### HDANYWHERE









## DOLBY™ & DTS® AV SIGNAL MANAGER

Product Guide (English UK)

CODE: DDSIGNALMANAGER

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## In the box



Name: **DOLBY™ & DTS® AV SIGNAL MANAGER** 

Product code: DDSIGNALMANAGER

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The DOLBY™ & DTS® AV Signal Manager (DDAV) is an audio down-mixer supporting Dolby® Digital/DTS® Stereo Audio Decoding. It can be used for bypassing bitstream audio over HDMI and down-mixing to a secondary output which only support 2 channel stereo audio systems. The device can manage standard Dolby Digital & DTS formats up to 7.1 and output the audio as stereo (LPCM 2.0) over HDMI & S/PDIF (optical and coaxial). Audio can also be set to be managed from ARC.

- up to 7.1 and output the audio as stereo (LPCM 2.0) over HDMI & S/PDIF (optical and coaxial). Audio can also be set to be managed from ARC.
- x1 5V/2A Multi-Territory Power Supply (Barrel Type)

DOLBY™ & DTS® AV Signal Manager

x1 Mounting brackets

## **IMPORTANT:**

For optimum performance and safety, please read these instructions carefully before connecting and operating this product. Please keep this manual for future reference.

To reduce the risk of fire, electric shock or product damage refer to the statements below.

### **EXPOSURE TO LIQUIDS**

Do not expose this device to rain, moisture, dripping or splashing and ensure that objects filled with liquids are not placed on or near the devices.

ENSURE DEVICE IS WELL VENTILATED AND NOT NEAR ANY HEAT SOURCES
Do not install or place this unit in a bookcase, built-in cabinet or in another confined
non-ventilated space. Ensure that device vents are not covered and do not install
near any heat sources or naked flames.

### **CLEANING**

Clean the device with a dry cloth only.

## Features

Simultaneous down scaled 4K (+HDR) to 1080p and bypassed output

Down-mix audio in different formats: LPCM 7.1CH, DTS, DTS ES, AC3, DD+, Dolby True HD

On-board EDID management

ARC routing and down-mix

Auto down scaling on all outputs

Control over serial

Informative LED indicators

# Specification

HDMI version	HDMI 2.0 (a/b)
HDCP compliance	HDCP 2.2
Video bandwidth	18Gbps and above (using ICT)
Video resolution	Up to 4K@60Hz (4:4:4) with HDR Up to DCI 4K (4096x2160)
Colour space	RGB, YCbCr 4:4:4, YUV 4:4:4, YCbCr 4:2:2/4:2:0
Colour depth	8-bit, 10-bit, 12-bit (1080p@60Hz) 8-bit (4K@60Hz)
HDR formats	HDR10, HDR10+, Dolby Vision, HLG
Video & audio IO	Inputs: x1 HDMI Outputs: x2 HDMI, x1 L/R Stereo Phono (unbalanced), x1 Phono RCA, x1 Optical Toslink
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Transmission distance	Dependent on HDMI cable
Transmission distance HDMI audio formats	, ,
	Dependent on HDMI cable PCM2.0, LPCM 5.1/7.1, Dolby Atmos, Dolby Digital/ Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio,
HDMI audio formats	Dependent on HDMI cable  PCM2.0, LPCM 5.1/7.1, Dolby Atmos, Dolby Digital/ Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio, DTS-X  PCM2.0, LPCM 5.1/7.1, Dolby Digital/Plus, Dolby
HDMI audio formats  Downmixed audio formats	Dependent on HDMI cable  PCM2.0, LPCM 5.1/7.1, Dolby Atmos, Dolby Digital/ Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio, DTS-X  PCM2.0, LPCM 5.1/7.1, Dolby Digital/Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio, DTS-X  PCM 2.0 44.1 / 48 / 88.2 / 96 / 176.4 / 192KHz,
HDMI audio formats  Downmixed audio formats  Stereo audio formats	Dependent on HDMI cable  PCM2.0, LPCM 5.1/7.1, Dolby Atmos, Dolby Digital/ Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio, DTS-X  PCM2.0, LPCM 5.1/7.1, Dolby Digital/Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio, DTS-X  PCM 2.0 44.1 / 48 / 88.2 / 96 / 176.4 / 192KHz, 16/20/24bit
HDMI audio formats  Downmixed audio formats  Stereo audio formats  Power consumption	Dependent on HDMI cable  PCM2.0, LPCM 5.1/7.1, Dolby Atmos, Dolby Digital/ Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio, DTS-X  PCM2.0, LPCM 5.1/7.1, Dolby Digital/Plus, Dolby TrueHD, DTS 5.1, DTS-HD Master Audio, DTS-X  PCM 2.0 44.1 / 48 / 88.2 / 96 / 176.4 / 192KHz, 16/20/24bit  6W (Maximum)  Chassis:

Relative humidity	5 - 90% (Non-condensing)
Housing	Aluminium Enclosure
Colour	Grey (Carbonite)
Dimensions (W/D/H) mm	Unit 129 x 92 x 12 Package 203 x 165 x 91
Weight	Unit 136g Package 900g

# Panel description

1. HDMI (IN): HDMI video input port.

2. HDMI (OUT): HDMI video output ports. Port A & B serve different purposes:

HDMI (OUT) A

Can down-scale video. ARC is not supported.

HDMI (OUT) B

Can not down-scale video. ARC is supported.

- 3. Audio (OUT): Extracted audio will output from these ports. The audio will always mirror whatever is being fed from HDMI (IN) and will always output 2 channel stereo.
- 4. **Settings**: Dip switch controls to adjust the behaviour of the device.

	OFF	ON
1	HDMI (OUT) A audio bypass bitstream	HDMI (OUT) A down-mix audio 2Ch stereo
2	HDMI (OUT) B audio bypass bitstream	HDMI (OUT) B down-mix audio 2Ch stereo
3	Read/Use EDID from HDMI (OUT) B	Use standard 4K 2Ch EDID profile
4	Disable downscaling	Enable downscaling

- 5. **Service**: Micro USB port for service and communicating with the device. To connect, please page 12.
- 6. **DC5V**: Power inlet. Connect the supplied power lead to this port to provide power to the device.

A. **Audio Type**: Indicator light. Denotes what audio format is being detected and decoded: PCM, DTS or Dolby.

- B. **HDMI Status**: Indicator light detailing which HDMI ports are active or connected. The light has 3 operational modes which denote the following:
- Solid Connected correctly.
- Flashing during connection Device is syncing
- Flashing continuously

There is a problem between HDMI device and unit. A picture may not be shown on the display, for example. In the event that this occurs, check the following 1) the source, by connecting it directly to the display to ensure that it is working properly 2) try using a longer HDMI cable as shorter ones may not sync correctly 3) Set EDID position to #1.

- Off

Unable to detect a HDMI connection. Check HDMI cable and ensure all devices are powered on.

- C.  $\boldsymbol{\mathsf{ARC}}$ : Indicator light. Denotes if ARC is active or not.
- Solid

ARC audio is being extracted from HDMI (OUT) B.

- Off

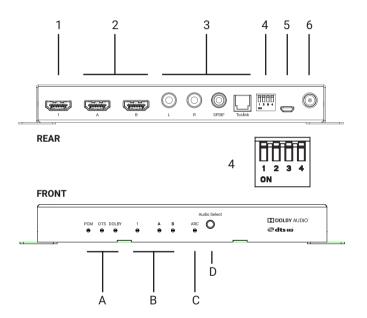
Audio is being extracted from HDMI (IN) port. This is the default mode.

D. **Audio Select**: A single press will toggle between the modes described by the ARC indicator light.





# Panel diagram





TOP

## Serial communication over USB

It is possible to communicate with the device over serial. This is achieved by using a USB with a micro USB connector. Serial to USB is managed internally and the driver (universal CH340 on Windows Operating System) should automatically install once connected.

The HDMI (OUT) ports A and B on the device casing are addressed using numbers 1 and 2 when using serial comms.

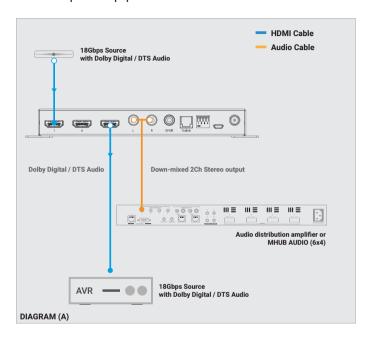
### Serial settings:

Baud rate: 57600
Bit number: 8
Checksum/Flow/Parity: None
Stop bits: 1

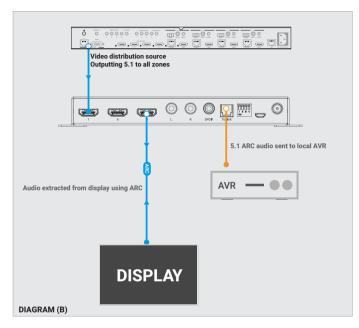
Н	Help
STA	System status
SET RST	Reset to factory defaults
SET ADDR [XX]	Set device address to XX (00-99) 00=Single
SET ARC ON/OFF	Enable or disable ARC
GET ADDR	Get device address
GET ARC	Get ARC status
GET STA	Get device status
GET IN1 SIG STA	Get input & signal status from HDMI (IN) port
SET OUT[X] EXA EN/DIS	Set extracted audio output to enabled or disabled (X=0, 0=ALL)
SET OUT[X] STREAM ON/OFF	Set output [X] stream on/off (X=0-2, 0=ALL)
GET OUT[X] EXA	Get status of extracted audio output enabled or disabled (X=0, 0=ALL)
GET OUT[X] EDID DATA	Get output [X] EDID data (X=0-2)
GET OUT[X] STREAM	Get output [X] stream on/off status (x=0-2, 0=ALL)



## Example applications



In diagram (A) an 18Gbps source outputting a digital audio format such as Dolby Digital or DTS is fed in to the input port on the Dolby Digital Down-Mixer. The audio is down-mixed to 2Ch stereo internally and extracted from the analogue audio ports which then is fed to an audio distribution amplifier or MHUB AUDIO (6x4) for distribution around a property. Simultaneously, the AVR receives an untouched HDMI signal and output whatever the source device is sending.



In diagram (B) the source content is being provided by a video distribution system like MHUB PRO (4x4) 40, here, it is presumed that all outputs from MHUB are delivering 5.1 audio. This is being fed in to and passed through the Dolby Digital Down-Mixer to the display. Using ARC it is now possible to extract the 5.1 audio back to the Dolby Digital Down-Mixer and route it to a local AVR using the Toslink port.

# Important information

Terms & Policies, including General Data Protection Regulation (GDPR) and other Data Protection Laws.

During the setup of MHUB, the HDA Pro (Installer) and End-User are required to agree to a set of terms, conditions, rules, policies and license agreements, including the HDANYWHERE Privacy Policy. These terms, notices and policies are, collectively, the "Agreements". By installing or using MHUB, you agree to be bound by the Agreements.

### **EU Conformity**

Hereby, HDANYWHERE declares that this HDMI connectivity device is in compliance with the essential requirements and other relevant provisions of the following Directives: 2006/95/EC (LVD Directive); 2004/108/EC (EMC Directive); 1999/5/EC (R&TTE Directive). The full text of the EU declaration of conformity is available in the compliance section at HDANYWHERE.com/legals

### Recycling your device properly

In some areas, the disposal of certain electronic devices is regulated. Make sure you dispose of or recycle your device in accordance with your local laws and regulations.

# HDANYWHERE Limited Product (2 Year) Guarantee

#### WHO WE ARE

1. We are HD CONNECTIVITY LTD trading as HDANYWHERE ("HDA"), a limited company registered under number 06046737 in England and Wales with its registered offices at The Haysfield, Malvern, WR14 1GF, United Kingdom.

#### OUR GUARANTEE TO YOU

- 2. We, HDANYWHERE warrant to you, the end user [MG1] of the HDA hardware (the "Products") that on the date of delivery of the Products to you, and for a period of 3 years from that date of delivery, the Products shall:
- (a) match any description that has been provided to you;
- (b) be free from any significant defects in their design, the materials used to make them, and the way they are made:
- (c) be of satisfactory quality (within the meaning of the Consumer Rights Act 2015); and
- (d) be fit for any purpose held out by us.
- This 3 year period, or, if the period has been extending to 4 years in accordance with paragraph 3, will be the "Guarantee Period". We offer this guarantee to all our customers who are resident and have an address in Great Britain and Northern Ireland, IMG2I

### **EXTENDING YOUR GUARANTEE**

3. On registering your Products with the HDA Cloud, the guarantee offered in paragraph 2 by us will automatically extend for a period of one year, provided that your registration takes place within 30 days from the date of delivery. The one year guarantee extension starts automatically from the date that the original 3 year guarantee ends.

### HOW TO CLAIM ON YOUR GUARANTEE AND YOUR REMEDIES

- 4. Subject to paragraphs 5 and 6 of this guarantee, Your sole remedies under Our guarantee to You are as follows: (I)Up to 30 days: we will repair or replace your Products or provide you with a full refund of the price of the defective Products at your ontion.
- (ii) Up to 6 Months: we will repair or replace your Products. If we are unable to repair or replace your Products we will provide you with a full refund of the price of the defective Products.
- (iii) Up to 3 (4) Years: we will repair or replace your Products. If we are unable to repair or replace your Products we will provide you with a partial refund of the price of the defective Products based upon the devaluation of the Products since the time of purchase.
- 5. In order to claim under the guarantee given to you in paragraph 2 you will need to:
- (a) give us notice in writing of your intention to claim under the guarantee during the Guarantee Period, and do so within a reasonable time after finding that some or all of the Products do not comply with the guarantee set out in paragraph 2:
- (b) show that the Products that you claim are defective, have been examined by a HDA Pro or other authorised or suitably qualified installer, and that they have[MG3] confirmed in writing that the suspected defect in the Products stems solely from a fault in the HDA hardware;
- (c) give us a reasonable opportunity to examine the Products in question;
- (d) provide us with an order number and a dated sales or delivery receipt from an HDA Distributor, HDA Pro or other authorised dealer, reseller or installer of the Products.
- (e) obtain from us in advance of returning the Products a return merchandise authorisation and/or case number[MG4]; and
- (f) (if asked to do so by us) return such Products to our place of business at our cost.

#### CIRCUMSTANCES WHERE YOUR GUARANTEE DOESN'T APPLY

- 6. We shall not be liable for the Products' failure to comply with the guarantee set out in paragraph 2 in any of the following events:
- (a) If you make any further use of the Products after giving us notice of an issue in accordance with paragraph 5;
- (b) the defect arises because you failed to follow our oral or written instructions as to the storage, installation[MG5], use and maintenance of the Products;

- (c) the defect arises as a result of your use of the Products with any other software or hardware that is not compatible with the Products:
- (d) the products are used by you for any commercial purpose, including rental or demonstrative purposes;
- (e) you alter or repair the Products without the written consent of HDA;
- (f) the defect arises as a result of an act of god, fair wear and tear, or your misuse, abuse, unreasonable use, wilful damage, negligence, or abnormal storage of the Products or by any other causes unrelated to defective hardware or manufacturing.
- (a) where the serial number has been altered, defaced or removed:
- (h) where the warranty seal on the system has been altered, defaced or removed; or
- (i) where the Products differ from their description as a result of changes made to ensure they comply with applicable statutory or regulatory requirements.

### TRANSFERRING YOUR GUARANTEE TO SOMEONE ELSE

7. [HDA will not accept any liability under such guarantee unless you are the original customer or can produce a letter or chain of letters from the original customer and subsequent customers (where appropriate) transferring the benefit of the guarantee to you.]

#### PRODUCTS THAT ARE NOT COVERED BY THIS GUARANTEE

8. This guarantee does not cover products sold and clearly marked "as is", "B-grade", or with faults. This guarantee does not apply to any system software that is preinstalled in the HDA hardware, or is subsequently provided via update or upgrade releases. Any and all HDA software is licensed to you under the terms of a separate end user licence agreement found here: (EULA Link)

### HOW THIS GUARANTEE WORKS WITH OUR EULA

9. We may void this guarantee if we reasonably believe that the HDA system has been used in a manner that violates terms of our separate End User Licence Agreement (EULA) for the HDA software. You assume all-risk and liabilities associated with the use of third party products in conjunction with the Products.

### YOUR STATUTORY RIGHTS

10. This guarantees is in addition to your statutory rights (including under the Consumer Rights Act) which are not affected by this guarantee

#### GENERAL TERMS OF THIS GUARANTEE

- 11. Except as provided in this guarantee, we shall have no liability to you in respect of the Products' failure to comply with the quarantee set out in paragraph 2.
- 12. We reserve the right to amend or withdraw this guarantee at any time although for the avoidance of doubt any quarantees that are in existence at such a time will be honoured.
- 13. These Conditions shall apply to any repaired or replacement Product supplied by us.

#### GUARANTEE CONTACT INFORMATION

To contact (support@hdanywhere.com) or call HDANYWHERE Technical Support (call charges will depend on your telephone provider. Please check with your operator for exact charges).

The team is available 9am - 5pm weekdays.

To help us handle your query promptly, please have your invoice number and model SKU and serial ready.

### HDANYWHERE

### Let us know what you think.

We would love to hear how we could further improve our products and services. If we can make something better, please let us know!

support@hdanywhere.com

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