

# KRAMER



## USER MANUAL

**MODEL:**

UTBUS-2xl

Under the Table Connection Bus



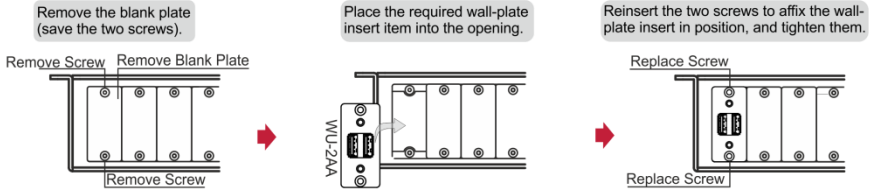
## UTBUS-2xl Quick Start Guide

This guide helps you install and use your product for the first time. For more detailed information, go to <http://www.kramerav.com/manual/UTBUS-2xl> to download the latest manual or scan the QR code on the left.

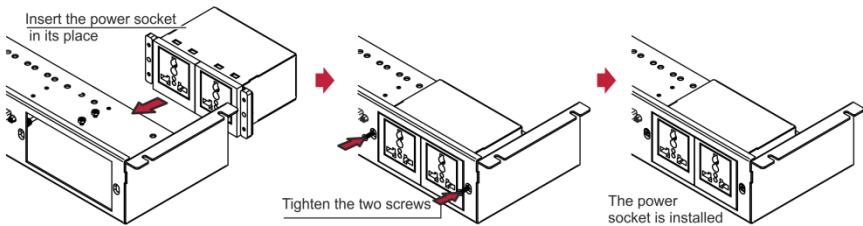
### Step 1: Check what's in the box

- ✓ The **UTBUS-2xl** Under the Table Connection Bus
- ✓ 4 mounting wood screws
- ✓ 6 self locking ties
- ✓ 1 quick start guide

### Step 2: Connect the wall plate items



### Step 3: Connect the power socket



### Step 4: Install the cables

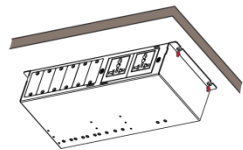
Connect the cables to the inside of the **UTBUS-2xl** and secure them with the self-locking ties.

### Step 5: Connect a TOOL (optional)

You can install a Kramer **TOOL** or **Pico TOOL** by connecting the mounting brackets to the Kramer **TOOL**, as described in the Bracket Installation Kit Instructions and then inserting the four 4x3/8" screws into the four **TOOL** mounting holes and fastening the Kramer **TOOL** to the inside floor of the **UTBUS-2xl**.

### Step 6: Connect the power

Mark the correct location and insert the four M4.2X16 wood screws into the four rim screw holes and fix the **UTBUS-2xl** to the table.



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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 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!

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.

Thank you for purchasing the Kramer **UTBUS-2x1**, which is ideal for boardrooms, conference and training rooms!

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## 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 <http://www.kramerav.com/downloads/UTBUS-2XL> 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 neighboring electrical appliances that may adversely influence signal quality
- Position your Kramer **UTBUS-2xl** 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.



There are no operator serviceable parts inside the unit.

### 2.2 Glossary

**Universal socket** The Universal socket fits almost all power cords, worldwide

**Insert** The insert is fitted in the inner frame. Go to our Web site to check for a variety of single and dual sized inserts

## 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 <http://www.kramerelectronics.com/support/recycling/>.

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## 3 Overview

The UTBUS-2xl is a furniture-mounted connection bus that is easily installed underneath a wooden table or podium top. The unit is sturdy, cost-effective, and easy to install.

The **UTBUS-2xl**:

- Is modular in design, letting you install up to six wall plate inserts, according to your requirements
- Has a dual power socket opening that is suitable for any of the following power sockets: for the USA, Germany (the Europlug), Belgium-France, Italy, Australia, Israel, Switzerland, UK, South Africa or “Universal” for use anywhere (see compatibility restrictions in [Section 6](#))
  - Order the power sockets separately from Kramer Electronics
- Lets you install a Kramer TOOL or Pico TOOL inside the body of the **UTBUS-2xl**

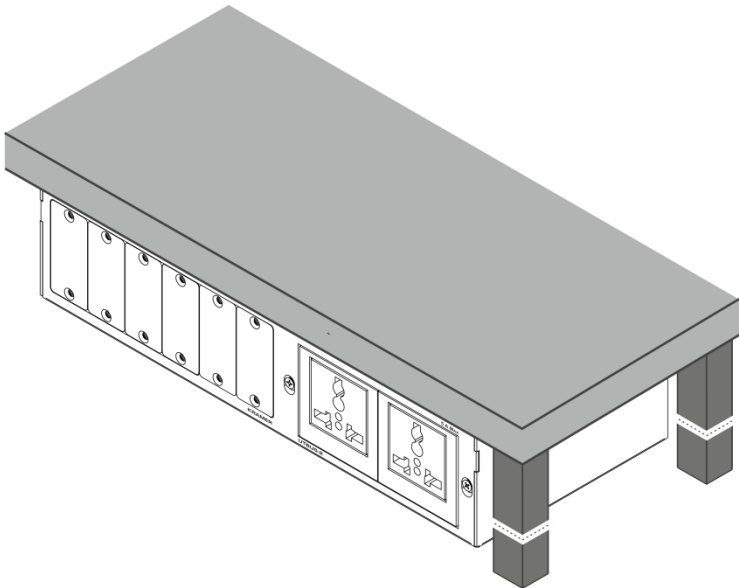


Figure 1: **UTBUS-2xl** under a Table

## 4 Defining the UTBUS-2xl Enclosure

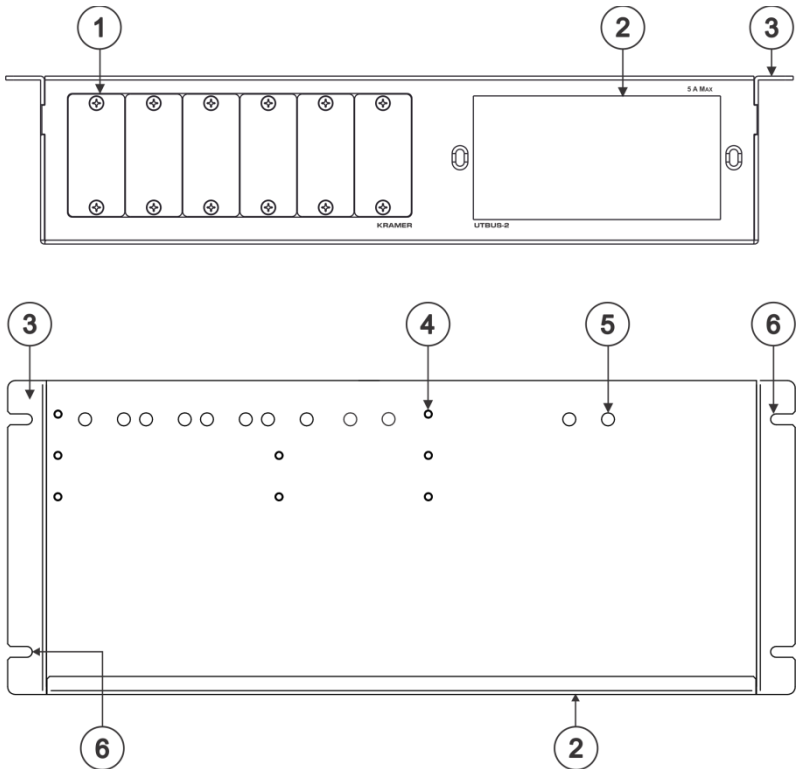


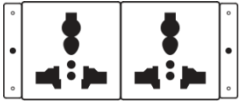
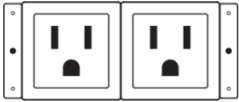
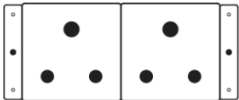
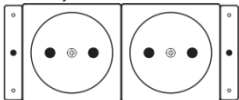
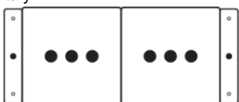
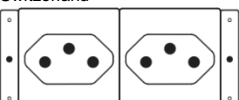
Figure 2: **UTBUS-2xl** Under the Table Connection Bus

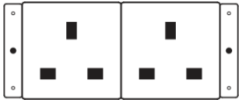
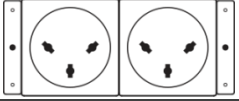
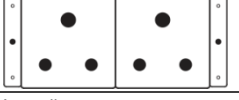
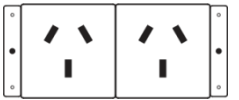
#	Feature	Function
1	Blank Plates	Six blank covers that can be replaced with wall plate inserts as required (see <a href="#">Section 5.1</a> )
2	Power Socket Opening	Suitable for international power requirements (Suitable for international power requirements (available with different types of power sockets, ordered separately, see <a href="#">Section 4.1</a> ))
3	Outer Rim	For mounting under the table
4	TOOL Mounting Holes (8)	Screw in the appropriate holes to install a Kramer TOOL or Pico TOOL
5	Tie Holes (12)	Insert self-locking ties through the holes to fix the pass-through cables to the inside walls of the UTBUS-2xl
6	Rim Screw Holes (4)	For fixing the UTBUS-2xl under the table (including two open screw holes)



## 4.1 Power Socket Options

A choice of dual power sockets are available in several versions, including power sockets for the USA, the UK, Germany (the Europlug), Belgium-France, Italy, Switzerland, South Africa, Israel and Australia. A “Universal” socket for general use is also available (see the compatibility restrictions in the table below).

Dual Power Socket Assemblies:	Power Specs
<p>Universal:</p>  <p><b>Fully compatible</b> with power plugs in the UK, India, Italy and Denmark, as well as with the 2-prong Europlug.</p> <p><b>Partially compatible</b> (if the polarity is reversed) with plugs in China, Switzerland, Israel and the USA. The universal socket does not supply grounding to plugs in Central Europe and France and so you should order country specific sockets instead.</p> <p><b>Not compatible</b> with South African plugs.</p>	<p><b>TS-2U (80-001899)</b></p> <p>100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet</p>
<p>USA:</p> 	<p><b>TS-2US (80-001999)</b></p> <p>100-120V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet</p>
<p>Belgium and France:</p> 	<p><b>TS-2FR (80-002299)</b></p> <p>100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet</p>
<p>Germany and EU:</p> 	<p><b>TS-2DE (80-002199)</b></p> <p>100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet</p>
<p>Italy</p> 	<p><b>TS-2IT (80-002399)</b></p> <p>100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet</p>
<p>Switzerland</p> 	<p><b>TS-2CH (80-000026)</b></p> <p>100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet</p>

Dual Power Socket Assemblies:	Power Specs
<b>UK</b> 	<b>TS-2UK (91-000023)</b>  100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
<b>Israel:</b> 	<b>TS-2IL (80-002699)</b>  100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
<b>South Africa:</b> 	<b>TS-2ZA (80-002599)</b>  100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
<b>Australia:</b> 	<b>TS-2AU (80-002499)</b>  100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet

## 4.2 Power Cord Options

You can order any of the following power cords to use with a modular TBUS:

Power Cord Type	Description	P/N
6ft/110V (North America)	C-AC/US (110V)	91-000099
6ft/125V (Japan)	C-AC/JP (125V)	91-000699
6ft/220V (Europe)	C-AC/EU (220V)	91-000199
6ft/220V (Israel)	C-AC/IL (220V)	91-000999
6ft/250V (UK)	C-AC/UK (250V)	91-000299
6ft/250V (India)	C-AC/IN (250V)	91-001099
6ft/250V/10A (China)	C-AC/CN (250V)	91-001199
6ft/250V/10A (South Africa)	C-AC/ZA (250V)	91-001299

## 5 Installing the UTBUS-2xl

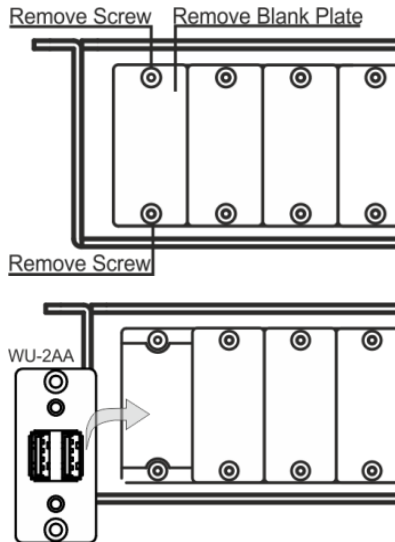
This section describes how to:

- Install the required wall plate insert items, see [Section 5.1](#)
- Install the cables, see [Section 5.2](#)
- Connect the Kramer TOOL or Pico TOOL (optional), see [Section 5.3](#)
- Secure the unit under the table, see [Section 5.5](#)

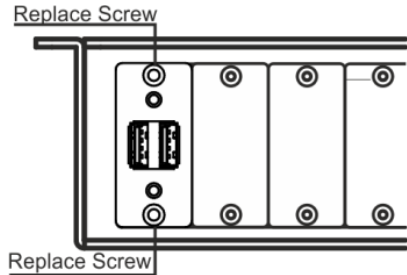
### 5.1 Installing the Required Wall Plate Inserts

By default, the mounting surface includes a power socket opening and four blank plates for optional video, audio and network connectors. Each blank plate can be removed and replaced with a Kramer passive wall plate insert or connector module for interfacing A/V type signals, if required. To install a wall plate insert or connector module, do the following:

1. Unscrew the two screws that attach the blank plate to the connecting surface and remove the blank plate (save the two screws).
2. Place the required wall plate insert item over the opening.



3. Reinsert the two screws to affix the wall plate insert in position, and tighten them.



## 5.2 Installing the Cables

To install the cables, do the following:

1. Connect the cables to the inside of the unit.
2. Insert the self-locking ties through the tie holes to secure the cables to the inside walls of the enclosure.

## 5.3 Installing the Power Socket

To install the power socket:

1. Insert the modular power socket in its place (in this example, a universal power socket is shown, but you can use any of the available power sockets, see [Section 4.1](#)).
2. Tighten the two screws (supplied with the power socket module).

The power socket is now installed.

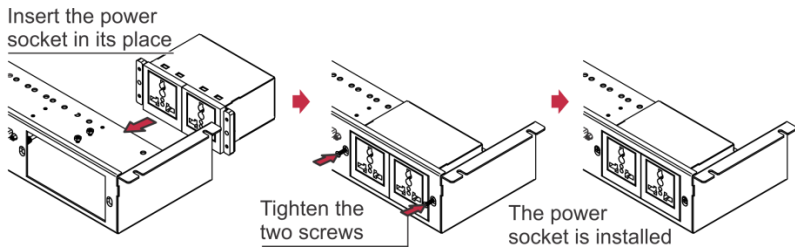


Figure 3: Installing the Power Socket

## 5.4 Connect the Kramer TOOL or Pico TOOL (Optional)

You can install a Kramer TOOL or Pico TOOL, as illustrated in the example in [Figure 4](#).

To connect the Kramer TOOL to the **UTBUS-2xl**:

1. Connect the mounting brackets to the Kramer TOOL, as described in the Bracket Installation Kit Instructions.
2. Insert the four 4x3/8" screws into the four TOOL mounting holes and fasten the Kramer TOOL to the inside floor of the **UTBUS-2xl**.

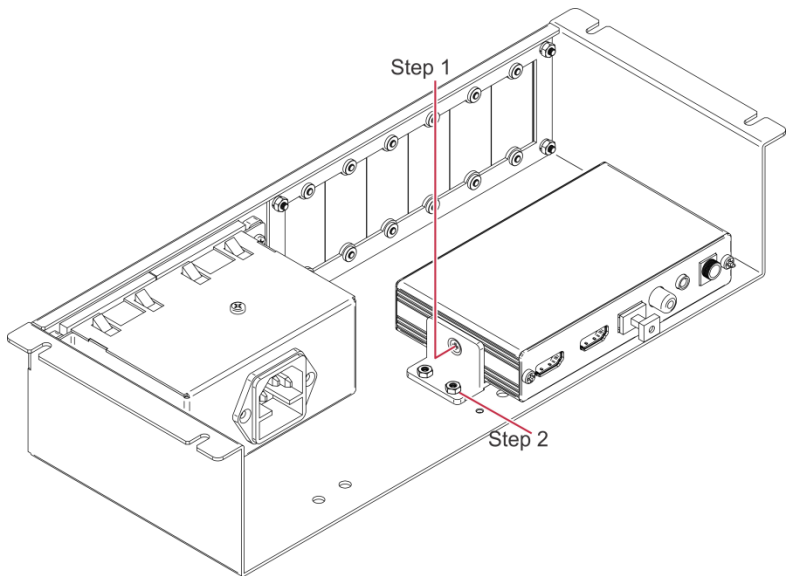


Figure 4: Installing a Kramer TOOL

## 5.5 Securing the UTBUS-2xl Enclosure to the Table

To install the **UTBUS-2xl** underneath the table, as illustrated in [Figure 5](#), do the following:

1. Place the unit to the underside of the table and mark the correct location.
2. Insert the four M4.2X16 wood screws into the four rim screw holes and fix the **UTBUS-2xl** to the table.

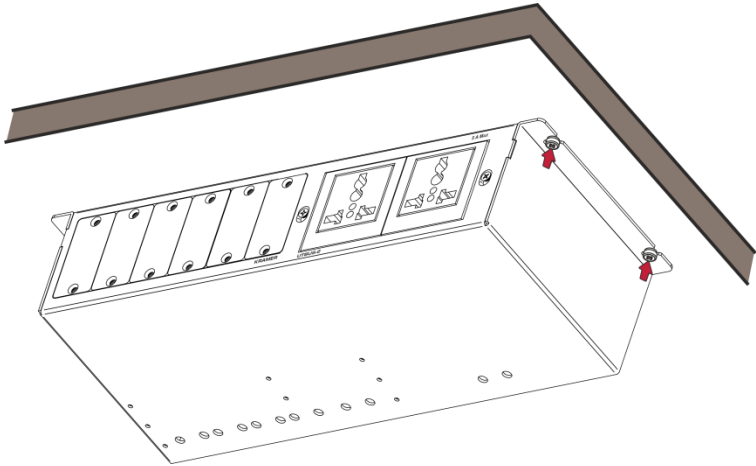


Figure 5: Securing the **UTBUS-2xl** under the Table

The **UTBUS-2xl** is ready for use.

## 6 Technical Specifications of the Assembled UTBUS-2xl

POWER SOURCE (AC power limits):	Power Socket Assemblies	
	Universal	100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet
	<p><b>Fully compatible</b> with power plugs in the UK, India, Italy and Denmark, as well as with the 2-prong Europlug.</p> <p><b>Partially compatible</b> (if the polarity is reversed) with plugs in China, Switzerland, Israel and the USA. The universal socket does not supply grounding to plugs in Central Europe and France (you should order country specific sockets instead).</p> <p><b>Not compatible</b> with South African plugs.</p>	
	USA	100-120V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	Germany and EU	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	Belgium and France	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	Italy	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	Switzerland	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	UK	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	South Africa	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	Australia	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	Israel	220V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
	FUSE RATING:	T 6.3A 250V
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	
DIMENSIONS:	250.2mm x 137.5mm x 65mm (9.85" x 5.41" x 2.56") W, D, H	
WEIGHT:	0.7kg (1.54lbs) approx.	
ACCESSORIES:	Power cord, self-locking ties, wood screws	
OPTIONS:	Passive wall plates and interfaces, power socket kits, power cord	
Specifications are subject to change without notice at <a href="http://www.kramerelectronics.com">http://www.kramerelectronics.com</a>		

## 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](http://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](http://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.



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# KRAMER



The voltage rating on the mains output receptacle is in accordance with the country's mains voltage to which the device is connected. Do not connect devices to this machine that do not operate in compliance with the country's mains voltage.



P/N: 2900-300455



Rev: 2



## 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.

[www.kramerAV.com](http://www.kramerAV.com)  
[info@kramerel.com](mailto:info@kramerel.com)