

# JBBELL Audio/Video Connectors, **HDMI A-Couplers**

**iSTATION**<sup>™</sup> System Front-Loading Footprint.

High Definition Video.

1080p Signal Transmission.

High Quality Gold Connection.



# **SPECIFICATIONS**

- Connector: HDMI - Female to female 3" tail; HDMI - Female to female coupler. Gold-plated 2µ". Version 1.3.
- Audio Signal: PCM, DVD-Audio, Super Audio CD, Dolby True HD, DTS-HD Master Audio.
- Video Signal: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p.
- **Pins**: 19.

# **CABLE TERMINATION**

Cable Type: Standard HDMI cable assemblies. Note: Can not be field terminated.

# Standard HDMI Distance Limitation:

- 28 AWG Cable Assemblies 5 meters.
- 24 AWG Cable Assemblies 12 meters.
- Always check cable/device manufacturer's specifications.

## Hubbell Distance Limitations:

 Maximum of 36 feet device to device (Non-Active Hubbell Cable Assemblies).

# **CONNECTOR TERM**

HDMI: High-Definition Multimedia Interface is a digital audio/video connector interface for transmitting uncompressed digital streams. HDMI connects through digital rights management (DRM) from the source to the device.

Hubbell's HDMI couplers provides an easy way to run High Definition Audio/Video from device to device. The high performance, high quality video connection is designed for minimal signal loss delivering true high definition 1080p video to the viewing device.

Hubbell's HDMI 3" tail provides flexibility and ease-of-use for installations that have depth and capacity issues. Hubbell's HDMI couplers fit into a high-density 1 unit **iSTATION**™ module allowing for 2 additional units to be placed into a single gang faceplate for additional applications.

Create a customized multimedia work station outlet by adding a high-density HDMI coupler along with Hubbell's extensive line of AV connectors, **iSTATION**<sup>™</sup> modules and **XCELERATOR**<sup>™</sup> jacks.

## **APPLICATIONS SUPPORTED**

- Projectors.
  - Flat panel monitors.
- Smart whiteboard technology.

DVR, DVD, HD DVD, Blu-Ray.

- Game consoles.
- Camcorders.
- Desktop and laptop computers.
- Multimedia devices.
- Audio/Video receivers.

# **INSTALLATION TIPS**

Important: Always allow for clearance behind connection location to ensure for proper bend radius with HDMI cable assemblies.

Gold Plating: Gold plating encapsulates the connectors base metal (brass) preventing allowing oxidation/corrosion to form. It also has a more transparent (signal) conductive path over nickel (3x), which is closer to the copper its transmitting over.

# TYPICAL APPLICATIONS

## Application 1 - Plate-to-Plate (Coupler to Coupler)

• HDMIT(1/10) - 3" Tail Coupler can be used when cable depth constraints are encountered.

• HDMIC(1/10) - Coupler can be used when cable depth constraints are not an issue

• HDHxxBK – HDMI locking horizontal cord (male screw plug to male screw plug) locks connections in place, not allowing a plug to coupler disconnect.

Note: Maximum Hubbell non-active channel distance is 36 feet from device-to-device.





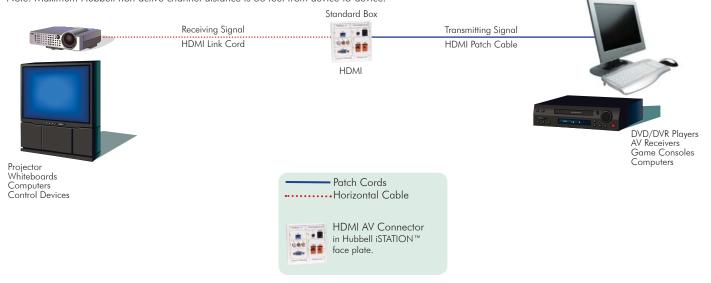
## Application 2 - Plate-to-Device (Coupler to Device)

• HDMIT(1/10) - 3" Tail Coupler can be used when cable depth constraints are encountered

- HDMIC(1/10) Coupler can be used when cable depth constraints are not an issue
- HDLxxBK HDMI locking Link Cord (male screw plug to male plug) locks connection in place in the plate and plugs directly into the device Note: Maximum Hubbell non-active channel distance is 36 feet from device-to-device.
- Standard Box **Receiving Signal** Transmitting Signal .. HDMI Link Cord HDMI Patch Cable --HDM DVD/DVR Players AV Receivers Game Consoles Computers Projector Whiteboards Computers Control Devices

## Application 3 - Plate-to-Device (Coupler Link Cord)

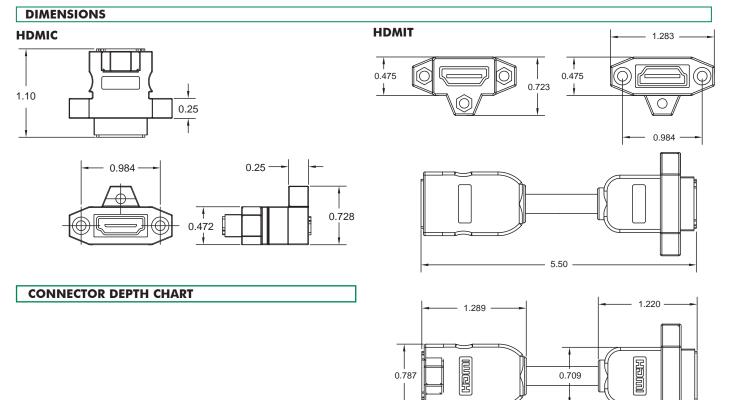
HDCxxBK - Coupler Link cord can be used when cable depth constraints are encountered – Coupler Link Cord (female coupler to male plug) mounts directly into the module/plate /frame and plugs directly into the device, eliminating an extra connection in the channel.
Note: Maximum Hubbell non-active channel distance is 36 feet from device-to-device.



2

# HUBBELL PREMISE WIRING

# WORK STATION



# HDMI CONNECTOR STANDARDS

HDMI Version & Capabilities	1	1.1	1.2/1.2	1.3/1.3a/1.3b
Maximum signal bandwidth (MHz)	165	165	165	340
Maximum TMDS bandwidth (Gbit/s)	4.95	4.95	4.95	10.2
Maximum video bandwidth (Gbit/s)	3.96	3.96	3.96	8.16
Maximum audio bandwidth (Mbit/s)	36.86	36.86	36.86	36.86
Resolutions @ 24bits per pixel	1920x1080p 60Hz	1920x1080p 60Hz	1920x1080p 60Hz	2560x1600p 60Hz
RGB	Yes	Yes	Yes	Yes
YCbCr	Yes	Yes	Yes	Yes
xvYCC	No	No	No	Yes
Deep Color	No	No	No	Yes
Maximum Color Depth (bits per pixel)	24	24	24	48*
Auto lip-sync	No	No	No	Yes
8channel/192 kHz/24-bit audio	Yes	Yes	Yes	Yes
Dolby TrueHD bit stream	No	No	No	Yes
DTS-HD Master Audio bit stream	No	No	No	Yes
Blu-Ray/HD DVD @ full resolution	Yes	Yes	Yes	Yes



# **AV Connectors, HDMI**



Description	Culuiog No.
HDMI Coupler, Gold, Female to Female, 1-pk	HDMIC1
HDMI Coupler, Gold, Female to Female, 10-pk	HDMIC10
HDMI 3" Tail, Gold, Female to Female, 1-pk	HDMIT1
HDMI 3" Tail, Gold, Female to Female, 10-pk	HDMIT10

### **HDMI Horizontal Cords**



HDMI Patch Cords	
Description	Catalog No.
HDMI Patch Cord, 24AWG, 3'	HDPC03BK
HDMI Patch Cord, 24AWG, 6'	HDPC06BK
HDMI Horizontal Cords (Connector	r to Connector)
HDMI Horizontal Cord, 24AWG, 10'	HDH10BK
HDMI Horizontal Cord, 24AWG, 15'	HDH15BK
HDMI Horizontal Cord, 24AWG, 20'	HDH20BK
HDMI Horizontal Cord, 24AWG, 15'	HDH25BK
HDMI Horizontal Cord, 24AWG, 30'	HDH30BK
HDMI Link Cords (Connector to Dev	rice)
HDMI Link Cord, 24AWG, 10'	HDL10BK
HDMI Link Cord, 24AWG, 15'	HDL15BK
HDMI Link Cord, 24AWG, 20'	HDL20BK
HDMI Link Cord, 24AWG, 15'	HDL25BK
HDMI Link Cord, 24AWG, 30'	HDL30BK
HDMI Coupler Cords (Coupler to D	evice)
HDMI Coupler Cord, 24AWG, 10'	HDC10BK
HDMI Coupler Cord, 24AWG, 15'	HDC15BK
HDMI Coupler Cord, 24AWG, 20'	HDC20BK
HDMI Coupler Cord, 24AWG, 15'	HDC25BK
HDMI Coupler Cord, 24AWG, 30'	HDC30BK
Note: Maximum Hubbell non-active channel	distance is 36 feet from devic

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### Unloaded HDMI 15/9-pin Plates, Frames and Modules

Catalog No.	Description
HDMI 15/9-pin Blank, Unloaded, 1 Unit, 10-pk	IMBDS1XX
HDMI/15/9-pin Blank, Angled Unloaded,	IMBDSA15XX
1.5 Unit, 1-pk	
HDMI 15/9-pin AV, Panel Mount Connector,	IMB153X2XX
3.5mm, Blank, 2 Unit, 1-pk	
HDMI 15/9-pin, 3.5mm, Blank, 2 Unit 1-pk	IMB15315XX
HDMI 15/p-Pin, Decorator Frame, 1-gang, 1-pk	IMISFB15XX
XX = Housing Colors	

"AL" = Almond; "B" = Black; "EI" = Electric Ivory; "GY" = Gray; "LA" = Light Almond; "OW" = Office White; "W" = White.



# **Hubbell Premise Wiring**

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DS-C120 4/08

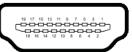
### Fax: 305-408-8201 Fax: (5255) 9151-9989 Fax: 971-4-393-4194 Fax: 787-855-3265 Fax: 886-2-2522-1872 Fax: 58-212-6627258

Type A connector has 19 pins, bandwidth supporting SDTV, EDTV, HDTV, etc. The outside dimensions of the plug is 13.9 mm wide by 4.45 mm high. Type A is electrically compatible with single-link DVI-D.

Type B connector is a higher resolution version defined in HDMI 1.0. Type B has 29 pins (21.2 mm wide by 4.45 mm high), allowing it to carry an expanded video channel for use with very high-resolution future displays - (WQSXGA (3200x2048). Type B is electrically compatible with dual-link DVI-D, but is not in general use.

**Type C** mini-connector is designed for portable multimedia devices (camcorders, cameras, etc). Outside dimensions (10.42 mm by 2.42 mm). Type C has the same 19-pin configuration as Type A.

## **HDMI PIN-OUT**



**iSTATION™ COMPATIBLE** 

**Hubbell Delivery System** 

• Decorator Frames

Floor Boxes

Non-Metallic

Table Boxes

• **iSTATION**<sup>™</sup> Front-loading Plates

 iSTATION<sup>™</sup> UDX Multimedia Panels • iFRAME® Vertical Patch Panel

Hubbell SystemOne Poke-Throughs and

• Multi-Connect<sup>™</sup> Wall Boxes/Conference

• Hubbell Surface Raceway, Metal and

**Work Station and Cross-Connect Solutions** 

Pin 1	TMDS Data2+	Pin 11	TMDS Clock Shield
Pin 2	TMDS Data2 Shield	Pin 12	TMDS Clock-
Pin 3	TMDS Data2-	Pin 13	CEC
Pin 4	TMDS Data1+	Pin 14	Reserved (N.C. on device)
Pin 5	TMDS Data1 Shield	Pin 15	SCL
Pin 6	TMDS Data1-	Pin 16	SDA
Pin 7	TMDS Data0+	Pin 17	DDC/CEC Ground
Pin 8	TMDS Data0 Shield	Pin 18	+5V Power
Pin 9	TMDS Data0-	Pin 19	Hot Plug Detect
Pin 10	TMDS Clock+		

# **HDMI CONNECTOR TYPES**