

KRAMER



USER MANUAL

MODEL:

PT-2C

Extended EDID Processor



PT-2C Quick Start Guide

This guide helps you install and use your **PT-2C** for the first time. For more detailed information, go to <http://www.kramerav.com/manual/PT-2C> to download the latest manual or scan the QR code) and check if firmware upgrades are available.

Step 1: Check what's in the box

✓ **PT-2C** Extended EDID Processor

✓ 4 Rubber feet

✓ 1 Quick Start Guide

Step 2: Install the PT-2C

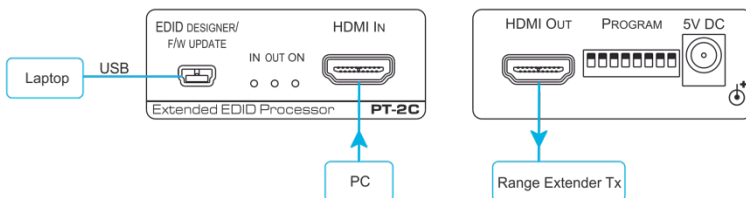
To mount the **PT-2C** in a rack, use an **RK-4PT** rack adapter . Alternatively, attach the four rubber feet to the device and place it on a table.

You can use the TOOL bracket Installation kit (supplied) to mount the **PT-2C** on a desk top, wall or similar area. Fasten a bracket on each side of the TOOL using the two M3x8 screws (supplied). Use the flat-head screws (supplied) to fix the TOOL to the mounting surface or enable it to slide in place.

Step 3: Connect the input and output

Always switch off the power to each device before connecting it to your **PT-2C**.

For best results, always use Kramer high-performance cables to connect your AV equipment to the **PT-2C**.



Step 4: Connect the power

Connect the 5V DC power adapter to the **PT-2C** and plug the adapter into the mains electricity.

Step 5: Set PROGRAM DIP-switches



DIP	Feature	Function				
1	EDID status	On — EDID pass-through mode Off— EDID Locked (DIP 3 implemented)				
2	Deep color	On—Passes the deep color parameters Off—Limits deep color to 8 bits per color				
3	Audio setup	On—Passes the audio parameters Off—Limits the audio to 2-channel LPCM				
4	HDCP operation	On—Passes HDCP, Off—HDCP off				
5	Color space	On—Passes color space Off—Forces RGB color space				
6/	Set output 5V shutdown Delay before 5V output cut-off	6	Off	Off	On	On
7		7	Off	On	Off	On
			Always on	5s	1m	15m
8	Reserved					

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1 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 video, audio, presentation, and broadcasting professionals on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better!

Our 1,000-plus different models now appear in 14 groups that are clearly defined by function: GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Routers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Range Extenders and Repeaters; GROUP 6: Specialty AV Products; GROUP 7: Scan Converters and Scalers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters; GROUP 11: Sierra Video Products; GROUP 12: Digital Signage; GROUP 13: Audio; and GROUP 14: Collaboration.

Congratulations on purchasing your Kramer **PT-2C** *Extended EDID Processor*. This product, which incorporates HDMI™ technology, is ideal for:

- Legacy infrastructures that require advanced feature support
- Troubleshooting aid for installers on legacy infrastructures
- Education, entertainment corporate and government

2 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/PT-2C to check for up-to-date user manuals, application programs, and to check if firmware upgrades are available (where appropriate).

2.1 Achieving the Best Performance

To achieve 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 neighbouring electrical appliances that may adversely influence signal quality
- Position your **PT-2C** 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.

2.2 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

2.3 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/.

3 Overview

The **PT-2C** is an EDID processor for HDMI signals. It allows you to pass or block HDCP, deep audio or deep color signals that may or may not be compatible with the display.

The **PT-2C** features:

- A maximum data rate of 10.2Gbps (3.4Gbps per data channel)
- 4K resolution support
- Compliance with HDMI and HDCP standards
- CEC and ARC support
- HDMI input and output connectors
- Signal reclocking
- Active video signal source detection
- LED indication for input, output and power as well as successful EDID capture
- Configurable timeout for when the input signal is lost
- Restore DDC clock rate on display side
- Program DIP-switches that control the desired functions
- Mini USB for EDID Designer and FW update support
- +5V DC Power supply
- The ultra-compact PicoTools case that allows four units to be mounted side-by-side in a 1U rack space with the optional **RK-4PT** 19" rack adapter

4 Defining the PT-2C Extended EDID Processor

Figure 1 defines the front and rear panels of the PT-2C.

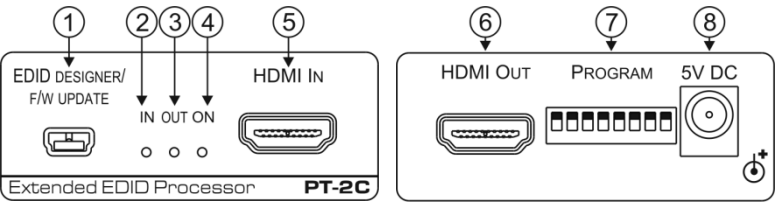


Figure 1: PT-2C Front and Rear Panels

#	Feature	Function
1	EDID DESIGNER/F/W UPDATE Mini USB Connector	Connect to a PC/laptop running EDID Designer to modify the EDID, or to update the firmware of the PT-2C
2	IN LED	Lights green when an HDMI active signal source is connected to the input
3	OUT LED	Lights green when an HDMI acceptor is connected to the output Blinks three times upon successful load of the designed EDID and then resumes to normal operation.
4	ON LED	Lights green when power is connected
5	HDMI IN Connector	Connect to an HDMI source, (for example, a PC)
6	HDMI OUT Connector	Connect to an HDMI acceptor, (for example, a UHD smart TV)
7	PROGRAM DIP-Switches	Set the device behavior, (see Section 5.1)
8	5V DC Power Connector	Connect to the supplied power adapter

5 Connecting the PT-2C



Always switch off the power to each device before connecting it to your **PT-2C**. After connecting your **PT-2C**, connect its power and then switch on the power to each device.

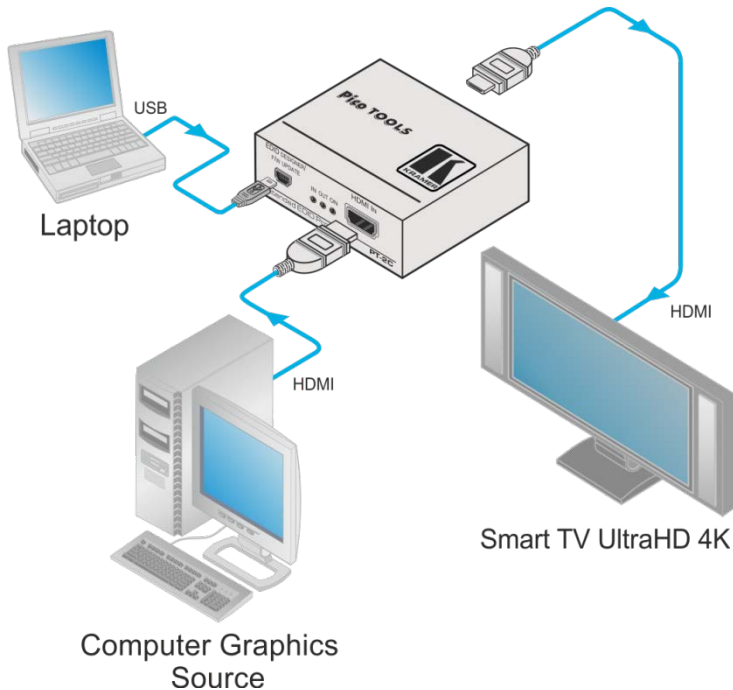


Figure 2: Connecting the PT-2C Extended EDID Processor

To connect the **PT-2C**, as illustrated in the example in [Figure 2](#):


1. Connect the HDMI source (for example, a PC) to the HDMI IN connector.
2. Connect the HDMI OUT connector to an HDMI acceptor (for example, a display).
3. Connect the USB port to a laptop running EDID Designer to modify the EDID, or to a PC to upgrade the firmware of the **PT-2C**.

5.1 Configuring the PT-2C

The 8-way Program DIP-switch on the rear panel is used to configure the **PT-2C** according to the following table.



Note that all the DIP-switches are set to off (up) by default.

DIP	Feature		Function			
1	Lock the EDID		On (down) — EDID pass-through mode Off (up) — EDID Locked When EDID is locked, the audio parameters are set as defined by DIP-switch 3. In pass-through mode, the DIP-switch 3 setup is ignored			
	 The Audio DIP-switch (3) setup is implemented only upon setting DIP-switch 1 to off (up), locking the EDID					
2	Deep color		On—Passes the deep color parameters (down) Off—Limits deep color to 8 bits per color (up)			
3	Audio setup		On—Passes the audio parameters (down) Off—Limits the audio to 2-channel LPCM (up) This setup is enabled only after DIP-switch 1 is set to Off (EDID locked).			
4	HDCP operation		On—Passes HDCP (down) Off—HDCP off (up) When On, if the output supports HDCP, the input declares HDCP support. It will then handle HDCP on the output and input actively. If the output does not support HDCP then the input will not support HDCP. When Off, the device does not support HDCP on its input, even if HDCP is detected on the output.			
5	Color space		On—Passes color space (down) Off—Forces RGB color space (up)			
6/7	Set output 5V shutdown	6	Off	Off	On	On
		7	Off	On	Off	On
	Delay before 5V output cut-off		Always on	5s	1m	15m
The PT-2C can power off the HDMI 5V output to let the connected device enter the sleep mode if there is no source connected. The power off delay time is controlled by DIP-switches 6 and 7 (0 = up/Off; 1 = down/On)						
8	Reserved (always set to off)					

5.2 EDID loading/storing

The EDID DIP-switch 1 determines the behavior of EDID on the device.

5.2.1 The Pass-through Mode

In the pass-through mode (DIP-switch 1 set to on), the EDID of the connected output (a display in the following examples) is automatically loaded to the **PT-2C**.

If the display is replaced, the **PT-2C** captures the new EDID from the new display. Any change in the output automatically changes the EDID that is stored in the **PT-2C**.

When disconnecting the output the last EDID remains stored in the **PT-2C**.

5.2.2 The EDID Lock Mode

When in the Lock mode (DIP-switch 1 set to off), the current EDID is locked and remains unchanged even if the display is replaced on the output.

When in the lock mode the audio setup is determined by the DIP-switch 3 Audio setup.

You can connect a PC to the EDID DESIGNER/F/W UPDATE Mini USB port to modify the EDID via the Kramer EDID designer software.



Note that when using EDID designer to modify the EDID (in the Lock mode), the DIP-switch 3 status is ignored.

5.2.3 Setting the default EDID

You can set the **PT-2C** to its EDID default value.

To set the default EDID:

1. Make sure the **PT-2C** is set to the Pass-through mode
2. Disconnect the output.
3. Set DIP-switch 1 to the Lock mode (off).

The default EDID is loaded

6 Default EDID

Monitor

Model name..... PT-2C
Manufacturer..... KMR
Plug and Play ID..... KMR1200
Serial number..... n/a
Manufacture date..... 2015, ISO week 255
Filter driver..... None

EDID revision..... 1.3
Input signal type..... Digital
Color bit depth..... Undefined
Display type..... RGB color
Screen size..... 520 x 320 mm (24.0 in)
Power management..... Standby, Suspend, Active off/sleep
Extension blocs..... 1 (CEA-EXT)

DDC/CI..... Supported
MCCS revision..... 2.1
Display technology..... TFT
Controller..... STMicro 0x9301
Firmware revision..... 2.1
Firmware flags..... 0x006645CC
Active power on time..... Not supported
Power consumption..... Not supported
Current frequency..... 74.20kHz, 60.20Hz

Color characteristics

Default color space..... Non-sRGB
Display gamma..... 2.20
Red chromaticity..... Rx 0.674 - Ry 0.319
Green chromaticity..... Gx 0.188 - Gy 0.706
Blue chromaticity..... Bx 0.148 - By 0.064
White point (default).... Wx 0.313 - Wy 0.329
Additional descriptors... None

Timing characteristics

Horizontal scan range.... 30-83kHz
Vertical scan range..... 56-76Hz
Video bandwidth..... 170MHz
CVT standard..... Not supported
GTF standard..... Not supported
Additional descriptors... None
Preferred timing..... Yes
Native/preferred timing.. 1280x720p at 60Hz (16:10)
Modeline..... "1280x720" 74.250 1280 1390 1430 1650 720 725 730 750 +hsync +vsync

Standard timings supported

720 x 400p at 70Hz - IBM VGA
720 x 400p at 88Hz - IBM XGA2

640 x 480p at 60Hz - IBM VGA
 640 x 480p at 67Hz - Apple Mac II
 640 x 480p at 72Hz - VESA
 640 x 480p at 75Hz - VESA
 800 x 600p at 56Hz - VESA
 800 x 600p at 60Hz - VESA
 800 x 600p at 72Hz - VESA
 800 x 600p at 75Hz - VESA
 832 x 624p at 75Hz - Apple Mac II
 1024 x 768i at 87Hz - IBM
 1024 x 768p at 60Hz - VESA
 1024 x 768p at 70Hz - VESA
 1024 x 768p at 75Hz - VESA
 1280 x 1024p at 75Hz - VESA
 1152 x 870p at 75Hz - Apple Mac II
 1280 x 1024p at 75Hz - VESA STD
 1280 x 1024p at 85Hz - VESA STD
 1600 x 1200p at 60Hz - VESA STD
 1024 x 768p at 85Hz - VESA STD
 800 x 600p at 85Hz - VESA STD
 640 x 480p at 85Hz - VESA STD
 1152 x 864p at 70Hz - VESA STD
 1280 x 960p at 60Hz - VESA STD

EIA/CEA-861 Information

Revision number..... 3
 IT underscan..... Supported
 Basic audio..... Supported
 YCbCr 4:4:4..... Supported
 YCbCr 4:2:2..... Supported
 Native formats..... 1
 Detailed timing #1..... 1920x1080p at 60Hz (16:10)
 Modeline..... "1920x1080" 148.500 1920 2008 2052 2200 1080 1084 1089 1125 +hsync +vsync
 Detailed timing #2..... 1920x1080i at 60Hz (16:10)
 Modeline..... "1920x1080" 74.250 1920 2008 2052 2200 1080 1084 1094 1124 interlace +hsync
 +vsync
 Detailed timing #3..... 1280x720p at 60Hz (16:10)
 Modeline..... "1280x720" 74.250 1280 1390 1430 1650 720 725 730 750 +hsync +vsync
 Detailed timing #4..... 720x480p at 60Hz (16:10)
 Modeline..... "720x480" 27.000 720 736 798 858 480 489 495 525 -hsync -vsync

CE audio data (formats supported)

LPCM 2-channel, 16/20/24 bit depths at 32/44/48 kHz

CE video identifiers (VICs) - timing/formats supported

1920 x 1080p at 60Hz - HDTV (16:9, 1:1)
 1920 x 1080i at 60Hz - HDTV (16:9, 1:1)
 1280 x 720p at 60Hz - HDTV (16:9, 1:1) [Native]
 720 x 480p at 60Hz - EDTV (16:9, 32:27)
 720 x 480p at 60Hz - EDTV (4:3, 8:9)
 720 x 480i at 60Hz - Doublescan (16:9, 32:27)
 720 x 576i at 50Hz - Doublescan (16:9, 64:45)
 640 x 480p at 60Hz - Default (4:3, 1:1)
 NB: NTSC refresh rate = (Hz*1000)/1001

CE vendor specific data (VSDB)
IEEE registration number. 0x000C03
CEC physical address..... 1.0.0.0
Maximum TMDS clock..... 165MHz

CE speaker allocation data
Channel configuration.... 2.0
Front left/right..... Yes
Front LFE..... No
Front center..... No
Rear left/right..... No
Rear center..... No
Front left/right center.. No
Rear left/right center... No
Rear LFE..... No

Report information
Date generated..... 2/16/2016
Software revision..... 2.60.0.972
Data source..... Real-time 0x0041
Operating system..... 6.1.7601.2.Service Pack 1

Raw data
00,FF,FF,FF,FF,FF,FF,00,2D,B2,00,12,00,00,00,00,FF,19,01,03,80,34,20,78,EA,B3,25,AC,51,30,B4,26,
10,50,54,FF,FF,80,81,8F,81,99,A9,40,61,59,45,59,31,59,71,4A,81,40,01,1D,00,72,51,D0,1E,20,6E,28,
55,00,07,44,21,00,00,1E,00,00,00,FD,00,38,4C,1E,53,11,00,0A,20,20,20,20,20,00,00,00,FC,00,50,
54,2D,32,43,20,20,20,20,20,20,20,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,01,CD,
02,03,1B,F1,23,09,07,07,48,10,05,84,03,02,07,16,01,65,03,0C,00,10,00,83,01,00,00,02,3A,80,18,71,
38,2D,40,58,2C,45,00,07,44,21,00,00,1E,01,1D,80,18,71,1C,16,20,58,2C,25,00,07,44,21,00,00,9E,01,
1D,00,72,51,D0,1E,20,6E,28,55,00,07,44,21,00,00,1E,8C,0A,D0,8A,20,E0,2D,10,10,3E,96,00,07,44,21,
00,00,18,00,47

7 Technical Specifications

INPUT:	1 HDMI connector
OUTPUT:	1 HDMI connector
PORTS:	1 Mini USB
MAX DATA RATE:	10.2Gbps (3.4Gbps per data channel)
STANDARDS SUPPORTED:	Supports HDMI and HDCP
CONTROLS:	8 DIP-switches
STANDARDS:	HDMI with Deep Color, x.v.Color™ and 3D HDCP—works with sources that support HDCP repeater mode
INDICATOR LEDS:	HDMI In, HDMI Out, Power
POWER CONSUMPTION:	5V DC 315mA
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
COOLING:	Convection
ENCLOSURE TYPE:	Aluminum
RACK MOUNT:	With optional adapter (RK–4PT)
FURNITURE MOUNT:	With included rubber feet
DIMENSIONS:	6.22cm x 5.18cm x 2.44cm (2.45" x 2.04" x 0.96") W, D, H.
PRODUCT WEIGHT:	0.1kg (0.22lbs) approx.
SHIPPING WEIGHT:	0.4kg (0.88lbs) approx.
INCLUDED ACCESORRIES:	Power supply
OPTIONS:	RK–4PT 19" rack adapter
Specifications are subject to change without notice at www.kramerav.com	

7.1 Supported Resolutions

Resolution	Refresh Rate	Comments
640x480p	85Hz; 75Hz; 72Hz; 60Hz; 59.95Hz	59.95Hz is available on quantum 780B
720x480p	60Hz	
720x576p	50Hz	
800x600p	85Hz; 75Hz; 72Hz; 60Hz	
848x480p	60Hz	"CVT(R)0860H" on quantum
852x480p	60Hz	available on quantum 780B
1024x768p	85Hz; 75Hz; 70Hz; 60Hz	
1280x960	60Hz	
1280x1024p	75Hz; 60Hz	
1280x768p	60Hz	available on quantum 780B
1280x800p	60Hz	"DMR(T)1260D" on quantum
1920x1080p	50Hz; 60Hz; 30Hz; 24Hz;	"1080p30" on quantum
1920x1080p	60Hz;	Deep color
1920x1080i	50Hz; 60Hz;	
1600x1200p	60Hz	

Resolution	Refresh Rate	Comments
1600x900p	60Hz	"DMR1660H" on quantum
1152x864p	75Hz	
1440x900p	60Hz	
1680x1050p	60Hz	
1360x768p	60Hz	
1366x768	60Hz; 50Hz	
1400x1050p	60Hz	
720x480i	30Hz	available on quantum 780B
3840x2160	30Hz	
4096x2160	30Hz	

LIMITED WARRANTY

The warranty obligations of 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 Does this Coverage Last

Seven years as of this printing; please check our Web site for the most current and accurate warranty information.

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, please visit our web site at www.kramerelectronics.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. 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 on 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, please visit our Web site at www.kramerelectronics.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.

KRAMER



P/N:



2900-300494

Rev: 1



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 to find updates to this user manual.

We welcome your questions, comments, and feedback.

www.kramerAV.com
info@kramerel.com