

HD-250 Owner's Manual

2 x 5 HDMI Distribution Amplifier

PureLinkTM

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Package Contents

Please make sure all of the following items are included in the package:

- HD-250 Unit
- DC 12V 4A Power supply adapter
- AC Cord
- Rack ears
- Owner's Manual

General Specifications

The PureLink HD-250 2x5 Distribution Amplifier is designed to distribute up to 2 HDMI outputs (PC, AVR) at full 1080p HD to as many as 5 HD display monitors with no degradation of the original signal quality or distortion of the image.

The HD-250's compact, durable and low power-consumption design makes it an ideal solution for connection of the high definition video and audio content in digital display devices, such as an LCD, Plasma, LED, Projector, etc. In addition, the HD-250 offers quick and easy plug-and-play installation for commercial or residential systems.

Item	Description
Model	HD-250
Input Signal	HDMI Single Link , 2 ports
Output Signal	HDMI Single Link , 5 ports
Supporting Graphic Resolution	Up to WUXGA (2048 X 1080 / 1920 X 1200 @ 60Hz), UXGA, SXGA, XGA, VGA & 480i/p, 720i/p, 1080i/p)
Frequency bandwidth	1.65 Gbps (Single Link)
Connector Type	DC Power Jack
	HDMI19 Pin Female
Supported Version	DDWG DVI 1.0
	HDMI 1.3
HDCP Compliant	Yes
Power Consumption	DC +12V 4A , 13W Max
Dimension (W x D x H)	11" x 6.3" x 2.4" In. (279.4 x 160.02 x 60.96 mm)
Weight	3.3 Lbs (1.5 Kg)

Environmental and Reliability Specifications

1. Operating Conditions

Temperature : 10° $^{\circ}$ $^{\circ}$ 40 $^{\circ}$

Humidity : 10% ~ 80%, non-condensing

Altitude : maximum 3,000m

2. Transportation Conditions

Temperature : $-25 \,^{\circ}\text{C} \sim 60 \,^{\circ}\text{C}$

Humidity : 5% ~ 95%, non-condensing

Altitude : maximum 15,000m

3. Storage Conditions

Temperature : -20° C ~ 45 $^{\circ}$ C

Humidity : 5% ~ 95%, non-condensing

Altitude : maximum 3,000m

4. Reliability Specifications

MTBF: more than 50,000 hours aging-test at 90% confidence level

Reliability Specifications and item: Conform to "Specification of reliability test

for an LCD monitor"

Main Features

1. High Quality Picture - No Signal Loss / Digital Noise Free

PureLink's Distribution Amplifiers are built to deliver the highest quality picture, preserving the native resolutions of the video sources without any signal loss. At the same time, the digital noise that may affect the picture quality will also be eliminated. Due to the nature of the digital signals and passage through multiple stages of connection when using distribution amplifiers, it is important to eliminate the digital noise and boost the signal strength to preserve and enhance the video signal quality.

2. Signal Amplification for reliability and long-length signal transmission

PureLink's 12V power adapter supplies adequate power to amplify the video signals from the video source. This is necessary as the overall length from the video source to the displays is longer when using the distribution amplifiers (distance from the video source to the distribution amplifier + distance from the distribution amplifier to the display). In most cases, the overall distance that the HDMI signal will need to travel is over 10ft. Due to the nature of HDMI signals, amplification is necessary to ensure the video quality and reliability. (Without amplification, there may be occasional blackouts or blinking effects) With this amplification feature, your video display can be extended up to 2300ft using our fiber optic HDMI extenders or cables.

3. HDMI (High-Definition Multimedia Interface) v1.3

The HD-250 is fully compatible with HDMI version 1.3 and it can also be used for DVI applications by using additional DVI to HDMI coupler or cable.

4. HDCP (High-bandwidth Digital Content Protection) Compliant

PureLink's HDMI distribution amplifiers are fully HDCP compliant. Many video sources such as Blu-ray DVD players and Satellite/Cable Receivers are HDCP encrypted to protect the copyrights of those who created it. For these video sources to be displayed correctly, an HDCP compliant device (e.g., TV, HDMI Switch, Distribution Amplifier, etc.) is required.

Setup / Installation

CABLE INSTALLATION

- 1. Turn off the whole system before connecting any cables
- 2. Connect your video source's output HDMI cable to HD-250's input port using a standard HDMI cable.
- 3. Connect the HD-250's output to your display device(s) input port using a standard HDMI cable.
- 4. Plug the 12V power adapter in to the HD-250
- 5. You may start turning on your system in the following order: HD-250 -> Display -> Video Source.
- 6. Input LED #1,2 and Output LED # 1~5 will be lit if everything is properly installed.

STARTUP

The LCD screen will display the following message after power-ON



The LCD screen will display the input video resolution when signal is detected

The LCD screen will display the following message when there is no signal detected.



How to program EDID (Extended Display Identification Data)

In EDID programming, there are two different ways of saving the EDID information.

- 1. Save the EDID from an external display device connected onto output #1
- 2. Use our pre-programmed internal EDID library

External EDID programming:

- 1. Select the Input number (make sure the input LED light is lit)
- 2. Connect your display device to output #1
- 3. Go to the MENU screen and press ENTER button to save your EDID into the HD-250

EXT EDID LOAD
OUT1 to IN1

<- When Input# 1 is selected
When Input# 2 is selected ->

EXT EDID LOAD
OUT1 to IN2

You will see the following error message if the EDID data program failed or there is no EDID data present. You may also want to check the cable connection or monitor's power supply if an error occurs:

EDID Loading! Load Error

Internal EDID Programming:

1. Press MENU button twice or more to find the appropriate EDID data for your application, and then press the ENTER button to confirm the change.

EXT EDID LOAD
OUT1 to IN1

1080i 2ch EDID Save PORT IN1 WUXGA EDID
Save PORT IN1

The internal EDID list is as follows:

The number represents the number of times the MENU button is pressed

1. EXT EDID

6. 1366x768

11. 1920x1200

2. 800x600

7. 1400x1050

12. 1080i2ch(audio)

3. 1024x768

8. 1600x900

13. 1080p 2ch

4. 1280x1024

9. 1600x1200

14. 1080p Multi

5. 1360x768

10. 1680x1050

Please note that all HD-250 are normally set to 1920x1080p 2ch audio as a default setting when released from the factory. If the default setting does not work for your system, please program either an external EDID or an EDID from our pre-loaded selections.

Mechanical Specifications



Front Panel:

MENU Button : Menu selection ENTER Button : Save/ Select SELECT Button : Input selection

IN 1, 2 : Input status LED
OUT 1~5 : Output status LED



Rear Panel:

DC +12V : Power receptacle / OUTPUT 1~5 : HDMI port / INPUT 1,2 : HDMI port

Warranty Information

1 (One) Years Warranty:

Dtrovision warrants this Purelink HD-250 HDMI Distribution Amplifiers to be free from defects due to faulty materials or improper workmanship for a period of one (1) year. Dtrovision further warrants that any part which proves defective in materials or workmanship within one(1) year, will be replaced or repaired at no cost to the user. Labor to replace defective parts will be done without charge. Provided the equipment is returned to Dtrovision prepaid, Insured and properly packaged. Prior return authorization must be obtained from your local dealer.

This warranty is void if the warranted part has been altered or subjected to abuse or misuse.

This warranty is in lieu of all other warranties expressed or implied including, without limitation, any implied warranty or any implied warranty of fitness for a particular purpose. Dtrovision shall have the final right to determination as to the existence and cause of any defect and its appropriate adjustment in accordance with the terms of this warranty. In no event shall Dtrovision be liable for any consequential or collateral damages.

Warranty Limitation and Exclusion

Dtrovision shall have no further obligation under the foregoing limited warranty if the product has been damaged due to abuse, misuse, neglect, accident, unusual physical or electrical stress, unauthorized modifications, tampering, alterations, or service other than by Dtrovision or its authorized agents, causes other than from ordinary use or failure to properly use the Product in the application for which said Product is intended.

Troubleshooting

Problem	Solution
Distribution Amplifier	Make sure the 12V power is plugged in the back of the unit.
does not operate	Check to see if the power LED light is on.
No picture (or signal)	1. In case your video source is HDCP enabled, make sure
Or Poor picture	your video display (HDTV) is HDCP compliant.
	2. If you are using a copper based HDMI cable, overall
	length of the cables (length of the cable from video source
	to switch and length of the cable from switch to display)
	should not exceed 20ft. Exceeding 20ft. with copper based
	cables will result in no or poor picture quality. To extend
	beyond 20ft, please use fiber optic HDMI extension cables
	such as the Purelink HDX II series
	3. Use high quality HDMI cables.
	4. If you are using computers, try other refresh rate
	settings. Most HDTV's have refresh rate of 48Hz and
	computer's video cards are usually set at higher refresh
	rate. Try lower refresh rates.
	5. Make sure all HDMI connectors are tightly secured to all
	HDMI ports. Loosened screws on the HDMI connectors will
	result in no or poor picture.
	6. Turn off all equipment (video source, switch and HDTV)
	and restart all equipment.
Incorrectly sized picture	Please remember that your video source will only transmit
/resolution or No	one resolution setting. To connect varying resolution
picture	displays (1920x1200 resolution display and 1024 x 768
	resolution display) the resolution setting of your video
	source must be set to the lowest resolution setting (1024 x
	768).