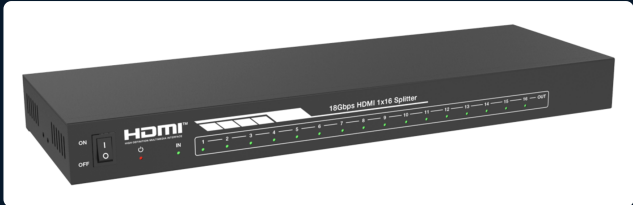


SPLITTERS · HDMI DISTRIBUTION AMPLIFIER

BLU-HDM-DA116

One 4K source, sixteen screens.

A 1×16 HDMI splitter that feeds one uncompressed 4K60 4:4:4 source to sixteen displays at once. 18 Gbps of bandwidth, HDR through Dolby Vision, and smart EDID management so every screen sees the right timing.



1 × 16 DISTRIBUTION	18 Gbps 594 MHZ	4K60 4:4:4 MAX RESOLUTION	HDCP 2.2 AND 1.X / DVI 1.0	Smart EDID + DIP PRESETS
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SPECIFICATION SUMMARY

Distribution	1 in × 16 out	Input	1× HDMI Type A, 19-pin
HDMI	HDMI 2.0b	Outputs	16× HDMI Type A, 19-pin
HDCP	HDCP 2.2 / 1.x	Service	Micro-USB update port
Bandwidth	594 MHz / 18 Gbps	Housing	Metal enclosure, black
Max resolution	4K2K @ 50/60 Hz 4:4:4	Dimensions	300 × 100 × 28 mm
HDR	HDR10+, HLG, Dolby Vision	Weight	900 g
Colour depth	up to 12-bit	Power	DC 12 V / 2.5 A
EDID	Smart management + DIP	Consumption	12 W
Compliance	DVI 1.0	Power switch	Front ON / OFF rocker
		Operating temp.	0 – 40 °C

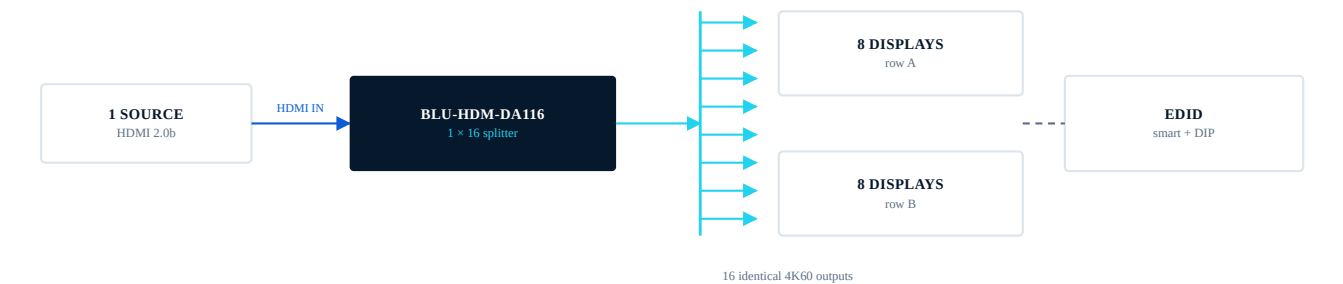
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TYPICAL USE

- Retail and hospitality video walls
- Command centres and control rooms
- Digital signage to many screens
- Bars, stadiums and transport displays

One in, sixteen out, all identical. Every output carries the same picture at the source's full resolution. Smart EDID picks a common format the whole wall can display; the DIP switch forces a preset when you need one.



DISTRIBUTION · ONE 4K60 SOURCE TO SIXTEEN DISPLAYS

01 Overview

What the splitter does, what it carries, and where it belongs.

The **BLU-HDM-DA116** is a 1×16 HDMI distribution amplifier. It takes a single HDMI source and drives sixteen displays simultaneously, each at the source's full resolution — up to **4K2K @ 50/60 Hz 4:4:4**. With 18 Gbps of bandwidth it passes uncompressed video, multichannel audio, HDCP and the full HDR range (HDR10, HDR10+, HLG and Dolby Vision) untouched to every output.

Because sixteen displays rarely share identical capabilities, the unit includes **smart EDID management** with a DIP-switch override, so it can present a single common format the whole wall can render. It ships in a black metal chassis with rack ears, powered from an external 12 V supply.

CAPABILITIES

- **HDMI 2.0b, HDCP 2.2 / 1.x and DVI 1.0** compliant
- **18 Gbps** video bandwidth (594 MHz)
- **4K2K @ 50/60 Hz 4:4:4** maximum resolution
- **Digital audio** — PCM 2.0/5.1/7.1, Dolby 5.1, DTS 5.1, Dolby TrueHD, DTS-HD
- **Full HDR** — HDR, HDR10, HDR10+, HLG and Dolby Vision
- **Smart EDID management** with 5-pin DIP override
- **Colour depth** to 12-bit (1080p60) and deep colour at 4K
- **Front ON/OFF switch**, power LED, input and per-output status LEDs (01–16)
- **Rack-friendly** metal chassis, designed for easy installation

AT A GLANCE

Split 1×16	HDMI 2.0b	HDCP 2.2/1.x
BW 18 Gbps	Max 4K60 4:4:4	
HDR Dolby Vision	EDID Smart+DIP	
PSU 12 V 2.5 A	Power 12 W	

AUDIO & HDR SUPPORT

PCM	2.0 / 5.1 / 7.1 CH
Compressed	Dolby 5.1, DTS 5.1
Lossless	Dolby TrueHD, DTS-HD
HDR formats	HDR10, HDR10+, HLG, Dolby Vision

Weakest-link EDID. On a mixed wall, set EDID to a format every display supports — often 1080p or a common 4K mode — so no screen drops out.

02 Specifications

Full technical, connection, mechanical and environmental figures.

TECHNICAL

HDMI compatibility	HDMI 2.0b
HDCP compatibility	HDCP 2.2 / 1.x
Video bandwidth	594 MHz / 18 Gbps
Video resolution	up to 4K2K @ 50/60 Hz 4:4:4
Colour depth	8 / 10 / 12-bit (1080p60) 8-bit (4K60 YUV 4:4:4) 8 / 10 / 12-bit (4K60 YCbCr 4:2:2 / 4:2:0)
Colour space	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 / 4:2:0
HDR	HDR, HDR10, HDR10+, HLG, Dolby Vision
HDMI audio	PCM 2.0 / 5.1 / 7.1 CH, Dolby 5.1, DTS 5.1, Dolby TrueHD, DTS-HD
ESD protection	Human body model ±8 kV air / ±4 kV contact

CONNECTIONS

Input	1× HDMI IN Type A, 19-pin female
Outputs	16× HDMI OUT Type A, 19-pin female
Control	1× SERVICE, Micro-USB update port 1× EDID DIP switch, 5-pin

MECHANICAL

Housing	Metal enclosure
Colour	Black
Front controls	ON/OFF switch, power LED, IN and 16× output LEDs
Dimensions	300 mm W × 100 mm D × 28 mm H
Weight	900 g

POWER

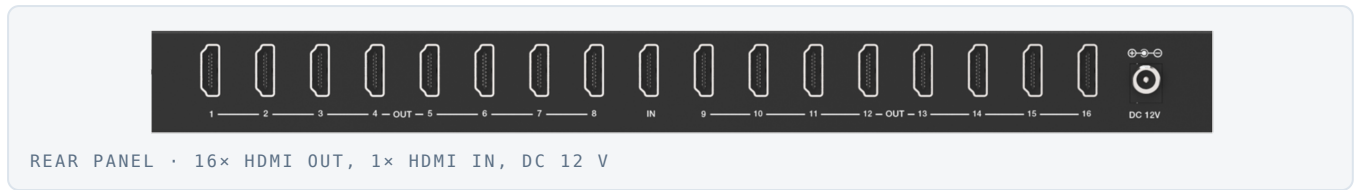
Adapter input	AC 100–240 V, 50/60 Hz
Adapter output	DC 12 V / 2.5 A US/EU, CE/FCC/UL
Consumption	12 W

ENVIRONMENT

Operating temperature	0 – 40 °C / 32 – 104 °F
Storage temperature	–20 – 60 °C / –4 – 140 °F
Relative humidity	20 – 90 % RH, non-condensing

03 Interfaces & EDID

Every connector on the unit, and how EDID keeps a mixed wall in sync.



- 1 DC 12V Barrel input from the external 12 V / 2.5 A supply (AC 100–240 V adapter, CE/FCC/UL).
- 2 HDMI IN Single HDMI Type A source input. HDMI 2.0b, HDCP 2.2 / 1.x.
- 3 HDMI OUT 01–16 Sixteen HDMI Type A outputs, each carrying the same picture at the source's full resolution.
- 4 SERVICE Micro-USB port for firmware updates and diagnostics. Accessed separately from the rear I/O row.
- 5 EDID DIP 5-pin DIP switch. Selects an EDID preset, or hands control to smart EDID management.

HOW EDID WORKS HERE

- **Smart mode** reads the connected displays and settles on a common format they can all show
- **DIP presets** force a fixed timing — useful when a display reports bad EDID or when you want the wall locked to one mode
- On a **mixed wall**, choose the highest format every screen supports so none drop out
- Changing EDID may briefly re-sync all outputs

BRING-UP ORDER

01

Power

Connect the 12 V supply; the power LED lights.

02

Source

HDMI IN from the player or matrix.

03

Displays

Fan out HDMI OUT 01–16 to the screens.

04

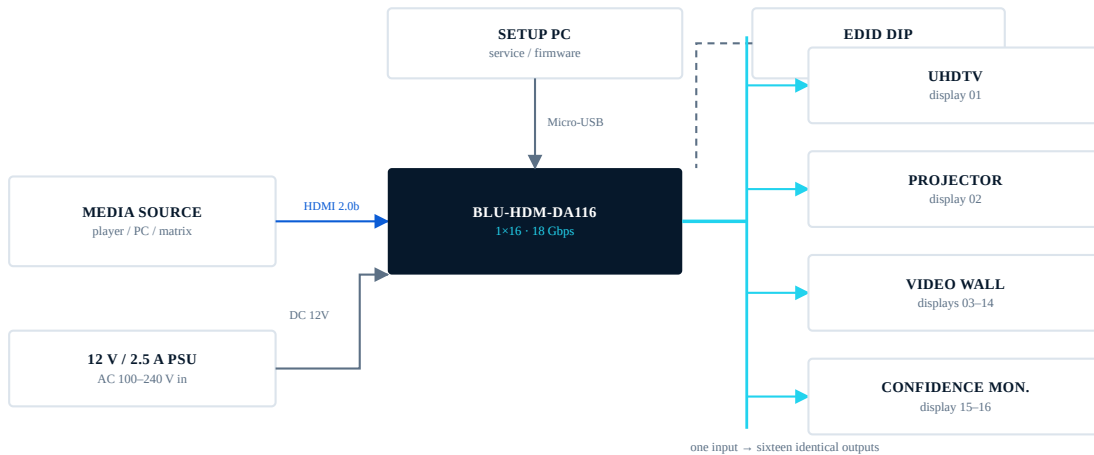
EDID

Set smart mode, or pick a DIP preset for the wall.

Cable matters at 4K60. Use certified Premium High Speed HDMI on every run; marginal cable shows first as sparkle or dropout on the longest output.

04 Application example

One source, sixteen destinations — a signage wall, an overflow room, a stadium concourse.



Every screen, the same feed. The splitter mirrors one 4K60 source to all sixteen outputs at once — no routing, no per-screen setup.

Plan the EDID first. On a wall of mixed panels, lock EDID to a format they all handle before going live.

ORDERING

BLU-HDM-DA116

1x16 HDMI splitter — HDMI 2.0b, 18 Gbps, 4K60 4:4:4, HDCP 2.2, HDR / Dolby Vision, smart EDID with DIP, 12 V DC

bluKnot

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www.bronx.co.in · admin@bronx.co.in · sales@bronx.co.in