



User Manual

1x8 DVI-D Distribution Amplifier Single Link with HDCP

Model PT-SP-DV18

Designed in Germany

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1. Safety and Notice

The PT-SP-DV18 1x8 DVI-D Distribution Amplifier Single Link with HDCP has been tested for conformance to safety regulations and requirements, and has been certified for international use. However, like all electronic equipments, the PT-SP-DV18 should be used with care. Please read and follow the safety instructions to protect yourself from possible injury and to minimize the risk of damage to the unit.

- Follow all instructions and warnings marked on this unit.
- Do not attempt to service this unit yourself, except where explained in this manual.
- Provide proper ventilation and air circulation and do not use near water.
- Keep objects that might damage the device and assure that the placement of this unit is on a stable surface.
- Use only the power adapter and power cords and connection cables designed for this unit.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.



2. Introduction

The PT-SP-DV18 1x8 DVI-D Distribution Amplifier Single Link with HDCP Support provides the most cost effective and advanced DVI splitter solution on the market, by which the high definition video can be transmitted to 8 different locations without losing quality. To equip with DVI/HDMI compliant splitter chipsets, PT-SP-DV18 is also good to be used as an advanced HDMI 8 port splitter. PT-SP-DV18 is suitable for high quality PC broadcasting, digital signage and education applications!

3. Features

- DVI 1.1 / Support HDMI Deep Color & 3D
- HDCP 1.2 compliant
- Wide Frequency Range: 25MHz~225MHz
- Video bandwidth: 6.75GBPS
- Supports conversion of HDMI signaling to DVI
- Resolution up to 1080p or WUXGA
- Automatic EDID learning
- Supports xvYCC, x.v.Color & Deep Color
- Supports Dolby Digital, DTS-HD and Dolby True HD audio
- USB firmware update for expanding compatibility
- Easy installation

Automatic EDID learning will detect all the connected DVI/HDMI equipped monitors and analyze all the content of EDID. The EDID with minimal resolution support will be the reference EDID for incoming DVI/HDMI source players.

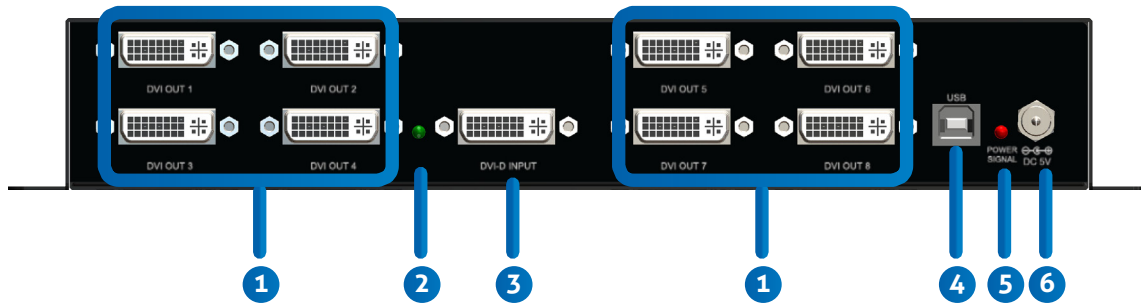
4. Package Contents

- 1x PT-SP-DV18
- 1x 5V power supply unit
- 1x User Manual

5. Specifications

Model Name		PT-SP-DV18
Role of usage	1x8 Distribution Amplifier (Splitter)	
DVI compliance	DVI 1.1	
HDMI compliance	HDMI Deep Color & 3D	
HDCP compliance	Yes	
Video bandwidth	Single-link 225MHz [6.75Gbps]	
Video support	Up to WUXGA [1920x1200@60Hz] & UXGA [1600x1200@60Hz]	
Audio support	DTS-HD Master Audio, Dolby TrueHDM Dolby Digital, DTS, DVD-Audio, LPCM, SACD, MPCM	
ESD protection	[1] Human body model — ±19kV [air-gap discharge] & ±12kV [contact discharge] [2] Core chipset — ±2kV	
PCB stack-up	4-layer board [impedance control — differential 100Ω; single 50Ω]	
Firmware update	Feasible via USB-port	
Input TMDS signal	1.2 Volts [peak-to-peak]	
Input DDC signal	5 Volts [peak-to-peak, TTL]	
Input	1x DVI / HDMI [7.1ch audio & video]	
Output	8x DVI / HDMI [7.1ch audio & video]	
DVI connector	DVI-I [29-pin female digital only]	
USB connector	Standard type-B [square shape]	
Mechanical		
Housing	Metal enclosure	
Dimensions [L x D x H]	Model	340 x 95 x 45mm [1'1.4" x 3.8" x 1.8"]
	Package	510 x 230 x 70mm [1'8" x 9.1" x 2.7"]
	Carton	510 x 410 x 252mm [1'8" x 1'5" x 1'3"]
Weight	Model	910g [2 lbs]
	Package	1.7g [3.7 lbs]
Fixedness	Wall-mounting case with screws	
Power supply	5V 4A DC	
Power consumption	2 Watt [max]	
Operation temperature	0~40°C [32~104°F]	
Storage temperature	-20~60°C [-4~140°F]	
Relative humidity	20~90% RH [no condensation]	

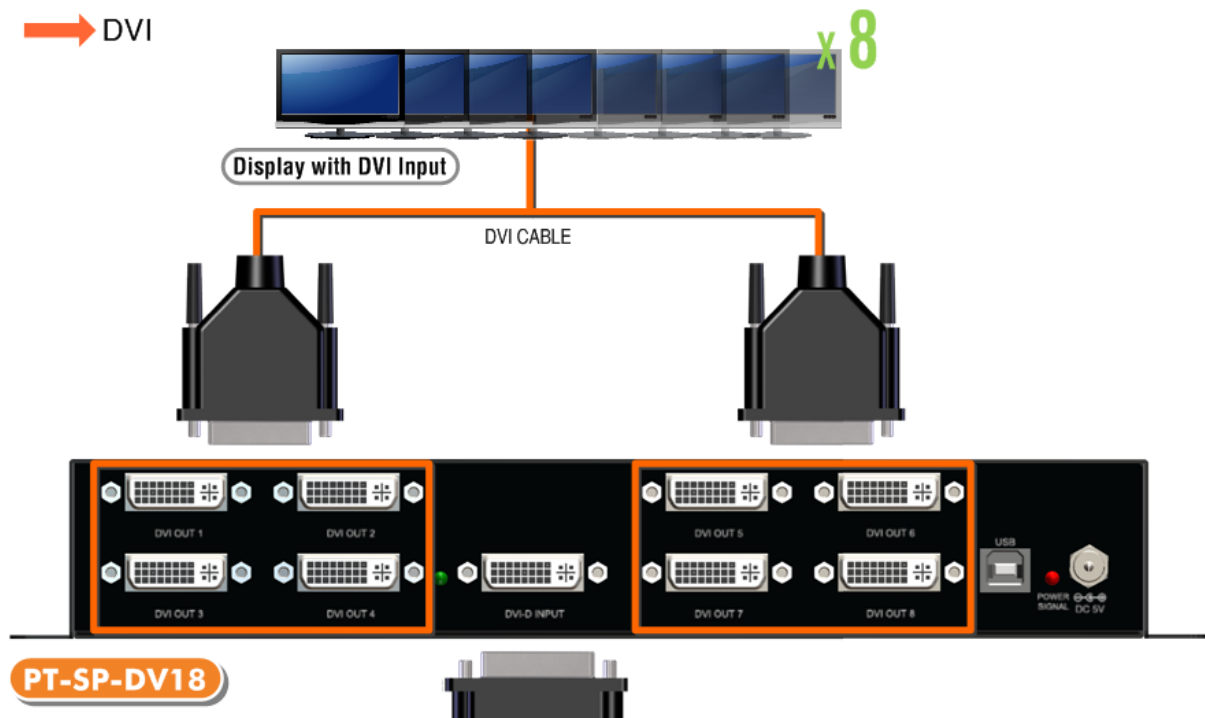
6. Panel Description



1. **SIGNAL OUT:** distributed DVI outputs
2. **Signal indicator LED**
3. **DVI IN:** DVI input source
4. **USB IN:** for firmware update use only
5. **Power:** Red light means power is on
6. **+5V DC:** connect to 5V 4A interlocking power supply unit

When the connected DVI / HDMI monitor is verified as DVI or HDMI and HDCP compliant, the corresponding green LED will blink.

7. Connection Diagram



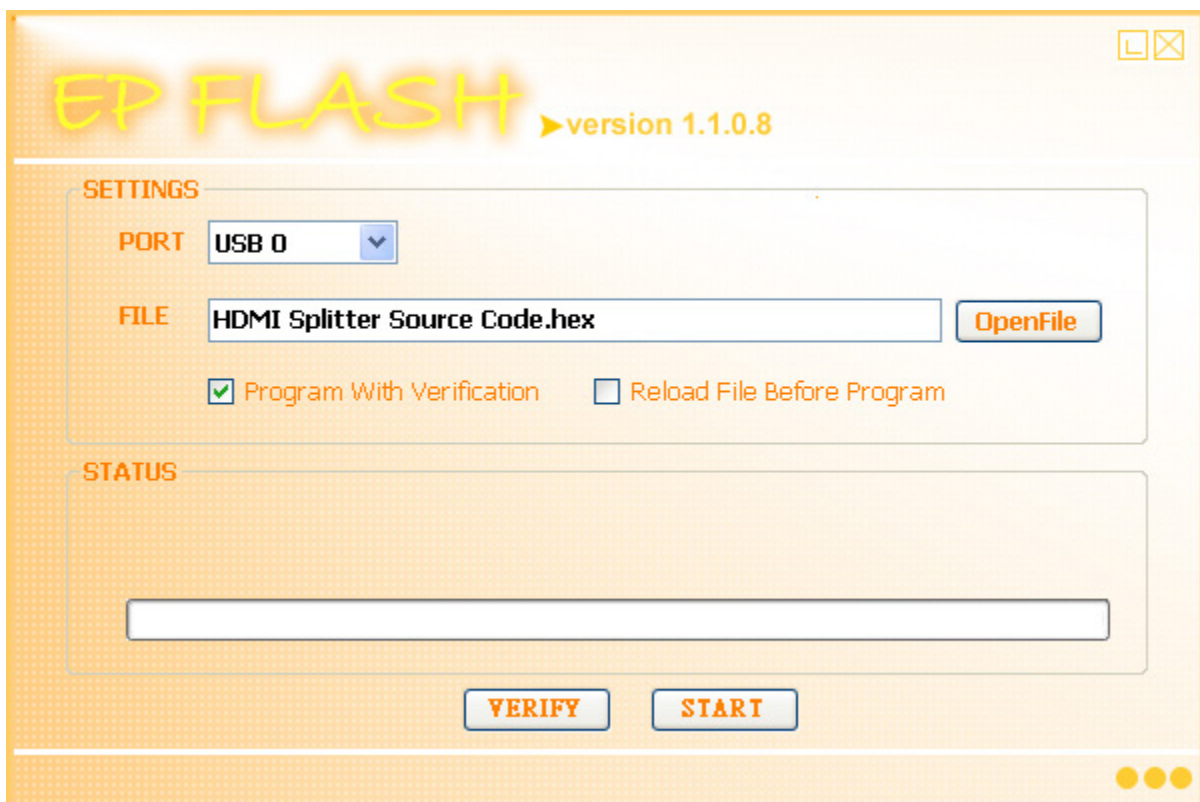
8. Hardware Installation

Broadcasts DVI signal to 8 DVI displays!

1. Switch off all devices, including monitors.
2. Connect to the receivers.
3. Connect a DVI source (such as a Blu-ray Disc player or PC) to the DVI In.
4. Plug in 5V DC power supply unit.
5. Power on the DVI monitors.
6. Power on the DVI source.

9. Notice

1. While connecting a new monitor to the splitter, experiencing a short period of time no display may be expected. Automatic EDID learning will analyze the newly connected monitor to see if the EDID for the HDMI input is necessary to update. Please also noted for easier use, the output 1 is man output for EDID learning.
2. For long range high definition DVI transmission applications, please adopt Cat-5e cable based DVI extenders.
3. For firmware update through USB, users MUST first turn off the power, plug USB cable connected to your PC, and then power up the module! In this setup, the power LED indicator will NOT blink, and this is normal! Execute the attached or download EPFlash.exe, and the following window will pop up. Click on "OpenFile" button to direct to the new firmware HEX file, and keep PORT at USB 0! Meantime, keep "Program With Verification" selected, and then click on "START" button on the bottom of the window! Wait for seconds until the update process is completed! After firmware update is successfully accomplished, please unplug USB cable and power off the splitter!



10. Limited Warranty

The SELLER warrants the **PT-SP-DV18 1x8 DVI-D Distribution Amplifier Single Link with HDCP Support** free from defects in the material and workmanship for 1 year from the date of purchase from the SELLER or an authorized dealer. Should this product fail to be in good working order within 1 year warranty period, The SELLER, at its option, repair or replace the unit, provided that the unit has not been subjected to accident, disaster, abuse or any unauthorized modifications including static discharge and power surge. This warranty is offered by the SELLER for its BUYER with direct transaction only. This warranty is void if the warranty seal on the metal housing is broken. Unit that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for 90 days from the day of reshipment to the BUYER. If the unit is delivered by mail, customers agree to insure the unit or assume the risk of loss or damage in transit. Under no circumstances will a unit be accepted without a return authorization number.

The warranty is in lieu of all other warranties expressed or implied, including without limitations, any other implied warranty or fitness or merchantability for any particular purpose, all of which are expressly disclaimed. Proof of sale may be required in order to claim warranty. Customers outside Taiwan are responsible for shipping charges to and from the SELLER. Cables and power adapters are limited to a 30 day warranty and must be free from any markings, scratches, and neatly coiled.

The content of this manual has been carefully checked and is believed to be accurate. However, The SELLER assumes no responsibility for any inaccuracies that may be contained in this manual. The SELLER will NOT be liable for direct, indirect, incidental, special, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. Also, the technical information contained herein regarding the PT-SP-DV18 features and specifications is subject to change without further notice.

Asking for Assistance

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