

# TECHNICAL SPECIFICATION



## Active Optical HDMI Cable

Part Number:	P-HDFH-XX
Revision Number:	1
Date:	6-23-2016
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1723 W. 4th Street Tempe Arizona 85281

P: 800.638.6104 | F: 480.966.6728 | E: sales@covid.com www.covid.com

The Covid Active Optical Cable is the perfect solution for critical AV installations that demand flawless signal integrity. The latest advances in technology allow the Active Optical Cable to be compliant with 3D, 4K UHD resolutions, as well as features like HPD, EDID, HDCP and CEC link operations.

The Active Optical Cable has features unlike any other which make it the best choice when flexibility is the key. The Active Optical Cable is thinner, lighter and more flexible than copper.

The Active Optical Cable is offered at lengths up to 100m (328ft.), which is far beyond the normal reach of conventional copper HDMI cables. Covid is proud to offer cable jackets that comply with the UL standards and have a Plenum (CMP) Rating, (Low Smoke Zero Halogen, LSZH) Also available by special order).

**Note:** These cables are recommended for point-to-point application use only. Not to be used with wall plates, additional patch cables or coupling devices.

## Features

- Supports full 1080p, up to 4K 30Hz, 3D, Deep Color
- Multi-channel Audio, Dolby TrueHD, DTS-HD Master Audio
- EDID, CEC, HDCP compliant
- Plug & Play Operation
- Built-in powering (No external 5V USB power port)
- High pulling strength & compression load
- Plenum rated
- 5mm bend radius
- Optional cable jacket: UL CMP-OF (Plenum), LSZH (Low Smoke Zero Halogen)

## Applications

- Professional AV systems interconnection
- In & outdoor digital signage panels & kiosks
- Home theater systems
- Facility automation systems

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## Active Optical HDMI Cable

## Absolute Maximum Ratings

Parameter	Symbol	Min.	Typ.	Max	Unit
Supply Voltage	VCC	-0.5		6	V
Storage Temperature	Tstg	-30		70	°C
Relative Humidity	RH	5		85	%
Electrostatic Discharge Immunity (Air: 8kV, Contact: 6kV)		B			Class

## Recommended Characteristics

Parameter	Symbol	Min.	Typ.	Max	Unit
Supply Voltage <sup>1</sup>	VCC	4.8	5	5.3	V
Operating Temperature	T <sub>OP</sub>	0		50	°C

<sup>1</sup> All power supplied from HDMI port.

## Electric Characteristics

Parameter	Symbol	Min.	Typ.	Max	Unit
Operating Current	I <sub>OP</sub>	35	47	56	mA
Power Consumption	P <sub>O</sub>	0.18	0.24	0.28	W
TMDS Different Input Voltage	V <sub>ID</sub>	400		1600	mV
TMDS Different Output Voltage	V <sub>OD</sub>	200	300	400	mV
TMDS Data Bit Rate		250		3400	Mbps

## Physical Characteristics

Parameter	Value	Unit
Cable Dimensions (WXH)	3.4mm (±0.2mm)	mm
Cable Color	Gray	-
Optical Fiber	62.5 Multi-mode fiber	um
Copper Wire	28 AWG TA (7/0.127mm)	-
Cable Jacket Material	CMP-OF (UL) & LSZH	-
Connector Pull Strength	50	Kg
Compression Load Resistance	50	Kg
Minimum Bending Radius	6	mm
Case Material	PC (Polycarbonate)	-

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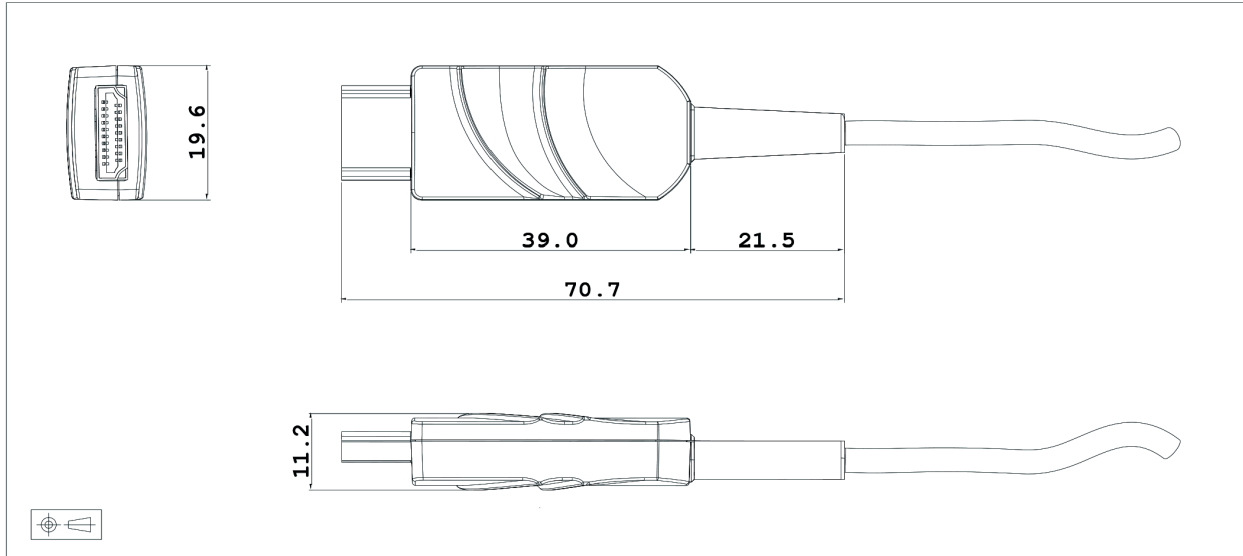
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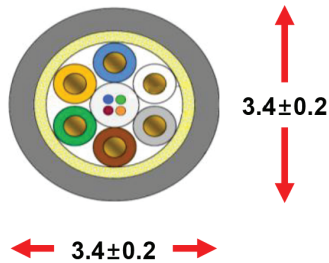
## Product Dimensions

Unit of Measure (mm)



### - Cable

Unit of Measure [mm]



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## Physical Characteristics

Pin	Symbol	
1	CH2+	TMDS data signal channel 2 positive
2	GND	TMDS data signal channel 2 shield
3	CH2-	TMDS data signal channel 2 negative
4	CH1+	TMDS data signal channel 1 positive
5	GND	TMDS data signal channel 1 shield
6	CH1-	TMDS data signal channel 1 negative
7	CH0+	TMDS data signal channel 0 positive
8	GND	TMDS data signal channel 0 shield
9	CH0-	TMDS data signal channel 0 negative
10	CLK+	TMDS data signal channel positive
11	GND	TMDS clock signal channel shield
12	CLK-	TMDS clock signal channel negative
13	CEC	That are conn. through HDMI, by using only one of their remote controls
14	N.C	N.C.
15	SCL	DDC clock
16	SDA	DDC data
17	GND	DDC/CEC shield
18	5V	DC +5V
19	HPD	Monitor detector signal

## Product Installation Diagram



1. Plug in Tx connector labeled "SOURCE" to HDMI port on source device like Blu-ray player.
2. Plug in Rx connector labeled "DISPLAY" to HDMI port of display device like a monitor.
3. TAKE the same steps when connecting a tablet, PC or other source devices with projectors or other displays.

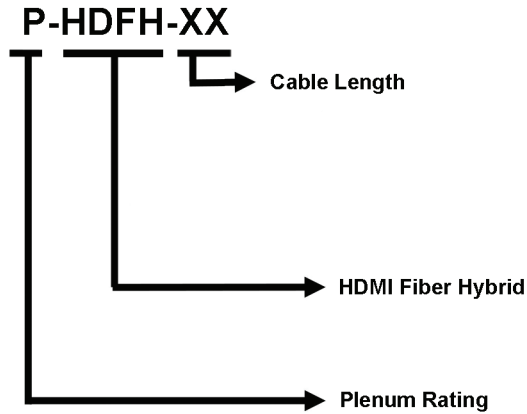
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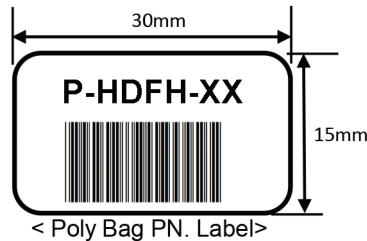
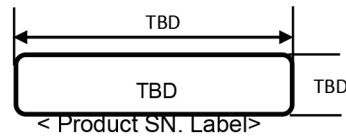
## Ordering Information



## Cable Length Index

Length	Code
32ft.	32
49ft.	49
75ft.	75
98ft.	98
164ft.	164
196ft.	196
262ft.	262
328ft.	328

## Product Labeling



## Safety Labels



Caution Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

-Please do not disassemble, Modify the product or cut off the cable

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