

PRESENTATION SWITCHER · HDMI SWITCHER

BLU-HDM-41AB

# Four sources, one screen.

A 4K@60 HDMI 4x1 switcher that brings four HDMI 2.0 sources to one display, with auto or manual switching, digital + analog audio de-embed, and HDCP repeater, CEC and ARC. Selected from the front panel, IR remote or RS-232.



4 × 1

HDMI SWITCHER

18Gbps

4K@60HZ

Auto /  
Manual

SWITCHING

ARC

+ CEC

Optical +  
L/R

AUDIO OUT

## SPECIFICATION SUMMARY

|                |                            |
|----------------|----------------------------|
| Type           | HDMI 4x1 switcher          |
| HDMI           | HDMI 2.0a, DVI 1.0         |
| HDCP           | HDCP 2.2 / 1.4             |
| Bandwidth      | 18Gbps                     |
| Max Resolution | 4K2K@60Hz                  |
| Audio de-embed | Optical + L/R analog       |
| EDID           | Auto / 2CH / 5.1CH / 7.1CH |
| Switching      | Auto or manual             |
| Control        | Panel, IR, RS-232          |
| Power          | DC 5V/1A, 2.5W             |

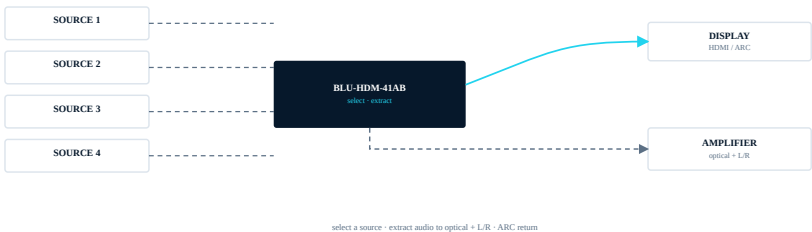
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## KEY FEATURES

- HDMI 2.0a, DVI 1.0; HDCP 2.2 / 1.4
- 4K2K@60Hz and all HDMI 3D formats
- Digital (optical) + analog (L/R) audio out
- HDCP repeater, CEC and ARC supported

**Four in, one out, no fuss.** Auto-switching jumps to the newest active source, or lock it to manual from the panel, IR or RS-232. Audio de-embeds to optical and L/R, and ARC returns display audio to the amplifier.



PRESENTATION SWITCHING · FOUR SOURCES TO ONE DISPLAY, WITH AUDIO DE-EMBED

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SWITCHER · 4 × 1

# 01 Overview

What the switcher does, and what's in the box.

This high-performance **HDMI 4×1 switcher** supports HDTV formats up to **4K2K@60Hz** and all HDMI 3D formats. It extracts HDMI stream audio to separate digital (optical) and analog (L/R) outputs, and supports HDCP repeater, CEC and ARC. Select any of the four inputs by front-panel button or IR remote — the corresponding LED illuminates — or drive it over RS-232. Smart EDID management keeps every source outputting a format the display can show.

## FEATURES

- Compliant with HDMI 2.0a, DVI 1.0
- HDCP 2.2 and HDCP 1.4 compliant
- Video up to 4K2K@60Hz and all HDMI 3D formats
- PCM, Dolby TrueHD, DTS-HD Master Audio up to 7.1CH
- Digital and analog audio output
- Smart EDID management (Auto / 2CH / 5.1CH selectable)
- Input auto-switching or manual switching mode
- Audio Return Channel (ARC) supported

## AT A GLANCE

**Switcher** 4×1

**HDMI** 2.0a

**HDCP** 2.2/1.4

**BW** 18Gbps

**Max** 4K60

**Audio** Opt + L/R

**EDID** Smart

**ARC** Yes

## PACKAGE CONTENTS

|    |                                |
|----|--------------------------------|
| 1× | HDMI 4×1 Switcher              |
| 1× | 5V/1A Power Adapter            |
| 1× | 38KHz IR Rx Cable              |
| 1× | Optical Convert Header (SPDIF) |
| 1× | HDMI 4×1 IR Remote             |
| 1× | Operational Manual             |

## 02 Specifications

Technical, connection, mechanical and environmental figures.

### TECHNICAL

|                     |                                                                   |
|---------------------|-------------------------------------------------------------------|
| HDMI Compliance     | HDMI 2.0a, DVI 1.0                                                |
| HDCP Compliance     | HDCP 2.2 / 1.4                                                    |
| Frequency Bandwidth | 18Gbps                                                            |
| Max Resolution      | 4K2K@60Hz, all 3D formats                                         |
| HDMI Audio Output   | PCM 2.1/5.1/7.1CH, Dolby 5.1,<br>DTS 5.1,<br>Dolby TrueHD, DTS-HD |
| ESD Protection      | Human-body Model:<br>±8kV (Air-gap), ±4kV (Contact)               |

### CONNECTIONS

|              |                                                   |
|--------------|---------------------------------------------------|
| Input Ports  | 4 × HDMI [female]<br>1 × IR Receive<br>1 × RS-232 |
| Output Ports | 1 × HDMI [female]<br>1 × L/R + Optical audio      |

### MECHANICAL

|            |                                |
|------------|--------------------------------|
| Dimensions | 180 (D) × 85 (W) × 11.6 (H) mm |
| Weight     | 300 g                          |

### POWER

|              |            |
|--------------|------------|
| Power Supply | DC 5V / 1A |
| Consumption  | 2.5W (Max) |

### ENVIRONMENT

|                 |                             |
|-----------------|-----------------------------|
| Operating Temp. | 0°C ~ 40°C / 32°F ~ 104°F   |
| Storage Temp.   | -20°C ~ 60°C / -4°F ~ 140°F |

## 03 Interfaces & control

The rear connections, and how switching and audio work.



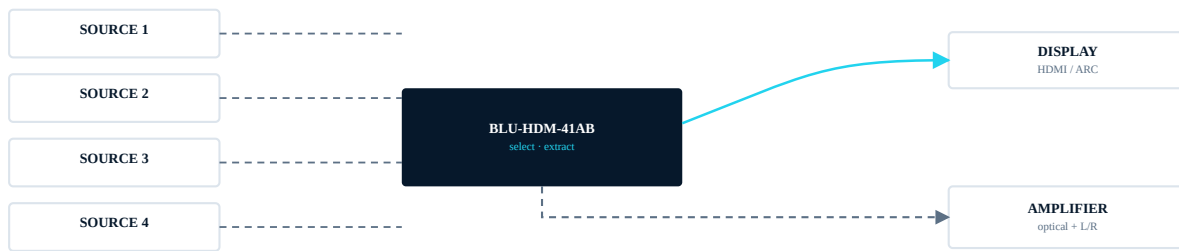
|   |                  |                                                                                 |
|---|------------------|---------------------------------------------------------------------------------|
| 1 | DC 5V            | Barrel input from the 5V / 1A supply.                                           |
| 2 | RS-232           | Serial control for input select / EDID / ARC.                                   |
| 3 | IR               | IR receiver input for the 38KHz Rx cable.                                       |
| 4 | HDMI IN 1–4      | Four HDMI Type A source inputs.                                                 |
| 5 | HDMI OUT + audio | HDMI output to the display, plus optical (SPDIF) and analog L/R audio de-embed. |

**Auto or manual.** Hold the select button >2s to toggle auto/manual; in manual, short-press to step through inputs. The active input's LED lights.

**EDID, dialled in.** Cycle the EDID button through Auto / 2CH / 5.1CH / 7.1CH so the sources output audio the system can decode.

## 04 Application example

Four sources into one display, with audio sent to a soundbar or receiver.



select a source · extract audio to optical + L/R · ARC return

**One remote, four sources.** Switch console, streamer, laptop and camera to a single screen from the panel or IR; ARC and de-embed feed the audio system.

**Small and quiet.** An 11.6mm-thin, 5V-powered switcher that tucks behind the display.

### ORDERING

BLU-HDM-41AB

4K@60 HDMI 4x1 Switcher — HDMI 2.0a / DVI 1.0, HDCP 2.2/1.4, 18Gbps, 4K2K@60Hz, optical + L/R audio de-embed, HDCP repeater / CEC / ARC, smart EDID, auto/manual switching, panel / IR / RS-232 control

# bluKnot

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