

# PureLink

## SE-DDL Dual Link DVI EDID Emulator & Equalizer Owner's Manual



**PureLink™**  
535 East Crescent Ave  
Ramsey, NJ 07446  
Tel: 201.488.3232  
Fax: 201.621.6118

Website : [www.purelinkav.com](http://www.purelinkav.com)  
E-mail : [info@purelinkav.com](mailto:info@purelinkav.com)

For Technical Support, contact us at  
: [support@purelinkav.com](mailto:support@purelinkav.com)

## Chapter 1. Product Overview

### 1.1 Safety Precautions

- All safety instructions should be read and understood before the unit is operated.
- The owner's manual and safety instructions should be retained for future reference.
- Unplug this unit from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth only.
- Keep away from wet, magnetic, and flammable surfaces or substances.
- Always use the correct external power supply (indicated on the product label) when operating this unit.
- This unit may be equipped with a 3 wire grounding-type plug - a plug having a third (grounding) pin. This pin will only fit in to a grounding type power outlet. If you are unable to insert the plug in to the outlet, contact your electrician to replace your obsolete outlet.
- Air vents should be kept clean and unobstructed at all times.
- Please refrain from using frayed power cords and damaged wall outlets.
- Do not place any heavy objects or equipment on top of the unit.

**If you experience any malfunctioning of product or have any question as to operation of the product, please contact our customer service center.**

**PureLink™**

Tel: 201.488.3232

Email: [support@purelinkav.com](mailto:support@purelinkav.com)

## Welcome!

Congratulations on your purchase of the PureLink SE-DDL Smart EDID Dual link DVI EDID emulator and equalizer.

This manual contains information that will assist you in installing and operating the product.

## 1.2 Product Description

SE-DDL is a Dual link DVI EDID emulator that is designed for single-link and dual-link DVI devices, enables you to emulate and store EDID (Extended Display Identification Data) information from the display.

SE-DDL can trick the DVI source (PC computer, Laptop, etc) emulating any DVI display (LCD monitor, projector) for continuous video output, even if the attached display is disconnected, or powered down. Emulating EDID, the user can set up any DVI output resolution, regardless of the used projector or monitor, this way the overall system's resolution can be controlled.

There are many video peripheral devices which do not offer EDID handshake between the source and remote location displays, the SE-DDL is a perfect solution for ensuring the optimum signal is provided to the display to help prolong the life of the displays.

## What's EDID?

**Extended Display Identification Data (EDID)** is an information set that digital display provides to describe its capabilities to a Video source. Video source will know what kinds of displays are connected and it will determine which resolution to Output according to the EDID information received from the display.

The EDID normally includes manufacturer name and serial number, sets of capable resolution including native resolution, supported timing, pixel mapping data (for digital displays only) and etc.

In a digital connectivity environment; in order to support the maximum resolution of connected monitor, EDID handshake is a critical because improper EDID handshake between sources to the display will result in no image on the display.

EDID handshake may sound simple; however, with multiple peripheral devices within the chain, display's EDID information easily get lost or blocked while it is traveling to the source device.

### 1.3 Product Features

- Allows continuous EDID handshake with single link DVI and Dual link DVI source
- SE-DDL automatically manages EDID handshake between connected devices
- Built-in rotary switch to support up to 15 total EDIDs including 12 default EDID and 3 empty positions for user emulation
- Support default, emulation, and bypass mode
- Built-in equalizer for reliable signal quality performance
- Can be powered directly from the DVI source or with an optional power supply
- Support both DVI single link and DVI dual link
- Support resolution up to 3840 x 2400 @30Hz
- Plug and play

### 1.4 What's in the Box

- 1) SE-DDL
- 2) Micro USB to DC jack cable
- 3) User Manual

### 1.5 Installation

\* Important: Please use the installation procedure below.

Improper or no operation may result if the start-up sequence is not correctly followed.

#### Step 1

Provide power to the SE-DDL via one of the options.

A) Connect DVI cable between DVI source and DVI Input of SE-DDL (when the source provide 5V)

B) Plug 5V power adapter

Then, ensures the power LED is on

#### Step 2

For EDID selection, there are 3 ways to set EDID. Bypass, Factory default, and Emulation.

**Bypass:** This mode enables the source to communicate EDID directly from the connected display

**Factory default :** This mode, user can select EDID from 13 factory pre-programmed EDID.

See below chart for EDID information. After making an EDID selection using rotary dial, press SAVE button for half seconds for selected EDID to be applied.

**Emulation :** This mode, user can emulate EDID from the display.

There are 3 positions on the rotary dial for user custom emulation. For EDID emulation programming, connected the powered SE-DDL's DVI output to the display, not to the PC.

When the power is connected, turn rotary to any of 1 ~ 3, then press SAVE button next to the rotary dial for 3 seconds, then release. EDID LED will blink few times during EDID emulation process.

Press save button for about half second for selected EDID to be applied.

**EDID rotary dial EDID information chart:**

Rotary Position	EDID
0	Bypass Mode
1	Custom EDID #1
2	Custom EDID #2
3	Custom EDID #3
4	1024 x 768 @60Hz
5	1280 x 720 @60Hz
6	1280 x 1024 @60Hz
7	1366 x 768 @60Hz
8	1440 x 900 @60Hz
9	1600 x 900 @60Hz
A	1600 x 1200 @60Hz
B	1680 x 1050 @60Hz
C	1920 x 1080 @60Hz
D	1920 x 1200 @60Hz
E	1920 x 1440 @60Hz
F	2560 x 1600 @60Hz

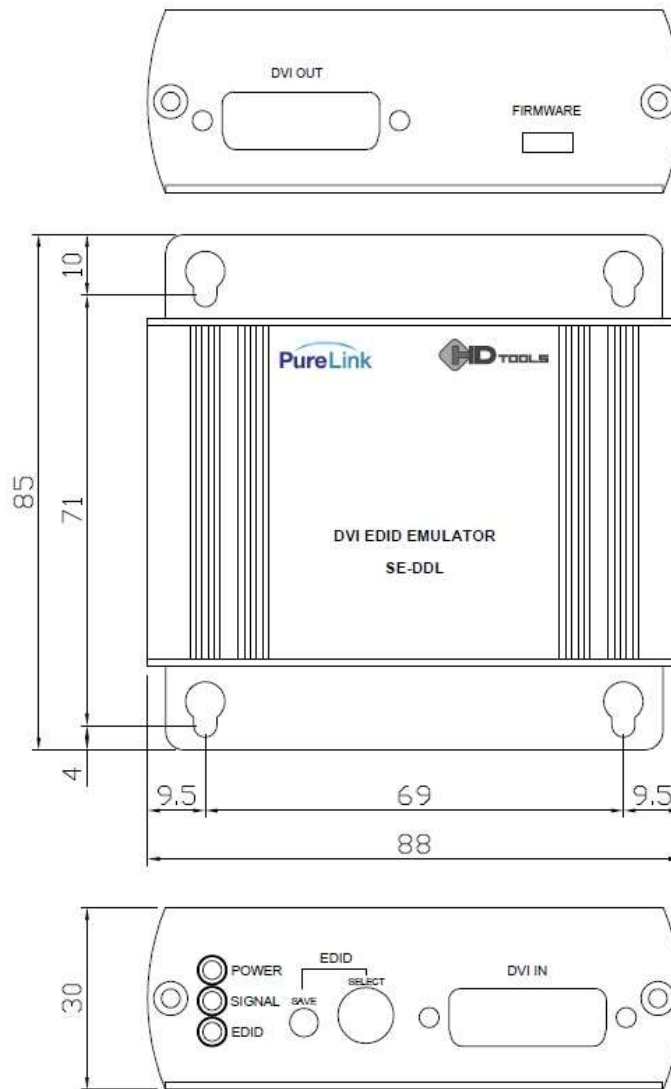
**Step 3**

Plug directly SE-DDL to DVI connector of PC and confirm if the power LED is on. Or, connect 5V power adapter to the power jack of SE-DDL.

Note: If you use laptop or desktop PC with PCI Express graphic card, we recommend using 5V power adapter for SE-DDL.

## Chapter 2. General Specification

Model	SE-DDL
Input Signal	Digital RGB(DVI), Single Link and Dual Link
Output Signal	Digital RGB(DVI), Single Link and Dual Link
Supporting Display Resolutions	Up to 3840 x 2400 @ 30Hz
EDID Rotary	16 Rotary Switch (0~9 & A~F)
Connector Type	Input : 29 PIN DVI-I Connector Output : 29 PIN DVI-I Connector Power: Micro USB Connector Firmware: Serial
Power Supply	DC 5V, 1.0A, Consumption: DC 2.5 W Max
Dimension (WxDxH)	3.5 x 3.4 x 1.2 in.   88 x 85 x 30 mm
Weight	0.4 lbs (0.19 kg)



## 2.1 Environmental Specification

Items	Status
Operating Temperature	32°F ~ 131°F (0°C ~ 55°C)
Operating Humidity	10% ~ 80%, non-condensing
Storage Temperature	-4°F ~ 185°F (-20°C ~ 85°C)
Storage Humidity	5% ~ 95%, non-condensing
Reliability	MTBF: 90% at over 50,000 hours aging test

## Chapter 3. Warranty

### **2 (Two) Years Warranty**

PureLink warrants this SE-DDL to be free from defects in workmanship and materials, under normal use and service, for a period of two (2) years from the date of purchase from PureLink or its authorized resellers. If a product does not work as warranted during the applicable warranty period, PureLink shall, at its option and expense, repair the defective product or part, deliver to customer an equivalent product or part to replace the defective item, or refund to customer the purchase price paid for the defective product. All products that are replaced will become the property of PureLink. Replacement products may be new or reconditioned. Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer. PureLink shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to PureLink for repair under warranty or not.

### **Warranty Limitation and Exclusion**

PureLink 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 PureLink 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.