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VOPEX® Series

VOPEX-DVI4K-2

2 Port 4K DVI/HDMI Video Splitter

Installation and Operation Manual

VOPEX-DVI4K-2

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INTRODUCTION

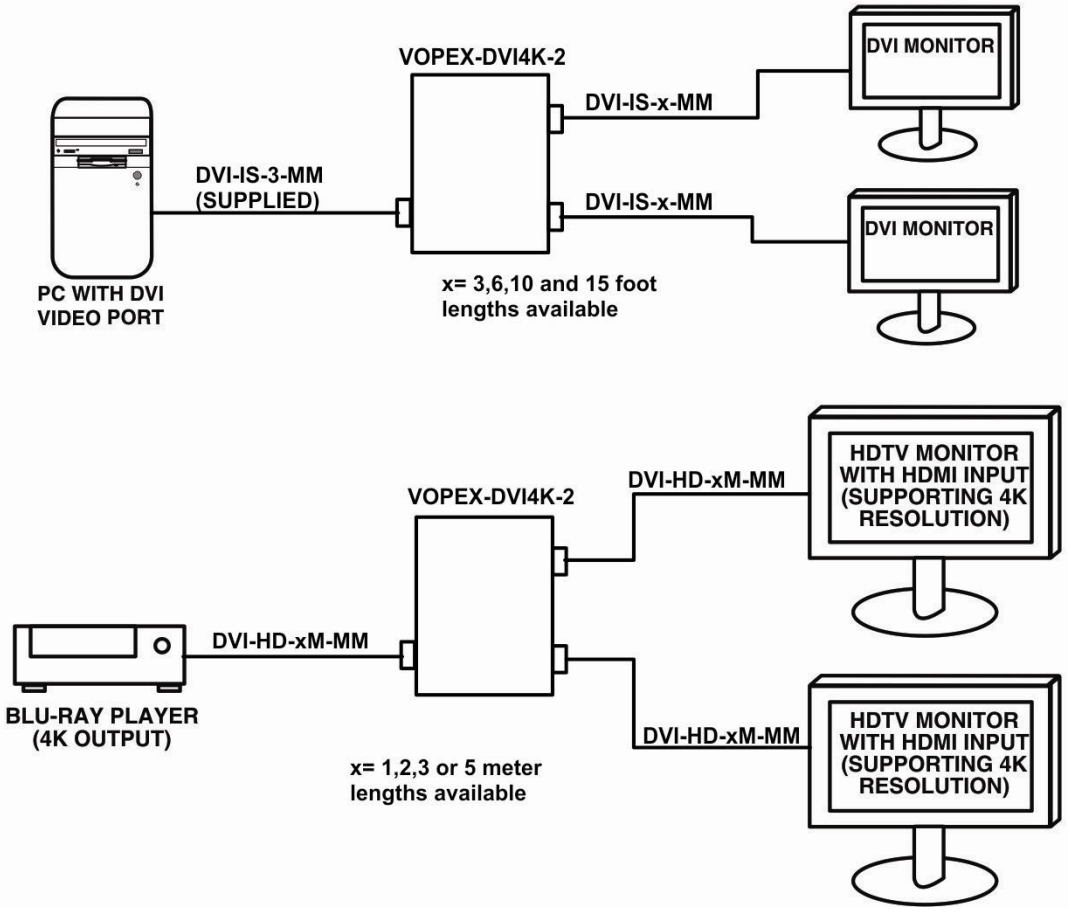
The VOPEX-DVI4K-2 2-Port 4K DVI/HDMI video splitter enables two single-link digital DVI displays or two 4K HDMI displays (with appropriate cables or adapters) to be driven by a single digital DVI or HDMI source (PC, DVD player, Satellite receiver, etc.) with no loss of signal. Compatible displays include (but are not limited to) HDMI monitors, HDTV (LCD, PDP), projectors, etc.

Features:

- Connects HDTV or computer DVI or HDMI source to two DVI or HDMI compatible displays or projectors.
- Supports video resolutions to 4K @24Hz and 30Hz ; 1080p@60Hz
    - PC resolutions to 3840x2160 @24Hz and 30Hz; 1920x1200 @60Hz
- Distributes digital 4K graphic signal to two displays simultaneously.
- No distortion or attenuation of the signal.
- Supports DVI 1.0, HDMI 1.4a and HDCP 1.3 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.

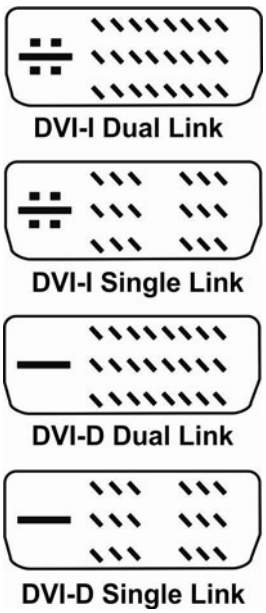
Common Applications



MATERIALS

Materials Supplied with this kit:

- NTI VOPEX-DVI4K-2 DVI/HDMI Video Splitter
- 100VAC to 240VAC at 50 or 60Hz-5VDC/3.0A AC Adapter
- DVI-IS-3-MM 3 foot DVI-I single link video interface cable
- This owners manual



Materials *Not* Supplied, but *REQUIRED*:

DVI interface cables ARE REQUIRED but not supplied.

- DVI-IS-x-MM cable - DVI-I single link cable for video interface
  Available (x) in 3, 6 , 10 and 15 foot cables

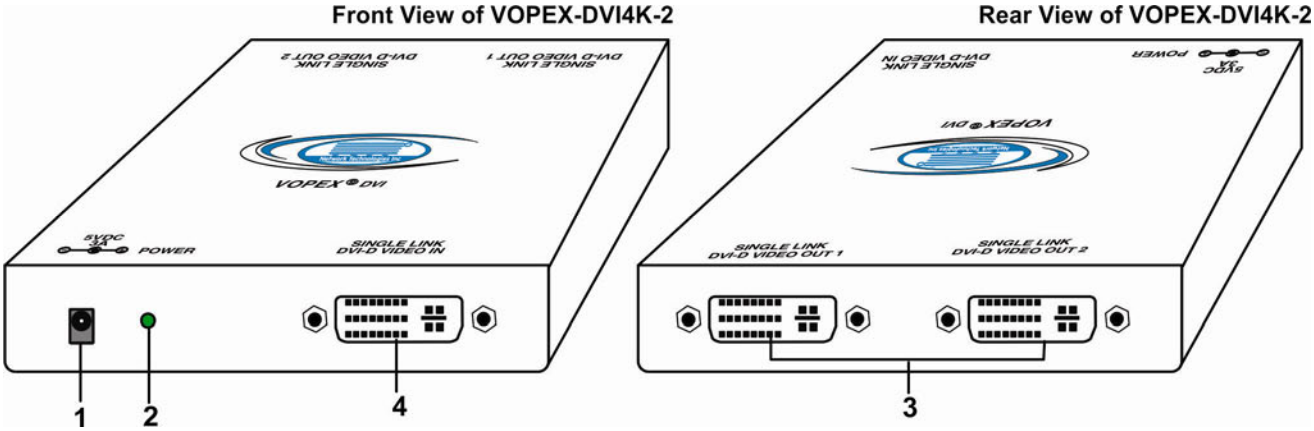
Also available from NTI:

- DVI-DS-2M-MM DVI-D single link 2 meter cable for video interface
- DP-DVID-x-MM - Display port to single link DVI -D cable for video interface
  Available (x) in 3, 6 , 10 and 15 foot cables
- DVI-HD-xM-MM - 1, 2, 3 or 5 meter single link DVI-D to HDMI for video and audio interface

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



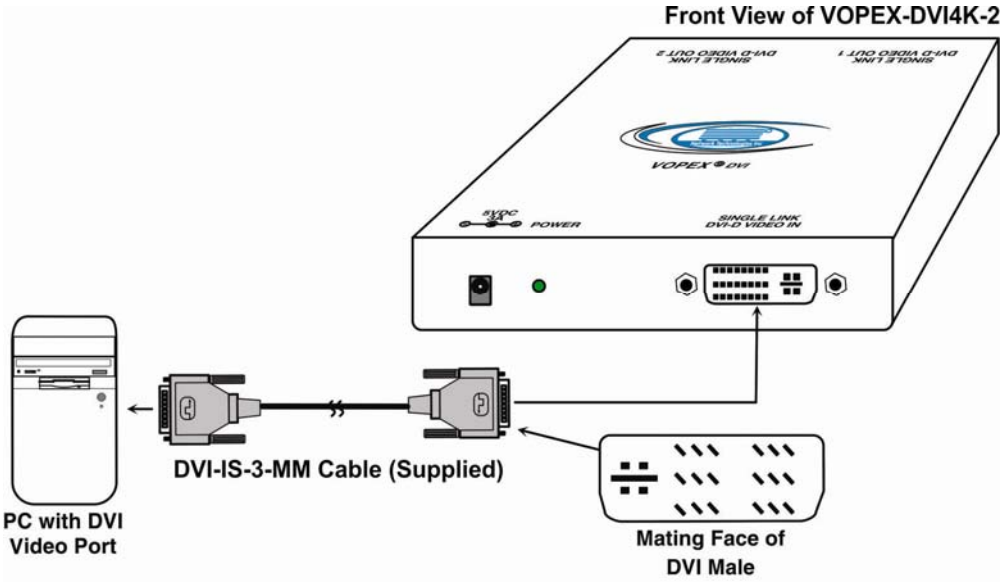
#	LABEL	CONNECTOR/LED	DESCRIPTION
1	**5V 3.0A**	3.5x1.3mm Power Jack	for connection of power supply
2	**Power**	Green LED	illuminates to indicate proper power to the unit
3	**DVI Video Out**	DVI female connector	for connection of the display devices
4	**DVI Video In**	DVI female connector	for connecting video cables from DVI or HDMI video source

INSTALLATION

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

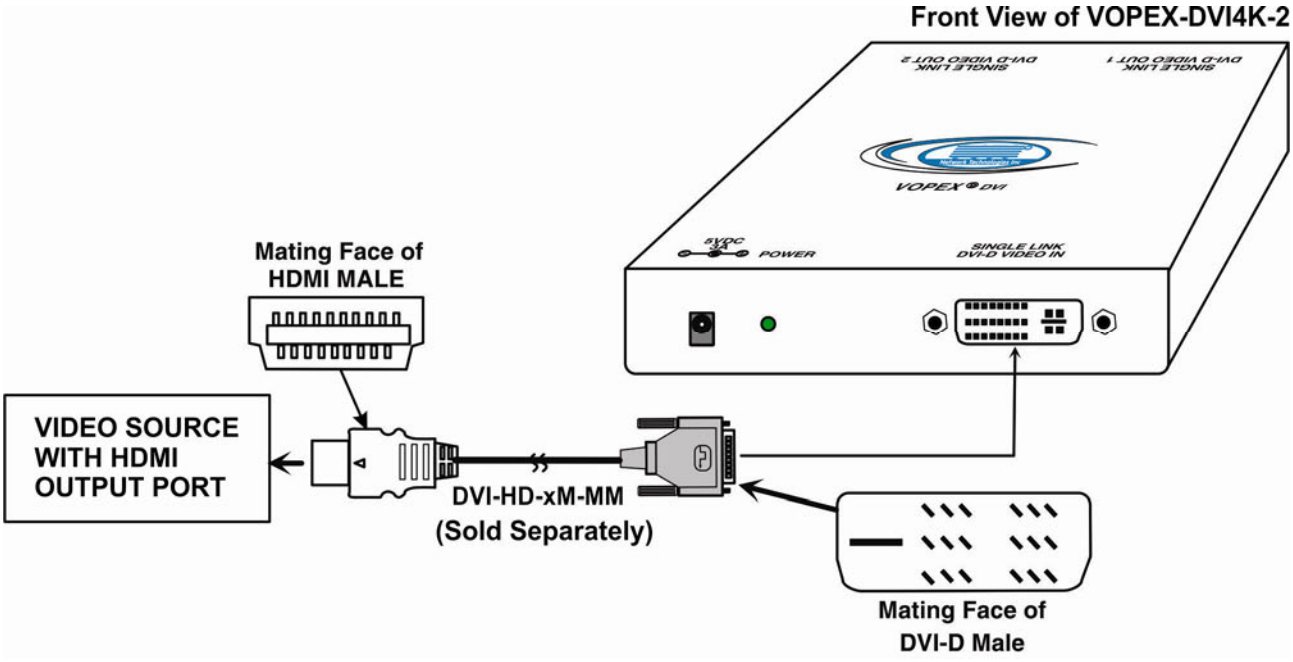
1. Before connecting the VOPEX to the video source, make sure the video source and the monitor(s) are turned OFF.

2. Connect the video source to the DVI port labeled “DVI-D 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.



When the video source has an HDMI output port, connection can be made using a DVI-HD-xM-MM cable (x= 1, 2, 3 or 5 meters-sold separately).

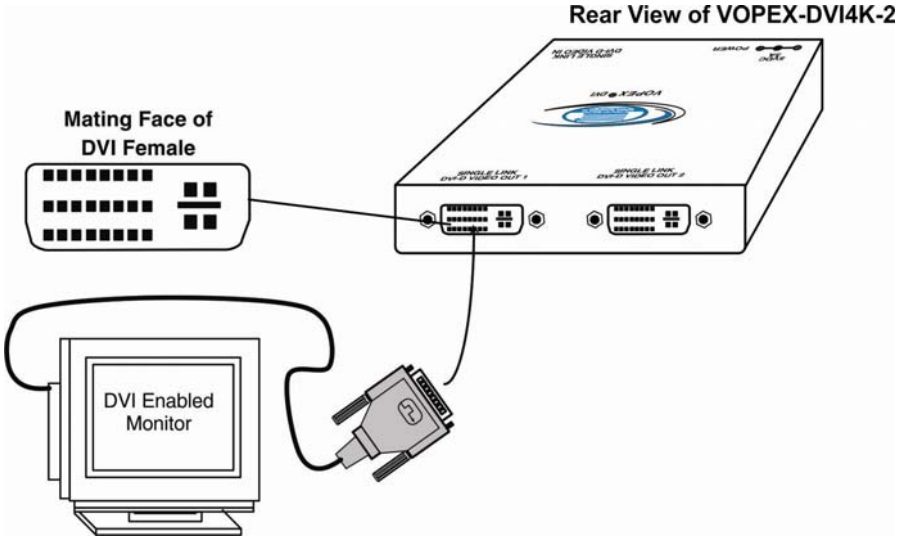
Note: If the video source and the connected monitors each support 4K resolution, 4K resolution will be displayed, regardless of the HDMI or DVI cable type used to connect them.



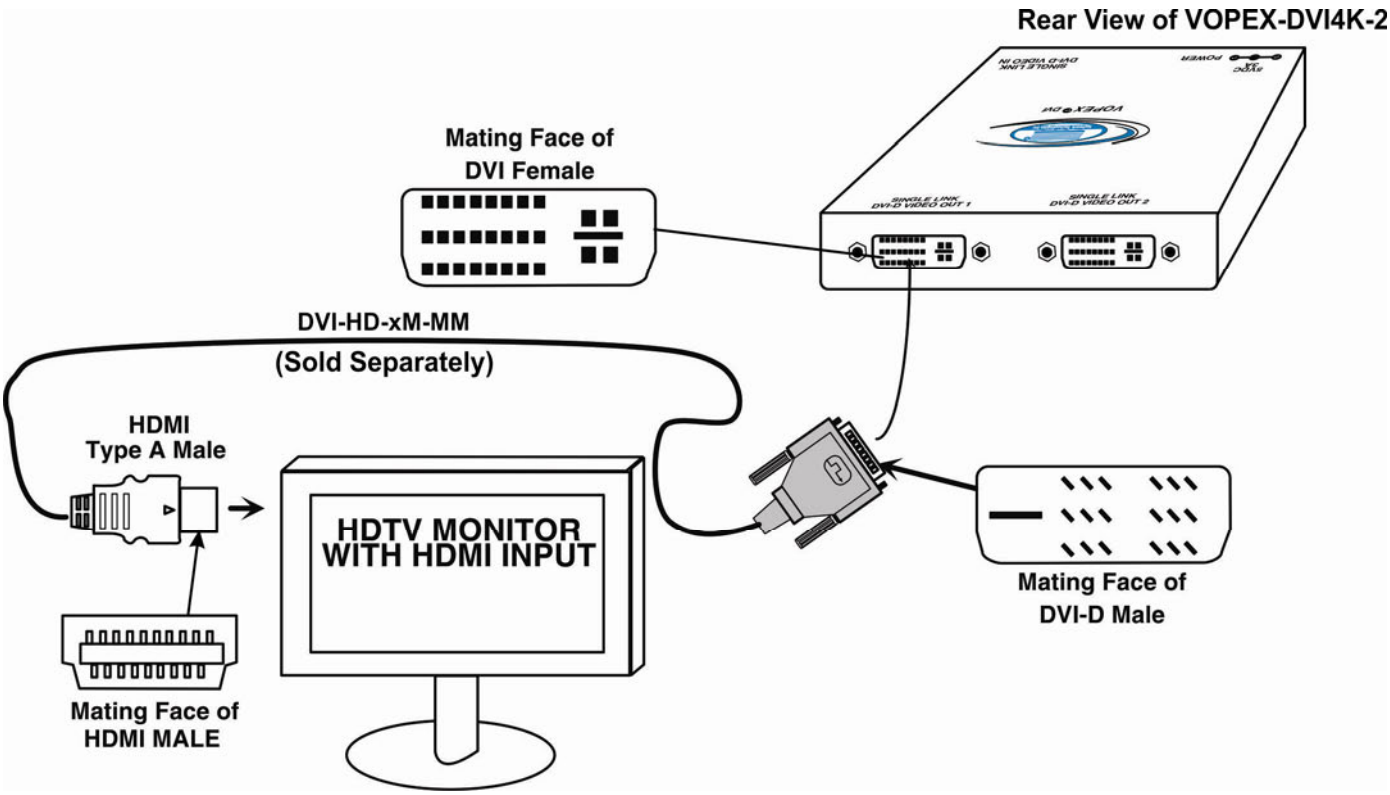
3. Connect a monitor to a DVI female port labeled “DVI-D Video Out x” on the rear panel of the VOPEX using a male-to-male DVI cable.

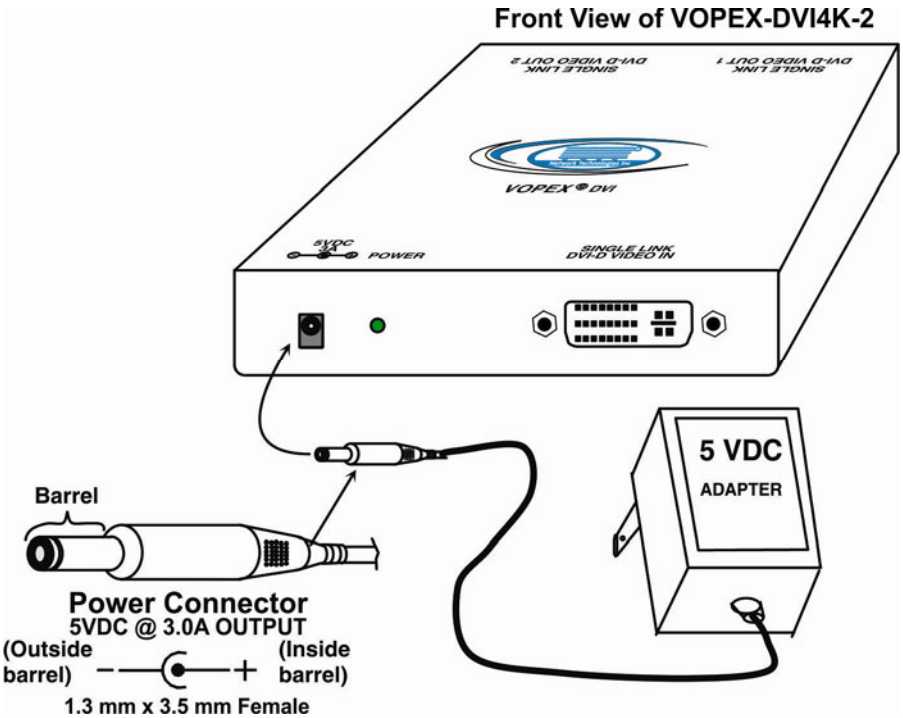
Note: Some monitors need to have their video input type set manually. In this case, select “Digital DVI” as the input type.

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.



When the display has an HDMI port, connection can be made using a DVI-HD-xM-MM cable (x= 1, 2, 3 or 5 meters-sold separately).





4. Plug the 5VDC AC adapter into the power jack on the rear panel.

5. Power up the VOPEX.

6. Power up the display device(s).

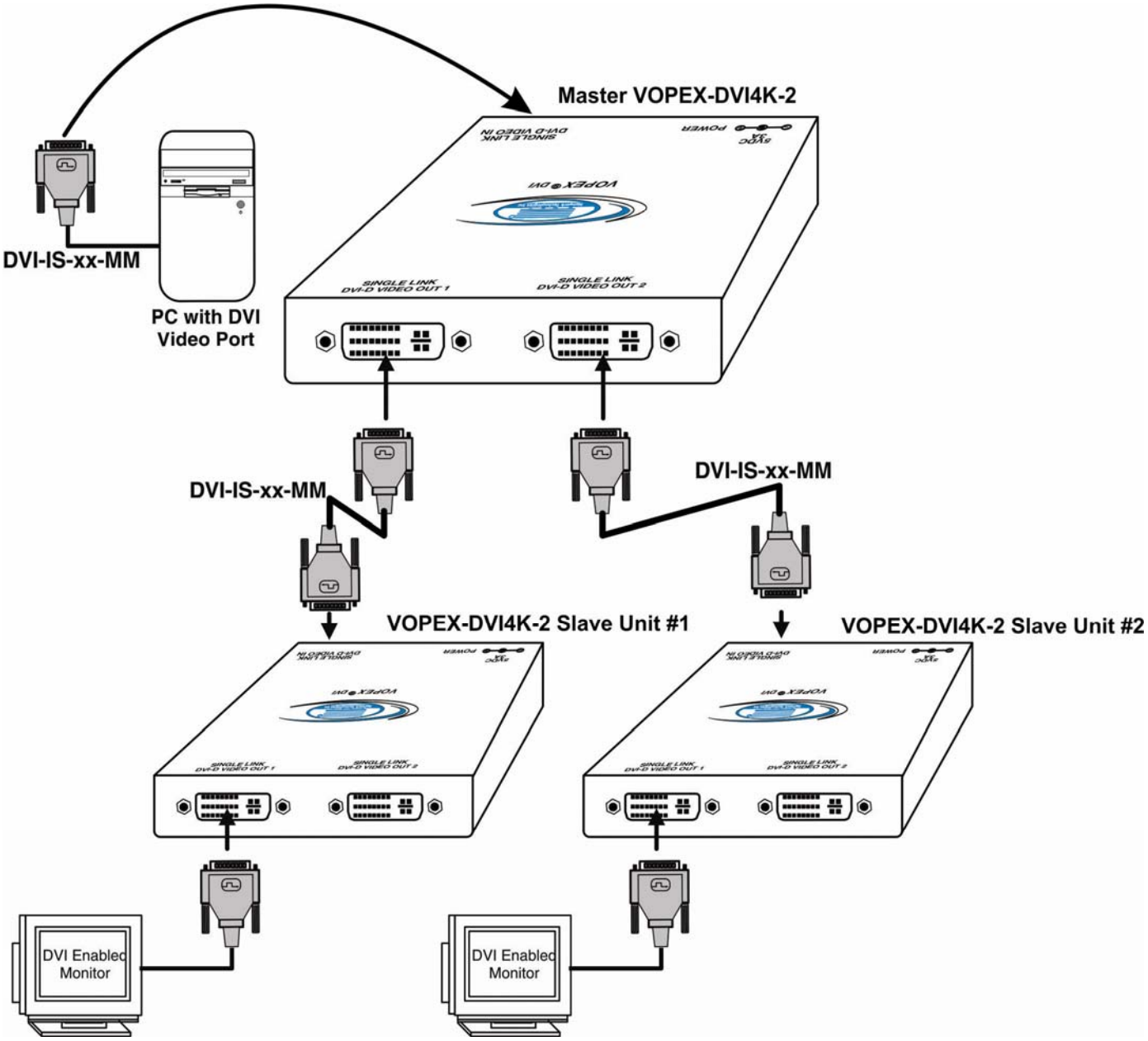
7. Power up the video source.

The video from the source should now be displayed on both connected display devices.

CASCADING

For applications that require more connections than are provided for by the VOPEX-DVI4K-2, 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-DVI4K-2 (shown as “Slave Unit #1” and “Slave Unit #2” below). Connect DVI/HDMI enabled displays to the cascaded VOPEXs for a larger 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	Any with DVI or HDMI output (Computer, Satellite Receiver, DVD player,etc)
Video Connections	Female DVI-I Single Link
Maximum Pixel Clock Rate	340 MHz
Supported Standard Resolution	Up to 4K/3840x2160@30Hz or 1080p/1920x1200@60Hz.
Supported video standards	DVI 1.0, HDMI 1.4a and HDCP 1.3
DDC	Supported on all ports (finds all EDID data and sends common data to source)
GENERAL	
Operating temperatures	32 to 100°F (0 to 38°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
Size (In.) WxDxH	4.25 x 3.87 x 1.09

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.

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