# KRAMER



# USER MANUAL

MODEL:

TBUS-1-KWC Table Connection Bus with Wireless Charging Spot



#### **TBUS-1-KWC Quick Start Guide**

This guide helps you install and use your TBUS-1-KWC for the first time.

Go to <u>www.kramerav.com/downloads/TBUS-1-KWC</u> to download the latest user manual and check if firmware upgrades are available.

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

 ☑
 TBUS-1-KWC table connection bus w/wireless charging spot
 ☑
 1 Power supply bracket
 ☑
 1 Cutout template

 ☑
 1 Power supply (12V DC)
 ☑
 2 Table clamps
 ☑
 1 Quick start guide

#### Step 2: Prepare TBUS-1-KWC for mounting

1. Carefully insert the power sockets and inserts to the inner frame.



Note: Power sockets and inserts are purchased separately.

#### Step 3: Prepare the table for mounting

Cut out an opening in the table using the cutout template.



2. Mount the inner frame in the enclosure.

Adjust the height of the inner frame.



#### Step 4: Install TBUS-1-KWC into the table

- Insert the unit through the table opening and attach the power supply under the table using the power supply bracket.
- Secure the unit to the table.





3. Connect the cables.

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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.

Thank you for purchasing the Kramer **TBUS-1-KWC** Table Connection Bus featuring a charging spot, which is ideal for boardrooms, conference and training rooms!

# 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 <u>www.kramerav.com/downloads/TBUS-1-KWC</u> to check for up-todate 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 highperformance, 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 TBUS-1-KWC 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 place heavy objects on top of TBUS-1-KWC.

## 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 <u>www.kramerav.com/support/recycling/</u>.

## 3 Overview

**TBUS-1-KWC** is a modular furniture-mounted connection bus enclosure that is easily installed into a table or podium top.

Once assembled, **TBUS-1-KWC** lets you connect any equipment to the room's presentation system installations via cable access or passive interfaces (see <u>Figure 1</u>). When the cables are not in use, they can be stored inside the unit, covered by the lid and out of sight.

**TBUS-1-KWC** features a built-in Qi standard compliant charging spot that enables you to charge your mobile device by simply placing it on the charging spot.



If your mobile device does not support wireless charging, you can connect it to a Kramer wireless charging receiver (sold separately) and then place it on the charging spot.

In addition, TBUS-1-KWC features:

- A modular design, letting you tailor TBUS-1-KWC according to your requirements.
- Black or clear sandblast finish, anodized aluminum lid.
- Special openings for cable pass-through.
- Height adjustment screw holes to set the inner frame (ordered separately) to the desired height.
- Single or dual power socket openings that are suitable for any of the following power sockets: for the USA, the UK, Switzerland, Germany (the Europlug), Belgium-France, Italy, Australia, Israel, Brazil, South Africa or "Universal" for use anywhere (see compatibility restrictions in <u>Section 8</u>).
   Order the power sockets separately from Kramer Electronics



Figure 1: TBUS-1-KWC inside a Table

# 4 Defining TBUS-1-KWC

This section defines TBUS-1-KWC.



Figure 2: TBUS-1-KWC Table Connection Bus - Front View

#	Feature	Function
1	Black/Clear Anodized Sandblast Textured Lid	Includes an opening for cable pass-through; covers the inner frame, leaving the table surface neat and tidy.
2	Charging Spot	For mobile device wireless charging
3	Outer Rim	Fits over the table surface. A protective rubber guard protects the outer rim during shipping. Remove it before installing the unit.
4	Enclosure	Inserted into the table cutout
5	Tie Holes	Insert the self-locking tie through the holes to fix the pass- through cables to the inside walls of the unit.
6	Bracket Grooves	For attaching the two mounting brackets on opposite sides.
7	TOOL Height Adjustment Screw Holes	Used for installing Kramer TOOLs.

#		Feature	Function
8	Set	Mounting Brackets (2 units)	Place in the bracket slits after inserting the enclosure into the table – for securing the unit to the table surface (one for each clamp)
9	nping	Mounting Butterfly Screws	Tighten to secure the unit to the table surface (one for each clamp)
10	Table Clamping	Locking Butterfly Screws	Tighten to lock the mounting butterfly screw (one for each clamp)
11	Tab	Rubber Protectors	Protect the table surface when mounting the unit and ensure soft tightening to the table underside (one for each clamp)
12		Frame Height ment Screw Holes	For adjusting the height of the mounted inner frame
13	Power	Spot Wiring	Connect to a power source (see Figure 3)



Figure 3: TBUS-1-KWC - Rear View

## 4.1 TBUS-1-KWC Optional Inner Frames

The following inner frames can be installed in the **TBUS-1-KWC** enclosure:



Inner Frames for TBUS-1A	Specifications
	T1AF-1T3 (P/N: 80-005199)
	1 opening for 1 power socket 2 openings for 3 Kramer TOOLs
	T1AF-14T (P/N: 80-005299)
	1 opening for 1 power socket 1 opening for 1 Kramer TOOL 2 cable pass-through inserts 2 blank inserts



Custom made inner frames can be designed if required. Contact Kramer Electronics for more details.

## 4.2 TBUS-1-KWC Optional Inserts

Accessories	Description
Inserts	You can install any wall plate devices as well as any of the single or dual inserts—see our Web site for details.
	T-RC8IR (P/N: 80-000599) 1 special panel to fit the Kramer <b>RC-8IR</b> Control Panel into the appropriate frame (P/N 80-000399 or P/N 80-000499 instead of two power sockets)
$\cdot \left  \begin{array}{c}   \\ \bullet \\   \\ \bullet \\ \bullet$	T-4INSERT (P/N: 60-100199) The <b>T-4INSERT</b> kit can be installed inside a dual power socket opening and includes: 2 single cable pass-through insert 2 dual cable pass-through insert
	T-2INSERT (P/N: 80-00006699) The <b>T-2INSERT</b> kit can be installed inside a single power socket opening and includes: 1 single cable pass-through insert 1 dual cable pass-through insert

Accessories	Description
	T-TBLANK (P/N: 80-005099)
	This TOOL blank covers a TOOL opening for the <b>T1AF-1T3</b> (P/N: 80-005199) and <b>T1AF-14T</b> (P/N: 80-005299) inner frames

## 4.3 Power Socket Options

Inner frames support installing one or more of the following power socket assemblies. **Note:** The Brazilian power sockets are supplied as dual power sockets in a single power socket assembly (see table below).

#### 4.3.1 Single Power Socket Assemblies

Power Socket Type	Power Specs	Power Socket Type	
Universal:	TS-1U (80-000899) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet	Fully compatible with power plugs in the UK, India, Italy and Denmark, as well as with the 2-prong Europlug. Partially compatible (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. Not compatible with South African plugs.	
Power Socket Type	Power Specs	Power Socket Type	Power Specs
USA:	TS-1US (80-000999) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet		TS-1UK (91-000022) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet
Belgium and France:	TS-1FR (80-001399) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet	Israel:	TS-1IL (80-001799) 220V AC, 50/60Hz, 5A Maximum 5A per power outlet
Germany and EU:	TS-1DE (80-001299) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet	South Africa	TS-1ZA (80-001699) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet

Power Socket Type	Power Specs	Power Socket Type	
Italy:	TS-1IT (80-001499) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet	Australia:	TS-1AU (80-001599) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet
Switzerland	TS-1CH (80-000027) 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet	Brazil	TS-BR (80-000034) 100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet

## 4.3.2 Dual Power Socket Assemblies

Dual Power Socket Assemblies:	Power Specs
Universal:	TS-2U (80-001899)
	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
USA:	TS-2US (80-001999)
	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
Belgium and France:	TS-2FR (80-002299)
	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
Germany and EU:	TS-2DE (80-002199)
	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
Italy	TS-2IT (80-002399)
	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
Switzerland	TS-2CH (80-000026)
	220V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet

Dual Power Socket Assemblies:	Power Specs	
UK	TS-1UK (91-000023)	
	220V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet	
Israel:	TS-2IL (80-002699)	
	220V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet	
South Africa:	TS-2ZA (80-002599)	
	220V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet	
Australia:	TS-2AU (80-002499)	
	100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet	

## 4.4 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

To use one power cord for a 4-socket configuration, you can order any of the following types of power cords separately:

Power Cord Type	Description	P/N
110V Y-version (6ft), North America	C-ACY/US	91-000399
220V Y-version (6ft), Europe	C-ACY/EU	91-000499
240V Y-version (6ft), UK	C-ACY/UK	91-000599

# 5 Installing TBUS-1-KWC

#### To install TBUS-1-KWC:

- 1. Assemble the inner frame (see <u>Section 5.1</u>).
- 2. Install the inner frame (see Section 5.2).
- 3. Cut an opening in the table (see <u>Section 5.3</u>).
- 4. Insert the unit through the opening and secure it to the table (see Section 5.4).
- 5. Connect the cables (see <u>Section 5.5</u>).
- 6. Insert the pass-through cables (see Section 5.6).
- 7. Adjust the height of the inner frame (see Section 5.7).

### 5.1 Assembling the Inner Frame

The modules mounted on the inner frame can include single inserts and/or dual inserts as well as power sockets and various Kramer devices. This section describes how to assemble these modules.



Each module kit is supplied with detailed assembly instructions.

#### 5.1.1 Mounting the Inserts

You can rearrange or remove any of the plates mounted on the inner frame and replace them with Kramer passive wall plates or connector modules for interfacing A/V type signals.

#### To mount a Kramer insert or connector module:

1. Unscrew the two screws that fasten the blank plate to the inner frame and remove the blank plate.

2. Place the required Kramer insert over the opening, insert the two screws to fix the Kramer insert in place, and tighten them.



Figure 4: TBUS-1-KWC Inner Frame (P/N: 80-000299)

#	Feature	Function	
1	Split Brackets	Support the split grommet for the pass through-cables	
2	Split Grommets	Push apart slightly to insert cables	
3	Blank Plates	Four blank covers that can be replaced with wall plates as required	
4	Power Socket Opening	Suitable for a single power socket or the T-2INSERT	
5	Adjustable Height Screw Holes	For adjusting the height of the inner frame	

#### 5.1.2 Mounting the Power Socket Assemblies

To mount the power socket, place the power socket under the frame in its appropriate place and tighten with the two screws (supplied).



Power socket kits are supplied with assembly instructions.

#### 5.1.3 Mounting a Kramer TOOL

#### To mount a TOOL (for example, to the T1AF-14T), as shown in Figure 5:

- 1. Screw the spacers to their designated places (one on each side).
- 2. Insert the TOOL, from beneath, through the TOOL opening.
- 3. Screw the screws (one on each side) through the frame holes and spacers.



Figure 5: Installing a Kramer TOOL

### 5.1.4 Installing the TOOL Blank

#### To install the T-TBLANK, as shown in Figure 6:

- 1. Insert the T-TBLANK from beneath, through the TOOL opening.
- 2. Screw the screws (one on each side) through the frame.



Figure 6: Installing the T-TBLANK TOOL Blank

#### 5.1.5 Mounting the Special Panel for RC-8IR

The Kramer **T-RC8IR** for **TBUS-1-KWC** Table Connection bus is used to fit the Kramer **RC-8IR** Control Panel into the appropriate frame (P/N 80-000399 or P/N 80-000499 instead of two power sockets).



Figure 7: T-RC8IR (P/N: 80-000599)

#### To replace the RC-8IR faceplate:

 Unscrew the two faceplate attachment screws and remove the RC-8IR faceplate before installing the T-RC8IR.



Figure 8: RC-8IR Faceplate Holes Table Connection Bus

- Place the T-RC8IR over the RC-8IR enclosure so that both face plate holes are aligned with the face plate holes on the RC-8IR enclosure and the IR IN receiver fits into the IR IN opening.
- Insert the faceplate screws through the T-RC8IR and RC-8IR enclosure faceplate holes, and tighten.

#### To install the T-RC8IR:

- 1. Insert the **T-RC8IR** assembly through the dual power socket opening from beneath.
- 2. Use the two power socket screws to tighten the **T-RC8IR** assembly in place.

#### 5.1.6 Installing the SI-1VGA / RC-3TB

To install the SI-1VGA / RC-3TB module, place it under the designated opening in the T1AF-14L (P/N: 80-000699) and then screw and tighten it in place using the two screws supplied with the inner frame.

## 5.2 Installing the Inner Frame

#### To install the inner frame:

- 1. Place the inner frame inside the TBUS-1-KWC enclosure.
- Set the required height using your fingers to bring the inner frame to the desired position, screw and tighten it in place using the height adjustment screws (supplied with the inner frame).



Inner frame kits come with assembly instructions.

## 5.3 Cutting an Opening in the Table

#### To cut an opening in the table:

- Place the included cutout template (that is included with your TBUS-1-KWC) on the surface of the table exactly where you want to install the TBUS-1-KWC.
- Attach the template to the table with the included screws (if using the cutout template).
- Following the <u>inside</u> edge of the template, cut a hole in the table surface with a sabre or keyhole saw according to the dimensions shown in <u>Figure 9</u> (not to scale).



The thickness of the table should be 76 mm / 3 inches or less.



Figure 9: Cutout Dimensions

4. Unscrew and remove the template from the surface of the table and clean the table surface.

Take care not to damage the table.

If needed, you can download a full-scale template from our Web site.



Kramer Electronics is not responsible for any damage caused to the table.

## 5.4 Inserting TBUS-1-KWC through the Cutout Opening

#### To install TBUS-1-KWC in the opening:

- Remove the protective rubber guard from around the outer rim of the TBUS-1-KWC housing. Beware of the sharp edge!
- 2. Carefully insert the unit into the prepared opening (see Figure 10).
- Attach the power supply under the table using the power supply bracket (supplied with the package).
- Take the support brackets under the table and place them into the support bracket grooves on both sides of the unit (see <u>Figure 2</u>, item 6).
- 5. Verify proper alignment of the unit before tightening the mounting screws.
- Tighten both mounting butterfly screws upward until they reach the table surface (from underneath). Tighten firmly (see <u>Figure 10</u>).

 Tighten the locking butterfly screws downward until tight against the mounting bracket.



Figure 10: Inserting TBUS-1-KWC into the Prepared Opening

## 5.5 Connecting the Cables

Connect the Charging spot to the power supply and the power supply to the mains electricity (the power cord is purchased separately, see <u>Section 4.3</u>).

To connect the cables when replacing blank inserts with connector inserts (for example, VGA, audio, HDMI<sup>™</sup> and so on):

- 1. Insert the cables to their appropriate connectors from underneath.
- Secure the cables to the tie holes on TBUS-1-KWC.
   Do not secure the cables too tightly or too loosely. Leave a small amount of slack.

### 5.6 Inserting the Pass-through Cables

#### To insert the pass through cables (for example, to connect a laptop):

- 1. Remove the two screws attaching the split pass-through bracket.
- 2. Remove the split grommet.
- 3. Insert the cable through the rectangular opening.

- 4. Open the split grommet slightly and insert the required cables.
- 5. Place the split bracket around the grommet and position this assembly over the inner frame.
- 6. Place the two screws appropriately and tighten the split bracket together with the grommet and inserted cables to the inner frame.
- 7. Insert the self-locking ties through the tie holes to secure the cables to the inside walls of the enclosure.



Figure 11: Cable Pass-through Insert (P/N: 80-000499)

## 5.7 Adjusting the Height of the Inner Frame

If needed, you can adjust the inner frame height to accommodate large or bulky cables.

#### To adjust the inner frame height:

- 1. Remove the height adjustment screws, while supporting the surface from underneath with your fingers.
- 2. Raise or lower the inner frame to the required height, insert the screws, and tighten them in place.

# 6 Using TBUS-1-KWC

Once **TBUS-1-KWC** is installed, you can easily customize it to suit your own requirements by plugging in the required A/V equipment, as illustrated in the example in Figure 12.



Figure 12: TBUS-1-KWC Boardroom Installation

# 7 Using the Wireless Charger

The wireless charger can be used in one of the following ways:

- Using the Wireless Charger Directly see section 7.1
- Using the Wireless Charger with a Receiver see section 7.2

## 7.1 Using the Wireless Charger Directly

If your mobile device supports wireless charging, you can charge it directly on top of the charging spot.



You can charge only one mobile device at a time.

#### To use the wireless charger directly:

- 1. Make sure that the charging spot power cable is connected.
- 2. Place it on the charging spot until it is fully charged.

## 7.2 Using the Wireless Charger with a Receiver



You can charge only one mobile device at a time.

When charging a mobile device, do not place any metal or magnetic objects over the receiver.

Charging a mobile device using the receiver in the vicinity of pacemakers, hearing aids, or similar medical electronic devices may interfere with the function of these devices.

Make sure the receivers are used in a cool and well-ventilated environment and away from flammable and explosive objects.

Avoid using the receivers in extreme temperatures or high humidity.

Kramer **KWC-MUSB** and **KWC-LTN** wireless charging receivers (sold separately) can be used with Kramer Wireless Charging (KWC) products for mobile devices that **DO NOT** have a built-in wireless charging receiver.

The **KWC-MUSB** Micro USB receiver (Figure 13) and **KWC-LTN** lightning receiver (Figure 14) are wireless power receivers that utilize electromagnetic induction to charge mobile devices wirelessly and are compatible with the Qi standard for wireless chargers (with security eyeholes).



Figure 13: KWC-MUSB Micro USB Receiver



Figure 14: KWC-LTN Lightning Receiver



Figure 15: Receiver Underside

#### To use the wireless charger with a receiver:

- Connect your mobile device to either a KWC-MUSB Micro USB receiver or a KWC-LTN lightning receiver, as required.
- Place the mobile device with the attached receiver centered on the charging spot (correct side facing the charging spot, see <u>Figure 15</u>) until it is fully charged.

# 8 Technical Specifications

POWER SOURCE	Single Socket Assemi	blies:	
(AC power limits):	Universal	100-240V AC, 50/60Hz, 5A	
	erin forda	Maximum 5A per power outlet	
	Fully compatible with power plugs in the UK, India, Italy and Denmark, as well as with the 2-prong Europlug.		
	<b>Partially compatible</b> (if the polarity is reversed) with plugs in		
	China, Świtzerland, 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).		
	Not compatible with South African plugs.		
	USA	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
	Germany and EU	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
	Belgium and France	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
	Italy	100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet	
	Australia	100-240V AC, 50/60Hz, 5A	
	Australia	Maximum 5A per power outlet	
	lana al	220V AC, 50/60Hz, 5A	
	Israel	Maximum 5A per power outlet	
	South Africa	100-240V AC, 50/60Hz, 5A	
	South Africa	Maximum 5A per power outlet	
	O altra altra al	100-240V AC, 50/60Hz, 5A	
	Switzerland	Maximum 5A per power outlet	
	UK	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
	Brazil	100-240V AC, 50/60Hz, 5A	
		Maximum 5A/2.5A per power outlet	
	Dual Power Kit Assemblies:		
	Universal	100-240V AC, 50/60Hz, 5A	
		Maximum 5A/2.5A per power outlet	
	USA	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	
	Germany and EU	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	
	Israel	220V AC, 50/60Hz, 5A	
		Maximum 5A/2.5A per power outlet	
	Switzerland	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
	UK	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
	Australia	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
	South Africa	100-240V AC, 50/60Hz, 5A	
		Maximum 5A per power outlet	
FUSE RATING:	T 6.3A 250V		

#### Limited Warranty

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 endosures, 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.
- All Kramer fiber optic cables and adapters, active cables, cable retractors, all Kramer speakers and Kramer touch panels are covered by a standard one (1) year warranty.
- 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.
- 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:

- 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.
- 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 the removation or re-installation of this contrals 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 frice auters you.

In order to pursue any remedy under this limited waranty, 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 waranty, 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 RESOLITING 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 or diability to specified amounts, so the above limitations or exclusions may not apply to you.

#### Exclusive Remedy

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#### 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, (iii) the product is not distributed by Kramer Electronics or (iiii) this product is not purchased from an authorized Kramer Electronics reseller, ify ou are unsure whether a reseller is an authorized Kramer Electronics reseller, visit our web site at www.kramerav.com or contact at 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







## 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.

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www.KramerAV.com info@KramerAV.com