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# HD-2100 Owner's Manual

## 2 x 10 HDMI Distribution Amplifier

### **PureLink™**

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# Package Contents

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

- HD-2100 Unit
- DC 12V 4A Power supply adapter
- AC Cord
- Rack ears
- Owner's Manual

## General Specifications

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The PureLink HD-2100 2x10 Distribution Amplifier is designed to distribute up to 2 HDMI outputs (PC, AVR) at full 1080p HD to as many as 10 HD display monitors with no degradation of the original signal quality or distortion of the image.

The HD-2100'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-2100 offers quick and easy plug-and-play installation for commercial or residential systems.

Item	Description
Model	HD-2100
Input Signal	HDMI Single Link , 2 ports
Output Signal	HDMI Single Link , 10 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 )	13.5" x 6.41" x 1.77" In. ( 343 x 163 x 45 mm )
Weight	3.8 Lbs ( 1.7 Kg )

# Environmental and Reliability Specifications

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## 1. Operating Conditions

Temperature	: 10 °C ~ 40 °C
Humidity	: 10% ~ 80%, non-condensing
Altitude	: maximum 3,000m

## 2. Transportation Conditions

Temperature	: -25 °C ~ 60 °C
Humidity	: 5% ~ 95%, non-condensing
Altitude	: maximum 15,000m

## 3. Storage Conditions

Temperature	: -20 °C ~ 45 °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

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## **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 noises that may affect the picture quality will be eliminated. Due to the nature of the digital signals and passing through multiple stages of connection when using distribution amplifiers, it is important to eliminate the digital noises and boost the signal strength to preserve/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 warrant 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 optical HDMI cables.

## **3. HDCP (High-bandwidth Digital Content Protection) Compliant**

PureLink's HDMI distribution amplifiers are fully HDCP compliant. Many video sources such as DVD players and Satellite/Cable Receivers are HDCP encrypted. For these video sources to be displayed correctly, HDCP compliant devices(e.g., TV, HDMI Switch, distribution amplifier) are required.

# Video Connection

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1. Connect your video source's HDMI output port to the HD-2100's HDMI input port using standard HDMI cables(not included). Make sure all your HDMI source and the displays are turned off before connecting the cables.
2. Connect your HDMI display's HDMI input port to HD-2100's HDMI output port. Make sure your HDMI display is turned off before connecting the cables.
3. Plug the 12V power supply into the switch's power input port.
4. Plug the 12V wall mount power supply into the wall outlet.
5. Turn on power switch
6. Turn on your displays.
7. Turn on your video source.

## External EDID and Internal EDID Set up

### A. External EDID Set up

- i. Unplug all HDMI cables.
- ii. Connect Monitor or HDTV to "**OUTPUT 1**" on the back of the HD-2100
- iii. Turn on the HD-2100 and HDTV
- iv. Press and hold "EXTERNAL EDID" button on the front of the HD-2100 for 3 seconds until RED LED light is on.
- v. Turn off HD-2100
- vi. Reconnect all device following above "**Video Connection**"

### B. Internal EDID Set up (Factory Default Setting)

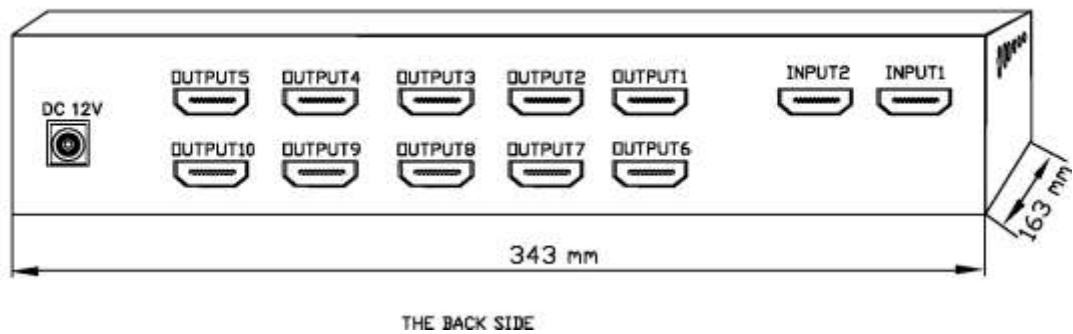
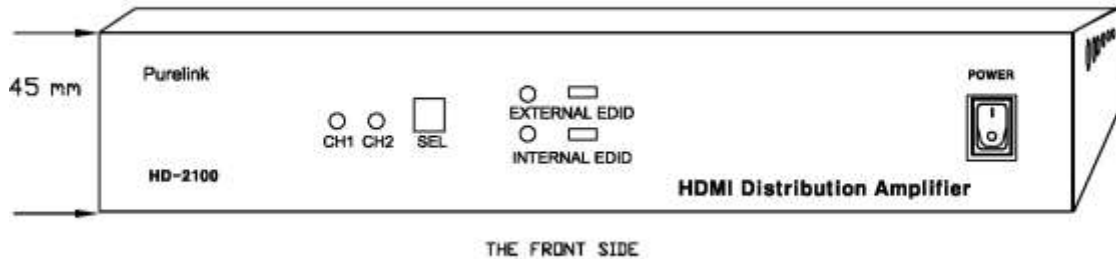
- i. Unplug all HDMI cables
- ii. Turn on HD-2100
- iii. Press "INTERNAL EDID" button on the front of the HD-2100 for 3 sec until RED LED light is on.
- iv. Turn off HD-2100
- v. Reconnect all device following above "**Video Connection**"

## \*\* What is EDID?

Extended Display Identification Data is a VESA standard data format that contains basic information about a display and its capabilities, including vendor information, maximum resolution, color characteristics, factory pre-set timings, frequency range limits, and character strings for the monitor name and serial number

# Mechanical Specifications

**MODEL : HD-2100**



**DC 12V : DC Power Input (+12 V)**

**POWER : Power On / Off Switch**

**CH1 : Input Channel 1 Indication LED**

**CH2 : Input Channel 2 Indication LED**

**SEL : Input Channel Selecting Switch**

**INPUT1~2 : HDM Input Signal**

**OUTPUT 1 ~ 10 : HDMI Output Signals**

**EXTERNAL EDID : External EDID Setting Switch**

**INTERNAL EDID : Internal EDID Setting Switch**

## Connector Pin Assignment

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Part No.	Pin No.	Description	Remarks
HDMI 19pin	1	TMDS DATA 2P	
	2	TMDS DATA 2 Shield	
	3	TMDS DATA 2M	
	4	TMDS DATA 1P	
	5	TMDS DATA 1 Shield	
	6	TMDS DATA 1M	
	7	TMDS DATA 0P	
	8	TMDS DATA 0 Shield	
	9	TMDS DATA 0M	
	10	TMDS Clock P	
	11	TMDS Clock Shield	
	12	TMDS Clock M	
	13	CEC	
	14	RESERVED	
	15	DDC Clock	
	16	DDC DATA	
	17	GND	
	18	+5v	
	19	Hot Plug Detect	



# Warranty Information

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## **1 (One) Years Warranty:**

Dtrovision warrants this Purelink HD-2100 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

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<b>Problem</b>	<b>Solution</b>
Distribution Amplifier does not operate	Make sure the 12V power is plugged in the back of the unit. Check to see if the power LED light is on.
No picture (or signal) Or Poor picture	<ol style="list-style-type: none"><li>1. In case your video source is HDCP enabled, make sure your video display (HDTV) is HDCP compliant.</li><li>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</li><li>3. Use high quality HDMI cables.</li><li>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.</li><li>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.</li><li>6. Turn off all equipment (video source, switch and HDTV) and restart all equipment.</li></ol>
Incorrectly sized picture /resolution or No picture	Please remember that your video source will only transmit one resolution setting. To connect varying resolution displays (1600x1200 resolution display and 800x600 resolution display) the resolution setting of your video source must be set to the lowest resolution setting (800x600).