit HDR 4:2:2					
	3840 x 2160p @60Hz 10bit HDR 4:4:4					
Supported Standards						
DCI Static HDR HDR10+ Dolby Vision HLG SL-HDR1 PQ BT.2020 BT.2100						
Audio						
Audio Formats	2ch PCM Multichannel LPCM 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					
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 signal flow direction prior to installation					
Power						
Power Supply	Passive 4.5v~5.5v VCC (From Connected Source)					
Max Power Consumption	250mW					
Environmental						
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C) 10% ~ 90%, non-condensing					
Storage Temperature	-4°F to ~ 140°F (-20°C ~ +60°C) 10% ~ 90%, non-condensing					
Maximum BTU	0.85 BTU/hr					
Impact	Low, free from single use plastic					
Dimensions and Weight (Connector Housing)						
Height	9mm/0.36in					
Width	19.8mm/0.78in					
Depth	39.5mm/1.56in					
Weight	NA					
Cable Length (Connector to Connector)	CAB-HAOC -15-x	CAB-HAOC -20-x	CAB-HAOC -30-x	CAB-HAOC -40-x	CAB-HAOC -50-x	
	15m/50ft	20m/65ft	30m/98ft	40m/131ft	50m/164ft	
Regulatory						
Safety and Emission	CAB-HAOC-xx-C: CE FCC RoHS CPR		CAB-HAOC-xx-P: CE FCC RoHS Plenum UL (CL3) FT6			

Right Product for the Right Application.



Note: Cable is unidirectional. Follow the connector labeling and color coding to ensure proper operation of the cable.