VOPEX® Series

VOPEX-DVIS(A)-x
2, 4, 8, or 16 Port DVI Splitter
Installation and Operation Manual

Front and Rear Views of VOPEX-DVIS-8

TRADEMARK

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CHANGES

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INTRODUCTION

The VOPEX-DVIS-x DVI video splitter (x= 2, 4, 8 or 16) enables single-link digital DVI displays (monitors, HDTV (LCD, PDP), projectors) to be driven by a single digital DVI source (PC, DVD player, Satellite receiver,etc.) with no loss of signal. The VOPEX-DVIS-x is available with 2,4,8 or 16 output ports.

Features:

- Connects HDTV or computer DVI source to multiple DVI compatible displays or projectors.

- Supports HDTV resolutions to 1080p and computer resolutions to 1920x1200@ 60Hz.

- Distributes digital DVI graphic signal to two, four, eight, or sixteen displays simultaneously.

- No distortion or attenuation of the signal.

- Supports DVI 1.0 and HDCP standards.

- Full DDC2B communications are supported.

- EDID learning for the support of any DVI display device

- Passes HDMI audio and video signal through DVI-I port.

    - Transmit audio and video over a single cable with the DVI-HD-xx-MM male DVI-D to male HDMI cable.

Option

For Stereo Audio support, add an "A" to the model number (i.e. VOPEX-DVIS**A**-x).
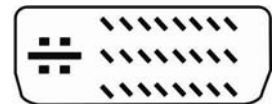
MATERIALS

Materials Supplied with this kit:

- NTI VOPEX-DVIS(A)-2/4/8/16 DVI Video Splitter
- 100VAC to 240VAC at 50 or 60Hz-5VDC/3.0A AC Adapter (2, 4 and 8 port models only)
- Line cord, country specific (16 port model only)
- DVI-IS-3-MM 3 foot DVI video interface cable
- SA-3-MM 3 foot stereo audio interface cable (models with stereo audio support only)
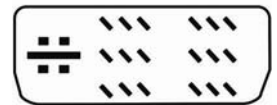- This owners manual

Materials *Not* Supplied, but *REQUIRED*:

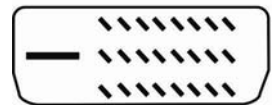DVI interface cables ARE REQUIRED but <u>not supplied</u>.

- DVI-IS-x-MM cable   **-**   DVI-I single link cable for video interface

Available (x) in 3, 6 , 10 and 15 foot cables

Also available from NTI:

- DVI-DS-x-MM   **-**   DVI-D dual link cable for video interface
  Available (x) in 3, 6 and 9 foot cables
- DVI-DS-33-MM   **-**   33 foot single link DVI-D cable with dual link connectors for video interface

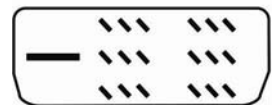- DVI-HD-xx-MM   **-**   3, 6, 10 or 15 foot single link DVI-D to HDMI for video and audio interface

DVI-I Dual Link

DVI-I Single Link

DVI-D Dual Link

DVI-D Single Link

Where MM indicates male-to-male connector

All cables can be purchased from Network Technologies Inc by calling 800-RGB-TECH (800-742-8324) or (330)-562-7070.

CONNECTORS AND LEDS
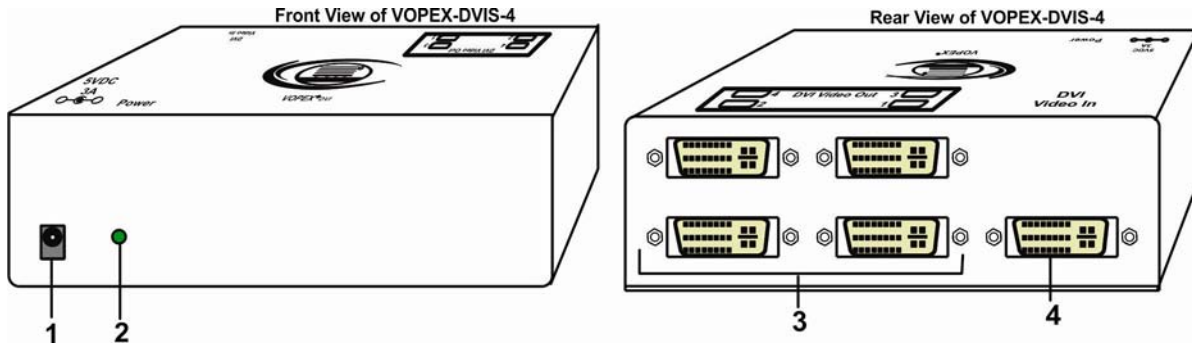
#	LABEL	CONNECTOR/LED	DESCRIPTION
1	**5V 3.0A**	3.5x1.3mm Power Jack	for connection of power supply
2	**Power**	Green LED	illuminates to indicate proper power to the unit
3	**DVI Video Out**	DVI female connector	for connection of the display devices
4	**DVI Video In**	DVI female connector	for connecting video cables from DVI video source
5	**AUDIO IN/OUT**	Stereo Audio jacks	for connecting stereo audio cables (models with audio support)
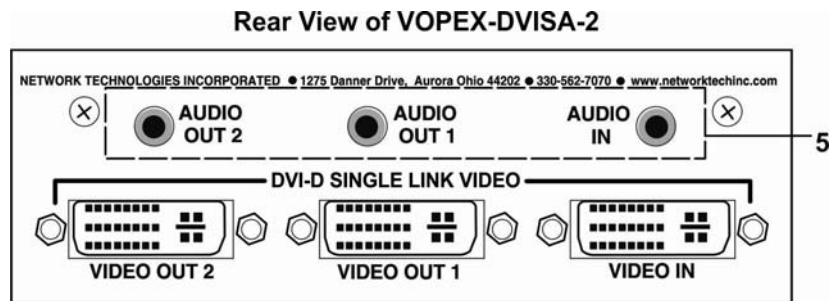
INSTALLATION

The VOPEX is a Plug-and-Play device with no special configuration settings and easy installation steps:

1. Before connecting the VOPEX to the video source, make sure the video source and the monitor(s) are turned OFF.

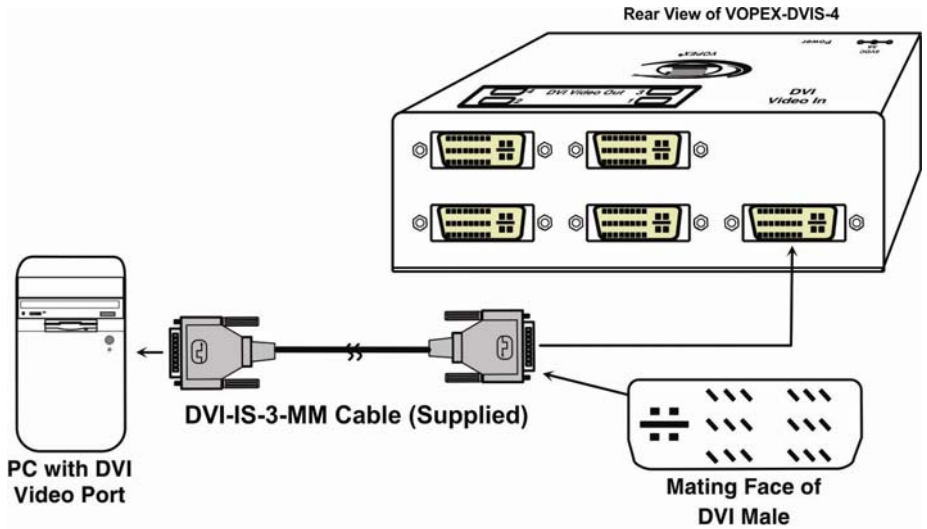2. Connect the video source to the DVI port labeled "DVI Video In" on the rear panel of the VOPEX using the DVI-IS-3-MM cable (supplied). Longer lengths (6, 10 and 15 foot) are also available.

Rear View of VOPEX-DVIS-4

DVI-IS-3-MM Cable (Supplied)

PC with DVI Video Port

Mating Face of DVI Male

3. Connect a monitor to a DVI female port labeled "DVI Video Out x" on the rear panel of the VOPEX using a male-to-male DVI cable.

Note: Some monitors need to have their video input type set manually. In this case, select "Digital DVI" as the input type.

Note: We recommend using monitors of all the same model, however it is not required.

DDC data is collected from all monitors but only resolution options common to all connected monitors are passed to the source.

Rear View of VOPEX-DVIS-4

Mating Face of DVI Female

DVI Enabled Monitor

3.5mm Stereo
Plug   SA-xx-MM   3.5mm Stereo
Plug

Stereo Audio
Source

(3,6,10 and 15 foot cables available)
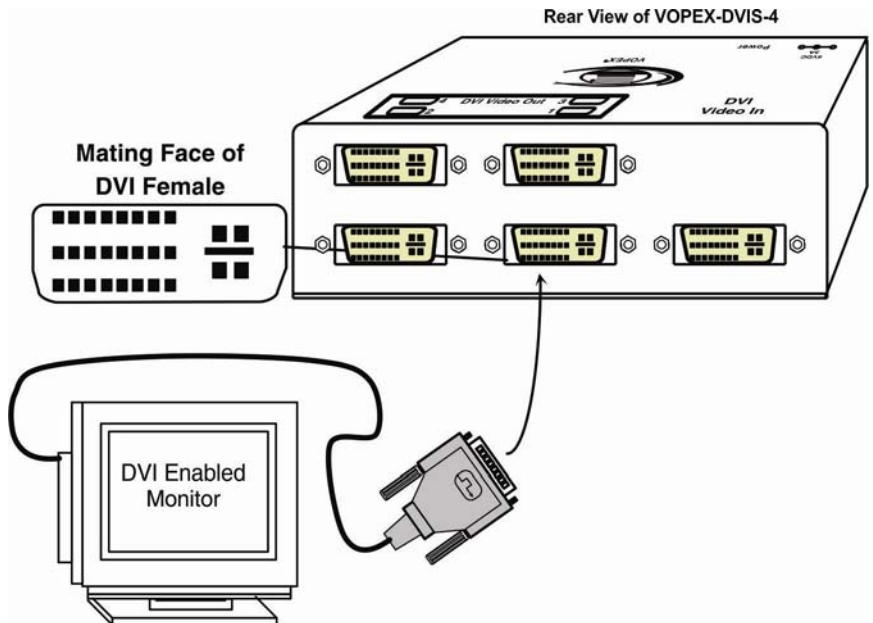
4. For models with audio support, connect the SA-3-MM stereo audio cable between an audio source and the "AUDIO IN" port on the VOPEX. Connect any self-powered stereo audio speakers to the "AUDIO OUT x" ports.

Rear View of VOPEX-DVISA-2

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AUDIO
OUT 2

AUDIO
OUT 1

AUDIO
IN

DVI-D SINGLE LINK VIDEO

VIDEO OUT 2   VIDEO OUT 1   VIDEO IN

Self-Powered
Amplifier

Stereo
Speakers

Front View of VOPEX-DVIS-4
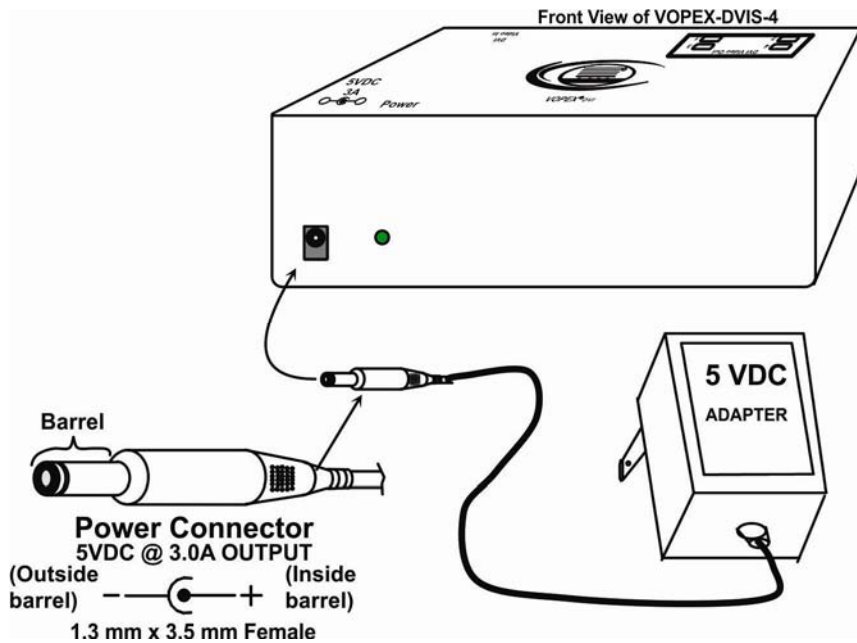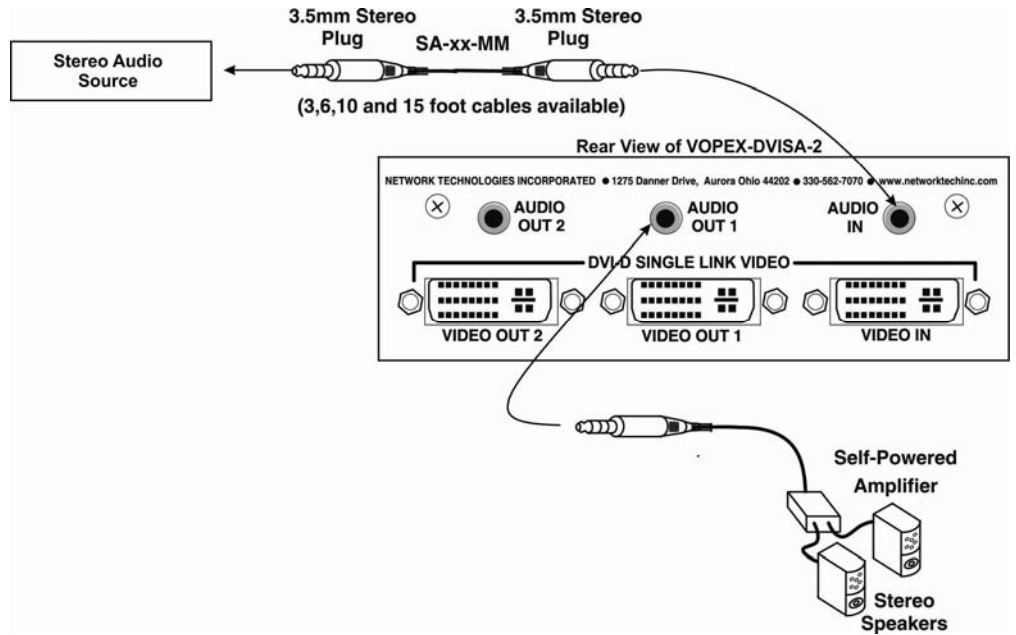
5. Plug the 5VDC AC adapter into the power jack on the rear panel.

6. Power up the VOPEX first.

7. Power up the display device(s) and speakers (as applicable).

8. Power up the video source and audio source (as applicable).

5 VDC
ADAPTER

Barrel

Power Connector
5VDC @ 3.0A OUTPUT
(Outside
barrel)   − —⊙— +   (Inside
barrel)
1.3 mm x 3.5 mm Female

CASCADING

For applications that require more connections than are provided for by the VOPEX-DVIS-x, one option is to connect multiple VOPEXs in a cascaded configuration (example below).   Using additional DVI-IS-xx-MM cables, connect the DVI Video Out ports of a master VOPEX unit (master is connected to the video source) to the DVI Video In ports of additional VOPEX-DVIS-x (shown as "Slave Unit #1" and "Slave Unit #2" below).   Connect DVI enabled displays to the cascaded VOPEXs for a larger configuration.

Tip: Any size NTI VOPEX-DVIS(A)-x can be used interchangeably in the cascaded configuration.

Note: Additional tiers of slave units can be added, however If too many levels of slave units are added, the image on the lower tiers may become unstable.
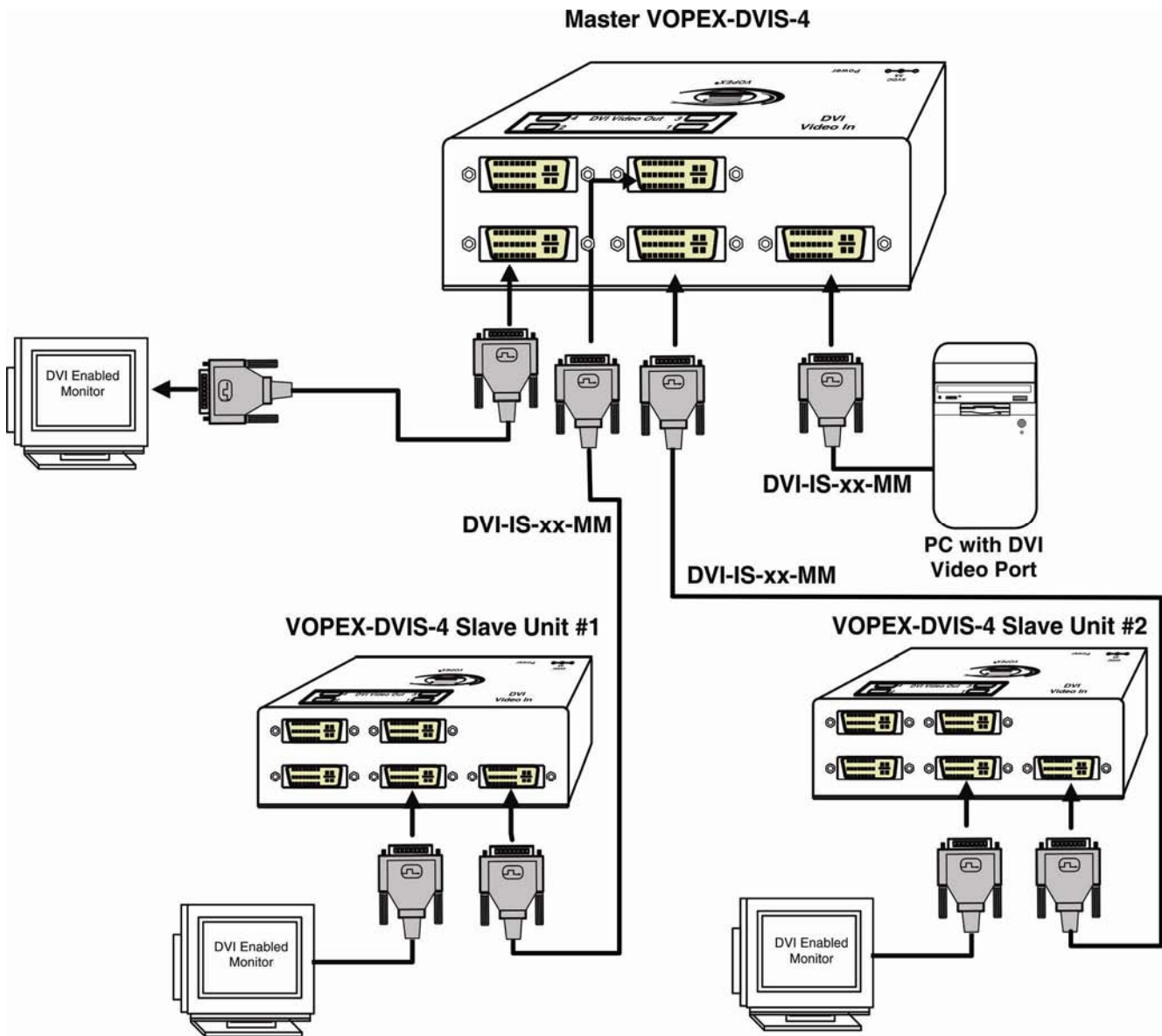
TECHNICAL SPECIFICATIONS

VIDEO	
Video Source	Computer, Satellite Receiver or DVD player with DVI-D output
Video Connections	Female DVI-I
Frequency	165 MHz
Supported Standard Resolution	1920 x 1200 @ 60Hz
DDC	Supported on all ports (finds all EDID data and sends common data to source)
AUDIO	
Audio Connectors	3.5mm female stereo audio connectors
Signal Type	Line Level, stereo, unbalanced
Audio Frequency Response	20Hz to 20Khz, $\pm$ 1dB
Signal-to-noise ratio	76 dBA
Total Harmonic Distortion and Noise	0.017%
Stereo Crosstalk	-70 dB
Audio Maximum I/O Levels	3.1Vp-p
Output Impedance	Max 2K Ohms, unbalanced
GENERAL	
Operating temperatures	32°F to 122°F (0°C to 50°C)
Operating Relative Humidity	10 to 90% non-condensing RH
Power Supply	• 100 to 240 VAC at 50 or 60 Hz-5VDC\3A AC adapter (2,4 or 8 port models) • 100 to 240 VAC at 50 or 60 Hz via line cord (16 port model)
Size (In.) WxDxH VOPEX-DVIS-2 VOPEX-DVIS-4 VOPEX-DVIS-8 VOPEX-DVIS-16	 5.13x3.45x1.09 5.6x3.6x1.5 8.33x3.45x1.68 17.47x7.22x1.68

TROUBLESHOOTING

If the VOPEX is not working properly, please look for a solution in the list below:

PROBLEM: No video at all

SOLUTION: Check cable connections on the video source, monitor and the VOPEX. After reconnecting, if a CPU is the video source, the CPU may need to be re-booted in order to sense the monitor connection.

PROBLEM: No video on one port

SOLUTION: Check cable connections on that port. Hot plug and/or power cycle the video source while that port is connected

PROBLEM: Some artifacts in the picture

SOLUTION: Check for any loose connection between cable and connectors. If loose, it may be necessary to reboot the CPU to achieve a clear image.

If a solution was not found in the list above, answers may be found in the Frequently Ask Questions (FAQs) section of our website at **http://www.networktechinc.com** or call us directly at (**800) 742-8324 (800-RGB-TECH)** or **(330) 562-7070** and we will be happy to assist in any way we can.

WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at **http://www.networktechinc.com** for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

PRODUCT: _____

SERIAL NO.: _____

DATE: _____   **INSPECTED BY:** _____

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