

USER MANUAL

MODEL:

VP-427H2

4K HDBaseT Receiver/Scaler



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Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront the video, audio, presentation, and broadcasting professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better!

Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment.
- Review the contents of this user manual.



Go to www.kramerav.com/downloads/VP-427H2 to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

Achieving the Best Performance

- Use only good quality connection cables (we recommend Kramer high-performance, high-resolution cables) to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables).
- Do not secure the cables in tight bundles or roll the slack into tight coils.
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality.
- Position your Kramer **VP-427H2** away from moisture, excessive sunlight and dust.



This equipment is to be used only inside a building. It may only be connected to other equipment that is installed inside a building.

Safety Instructions



Caution: There are no operator serviceable parts inside the unit.

Warning: Use only the Kramer Electronics power supply that is provided with the unit.

Warning: Disconnect the power and unplug the unit from the wall before installing.

Recycling Kramer Products

The Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC aims to reduce the amount of WEEE sent for disposal to landfill or incineration by requiring it to be collected and recycled. To comply with the WEEE Directive, Kramer Electronics has made arrangements with the European Advanced Recycling Network (EARN) and will cover any costs of treatment, recycling and recovery of waste Kramer Electronics branded equipment on arrival at the EARN facility. For details of Kramer's recycling arrangements in your particular country go to our recycling pages at www.kramerav.com/support/recycling.

Overview

Congratulations on purchasing your Kramer **VP-427H2 4K HDBaseT Receiver/Scaler**.

VP-427H2 is a high-performance receiver/scaler for extended-reach HDBaseT twisted pair, HDMI™, bidirectional RS-232 and IR signals. The unit receives an HDBaseT signal that it converts to HDMI and passes Ethernet, IR and RS-232 signals. It also de-embeds and outputs an unbalanced stereo audio signal, and up- or down-scales the picture to match the resolution of the HDMI monitor.

VP-427H2 is housed in a compact, Kramer MegaTOOL™ enclosure which can be mounted side by side in a 19-inch rack adapter.

VP-427H2 provides exceptional quality, advanced and user-friendly operation, and flexible control.

Exceptional Quality

- Max. Output Resolution (HDMI) – Up- and down-scales to any resolution. (Maximum resolution: 4K@60Hz (4:4:4)).
- Max. Input Resolution (HDBaseT) – HDBaseT input resolution up to 4K@60Hz (4:2:0).
- Supports HDMI 2.0 and HDCP 1.4 / 2.2.
- Audio Support – Embedded and analog (supporting LPCM 2CH) for the output.
- HDBaseT Data Tunneling – Supports Ethernet tunneling, as well as bidirectional tunneling for RS-232 and IR control.
- On-Screen Display (OSD) – For easy setup and adjustment, accessible via the front-panel buttons.
- Constant Sync – Maintains sync on the output, even if the input video signal is lost or interrupted.
- System Range – Up to 100m (328ft) at 4K.

Advanced and User-friendly Operation

- Control of scaler via OSD menu and navigation buttons.
- Fast reset to XGA / 1080P output resolution.
- Bi-directional RS-232 on 9-pin D-SUB connector.

- HDMI video and audio.
- Built-in video Proc-Amp – control of color, hue, sharpness, contrast, and brightness.
- Advanced EDID management.
- Constant Sync – Maintains sync on the output, even if input video signal is lost or interrupted.
- Audio – Unbalanced stereo and embedded audio output.
- Firmware Upgrade – Via USB-A port.
- Non-volatile memory that retains the last settings after switching the power off and then on again.

Flexible Connectivity

- HDBT tunneling of Ethernet in the receiver (in addition to the current IR and RS-232 tunneling).
- A FREEZE button, RESET TO XGA/1080P buttons (to hardware-reset the output resolution).
- Analog stereo audio output.
- Embedded audio on the HDMI output.
- IR input and output port tunneling.
- RS-232 port tunneling.

Typical Applications

VP-427H2 is ideal for the following typical applications:

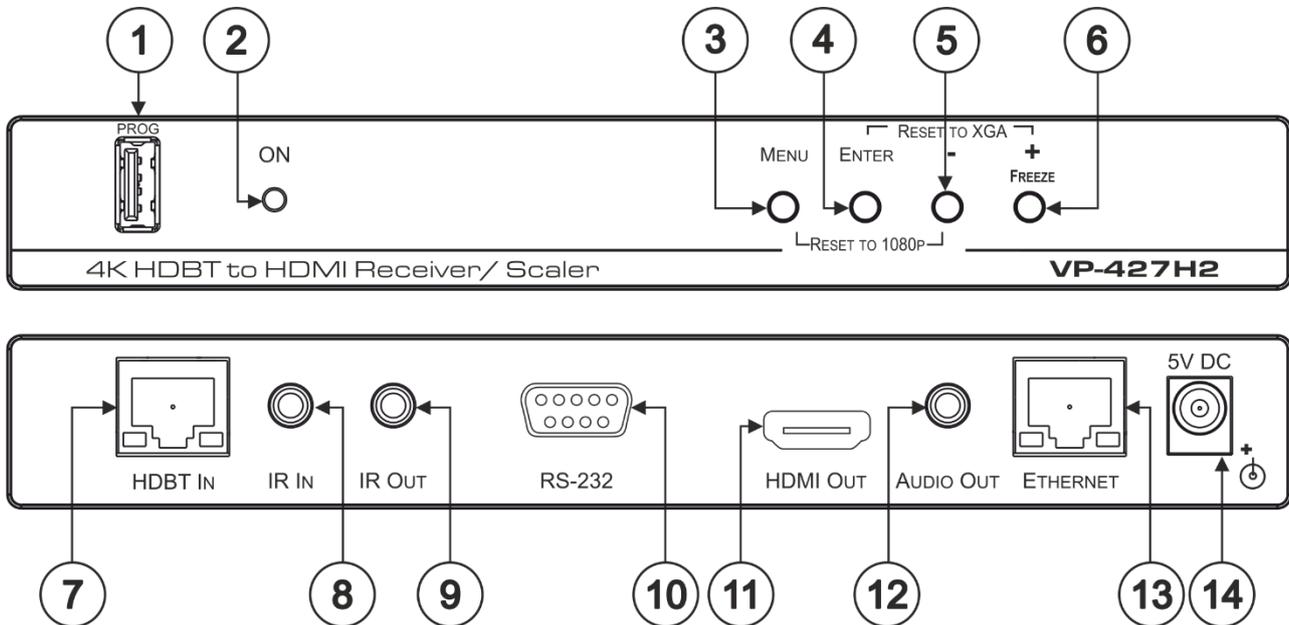
- Educational – Classrooms, lecture theaters.
- Projection systems in conference rooms, boardrooms, hotels and churches.
- Home theatre up-scaling.
- Rental and staging.

Controlling your VP-427H2

Control your VP-427H2 directly via the front panel push buttons (see [Front Panel Buttons](#) on page [7](#)), with on-screen menus ([OSD Menu](#) on page [7](#)).

Defining VP-427H2 4K HDBaseT Receiver/Scaler

This section defines VP-427H2.



#	Feature	Function
①	PROG USB Connector	Connects to a USB memory stick for programming upgrade.
②	ON LED	Lights green when the unit is powered on.
③	MENU Button	Press to enter/exit the on-screen display (OSD) menu. Press together with the – button to reset to 1080p.
④	ENTER Button	In OSD, press to choose the highlighted menu item. Press together with the + / FREEZE button to reset to XGA.
⑤	–	In OSD, press to move back through the list or to decrement the parameter value.
⑥	+ / FREEZE Button	In OSD, press to move forward through the list or to increment the parameter value. When not in OSD, press to freeze the display.
⑦	HDBT IN RJ-45 Connector	Connects to an HDBaseT transmitter.
⑧	IR IN 3.5mm Mini Jack	Connects to an IR sensor.
⑨	IR OUT 3.5mm Mini Jack	Connects to an IR emitter.
⑩	RS-232 9-pin D-sub Connector	Connects to a serial controller or device to embed/de-embed control commands in the HDBaseT data stream.
⑪	HDMI OUT Connector	Connects to an HDMI acceptor.
⑫	AUDIO OUT 3.5mm Mini Jack	Connects to an unbalanced stereo audio acceptor.
⑬	ETHERNET RJ-45 Connector	Connect to a PC via a LAN.
⑭	5V DC	+5V DC connector for powering the unit.

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

Connecting VP-427H2



Always switch off the power to each device before connecting it to your **VP-427H2**. After connecting your **VP-427H2**, connect its power and then switch on the power to each device.

To connect **VP-427H2** as illustrated in the example in [Figure 1](#):

1. Connect the HDBT output from an HDBaseT transmitter (for example, the Kramer **TP-580Txr**) to the HDBT IN RJ-45 connector on the **VP-427H2** (7).
2. Connect the HDMI OUT connector (11) to an HDMI acceptor (for example, a projector).
3. Connect the RS-232 9-pin D-sub connector (10) to an RS-232 port (for example, a projector).
4. Connect the AUDIO OUT 3.5mm mini jack connector (12) to an unbalanced stereo audio acceptor (for example, an amplifier).
5. Connect the IR IN 3.5mm mini jack connector (8) to an IR sensor (to control the device attached to the transmitter using a remote).
6. Connect the RJ-45 Ethernet port (13) to tunnel Ethernet data via HDBT IN.
7. Connect the supplied power adapter to the 5V DC power socket (14) of the **VP-427H2** and plug the adapter into the mains electricity (not shown in [Figure 1](#)).

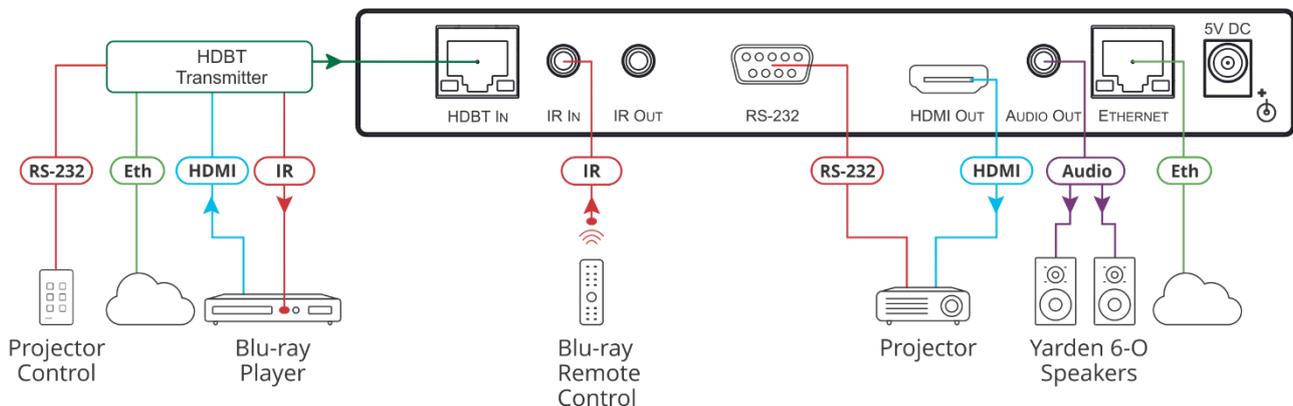


Figure 1: Connecting to the **VP-427H2**



[Figure 1](#) depicts a Kramer Room Controller on the transmitter side controlling the projector on the receiver side using RS-232, and a Blu-ray remote on the receiver side controlling the Blu-ray player on the transmitter side using IR.

Connecting to VP-427H2 via RS-232

You can connect to the VP-427H2 via an RS-232 connection ⁽¹⁰⁾ using, for example, a PC.

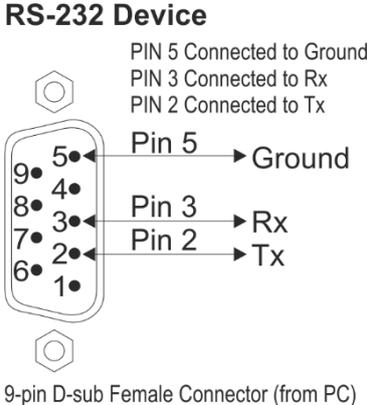


Figure 2: Connecting to the RS-232

Operating VP-427H2

Operate VP-427H2 via:

- [Front Panel Buttons](#) on page [7](#).
- [OSD Menu](#) on page [7](#).

Front Panel Buttons

Use VP-427H2 front panel buttons to perform the following operations:

- Press **MENU** (3), **ENTER** (4), **+** (6) and **-** (5) to use the OSD menu.
- Press **MENU** (3) and **-** (5) simultaneously to reset the resolution to 1080p (RESET TO 1080p).
- Press **ENTER** (4) and **FREEZE** (6) simultaneously to reset the resolution to XGA (RESET TO XGA).

OSD Menu

The control buttons let you control the VP-427H2 via the OSD menu. Press:

- **MENU** to enter the menu.
The default timeout is set to 10 seconds.
- **ENTER** button to accept changes and to change the menu settings.
- **+** and **-** to move through the OSD menu, which is displayed on the video output.

On the OSD menu, select **EXIT** to exit the menu.

The OSD menu enables performing the following:

- [Setting Image Parameters](#) on page [8](#).
- [Setting Output Parameters](#) on page [8](#).
- [Setting the Output Volume](#) on page [9](#).
- [Setting OSD Parameters](#) on page [9](#).
- [Defining Advanced Settings](#) on page [9](#).
- [Performing Factory Reset](#) on page [10](#).
- [Viewing Device Information](#) on page [10](#).

Setting Image Parameters

To set the image parameters:

1. On the front panel, select **MENU**.
The menu appears.
2. Select **PICTURE** and set the following:

Menu Item	Function
CONTRAST	Set the contrast.
BRIGHTNESS	Set the brightness.
FINETUNE	HDBT Input Signal
	HUE – set the color hue.
	SATURATION – set the color saturation.
	SHARPNESS – set the sharpness of the picture.
	NOISE REDUCTION – select the noise reduction: OFF (default), LOW, MIDDLE, HIGH or AUTO.
COLOR	Set the RED, GREEN and BLUE intensity.

Setting Output Parameters

To set the output parameters:

1. On the front panel, select **MENU**.
The menu appears.
2. Select **PICTURE** and set the following:

Menu Item	Function			
SIZE	Set the size of the image: FULL, OVER SCAN, UNDERSCAN, LETTER BOX, PAN SCAN or BEST FIT.			
4K in -> 4K out	Select SCALER to process the 4K-in to 4K-out signal via the scaler. Select BYPASS to bypass the scaler.			
RESOLUTION (4:4:4 unless shown otherwise)	Select the output resolution:			
	Appears as	Output Resolution	Appears as	Output Resolution
	720X480P	480p	640x480	640x480
	720X576P	576p	800x600	800x600
	1280X720P50	720p@50Hz	1024x768	1024x768
	1280X720P60	720p@60Hz	1280x768	1280x768
	1920X1080P24	1080p@24Hz	1360x768	1360x768
	1920X1080P25	1080p@25Hz	1280x720	1280x720
	1920X1080P30	1080p@30Hz	1280x800	1280x800
	1920X1080P50	1080p@50Hz	1280x1024	1280x1024
	1920X1080P60	1080p@60Hz	1440x900	1440x900
	4K2K 24	4K2K@24Hz	1400x1050	1400x1050
	4K2K 25	4K2K@25Hz	1920X1080	1920X1080
	4K2K 30	4K2K@30Hz	1680x1050	1680x1050
	4K2K(420) 50	4K2K@50Hz(4:2:0)	1600x1200	1600x1200
	4K2K(420) 60	4K2K@60Hz(4:2:0)	1920x1200 RB	1920x1200 RB
	Native (Default)			

Setting the Output Volume

To set the Output Volume:

1. On the front panel, select **MENU**.
The menu appears.
2. Select **AUDIO** and set the volume level (0 ~ 100), Default 80.

Setting OSD Parameters

To set the OSD parameters:

1. On the front panel, select **MENU**.
The menu appears.
2. Select **OSD** and set the following:

Menu Item	Function
H POSITION	Set the horizontal position of the OSD.
V POSITION	Set the vertical position of the OSD.
TIMER	Set the timeout period in seconds.
TRANSPARENCY	Set the OSD background between 100 (transparent) and 0 (opaque).
DISPLAY	Select the information displayed on-screen during operation: INFO (default) – the information appears for 10 seconds. ON – the information appears constantly. OFF – the information does not appear.

Defining Advanced Settings

To set the advanced settings:

1. On the front panel, select **MENU**.
The menu appears.
2. Select **ADVANCED** and set the following:

Menu Item	Function
HDCP ON INPUT:	ON/OFF (Default is ON).
HDCP ON OUTPUT:	This option is recommended when the HDMI/HDCP output is connected to a splitter/switcher. Select FOLLOW INPUT, to change its HDCP output setting according to the HDCP of the input. Select FOLLOW OUTPUT for the scaler to match its HDCP output to the HDCP setting of the HDMI/HDCP acceptor to which it is connected. This is the default and recommended option for most installations.
AUTO SYNC OFF:	Turns off the output after a period of not detecting a valid video signal on the input until a valid input is again detected or any keypad is pressed. Set to: Slow – to disable outputs after 2 minutes. Fast – to disable outputs after 10 seconds. Disable – to leave outputs active at all times.
FREEZE:	Select to freeze and/or mute the display FREEZE ONLY / FREEZE + MUTE (default) / MUTE ONLY.
EDID MANAGE:	Select the default EDID: Set to 1080P, 4K2K(3G), 4K2K(4:2:0), or OUTPUT. When set to OUTPUT, the EDID is read from the sink connected to the VP-427H2 output.

Performing Factory Reset

To perform factory reset:

1. On the front panel, select **MENU**.
The menu appears.
2. Select **FACTORY** and select **YES**.
Wait for completion of factory reset.

Viewing Device Information

To view device information:

1. On the front panel, select **MENU**.
The menu appears.
2. Select **INFO**.
view the following device information: the selected source, the input and output resolutions, and software version.

Firmware Upgrade

To upgrade the firmware:

1. Save the new firmware file to a memory stick.
2. Disconnect power from the **VP-427H2**.
3. Plug the memory stick into the PROG USB port ① on the **VP-427H2** back panel.
4. Press and hold the **MENU** button while reconnecting power to the **VP-427H2**.
5. When the ON LED flashes twice, release the **MENU** button (meaning the device is in the FW upgrading mode).
6. The upgrade procedure finishes and the device reboots.
7. Check that the **INFO.** screen shows the latest FW version (see [Viewing Device Information](#) on page [10](#)).



The USB stick must be formatted as FAT32. If the device cannot read the file in USB stick, the ON led will flash 5 times, then reboot and leave ISP mode.

Technical Specifications

Input	1 HDBaseT	On an RJ-45 twisted pair connector
Output	1 HDMI	On a female HDMI connector (Supports up to HDMI 2.0, and HDCP 2.2)
	1 Stereo Analog Unbalanced Audio	On a 3.5mm mini jack (1.2Vrms nominal, 100Ω)
Ports	1 IR IN	On a 3.5mm mini jack for IR extension
	1 IR OUT	On a 3.5mm mini jack for IR extension
	1 RS-232	Bidirectional RS-232 port on a 9-pin D-sub connector for serial extension
	1 100BaseT Ethernet	On an RJ-45 female connector for LAN extension
	1 USB	On a female USB (A) connector for upgrading
Controls	Button	MENU and navigation buttons for control using OSD
	LEDs	Power ON LED (green)
Video	Output Resolutions	640x480@60Hz, 800x600@60Hz, 1024x768@60Hz, 1280x768@60Hz, 1360x768@60Hz, 1280x800@60Hz, 1280x1024@60Hz, 1440x900@60Hz, 1400x1050@60Hz, 1680x1050@60Hz, 1600x1200@60Hz, 1920x1200@60Hz, 480P@60Hz, 576P@50Hz, 720P@50/60Hz, 1080P@24/25/30/50/60Hz, 4k2k@24/25/30/50/60Hz, 4k2k (4:2:0)@50/60Hz, Native
	Max. Input Resolution	(HDBaseT) 4K@60Hz (4:2:0)
	Reach	100m (328ft) at 4K
	Video Latency	30ms (typical)
Power	Consumption	5V DC, 2.5A
	Source	5.2V/4A
Environmental Conditions	Operating Temperature	0° to +40°C (32° to 104°F)
	Storage Temperature	-40° to +70°C (-40° to 158°F)
	Humidity	10% to 90%, RHL non-condensing
Enclosure	Size	MegaTools
	Type	Aluminum
	Cooling	Convection Ventilation
General	Net Dimensions (W, D, H)	18.75cm x 14.50cm x 2.54cm (7.38" x 5.71" x 1.00") W, D, H
	Shipping Dimensions (W, D, H)	35.10cm x 21.20cm x 7.20cm (13.82" x 8.35" x 2.83") W, D, H
	Net Weight	0.6kg (1.2lbs) approx.
	Shipping Weight	1.1kg (2.4lbs) approx.
Accessories	Included	Power supply

Specifications are subject to change without notice at www.kramerav.com

Default Communication Parameters

RS-232	
Baud Rate:	9,600
Data Bits:	8
Stop Bits:	1
Parity:	None
Full Factory Reset	
OSD	Go to: Menu-> Setup -> Factory Reset -> press Enter to confirm
Front panel buttons	Press the Reset to XGA/1080p Button while plugging the power to reset the machine

Input to Output Resolutions

HDBT Input	HDMI Output	Bypass Mode	Scaler Mode
Not-4K Timing	Any Timing	✘	✓
4K but not 24Hz	4K2K/24	✘	✓
4K but not 25Hz	4K2K/25	✘	✓
4K but not 30Hz	4K2K/30	✘	✓
4K but not 50Hz	4K2K/50 420	✘	✓
4K but not 60Hz	4K2K/60 420	✘	✓
4K but not 50Hz	4K2K/50	✘	✓
4K but not 60Hz	4K2K/60	✘	✓
4K2K/24	4K2K/24	✓	✘
4K2K/25	4K2K/25	✓	✘
4K2K/30	4K2K/30	✓	✘
4K2K/50 420	4K2K/50 420	✓	✘
4K2K/60 420	4K2K/60 420	✓	✘
4K2K/50 420	4K2K/50	✓	✘
4K2K/60 420	4K2K/60	✓	✘
4K Timing**	Input Timing	✓	✘
**when 4Kin->4Kout Setting is Bypass			

The warranty obligations of Kramer Electronics Inc. ("Kramer Electronics") for this product are limited to the terms set forth below:

What is Covered

This limited warranty covers defects in materials and workmanship in this product.

What is Not Covered

This limited warranty does not cover any damage, deterioration or malfunction resulting from any alteration, modification, improper or unreasonable use or maintenance, misuse, abuse, accident, neglect, exposure to excess moisture, fire, improper packing and shipping (such claims must be presented to the carrier), lightning, power surges, or other acts of nature. This limited warranty does not cover any damage, deterioration or malfunction resulting from the installation or removal of this product from any installation, any unauthorized tampering with this product, any repairs attempted by anyone unauthorized by Kramer Electronics to make such repairs, or any other cause which does not relate directly to a defect in materials and/or workmanship of this product. This limited warranty does not cover cartons, equipment enclosures, cables or accessories used in conjunction with this product.

Without limiting any other exclusion herein, Kramer Electronics does not warrant that the product covered hereby, including, without limitation, the technology and/or integrated circuit(s) included in the product, will not become obsolete or that such items are or will remain compatible with any other product or technology with which the product may be used.

How Long this Coverage Lasts

The standard limited warranty for Kramer products is seven (7) years from the date of original purchase, with the following exceptions:

1. All Kramer VIA hardware products are covered by a standard three (3) year warranty for the VIA hardware and a standard three (3) year warranty for firmware and software updates.
2. All Kramer fiber optic cables, adapter-size fiber optic extenders, active cables, cable retractors, all Kramer speakers and Kramer touch panels are covered by a standard one (1) year warranty.
3. All Kramer Cobra products, all Kramer Calibre products, all Kramer Minicom digital signage products, all HighSecLabs products, all streaming, and all wireless products are covered by a standard three (3) year warranty.
4. All Sierra Video MultiViewers are covered by a standard five (5) year warranty.
5. Sierra switchers & control panels are covered by a standard seven (7) year warranty (excluding power supplies and fans that are covered for three (3) years).
6. K-Touch software is covered by a standard one (1) year warranty for software updates.
7. All Kramer passive cables are covered by a ten (10) year warranty.

Who is Covered

Only the original purchaser of this product is covered under this limited warranty. This limited warranty is not transferable to subsequent purchasers or owners of this product.

What Kramer Electronics Will Do

Kramer Electronics will, at its sole option, provide one of the following three remedies to whatever extent it shall deem necessary to satisfy a proper claim under this limited warranty:

1. Elect to repair or facilitate the repair of any defective parts within a reasonable period of time, free of any charge for the necessary parts and labor to complete the repair and restore this product to its proper operating condition. Kramer Electronics will also pay the shipping costs necessary to return this product once the repair is complete.
2. Replace this product with a direct replacement or with a similar product deemed by Kramer Electronics to perform substantially the same function as the original product.
3. Issue a refund of the original purchase price less depreciation to be determined based on the age of the product at the time remedy is sought under this limited warranty.

What Kramer Electronics Will Not Do Under This Limited Warranty

If this product is returned to Kramer Electronics or the authorized dealer from which it was purchased or any other party authorized to repair Kramer Electronics products, this product must be insured during shipment, with the insurance and shipping charges prepaid by you. If this product is returned uninsured, you assume all risks of loss or damage during shipment. Kramer Electronics will not be responsible for any costs related to the removal or re-installation of this product from or into any installation. Kramer Electronics will not be responsible for any costs related to any setting up this product, any adjustment of user controls or any programming required for a specific installation of this product.

How to Obtain a Remedy Under This Limited Warranty

To obtain a remedy under this limited warranty, you must contact either the authorized Kramer Electronics reseller from whom you purchased this product or the Kramer Electronics office nearest you. For a list of authorized Kramer Electronics resellers and/or Kramer Electronics authorized service providers, visit our web site at www.kramerav.com or contact the Kramer Electronics office nearest you.

In order to pursue any remedy under this limited warranty, you must possess an original, dated receipt as proof of purchase from an authorized Kramer Electronics reseller. If this product is returned under this limited warranty, a return authorization number, obtained from Kramer Electronics, will be required (RMA number). You may also be directed to an authorized reseller or a person authorized by Kramer Electronics to repair the product.

If it is decided that this product should be returned directly to Kramer Electronics, this product should be properly packed, preferably in the original carton, for shipping. Cartons not bearing a return authorization number will be refused.

Limitation of Liability

THE MAXIMUM LIABILITY OF KRAMER ELECTRONICS UNDER THIS LIMITED WARRANTY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS IS NOT RESPONSIBLE FOR DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY. Some countries, districts or states do not allow the exclusion or limitation of relief, special, incidental, consequential or indirect damages, or the limitation of liability to specified amounts, so the above limitations or exclusions may not apply to you.

Exclusive Remedy

TO THE MAXIMUM EXTENT PERMITTED BY LAW, THIS LIMITED WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. TO THE MAXIMUM EXTENT PERMITTED BY LAW, KRAMER ELECTRONICS SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF KRAMER ELECTRONICS CANNOT LAWFULLY DISCLAIM OR EXCLUDE IMPLIED WARRANTIES UNDER APPLICABLE LAW, THEN ALL IMPLIED WARRANTIES COVERING THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY TO THIS PRODUCT AS PROVIDED UNDER APPLICABLE LAW. IF ANY PRODUCT TO WHICH THIS LIMITED WARRANTY APPLIES IS A "CONSUMER PRODUCT" UNDER THE MAGNUSON-MOSS WARRANTY ACT (15 U.S.C.A. §2301, ET SEQ.) OR OTHER APPLICABLE LAW, THE FOREGOING DISCLAIMER OF IMPLIED WARRANTIES SHALL NOT APPLY TO YOU, AND ALL IMPLIED WARRANTIES ON THIS PRODUCT, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR THE PARTICULAR PURPOSE, SHALL APPLY AS PROVIDED UNDER APPLICABLE LAW.

Other Conditions

This limited warranty gives you specific legal rights, and you may have other rights which vary from country to country or state to state.

This limited warranty is void if (i) the label bearing the serial number of this product has been removed or defaced, (ii) the product is not distributed by Kramer Electronics or (iii) this product is not purchased from an authorized Kramer Electronics reseller. If you are unsure whether a reseller is an authorized Kramer Electronics reseller, visit our web site at www.kramerav.com or contact a Kramer Electronics office from the list at the end of this document.

Your rights under this limited warranty are not diminished if you do not complete and return the product registration form or complete and submit the online product registration form. Kramer Electronics thanks you for purchasing a Kramer Electronics product. We hope it will give you years of satisfaction.



SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing

For the latest information on our products and a list of Kramer distributors, visit our Web site where updates to this user manual may be found.

We welcome your questions, comments, and feedback.