



DIGITALINX
BY LIBERTY AV SOLUTIONS

DL-HDDM21 Install Guide



Product Overview

This Digitalinx DL-HDDM21 is an HDMI Dolby Digital & DTS Stereo Decoder that supports the transmission of high bandwidth (18Gbps) video and allows the associated audio signal to be simultaneously extracted and split to both digital and analog audio outputs, providing high quality audio and video performance.

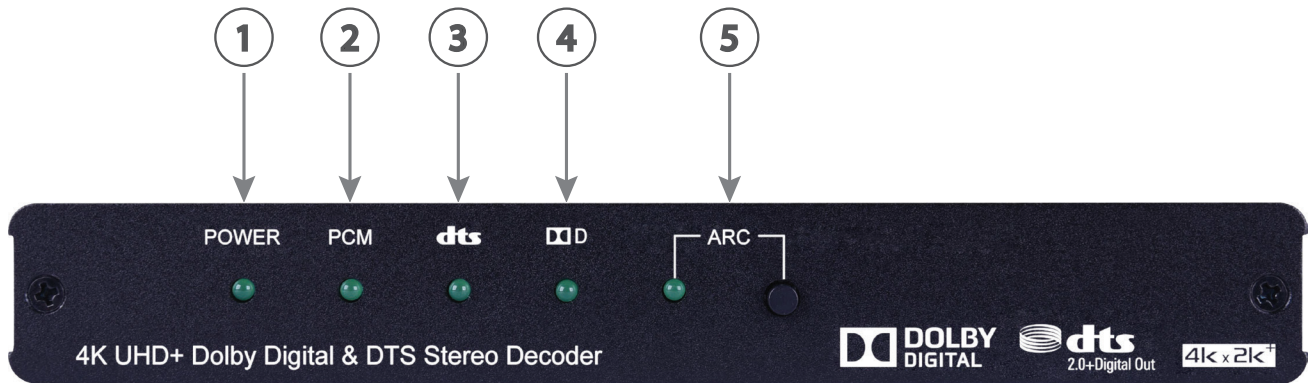
This unit can decode standard Dolby Digital & DTS formats up to 5.1 and output the audio as stereo (LPCM 2.0) over HDMI, S/PDIF (optical and coaxial) and analog RCA connections. If the connected display supports ARC (Audio Return Channel), and has it enabled, then the DL-HDDM21 can extract the ARC audio and route to all available audio outputs.

Both the input and output HDMI ports support 4K UHD resolutions up to 4K@60Hz (4:4:4, 8-bit). Built-in EDID management support allows the user to select from multiple EDIDs and, with the use of optional PC software, to upload, download, or edit EDID files.

Package Contents

- (1) DL-HDDM21 HDMI Dolby Digital & DTS Stereo Decoder
- (1) Quick Install Guide
- (1) 5V/2.6A DC Power Supply with US, UK, EU and AU adapter plugs

Front Panel View



1. POWER LED

- Illuminates when the unit is on and receiving power.

2. PCM LED

- Illuminates when LPCM audio is detected on the HDMI input. If the ARC function is active, this LED will illuminate when LPCM is detected from the ARC source.

3. DTS LED

- Illuminates when DTS 2.0+Digital audio is detected on the HDMI input. If the ARC function is active, this LED will illuminate when DTS 2.0+Digital audio is detected from the ARC source.

4. DOLBY DIGITAL LED

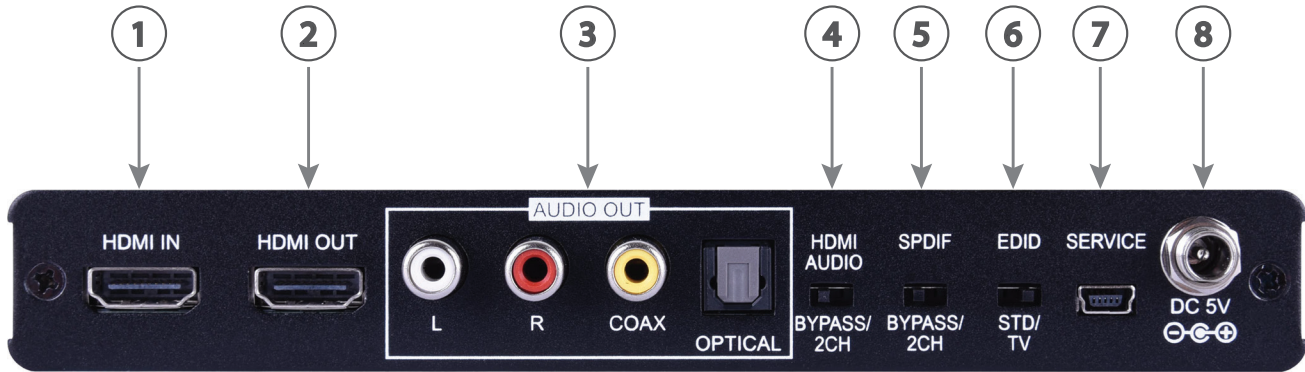
- Illuminates when Dolby Digital audio is detected on the HDMI input. If the ARC function is active, this LED will illuminate when Dolby Digital audio is detected from the ARC source.

5. ARC:

- Pressing the this button will enable/disable the unit's ARC (Audio Return Channel) functionality. When the ARC function is enabled, the LED will illuminate and ARC audio sent back from the connected display will be output over all local audio outputs. When the ARC function is not enabled the LED will remain off.

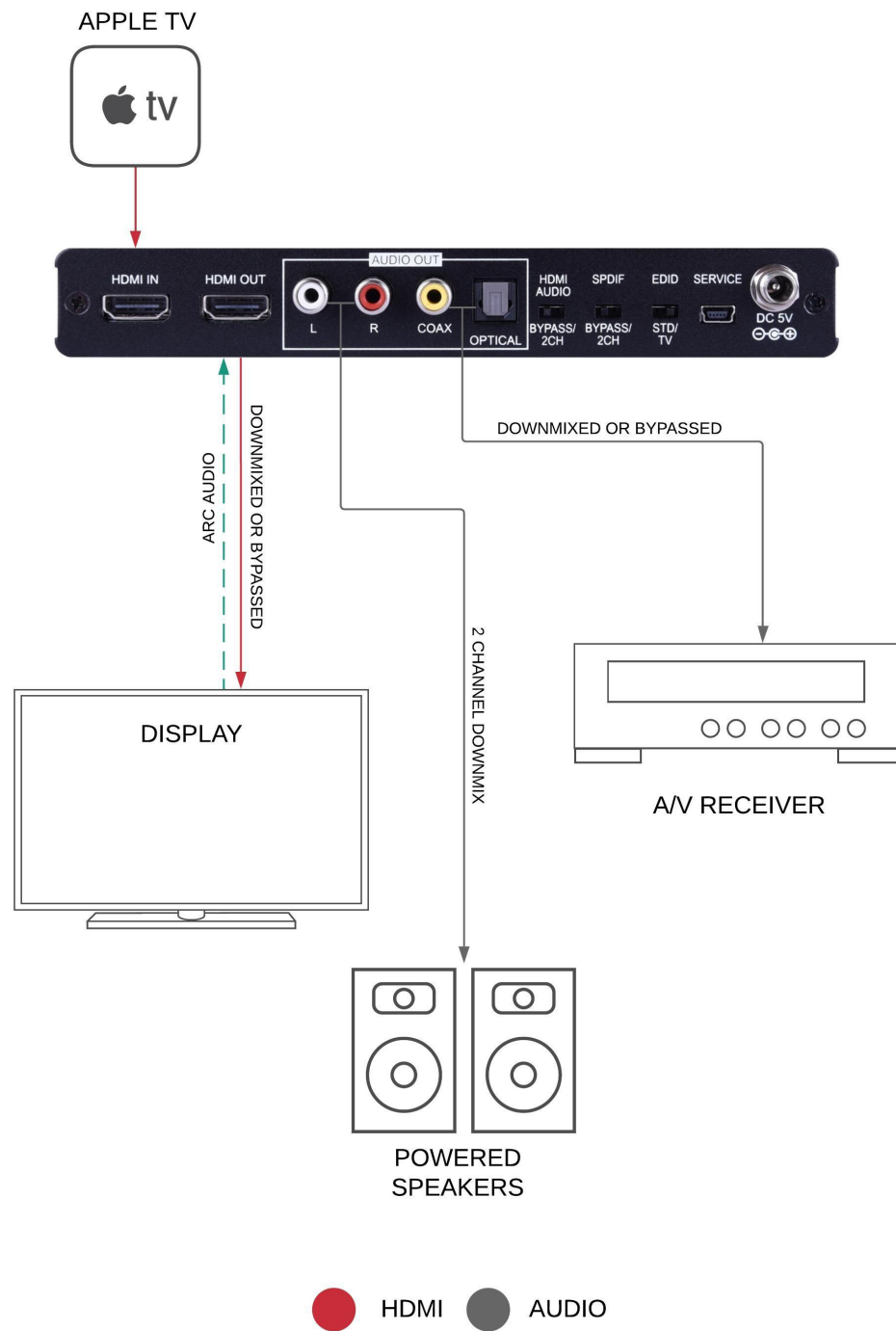
Note: Please ensure that the connected display supports ARC and that the display's ARC function is enabled before activating the ARC functionality of this unit. Failure to meet these requirements will result in no audio output.

Back Panel View



1. HDMI IN - HDMI Input
2. HDMI OUT - HDMI Output
3. AUDIO OUT
 - L/R; Analog RCA 2 channel stereo audio output
 - COAX; Digital multi-channel HD audio output
 - OPTICAL; Digital multi-channel HD audio output
4. HDMI AUDIO BYPASS/2CH
 - Controls the audio output format for the HDMI port. Moving the switch to the left sets it to "BYPASS" which allows audio to pass unchanged from the HDMI input port. Moving the switch to the right sets it to "2CH" which enables decoding Dolby Digital and DTS audio from the HDMI input and down-mixing it to LPCM 2.0.
5. S/PDIF BYPASS/2CH:
 - Controls the audio output format for the S/PDIF audio output ports (Optical and Coaxial). Moving the switch to the left sets it to "BYPASS" which allows audio to pass unchanged from the HDMI input port. Moving the switch to the right sets it to "2CH" which enables decoding Dolby Digital and DTS audio from the HDMI input and down-mixing it to LPCM 2.0.
6. EDID STD/TV
 - Controls which EDID is sent to the connected HDMI input device. Moving the switch to the left sets it to "STD" mode which will use the internal (user) EDID. Moving the switch to the right sets it to "TV" mode which will pass the EDID from the connected display device to the HDMI input device. Note: By default the "STD" EDID contains video resolution support up to 1080p@60Hz and audio support including LPCM 2.0 up to 96kHz, Dolby Digital (5.1 channel) and DTS (5.1 channel).
7. SERVICE- USB port for EDID management, control and firmware use.
 - Visit www.libav.com and navigate to the DL-HDDM21 product page to download the EDID editor and instructions.
8. DC-5V- Power plug input

A/V Diagram



Input / Output Compatibility and Conversion Chart

Resolution Support

RESOLUTION	FPS	INPUT	OUTPUT
640 X 480	60,72,75,85	x	x
800×600	56, 60, 72, 75, 85	x	x
1024×768	60, 70, 75, 85	x	x
1280×720	50, 60	x	x
1280×768	60, 75, 85	x	x
1280×800	60	x	x
1280×1024	60	x	x
1360×768	60	x	x
1600×1200	60	x	x
1920×1200	60 (RB)	x	x
720×480p	60	x	x
720×576p	50	x	x
1280×720p	60	x	x
1920×1080i	50, 60	x	x
1920×1080p	24, 25, 30, 50, 60	x	x
3840×2160p (YUV 4:2:0)	50, 60	x	x
4096×2160p (YUV 4:2:0)	50, 60	x	x
3840×2160p	24, 25, 30, 50, 60	x	x
4096×2160p	24, 25, 30, 50, 60	x	x

Input / Output Conversion Chart

INPUT	OUTPUT	ANALOG	HDMI		S/PDIF	
		RCA LEFT / RIGHT	BYPASS	2CH	BYPASS	LPCM 2.0
HDMI	LPCM 2.0	ANALOG 2CH	LPCM 2.0	LPCM 2.0	LPCM 2.0	LPCM 2.0
	DOLBY DIGITAL	DECODED 2CH	BITSTREAM PASS THROUGH	LPCM 2.0	BITSTREAM PASS THROUGH	LPCM 2.0
	DTS	DECODED 2CH		LPCM 2.0		LPCM 2.0
HDMI ARC	LPCM 2.0	ANALOG 2CH	HDMI PASS THROUGH		LPCM 2.0	LPCM 2.0
	DOLBY DIGITAL	DECODED 2 CH			ARC BITSTREAM PASS THROUGH	LPCM 2.0
	DTS	DECODED 2 CH				LPCM 2.0

Technical Specifications

Video	
Video Input	(1) HDMI
Video Output	(1) HDMI
Standards	Compliant with HDMI 2.0 & HDCP2.2
Audio	
Output Signals	Analog, S/PDIF Digital
Output Connectors	RCA Left and Right (Analog), Coax and Optical (S/PDIF)
Storage Temperature	-20 - +70 C (-4 - +158 F)
Control	
Protocol	RS232, Up to 115200 baud rate
Control Interface	USB Mini B
General	
System Bandwidth	18Gbps
HDMI Transmission Distance	10m / 1080p@60/Hz, 12 bit 3m / 4K@60Hz, 4:4:4, 8 bit
Operating Temperature	0 ~ +40 C (32 F to +104 F)
Storage Temperature	-20 - 60 C (-4 - +140 F)
Humidity	20% ~ 90%
Power Supply	DC5V / 2.6A
Power Consumption	5 watts (maximum)
Dimension (W*H*D)	180mm x 25mm x 111.75mm / 7" x 1" x 4.4"
Weight	0.37kg, .8lbs
Warranty	5 years
Certification	CE, FCC, RoHS

Thank you for your purchase.

For Technical Support please call our toll free number at
800-530-8998 or email us at supportlibav@libav.com

www.libav.com

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