

USER MANUAL



1X2 DVI Distribution Amplifier (DD-D12(P))
1X5 DVI Distribution Amplifier (DD-D15(P))

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UNPACKING

Each DVI Link DVI Switch package includes the following items;

- DD-D12(P) / DD-15(P) DVI LINK DVI Distribution Amplifier Unit x 1
- 5V Power Supply Adapter x 1
- User manual x 1

PRODUCT OVERVIEW

DVI Link DD-D12 and DD-D15, DVI Distribution Amplifiers, allow one digital video sources to be split into multiple digital displays. The built-in amplification function enables DVI signal distribution without signal loss.

MAIN FEATURES

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

Our 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 signal reliability and long length signal transmission.

Our 5V 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 DVI signal will need to travel is over 10ft. Due to the nature of DVI 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 DVI cables.

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

Our DVI 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, DVI Switch, distribution amplifier) are required.

VIDEO CONNECTION

1. Connect your video source's DVI output port to the DD-D12/D15's DVI input port using standard DVI cables(not included). Make sure all your DVI source and the displays are turned off before connecting the cables.
2. Connect your DVI display's DVI input port to DD-D12/D15's DVI output port. Make sure your DVI display is turned off before connecting the cables.
3. Plug the 5V power supply into the switch's power input port.
4. Plug the 5V wallmount power supply into the wall outlet.
5. Turn on your displays.
6. Turn on your video source.

*** DDC On/Off Switch**

DD-D12/D15 are equipped with DDC on/off dip switches in the back for each DVI output port. DDC communication is required for some video sources and displays(such as PC and LCD monitor) to correctly display the picture. In most cases, you will not need to change the factory settings.

When the DDC is turned on for both DVI output ports, some video source may not work correctly as it sees multiple (conflicting) DDC information. Please turn on DDC for the video display you would like the video source to recognize as the default display and at the same time, turn off DDC for all other DVI out ports. In such case, other DVI ports will transmit video according to the default display setting (DVI port with DDC turned on)

TECHNICAL SPECIFICATION

- Frequency bandwidth: 1.65 Gbps (Single Link)
- Supporting Graphic Resolution: UXGA (1600 X 1200 at up to 75Hz) (1920 X 1080 at up to 60Hz)
- Inputs: DVI-D Female ports
- Output: DVI-D Female port(DD-D12/ 2 port, DD-D15/ 5 port).
- Power supply: DC 5V, 2A Adapter included.
- DVI Pin Assignments

PIN#	Function	PIN#	Function	PIN#	Function
1	TMDS D2-	9	TMDS D1-	17	TMDS D0-
2	TMDS D2+	10	TMDS D1+	18	TMDS D0+
3	TMDS D2 SHD	11	TMDS D1 SHD	19	TMDS D0 SHD
4	N. C.	12	N. C.	20	N. C.
5	N. C.	13	N. C.	21	N. C.
6	DDC CLOCK	14	POWER +5V	22	TMDS CLK SHD
7	DDC DATA	15	GND(DDC)	23	TMDS CLK+
8	RESERVED	16	H.P. DETECT	24	TMDS CLK-

WARRANTY

DTronics Inc. warrants that each DVI Link DVI distribution amplifier is free from defects due to faulty materials or improper workmanship for a period of one(1) year. DTronics Inc. 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 DTronics Inc. 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. DTronics Inc. 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 DTronics Inc be liable for any consequential or collateral damages.

RETURNS

All returns MUST have an Return Authorization number. Please contact your local dealer or distributor where you purchased this product to obtain the Return Authorization number.

Troubleshooting

Problem	Solution
Distribution Amplifier will not operate	<p>Make sure the 5V power is plugged in the back of the unit.</p> <p>Check to see if the power LED light is on.</p>
<p>No picture(or signal) Or Poor picture</p>	<ol style="list-style-type: none"> 1. In case your video source is HDCP enabled, make sure your video display(HDTV) is HDCP compliant. 2. If you are using copper based DVI 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 optical DVI extension cables such as DTronics Inc.'s Model OC cables. 3. Use high quality DVI cables. 4. If you are using computers, try other refresh rate settings. Most HDTVs 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 DVI connectors are tightly secured to all DVI ports. loose screws on the DVI connectors will result in no or poor picture. 6. Turn off all equipments(video source, switch and HDTV) and restart all equipments.
Display Conflict	<p>Turn on DDC for only one DVI output and turn off DDC for all other DVI ports. The port with DDC on must be connected to a display. Please refer to "Video Connection" guide in this manual.</p>
<p>Incorrectly sized picture/resolution or No picture</p>	<p>Please remember that your video source will only support one resolution setting. To connect 1600x1200 resolution display and 800x600 resolution display, the resolution setting of your video source must be set to the lower resolution setting (800x600) OR, turn on DDC for the 800x600 display and turn off DDC for 1600x1200 display.</p>