

Introduction

The DVS200 extends the distance between any computer supporting single-link DVI-D and a monitor or projector with a compatible DVI input.

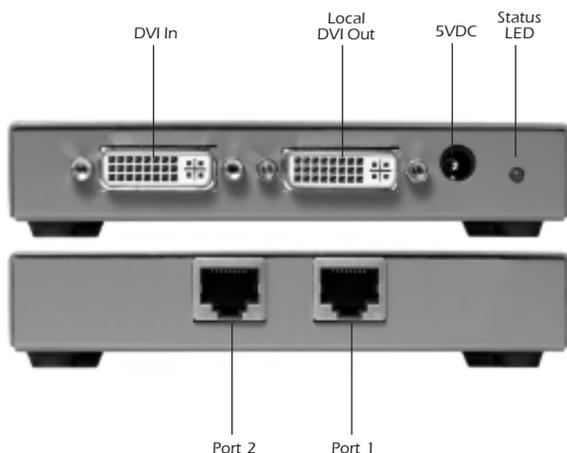
Features

- 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



© Copyright 2007 Smart-AVI, All Rights Reserved

Notice

The information contained in this document is subject to change without notice. Smart-AVI makes no warranty of any kind with regard to this material, including but not limited to, implied warranties of merchantability and fitness for any particular purpose.

Smart-AVI will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

No part of this document may be photocopied, reproduced or translated into another language with out prior written consent from Smart-AVI.

Smart-AVI

Smart Audio Video Integration

User Manual

DVS200

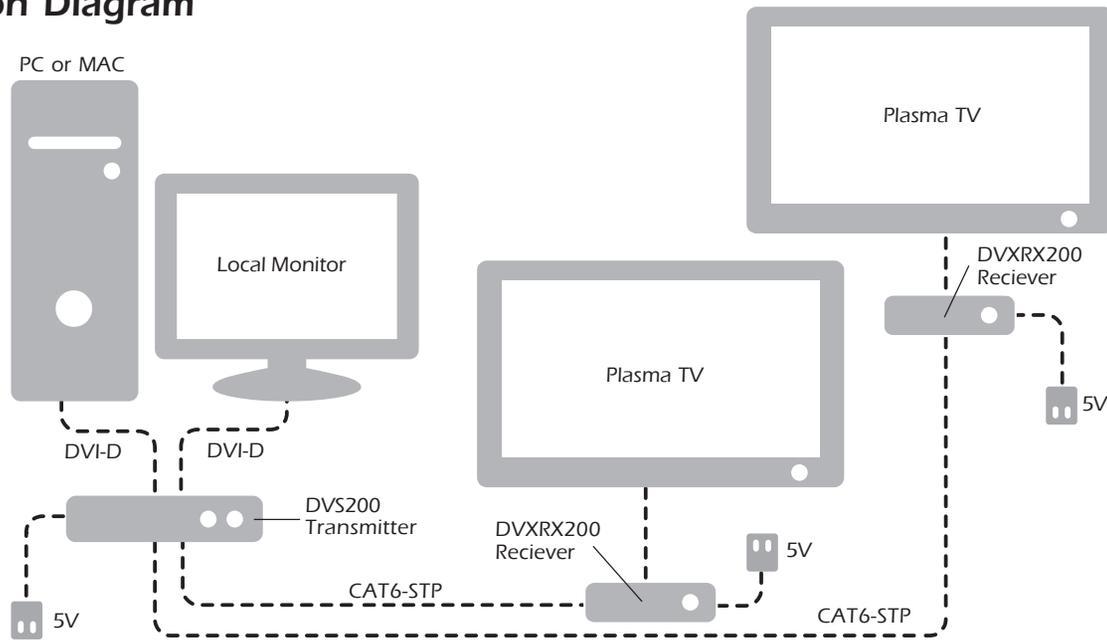


The DVS200 extends and splits any single-link DVI-D signal 2 ways up to 220 feet using CAT 6 shielded cables. (Includes automatic DDC Learning)

Smart-AVI
2840 N. Naomi Ave.
Burbank, California 91504
Phone: (818) 565-0011
Facsimile: (818) 565-0020

www.smartavi.com

Installation Diagram



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

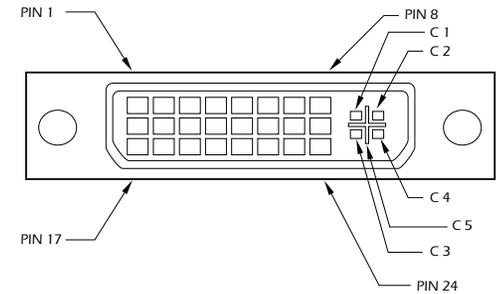
The Display Data Channel (DDC) is a digital connection between a computer display and a graphics adapter that allows the display to communicate its specifications to the adapter.

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 DVS200 does not continue the DDC across the CAT6 links and contains its own EDID at the video source input. Therefore, the EDID on the DVS200 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 DVS200 must be loaded with the monitor's EDID.

On power-up the DVS200 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 #	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	+5V Power	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

Preparing System CAT6 Cable

Pair 1 Pins 1 & 2
 Pair 2 Pins 3 & 6
 Pair 3 Pins 4 & 5
 Pair 4 Pins 7 & 8

Connectors: RJ-45
 Capacitance: 14 pf/ft (46.2 pf/m)
 Conductor Gauge: 24 AWG
 Impedance: 100 +/- 15 ohms
 4 - Pair, (stranded) Foil Shielded

