



KRAMER ELECTRONICS LTD.

USER MANUAL

MODEL:

Yarden 6-ID (SPK-I651T-KI)
2-Way In-Wall Speaker

P/N: 2900-300355 Rev 1

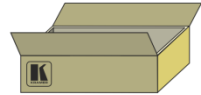


Yarden 6-ID Quick Start Guide

This guide helps you install and use your product for the first time. For more detailed information, go to http://www.kramerelectronics.com/support/product_downloads.asp to download the latest manual or scan the QR code on the left.

Step 1: Check what's in the box

- Yarden 6-ID 2-way in-wall Speaker
- 1 Quick start guide
- Cutout template



Save the original box and packaging materials in case you need to return your product for service.

Step 2: Choose the best location

Ideally, locate the speakers above the main listening area. Before doing so, be sure that:

- The desired location is free of obstructions, such as electric piping, AC ducts or water lines, and so on
- There is enough space behind the mounting surface for the speakers
- The rear side of the speakers is not blocked by wall studs or other objects

Step 3: Install the speakers

To install the speakers:

- Cut the wall to the correct size using the cut-out template
- Connect the speaker wires
- Remove the speaker grille and adjust to the proper tap setting



- Set the Speaker to the Stereo/Mono and Music/Speech modes

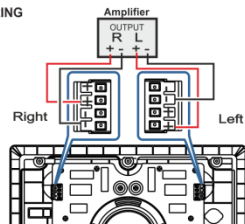


- Push the speaker into the opening and tighten the mounting tabs

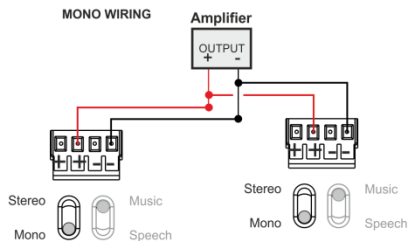
For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to your speakers

Always switch OFF the power on each device before connecting it to your Speakers.

STEREO WIRING



MONO WIRING



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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 11 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 and GROUP 11: Sierra Products.

Congratulations on purchasing your Kramer **Yarden 6-ID** 2-Way In-Wall Speaker, which is ideal for:

- Conference rooms
- Boardrooms and classrooms
- Multimedia systems

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.kramerelectronics.com/support/product_downloads.asp 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 Speaker 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.



Do not open the housing of the speaker; doing so may reduce the quality of the sound.

2.2 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/>.

3 Overview

The **Yarden 6-ID** is a high performance in-wall speaker that features:

- A Mono/Stereo selector switch
- A Music/Speech selector switch to toggle between Music mode (full range) to Speech mode (cuts low frequencies and clears up speech frequencies to enhance intelligibility)
- A double looping Kevlar driver with two pivoting titanium tweeters and two transformers, letting you use the speaker in the mono or stereo mode
- A multi tap power transformer for selecting 8Ω (bypassing the transformer) or 70V/100V power settings that are suitable for an array installation

3.1 Defining the Yarden 6-ID

This section defines the **Yarden 6-ID**:

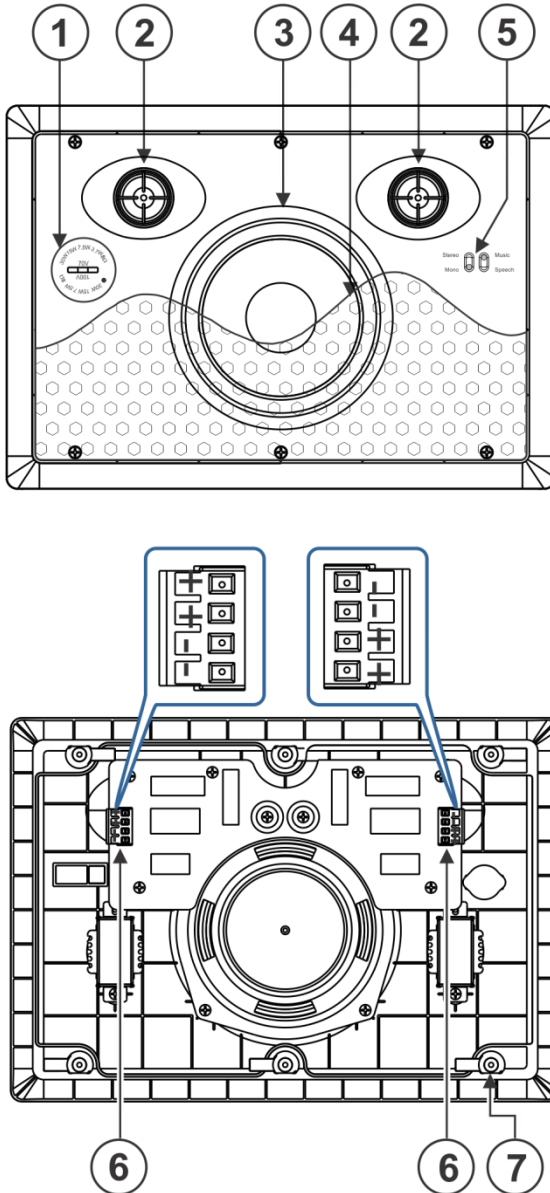


Figure 1: Yarden 6-ID

#	Feature	Function
1	Tap Selector	Adjust each speaker to the appropriate tap setting: For 70V: 3.7W, 7.5W, 15W or 30W For 100V: 7.5W, 15W or 30W Or select 8Ω (to bypass the transformer when connecting directly to an amplifier without using the 70/100V array option), see Figure 4
2	Tweeters	2 pivoting tweeters, reproduce the higher frequency sounds
3	Woofer Driver	Reproduces low frequencies
4	Speaker Grille	Protects the internal components of the speaker from foreign objects.
5	Selector Switches	Stereo/Mono to select the stereo or mono option
		Music/Speech to select the music or speech option
6	Left (L) and Right (R) Terminal Block Connectors	Use the left and right terminal blocks to setup a stereo speaker (see Figure 2) Note that you can use any one of the two terminal block connectors for a "Mono" setup (once the selector switch is set to Mono): one +, - pair for the input (see Figure 8)
7	Mounting Tab (6)	For installing the speaker in the wall.

[Figure 2](#) shows the **Yarden 6-ID** setup in stereo mode:

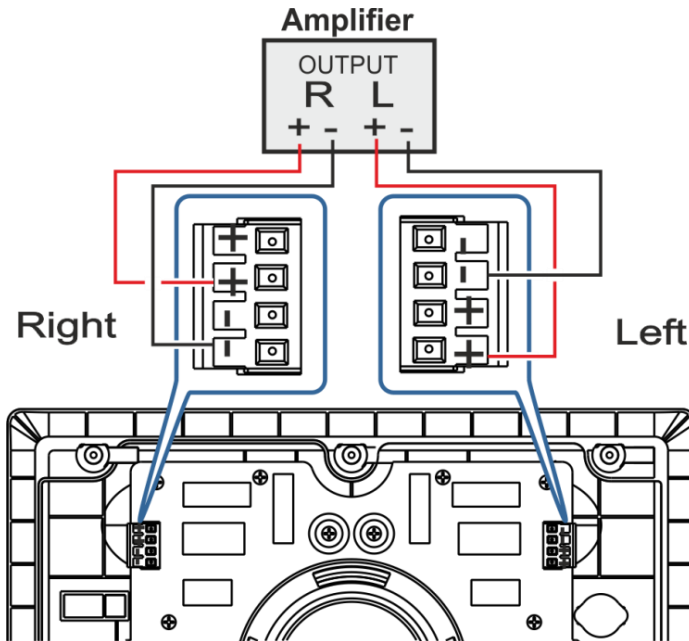


Figure 2: Yarden 6-ID Stereo Mode

4 Installing the Yarden 6-ID

This section explains how to:

- Choose the best location for your speakers (see [Section 4.1](#))
- Cut the wall (see [Section 4.2](#))
- Install the speaker wires (see [Section 4.3](#))
- Mount onto the wall (see [Section 4.4](#))
- Setup an array installation (see [Section 4.5](#))

4.1 Choosing the Best Location

Before installing the speaker make sure that:

- The desired location is free of obstructions, such as electrical piping, AC ducts or water lines, and so on
- There is enough space behind the mounting surface for the speakers
- The rear side of the speaker is not blocked by wall studs or other objects

4.2 Cutting the Wall

To cut the wall, do the following:

1. Mark the location of the opening, using the template measurements.
2. Cut out the opening according to the template.
Initially, you can cut a smaller area inside the marked area just to be sure that the space behind the speakers is clear

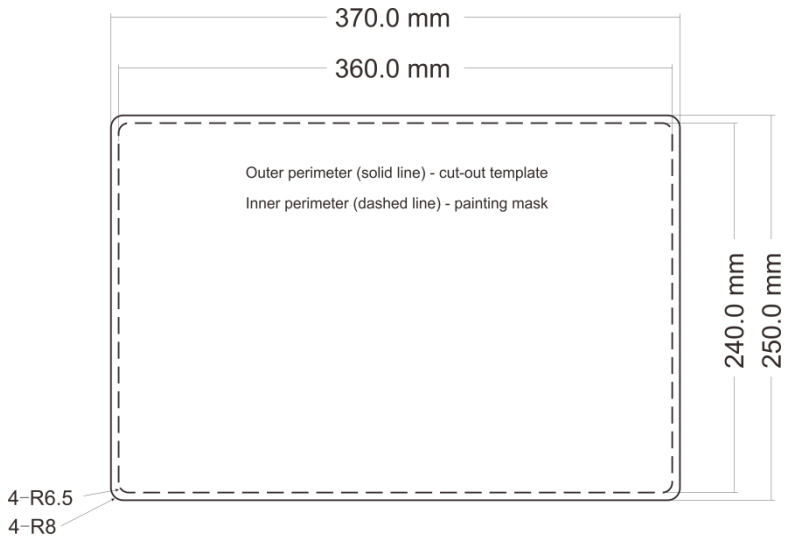


Figure 3: Yarden 6-ID Cut-out Template

4.3 Installing the Speaker Wires

To install the speaker, do the following:

1. Prepare the wires for the speaker:
 - Cut the wires to similar lengths
For achieving high quality sound
 - Measure the length from each speaker to the receiver, and cut the wires accordingly, adding some access wire length to let you easily remove the speakers from the bracket without having to disconnect the input wires
2. Strip the ends of the wires to expose a length of approximately 3/8 inch.
3. Remove the speaker grille by inserting a paper clip into one of the grille openings and pulling it.
4. Adjust appropriate tap setting (see [Figure 4](#)).
Set the tap according to the power requirements of the speaker based on its location in the room (for example, a speaker located in a remote corner may require additional power)

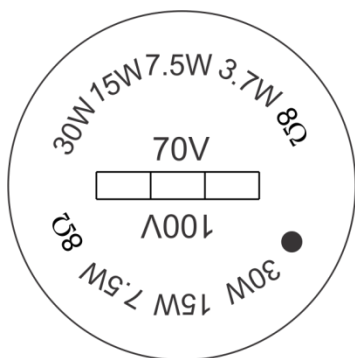


Figure 4: Adjust Tap Selector

	Stereo Mode (see Figure 2)	Mono Mode (see Figure 8)
5.	Set the selector switch to STEREO.	Set the selector switch to MONO.
6.	Push the grille firmly in place.	Push the grille firmly in place.
7.	On the L terminal block, connect one of the + and – terminal block pairs on the rear panel (see Figure 1) by connecting the wire from the: <ul style="list-style-type: none"> ▪ Negative left terminal on the receiver into the negative terminal block of the speaker ▪ Positive left terminal on the receiver into the positive terminal block of the speaker 	On any one of the terminal blocks, connect one of the + and – terminal block pairs on the rear panel (see Figure 1) by connecting the wire from the: <ul style="list-style-type: none"> ▪ Negative terminal on the receiver into the negative terminal block of the speaker ▪ Positive terminal on the receiver into the positive terminal block of the speaker
8.	On the R terminal block, connect one of the + and – terminal block pairs on the rear panel by connecting the wire from the: <ul style="list-style-type: none"> ▪ Negative right terminal on the receiver into the negative terminal block of the speaker ▪ Positive right terminal on the receiver into the positive terminal block of the speaker 	

4.4 Mount onto the Wall

To mount the speaker to the wall:

1. Insert the speaker into the opening in the wall.
2. Tighten the mounting tabs (6) by turning the screws counter clockwise (see [Figure 5](#)).

Turning one quarter of a circle rotates the tab outwards; after that the screw is turned to tighten the tabs to the rear side of the wall surface

When tightening the mounting tabs, the tabs automatically turn outward, thus clamping the speaker to the wall from its rear side.



Do not over-tighten the screws. It may cause damage to both the speakers and the surface.



Figure 5: Tighten the Mounting Tabs

4.5 Setting up an Array Installation

When installing **Yarden 6-ID** in an array installation layout, you have to define the distance between speakers as well as the layout pattern (square or hexagonal).

The distance between speakers is set according to the uniformity of the coverage desired and the budget.

The coverage angle of the speaker determines the coverage area and the number of speakers required in the array installation. Two patterns are usually used for array installations, square (see [Figure 6](#)) or hexagonal (see [Figure 7](#)), depending on the shape of the installation area. The speakers are positioned according to their coverage area.

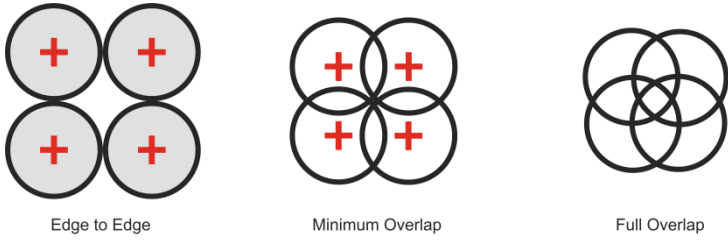


Figure 6: Square Layout

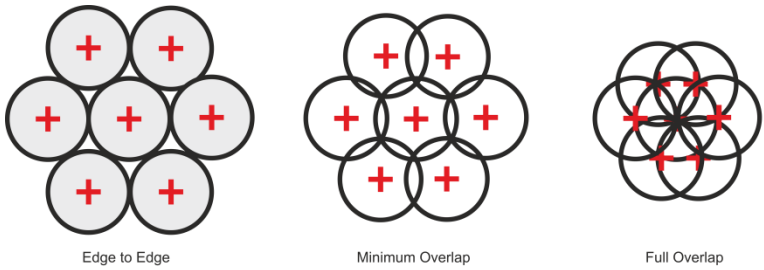


Figure 7: Hexagonal Layout

You can set the power on each speaker to get the desired power level in different installation areas.



We recommend that you set the Mode switch to MONO for an array installation.

Figure 8 shows an example of parallel wiring in a square array installation:

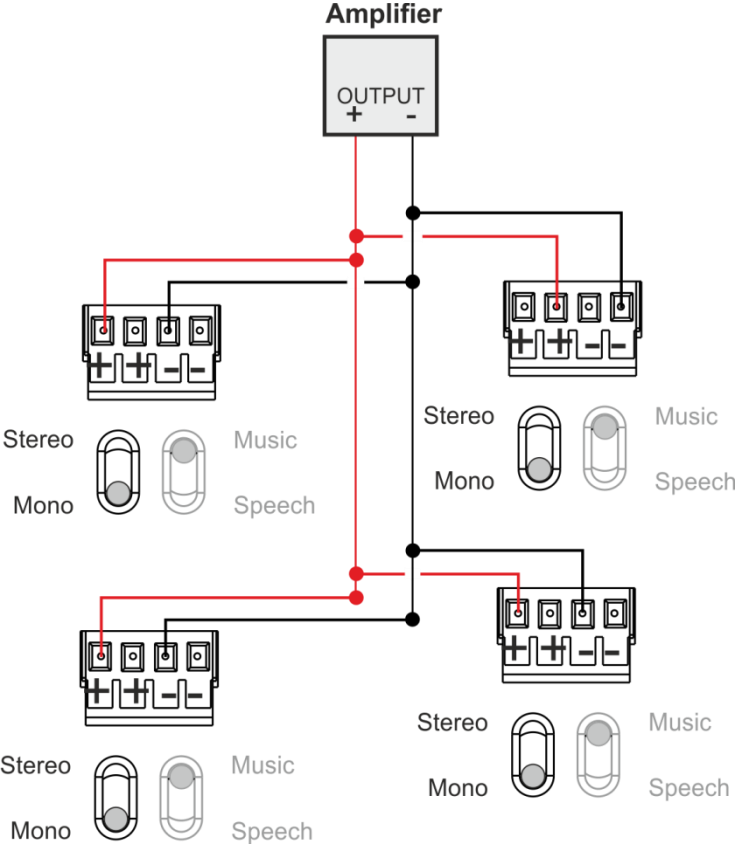


Figure 8: Square Layout Parallel Wiring

5 Technical Specifications

Audio and Power	
DESCRIPTION:	2-way in-wall speaker
FREQUENCY RESPONSE:	40Hz to 20kHz @ -10dB 60Hz to 20kHz @ ±3dB
WOOFER:	6.5" (166mm) Kevlar(R) with rubber surround
TWEETER:	2 pivoting 1" (25mm) titanium
IMPEDANCE:	8Ω (transformer tap in off position)
TRANSFORMER TAPS:	70V – 30W / 15W / 7.5W / 3.7W / Off (Lo-Z) 100V – 30W / 15W / 7.5W / Off (Lo-Z)
SENSITIVITY:	85dB SPL, 1W@1m
MAX SPL:	Continuous: 100dB Peak: 103dB
POWER HANDLING	30W RMS 80W continuous program
CROSSOVER FREQUENCY:	2.3kHz
DIRECTIVITY FACTOR (Q):	7.5, averaged 1kHz to 10kHz
DIRECTIVITY INDEX (DI)	8.8dB averaged 1kHz to 10kHz
INPUT CONNECTORS:	Terminal blocks
CONTROLS:	Mono/Stereo select switch, Music/Speech select switch
Shipping and Installation	
MATERIALS:	Frame, aluminum grill, ABS cabinet
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
WEIGHT:	3.03kg (6.68lbs) approx.
SHIPPING WEIGHT:	3.85kg (8.49lbs) approx.
DIMENSIONS:	48cm x 28cm x 8.8cm (18.9" x 11.02" x 3.46"), W, D, H
INSTALLATION CLEARANCE:	mounting depth: 8.3cm (3.27")
COLORS:	Available in white
Specifications are within a 10% tolerance and are subject to change without notice at http://www.kramerelectronics.com	

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

One year 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.



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.

Web site: www.kramerelectronics.com

E-mail: info@kramerel.com



SAFETY WARNING

Disconnect the unit from the power supply before opening and servicing



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