Introduction

The DVS400 extends the distance between any computer supporting single-link DVI-D and a monitor or projector with a compatible DVI input.
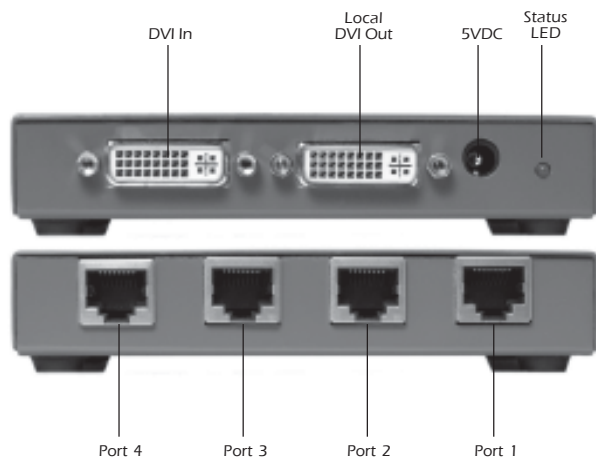
Features

- Supports Mac and PC DVI-D
- Resolutions up to 1920 x 1080
- No degradation of video quality
- LEDs indicate power and loss of clock signal
- External power supplies
- Silent fanless operation
- Perfect Image Quality at all Resolutions.
- Automatic EDID learning for the support of any DVI monitor.

Applications

- Call Centers (co-locate user's computers).
- Industrial (protection against pollution).
- Information Terminals & Kiosks.
- Airports (air traffic control, passenger information systems).

Front and Rear View

DVI In   Local DVI Out   5VDC   Status LED

Port 4   Port 3   Port 2   Port 1

Smart-AVI
Smart Audio Video Integration
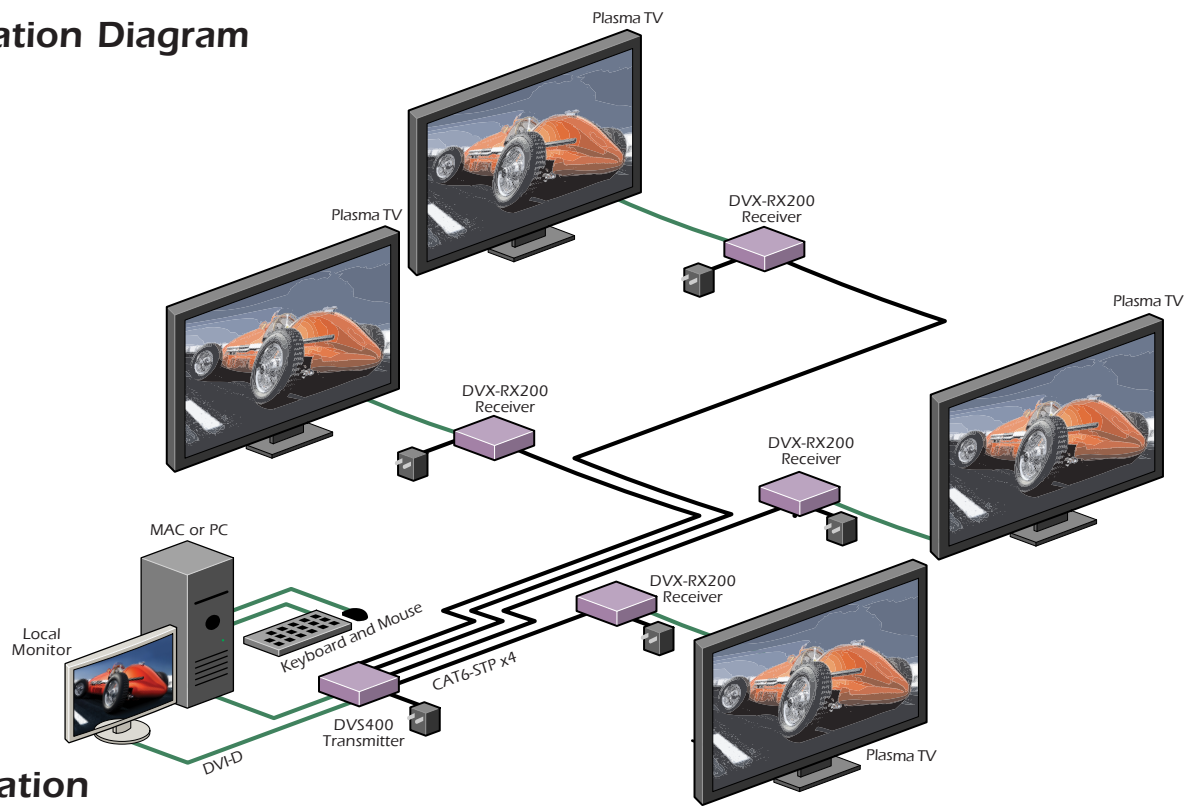
User Manual

DVS400

The DVS400 extends and splits any single-link DVI-D signal 4 ways up to 220 feet using CAT 6 STP shielded cables. (Includes automatic DDC Learning)

www.smartavi.com
m_dvs400-111309

Installation Diagram

Plasma TV

Plasma TV

Plasma TV

Plasma TV

Plasma TV

DVX-RX200 Receiver

DVX-RX200 Receiver

DVX-RX200 Receiver

DVX-RX200 Receiver

MAC or PC

Local Monitor

Keyboard and Mouse

CAT6-STP x4

DVS400 Transmitter

DVI-D

Installation

1. Turn off computer and monitor.

2. Connect DVI male to male cable between the computer and the transmitter.

3. Connect monitor or projector to the local loopback DVI port on the transmitter.

4. Turn on the monitor.

5. Plug in one of the power transformers and connect it to the transmitter.

6. Remove the monitor from the local loopback DVI port on the transmitter and connect it to the DVI port on the receiver.

7. Connect a shielded CAT6 cable between port 1 on the transmitter and port 1 on the receiver.

8. Plug in the other power transformer and connect it to the receiver.

9. Turn on the computer.

EDID Learning Explained

The Display Data Channel (DDC) is a digital connection between a computer display and a graphics adapter that allows the display to communicate its specifications to the adapter.

The Extended Display Identification Data (EDID) is a data structure provided by a computer display over the DDC to describe its capabilities to a graphics card.

The DVS400 does not continue the DDC across the CAT6 STP links and contains its own EDID at the video source input. Therefore, the EDID on the DVS400 is used in place of the actual monitor's EDID. In order for the computer to output at the correct resolutions and refresh rates for a specific monitor, the DVS400 must be loaded with the monitor's EDID.

On power-up the DVS400 reads and stores the EDID of the DVI monitor connected to the local loopback port. If the local loopback port is disconnected during power-up, the stored EDID will not be modified.

Technical Specifications
Input/Output Signal

PIN 1

PIN 8
C 1
C 2
C 4
C 5
C 3
PIN 24

PIN 17
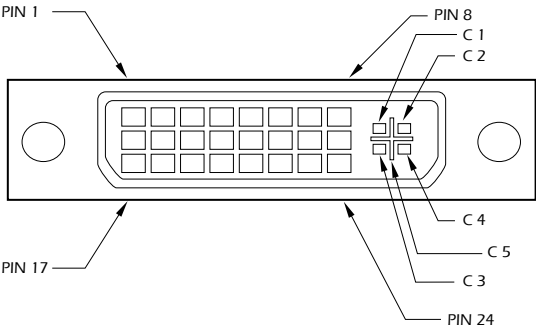
Pin #	Signal	Pin #	Signal
1	T.M.D.S Data 2-	16	Hot Plug Detect
2	T.M.D.S Data 2+	17	T.M.D.S Data 0-
3	T.M.D.S Data 2/4 Shield	18	T.M.D.S Data 0+
4	T.M.D.S Data 4-	19	T.M.D.S Data 0/5 Shield
5	T.M.D.S Data 4+	20	T.M.D.S Data 5-
6	DDC Clock	21	T.M.D.S Data 5+
7	DDC Data	22	T.M.D.S Clock Shield
8	Analog Vert. Sync	23	T.M.D.S Clock+
9	T.M.D.S Data 1-	24	T.M.D.S Clock -
10	T.M.D.S Data 1+		
11	T.M.D.S Data 1/3 Shield	C1	Analog Red
12	T.M.D.S Data 3-	C2	Analog Green
13	T.M.D.S Data 3+	C3	Analog Blue
14	5VDC 1.6A	C4	Analog Horz Sync
15	GND	C5	Analog Ground

Resolutions
Supported by the internal EDID configuration

Resolution	Refresh Rate
640 x 480	85 Hz
800 x 600	85 Hz
1024 x 768	85 Hz
1152 x 870	75 Hz
1280 x 768	75 Hz
1280 x 960	60 Hz
1280 x 1024	60 Hz
1600 x 1200	60 Hz
1920 x 1080	60 Hz