

# KRAMER



## Installation Instructions

MODEL:

### CRS-AOCH/CLR/60

Rental & Staging Active Optical High-Speed  
HDMI Cable



P/N: 2900-300956



Rev: 1



#### SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing

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

We welcome your questions, comments, and feedback.

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# CRS-AOCH/CLR/60 Rental & Staging Active Optical High-Speed HDMI Cable

Congratulations on purchasing your Kramer **CRS-AOCH/CLR/60** Plug and Play active Rental & Staging Active Optical High-Speed HDMI Cable. The **CRS-AOCH/CLR/60** provides an extremely high quality signal over a wide range of resolutions, up to 4K@60Hz. This cable is available in various lengths from 33ft (10m) up to 328ft (100m).

## Features

The **CRS-AOCH/CLR/60**:

- Supports a wide range of resolutions up to 4K@60Hz Full HD, 3D, Deep Color.
- Supports Multi-channel audio, Dolby True HD, DTS-HD Master Audio.
- Is HDMI compliant: EDID, CEC, HDCP 2.2.
- Inherently 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 **CRS-AOCH/CLR/60** includes four optical fibers and six AWG 28 wires with compact size HDMI connectors. The cable has a SOURCE **green** colored end to which the source is connected (for example, a DVD, Blu-ray or game console box) and a DISPLAY **red** colored end to which the acceptor is connected (for example, a projector, an LCD display or a tablet device), see [Figure 1](#).

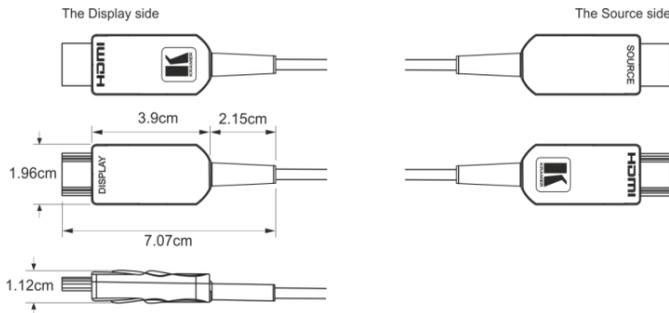


Figure 1: HDMI Connectors – SOURCE and DISPLAY (with Dimensions)

## CRS-AOCH/CLR/60 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 **CRS-AOCH/CLR/60** 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, **CRS-AOCH/CLR/60** 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 **CRS-AOCH/CLR/60** is installed into the conduit, the fiber pulling strength and the bending radius are the key conditions to safe installation of the cable:

**Maximum fiber bending radius:** 90mm

**Maximum 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 **CRS-AOCH/CLR/60**:

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 **green** connector head of the cable into the source devices.  
**Do not plug the SOURCE **green** connector to the display device.**
4. Remove the dust cap and plug the DISPLAY **red** connector head of the cable into the display devices.  
**Do not plug the DISPLAY **red** 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 is not physically damaged
- The cable is not bent or kinked



It is important to connect the cable correctly as marked on the end of each connector: SOURCE (green) to the source side and DISPLAY (red) to the acceptor side.

## Specifications

Audio and Power	
Video Resolution:	Up to 4K@60Hz (4:4:4)
Embedded Audio Support:	PCM 8ch, Dolby Digital True HD, DTS-HD Master Audio
HDMI Compliance:	HDCP 2.2, HDR, EDID, CEC
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:	TPU (Thermoplastic Polyurethane), complied with IEC 60794-1-21 E2A
Cable Diameter:	4.5mm
Cable Bending Radius:	90mm
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:	0.65W
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:	Weight changes per length