

## CLS-AOCH / CP-AOCH Fiber Optic HDMI Cable

Congratulations on purchasing your Kramer **CLS-AOCH / CP-AOCH** Plug and Play active Fiber Optic HDMI Cable. The **CLS-AOCH / CP-AOCH** provides an extremely high quality signal over a wide range of resolutions, up to 4K@30Hz. This cable is available at lengths of 33ft (10m), 50ft (15m), 66ft (20m), 98ft (30m), 131ft (40m), 164ft (50m), 197ft (60m), 230ft (70m), 262ft (80m), 295ft (90m) and 328ft (100m).

The **CLS-AOCH / CP-AOCH** is ideal for long distance transmission in professional AV systems, indoor and outdoor digital signage and kiosks, home theater systems, surgical theaters, facility automation systems and whenever high resolution video and audio is required.

## Features

The **CLS-AOCH / CP-AOCH**:

- Supports a wide range of resolutions up to 4K@30Hz Full HD, 3D, Deep Color
- Supports Multi-channel audio, Dolby True HD, dts-hd Master Audio
- Is HDMI compliant: EDID, CEC, HDCP
- Provides protection from electromagnetic interference (EMI) and radio frequency interference (RFI)
- Has built-in powering with low power consumption
- Has high pulling strength

## Cable Dimensions

The **CLS-AOCH / CP-AOCH** includes four optical fibers and six AWG 28 wires with compact size HDMI connectors. The cable has a SOURCE end to which the source is connected (for example, a DVD, Blu-ray or game console box) and a DISPLAY end to which the acceptor is connected (for example, a projector, an LCD display or a tablet device), see [Figure 1](#)

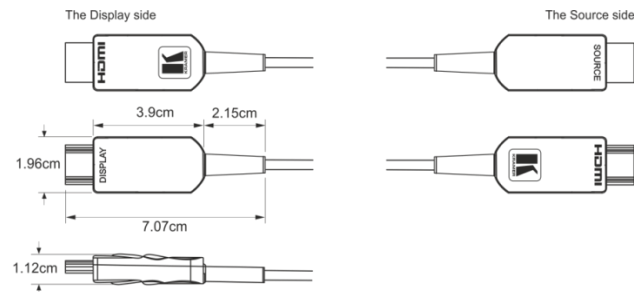


Figure 1: HDMI Connectors – SOURCE and DISPLAY (with Dimensions)

## CLS-AOCH / CP-AOCH Plug and Play Installation

Before installing the cable, make sure that you have an HDMI graphic card or devices with an HDMI port (for example, a PC, laptop, DVD/Blue-ray player or any other video/audio signal source devices).



Kramer **CLS-AOCH / CP-AOCH** Fiber Optic HDMI cables are designed to take +5V DC power from the source devices to the HDMI pin #18 of the SOURCE side connector on the cable.

Optical fiber cable is not robust physically compared to conventional copper cable materials. Even if this cable is designed to be seamlessly resistant at certain levels of artificial strengths to the cable, **CLS-AOCH / CP-AOCH** can be damaged if it is excessively pinched, twisted or kinked when being installed and after being installed. **Be careful not to bend or twist the cable tightly.**

When **CLS-AOCH / CP-AOCH** is installed into the conduit, the fiber pulling strength and the bending radius are the key conditions to safe installation of the cable:

**Fiber bending radius:** 6mm

**Fiber pulling/tensile strength:** 50kg (500N)

**Crush Resistance:** 50kg (500N)

Do not disassemble or modify the products, especially the HDMI connector head parts. Do not remove the dust plug before the cable laying process is completed. HDMI connector heads are very critical parts. Remove the head at the last moment just before the connector is plugged into the source or the display devices after the installation is complete.

To install the **CLS-AOCH / CP-AOCH**:

1. Unpack the cable from the package with care and remove the cable tie. We recommend that you save the original box and packaging materials for possible future shipment.
2. Install the cable (for example, an in-wall or conduit installation or under-floor installations).
3. Once the cable installation is complete, remove the dust cap and plug the SOURCE connector head of the cable into the source devices.  
**Do not plug the SOURCE connector to the display device.**
4. Remove the dust cap and plug the DISPLAY connector head of the cable into the display devices.  
**Do not plug the DISPLAY connector to the source device.**
5. Switch on the power of source and display devices.

## Troubleshooting

If you have encountered a problem, check that:

- The source and display devices are both switched on
- Both HDMI connector heads are fully plugged into the devices
- The cable or its jacket are not physically damaged
- The cable is not bent or kinked



Note that it is important to connect the cable correctly as marked on the end of each connector: SOURCE to the source side and DISPLAY to the acceptor side.

## Specifications

Audio and Power	
VIDEO RESOLUTION:	1080p Full HD Deep Color 48bit, 3D, 4K@30Hz
EMBEDDED AUDIO SUPPORT:	PCM 8ch, Dolby Digital True HD, DTS-HD Master Audio
HDMI COMPLIANCE:	HDCP, EDID, CEC
PIXEL CLOCK RATE:	300MHz
DDC SIGNAL INPUT:	5.0V
Cable Assembly	
HDMI CONNECTOR:	Male HDMI Type A Connector
HDMI CONNECTOR DIMENSIONS:	7.07cm x 1.96cm x 1.12cm (2.78" x 0.8" x 0.44") W, D, H
CABLE STRUCTURE:	Hybrid Optical Fiber Cable
CABLE JACKET MATERIAL:	UL Plenum (CMP-OF) and LSZH (Low Smoke Zero Halogen)
CABLE DIAMETER:	3.4mm
CABLE BENDING RADIUS:	6mm
MAX. PULLING STRENGTH:	500N (50kg, 110lbs)
MAX. COMPRESSION LOAD RESISTANCE:	500N (50kg, 110lbs)
Power	
POWER SUPPLY HDMI:	PIN # 18 (draws current from the source)
POWER CONSUMPTION:	0.25W
General	
OPERATING TEMPERATURE:	0° to +50°C (32° to 122°F)
STORAGE TEMPERATURE:	-30° to +70°C (-22° to 158°F)
OPERATING HUMIDITY:	5% to 85%, RHL non-condensing
AVAILABLE SIZE:	33ft (10m), 50ft (15m), 66ft (20m), 98ft (30m), 131ft (40m), 164ft (50m), 197ft (60m), 230ft (70m), 262ft (80m), 295ft (90m) and 328ft (100m)
WEIGHT:	1.46kg (3.22lbs) approx.



KRAMER ELECTRONICS LTD.

# Installation Instructions

MODELS:

**CLS-AOCH** (Low Smoke Version)  
**CP-AOCH** (Plenum Version)

Fiber Optic HDMI Cables

For the latest information on our products and a list of Kramer distributors, visit our Web site where updates to these installation instructions may be found.

We welcome your questions, comments, and feedback.  
Web site: [www.kramerelectronics.com](http://www.kramerelectronics.com)  
E-mail: [info@kramerelect.com](mailto:info@kramerelect.com)



### SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing

P/N: 2900-300442 Rev 3



P/N: 2900-300442



Rev: 3