

DATA SHEET

HDMI 2.0 Active Optical Cable, HDFC-200

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■ Description

HDMI 2.0 active optical cable, HDFC-200, enables to transmit 4K (4096x2160) at 60Hz signal up to 100m (384feet) over plenum graded & LSZH hybrid cable. It avoids any scaling or data compression for lessening a burden of data transmission. HDFC-200 is designed compact enough to be fitted into various installation environments with cutting edge technology performance. It gives slim, light, easy installation like a general copper HDMI cable. It can be operated by external USB power on the RX side of the cable. For the devices with insufficient power supply from HDMI source such as media player or signal generator, optional USB power cable on TX side is also available upon request. High-Retention HDMI connector, which allows for more retention force than standard HDMI connector, prevents accidental disconnect.

HDFC-200 is compliant with HDMI standards features like CEC, EDID, and HDCP 2.2 for better installation flexibility and compatibility.

■ Features

- Extends up to 4K (4096x2160) at 60Hz (RGB & YCbCr : 4:4:4)
- Transmits HDMI 2.0 data up to 100m (328feet) over hybrid cable
- Adopts plenum graded & LSZH (Low Smoke Zero Halogen) hybrid cable
- Prevents accidental disconnection by using High-Retention HDMI connector
- Supports 3D contents transmission
- Supports HDMI2.0 standards feature
- Operates by external USB power on the display (RX) side
- Provides USB power cable on TX side for insufficient power supply (optional)

■ Applications

- Home AV system
- Control room
- Projectors and Displays for Conference room
- Console Game

■ Absolute Maximum Ratings

Stresses in excess of the absolute maximum ratings can cause permanent damage to the device. These are absolute stress ratings only. Functional operation of the device is not implied at these or any other conditions in excess of those given in the operational sections of the datasheet. Exposure to absolute maximum ratings for extended periods can adversely affect device reliability.

Parameter	Symbol	Min	Typ	Max	Units
Storage Temperature ¹	T _{ST}	-20		85	°C
Supply Volt ¹	V _{CC}		5	6	V
Relative Humidity ²	RH			90	%
Electrostatic Discharge	ESD	-8		+8	KV

■ Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Units
Bitrate/Channel	B			6	Gbps
Operation Temperature Range	T _o	0		70	°C
Supply Voltage	V _{CC}	4.8	5	5.2	V
Operating Current	I _{CC}		290	320	mA
Differential Impedance	R		100		ohm

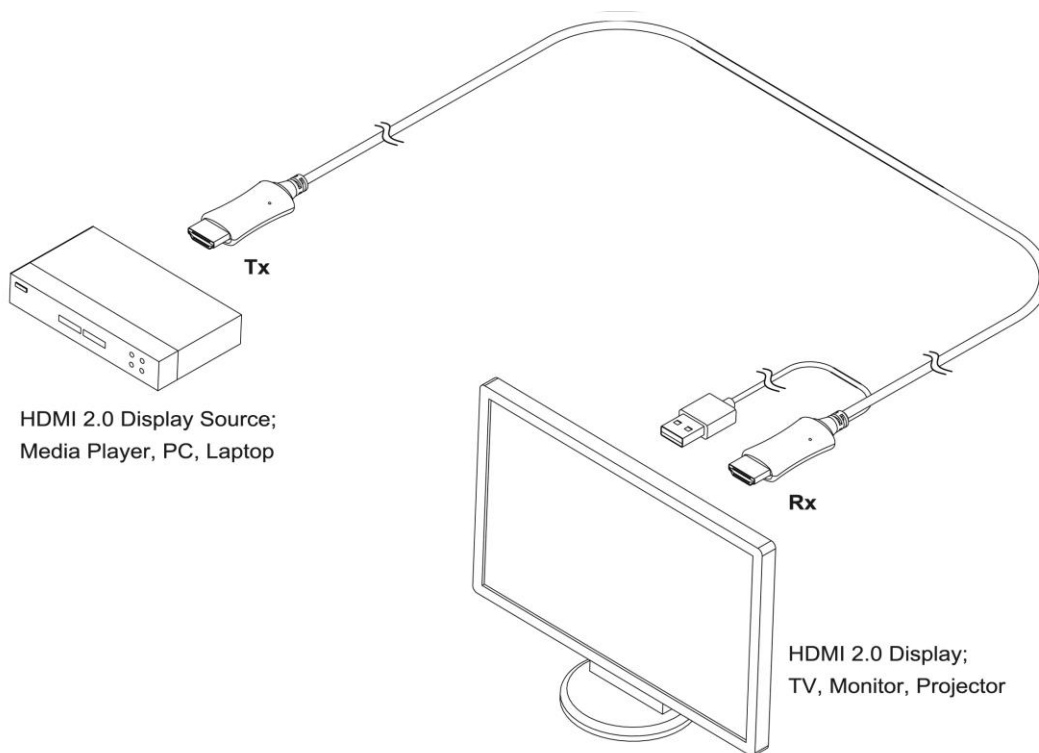
■ Physical Characteristics

Parameter	Description
Cable Type	Hybrid Cable MMF(OM2) + 6C Electrical Wires
Cable Jacket	LSZH/Plenum
Cable Dimensions(WxH)	3.9 x 2.7 mm
Pull Strength	15 kg
Minimum Bend Radius	70 mm

¹ Stresses listed may be applied without causing damage. Functionality at or above the values listed is not implied. Exposure to these values for extended periods may affect reliability.

² Non-condensing environment.

■ **Connection Diagram**



Example : PC to HDMI Monitor Set-up

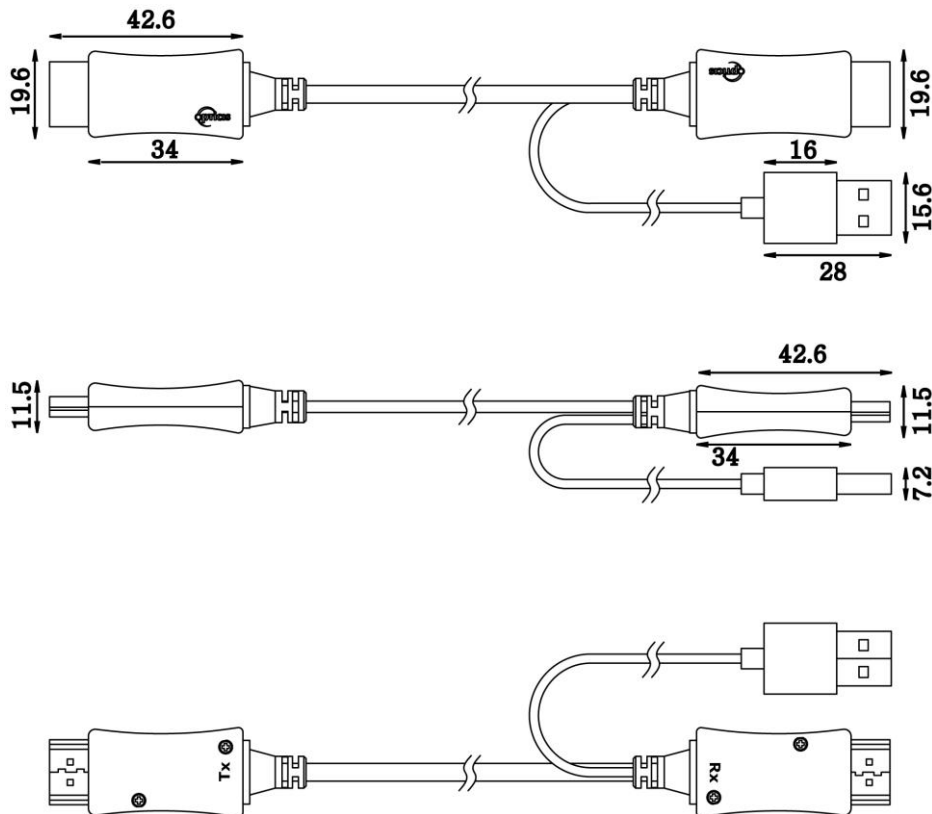
- Source : DVD, PC, Set-top box, Console
- Display : UHD TV, Projector, 4K monitor

■ **HDMI A-Type PIN Description**

Pin Number	Symbol	Functional Description
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 Clock Channel Positive

11	GND	TMDS Clock Channel Shield
12	CLK-	TMDS Clock Channel Negative
13	CEC	CEC Consumer Electronics Control
14	Utility	HEAC+
15	SCL	SCL HDCP/DDC
16	SDA	SDA HDCP/DDC
17	GND	DDC/CEC Ground & DDC/CEC shield
18	+5V Power	+5V Power
19	HPD	HEAC-

■ Dimensions(Unit/mm)



Size (L*W*H): 42.6x 19.6 x 11.5mm