

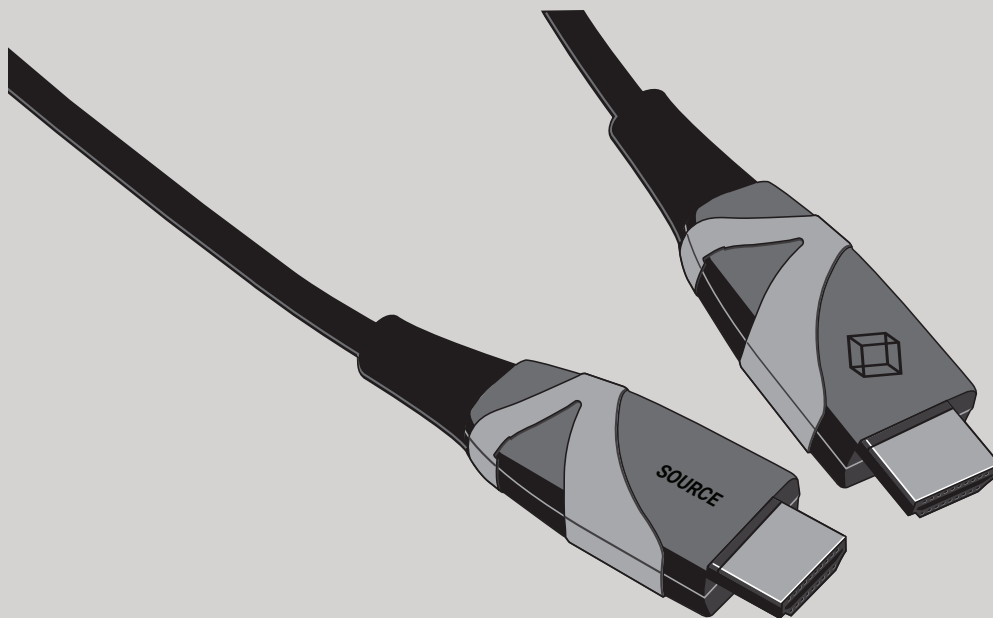
DATA SHEET

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# HDMI 2.0 ACTIVE OPTICAL CABLE, 4K60, 4:4:4, 18 G

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24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT [BLACKBOX.COM](http://BLACKBOX.COM)



# OVERVIEW

## HDMI 2.0 ACTIVE OPTICAL CABLE, 4K60, 4:4:4, 18 GBPS DATA SHEET



### INTRODUCTION

Black Box HDMI Active Optical Cables flawlessly transmit uncompressed, full Ultra HD 4K60 (4:4:4) video signals hundreds of meters. This all-in-one cable design is plug-and-play, and eliminates the need for a modular solution including a transmitter, receiver, copper cabling, power and all of the potential points of failure that come with it. Simply connect the cable between your source and display like a standard copper cable and leave it to flawlessly transmit your audio/video signal without worry of signal loss or degradation. The cable is unidirectional: the source side connector connects to the source, and the display side connects to the display.

Built-in technology inside the connectors actively converts the electrical HDMI signal into an optical signal for transmission, and then back to electrical for display. They also use a hybrid design that includes both copper and fiber, in which the fiber technology allows for significantly increased bandwidth that supports transmission of full Ultra HD video resolutions at distances that the copper alternatives just can't come close to. It also provides higher immunity to EMI/RFI interference and electromagnetic noise. And the inclusion of copper wiring in the design allows for power to go over the cable, meaning no external power is required. This design also makes for a much thinner and more flexible cable with a tighter bend radius, making it easy to pull through tight spaces and more freely navigate around corners and bends, not to mention much lighter than its all-copper counterparts.

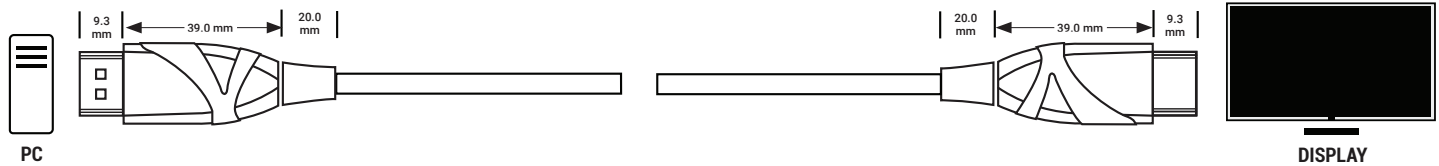
Black Box Active Optical Cables are the perfect A/V distribution solution for control rooms, digital signage, healthcare, conference rooms, mass transit and any other application where uncompromised, Ultra High Definition video is required at extended distances.

### FEATURES

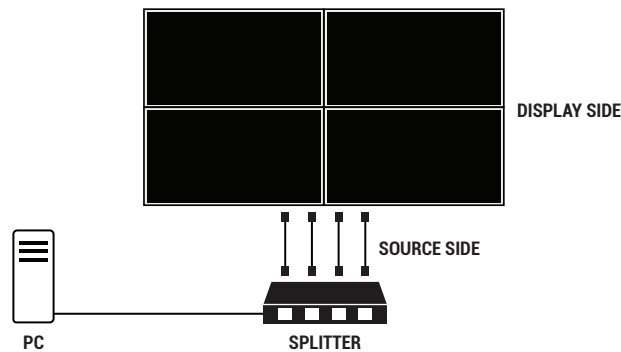
- **EXTEND FULL 4096 X 2160 (4K) @ 60 HZ 4:4:4 VIDEO SIGNALS UP TO 100 M**
- **DATA TRANSFER RATES UP TO 18 GBPS**
- **HIGH DYNAMIC RANGE (HDR) VIDEO FOR EXPANSIVE CONTRAST RATIO AND COLOR ACCURACY**
- **SUPPORTS DELIVERY OF DUAL VIDEO STREAMS TO A DISPLAY (IF SUPPORTED BY DISPLAY)**
- **21:9 CINEMA ASPECT RATIO**
- **SUPPORTS BT.2020 COLORIMETRY**
- **COMPLIANT WITH CATEGORY 2 (600 MHZ CLOCK FREQUENCY) SPECIFICATIONS**
- **PCM 8-CHANNEL, DTS-HD MASTER, AND DOLBY DIGITAL TRUE HD SURROUND SOUND AUDIO**
- **UP TO 32 AUDIO CHANNELS WITH 1536 HZ SAMPLING RATE**
- **SUPPORTS DELIVERY OF MULTI-STREAM AUDIO TO UP TO 4 USERS**
- **COMPATIBLE WITH AUDIO RETURN CHANNEL (ARC)**
- **SUPPORT EDID/CEC/DDC**
- **COMPLIANT WITH ALL HDMI 2.0 AND HDCP 2.2 SPECIFICATIONS**
- **GOLD-PLATED CONNECTORS ENSURE OPTIMAL PERFORMANCE**
- **PLUG AND PLAY, NO SOFTWARE TO BE INSTALLED. THE SOURCE SIDE CONNECTOR CONNECTS TO THE SOURCE, AND THE DISPLAY SIDE CONNECTOR CONNECTS TO THE DISPLAY**
- **HYBRID CONSTRUCTION UTILIZES BOTH COPPER AND FIBER. NO EXTERNAL POWER IS REQUIRED.**
- **ULTRA-THIN, FLEXIBLE CABLING MAKES IT EASY TO PULL THROUGH TIGHT SPACES AND NAVIGATE CORNERS AND BENDS WITH LOW RISK OF SIGNAL LOSS**
- **FIBER TECHNOLOGY GREATLY REDUCES EMI/RFI EMISSIONS**
- **TRIPLE-SHIELDING FURTHER PROTECTS AGAINST INTERFERENCE TO ENSURE OPTIMAL SIGNAL QUALITY**
- **FEATURES ZINC ALLOY HDMI CONNECTORS FOR ENHANCED DURABILITY**

# DIAGRAMS, SPECIFICATIONS, AND ORDERING INFORMATION

## HDMI 2.0 ACTIVE OPTICAL CABLE, 4K60, 4:4:4, 18 GBPS



### APPLICATION DIAGRAM



HDMI 2.0 ACTIVE OPTICAL CABLE, 4K60, 4:4:4, 18 GBPS	
CONNECTOR A	HDMI male
CONNECTOR B	HDMI male
CONNECTOR PLATING	Gold
LENGTH	Up to 656 ft. (200 m)
HDMI SPECIFICATION	2.0
HDCP SPECIFICATION	HDCP 2.2
MAX. VIDEO RESOLUTION	4096 x 2160 / 3840 x 2160 @ 60Hz (4:4:4)
MAX. COLOR DEPTH	30/36/48-bit Deep Color: 48-bit
BANDWIDTH	18 Gbps
MAX. PIXEL CLOCK	600 MHz
JACKET TYPE	LSZH
FIBER TYPE	OM3 MMF
OUTER DIAMETER	0.189" (4.8 mm)
OPERATING TEMPERATURE RANGE	32 to 158° F (0 to 70° C)
STORAGE TEMPERATURE RANGE	14 to 158° F (-10 to 70° C)
OPERATING HUMIDITY RANGE	10 to 85% RH, condensing
STORAGE HUMIDITY RANGE	5 to 89% RH, noncondensing
POWER CONSUMPTION	250 mW
COMPLIANCE	FCC, CE, RoHS
WARRANTY	3-year limited warranty

ITEM	CODE
10-m	AOC-HL-H2-10M
15-m	AOC-HL-H2-15M
30-m	AOC-HL-H2-30M
50-m	AOC-HL-H2-50M
100-m	AOC-HL-H2-100M

### DISCLAIMER

Black Box Corporation shall not be liable for damages of any kind, including, but not limited to, punitive, consequential or cost of cover damages, resulting from any errors in the product information or specifications set forth in this document and Black Box Corporation may revise this document at any time without notice.

\*NOTE: The longest length stock model is the 100 m AOC-HL-H2-100M

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