USER MANUAL

MODEL:

**MODULAR TBUS-10xl**
Table Connection Bus

TBUS-10xl 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

☑ The **TBUS-10xl** Table Connection Bus Enclosure
☑ 2 table clamps
☑ 6 self locking ties

☑ 1 cut out template
☑ 1 quick start guide
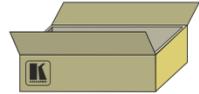
Save the original box and packaging materials in case you need to return your product for service.

Step 2: Prepare the TBUS-10xl for mounting

Assemble the inner frame and install the power sockets.
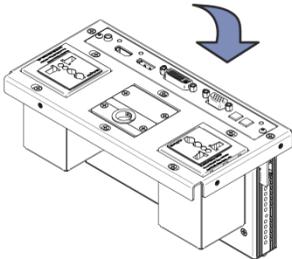
Adjust the height of the inner frame.
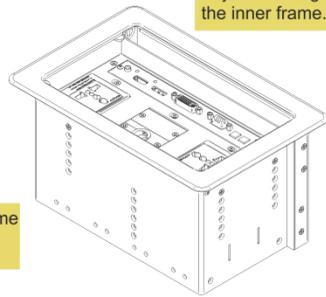
Mount the inner frame into the **TBUS-10xl** enclosure.

Step 3: Prepare the table for mounting

Cut out an opening in the table using the cut out template.
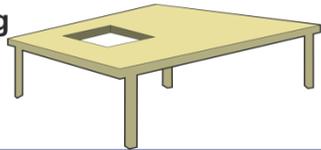
Step 4: Install the TBUS-10xl to the table

Insert the unit through the table opening.
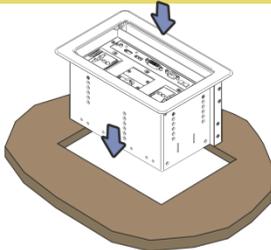
Secure the unit to the table and connect the cables.

Contents

Figures

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 Video Products.

Thank you for purchasing the Kramer **TBUS-10xl** enclosure, which is ideal for boardrooms, conference and training rooms!

> Note that the inner frame, power socket assembly, power cord and other inserts for the **TBUS-10xl** enclosure are purchased separately.

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 to check for up-to-date user manuals, a complete list of Kramer wall plates and module connectors, 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 **TBUS-10xl** 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

Inner frame: The inner frame fits into the TBUS enclosure

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

Insert: The insert fits into 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 *www.kramerav.com/support/recycling/*.

3 Overview

The Kramer **TBUS-10xl** is a high-quality, anodized aluminum, table-mounted connection bus enclosure for boardrooms and conference rooms. Its attractive enclosure is designed to provide maximum connectivity in the smallest possible footprint. The unit is sturdy, cost-effective, and easy to install.

The **TBUS-10xl**:

- Has a modular design, letting you tailor the **TBUS-10xl** according to your requirements

- Is available with a black sand blasted anodized, silver sand blasted anodized, or sliver brushed anodized aluminum lid with a special opening for cable pass-through (note, that other customized colors can also be ordered)

- Includes height adjustment screw holes to set the inner frame (ordered separately) to the desired height

- Features a cover that opens and closes manually and retracts into the unit to remain out of sight when the **TBUS-10xl** is in use. When closed, all cables and connectors are out-of-sight under the anodized cover

> Do not place heavy objects on top of the **TBUS-10xl**.

4   Your TBUS-10xl Enclosure

This section defines the **TBUS-10xl** enclosure and the Inner frame options.
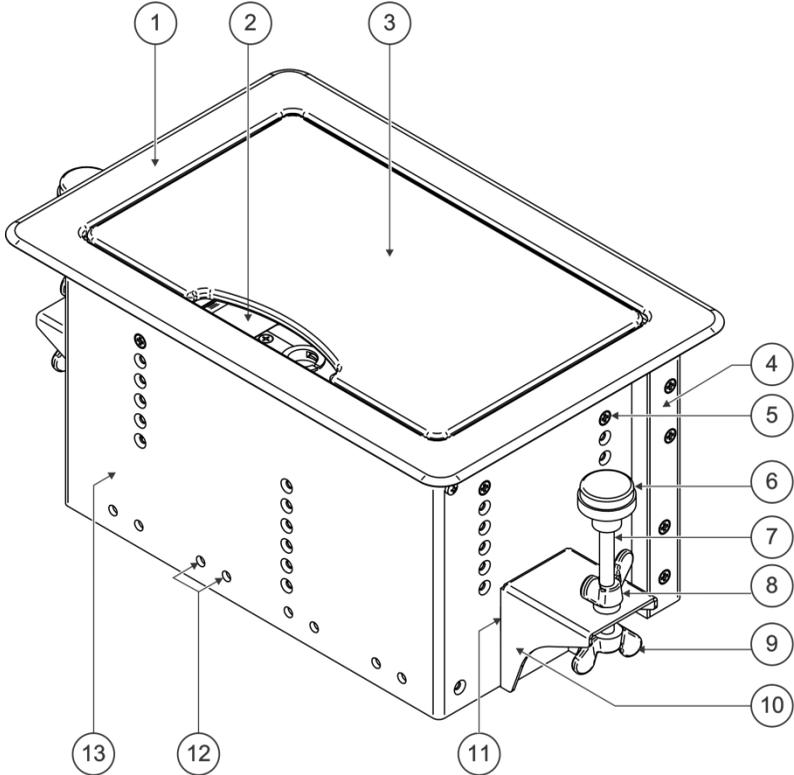
Figure 1: TBUS-10xl Enclosure Top View

#	Feature	Function
1	Outer Rim	Fits over the table surface. A protective rubber guard protects the outer rim during shipping. Remove it before installing the unit
2	Inner Frame	Installed within the **TBUS-10xl** enclosure
3	Black Sand Blasted Anodized / Silver Sand Blasted Anodized / Silver Brushed Anodized Textured Aluminum Lid	Includes an opening for cable pass-through; covers the inner frame, leaving the table surface neat and tidy
4	Lid Housing	When opened, the lid retracts into the lid housing
5	Height Adjustment Screw holes	The screw holes on each side panel are used for mounting and adjusting the height of the Inner Frame

#		Feature	Function
6	Table Clamping Set	Rubber Protectors	Protect the table surface when mounting the unit (one for each clamp)
7		Mounting Screws	For mounting onto table (one for each clamp)
8		Locking Butterfly Screws	Tighten to lock the mounting butterfly screw (one for each clamp)
9		Mounting Butterfly Screws	Tighten to secure the unit to the table surface (one for each clamp)
10		Mounting Clamps	Fit in the clamps slits after inserting the enclosure into the table – to secure the unit to the table surface (one for each clamp)
11		Bracket Slits	For attaching the two mounting clamps on opposite sides
12		Tie Holes	Insert the self-locking tie through the holes to fix the pass-through cables to the inside walls of the unit (4)
13		Enclosure	Inserted into the table cut out

4.1 TBUS-10xl Optional Inner Frames

The following inner frames can be installed in the **TBUS-10xl** enclosure:

Inner Frames for TBUS-10xl	Specifications (defines what you can include in this inner frame):
	T10F-22M (P/N: 80-000028) 1 opening for 1 MegaTOOL, specially designed for the Kramer **SID-X1** 2 openings for 2 power sockets 1 blank insert 1 pass-through insert
	T10F-33 (P/N: 80-000040) 2 openings for 3 power sockets (1 dual and 1 single) 2 blank inserts 1 pass-through insert

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

4.2 TBUS-10xl Optional Inserts

Accessories	Description
Inserts	You can install any wall plate device as well as any of the single or dual inserts—see our Web site for details.
	T-2INSERT (P/N: 80-00006699) The **T-2INSERT** kit can be installed inside a single power socket opening and includes: 1 single cable pass-through insert 1 dual cable pass-through insert
	T-RC8IR (P/N: 80-000599) 1 special panel to fit the Kramer **RC-8IR** Control Panel into the appropriate frame (P/N 80-000040 instead of two power sockets)
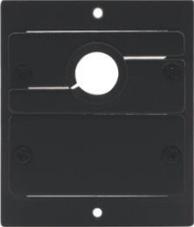
Accessories	Description
	T-RC-76 (P/N: 80-000080) 1 special panel to fit the Kramer **RC-76** Control Panel into the appropriate frame (P/N 80-000040 instead of two power sockets)
	T-RC-78 (P/N: 80-000081) 1 special panel to fit the Kramer **RC-78** Control Panel into the appropriate frame (P/N 80-000040 instead of two power sockets)
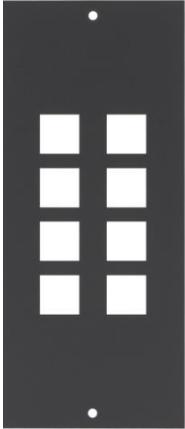
4.3 Power Socket Options

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

Socket Type	Power Specs	
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.

Socket Type	Power Specs	Socket Type	Power Specs
USA:	**TS-1US (80-000999)** 100-125V AC, 50/60Hz, 5A Maximum 5A per power outlet	UK	**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)** 100-240V 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
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
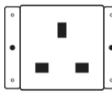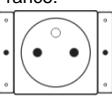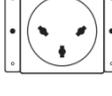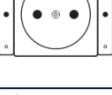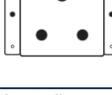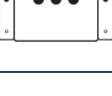
Socket Type	Power Specs	Socket Type	Power Specs
Switzerland	**TS-1CH (80-000027)** 100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet	Brazil	**TS-BR (80-000034)** 100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
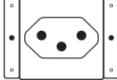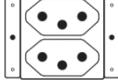
4.3.2 Dual Power Socket Assemblies

Socket Type	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)** 100-125V 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)** 100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
UK	**TS-2UK (91-000023)** 100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
Israel:	**TS-2IL (80-002699)** 100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
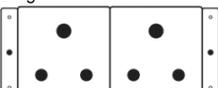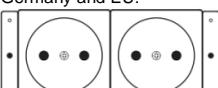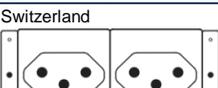
Socket Type	Power Specs
South Africa:	**TS-2ZA (80-002599)** 100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
Australia:	**TS-2AU (80-002499)** 100-240V AC, 50/60Hz, 5A Maximum 5A/2.5A per power outlet
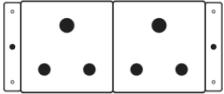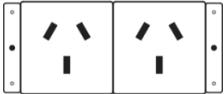
4.4   Power Cord Options

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 3-socket configuration on the **T10F-33**, 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 the TBUS-10xl

To install the **TBUS-10xl** perform the following steps:

1. Assemble the inner frame (see Section 5.1).

2. Install the inner frame (see Section 5.2).

3. Cut an opening in the table (see Section 5.3).

4. Insert the unit through the opening and secure to the table (see Section 5.4).

5. Connect the cables (see Section 5.5).

6. Insert 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 a MegaTOOL, single inserts and/or dual inserts as well as a power socket (in some models). This section describes how to assemble these modules.

Each module kit comes 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.
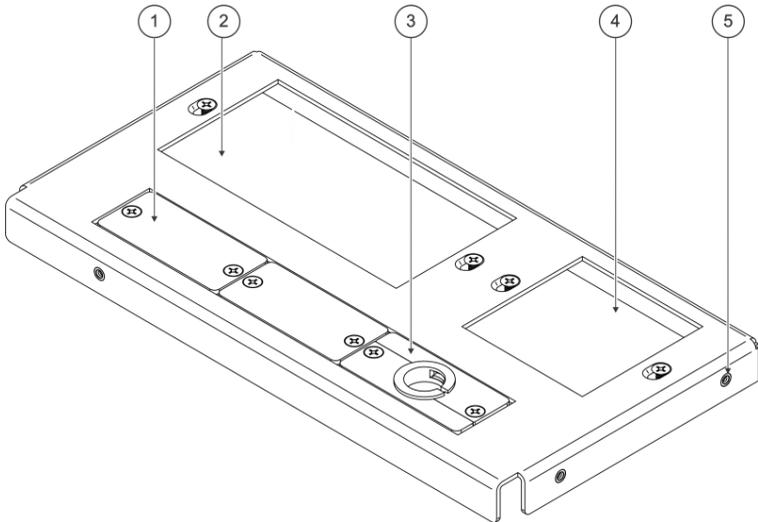
Figure 2: TBUS-10xl Inner Frame (P/N: 80-000028)

#	Feature	Function
1	Blank Plates	Two blank covers that can be replaced with wall plates as required
2	Dual Power Socket Opening	Suitable for 2 power sockets or optional TBUS insert kits (for example, the T-RC18 insert kit)
3	Split Brackets	Support the split grommet for the pass through-cables
4	Power Socket Opening	Suitable for a single power socket or the optional insert kit for TBUS
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 come with assembly instructions.

5.1.3 Mounting the T-2INSERT

The **T-2INSERT** optional insert kit lets you add 2 more inserts to the TBUS configuration of the TBUS instead of a power socket.

To mount the **T-2INSERT**, place the **T-2INSERT** under the frame in its appropriate place and tighten with the two screws (supplied).

> The **T-2INSERT** comes with assembly instructions.

5.1.4 Mounting a MegaTOOL

To install a MegaTOOL, as shown in Figure 3:

1. Screw the supplied TOOL brackets to their designated places (one on each side).

2. Insert the MegaTOOL, from beneath, through the MegaTOOL opening.

3. Screw the screws (one on each side) through the inner frame holes and TOOL brackets.
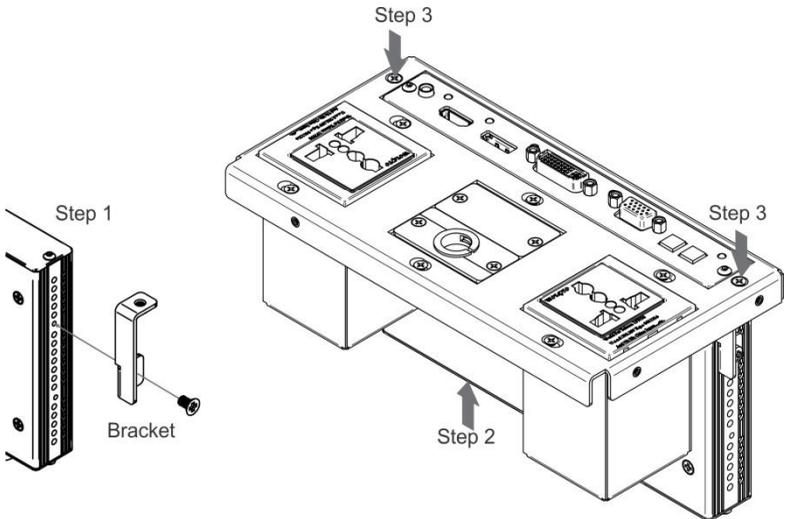
Figure 3: Installing the MegaTOOL

5.1.5 Mounting an RC-8IR Device

The Kramer **T-RC8IR** for the **TBUS-10xl** Table Connection bus is used to fit the Kramer **RC-8IR** Control Panel into the appropriate frame (P/N 80-000040).
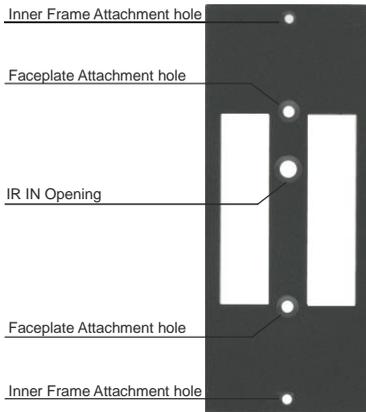

Figure 4: T-RC8IR (P/N: 80-000599)

To mount the **RC-8IR**, do the following

1. Before installing the **T-RC8IR**, unscrew the two faceplate attachment screws and remove the **RC-8IR** faceplate.
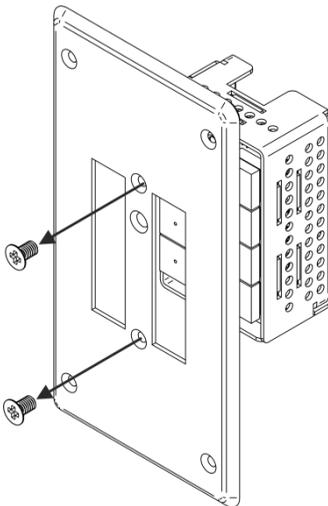

Figure 5: Removing the RC-8IR Faceplate

2. Place the **T-RC8IR** over the **RC-8IR** enclosure so that both faceplate holes are aligned with the faceplate holes on the **RC-8IR** enclosure and the IR IN receiver fits into the IR IN opening.

3. Insert the faceplate screws through the **T-RC8IR** and **RC-8IR** enclosure faceplate holes, and tighten.
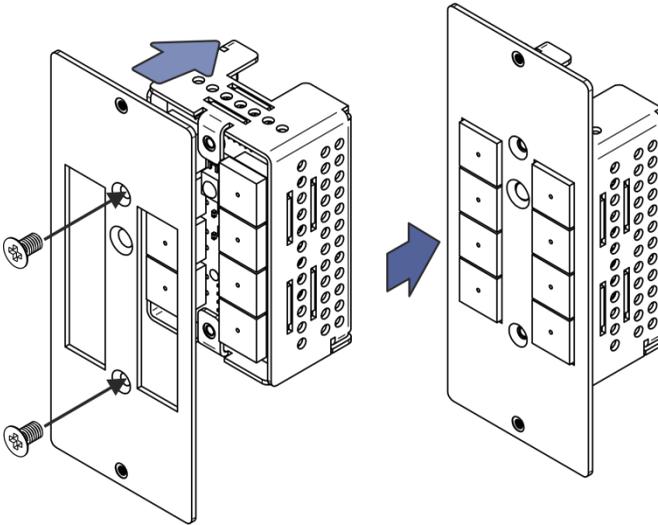
Figure 6: T-RC8IR Installation

4. Place the assembled **T-RC8IR** + **RC-8IR** under the dual socket opening.

5. Insert the two screws (supplied with the kit) to fix the **T-RC8IR** in place, and tighten them.

The **T-RC8IR** comes with assembly instructions.

5.1.6 Mounting RC-76 and RC-78 Devices

Note that the **T-RC-76** installation example also applies to the **T-RC-78**.

To install the **T-RC-76/T-RC-78** insert:

1. Remove the design frame from the device by removing the two mounting plate screws (see Figure 7) and remove the mounting plate. Put the screws aside.
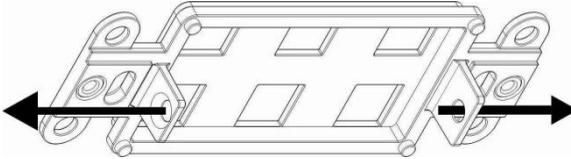

Figure 7: Removing the Mounting Plate Screws

2. Fit the **T-RC-76** over the buttons of the **RC-76**; insert the two mounting plate screws through the **T-RC-76** mounting bracket screw holes and tighten them (see Figure 8).
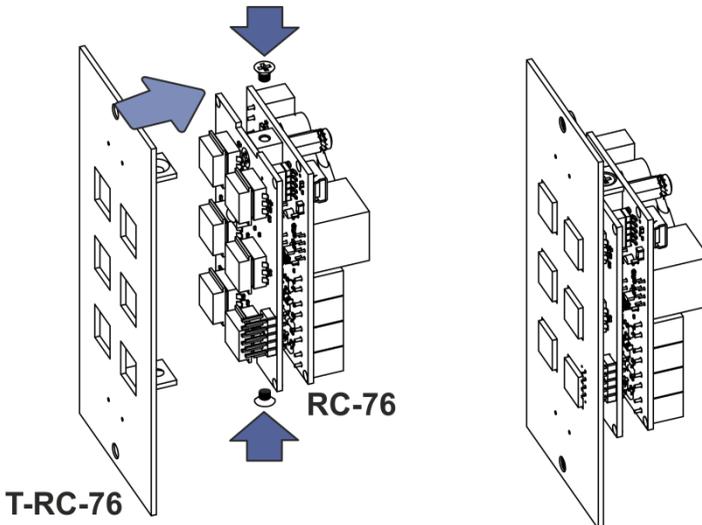

Figure 8: T-RC-76/T-RC-78 Installation

3. Place the assembled **T-RC-76** + **RC-76** under the dual socket opening.

4. Insert the two screws (supplied with the kit) to fix the **T-RC-76**/**T-RC-78** in place, and tighten them.

5. Install the inner frame (when configuration is complete) according to the specific TBUS inner frame installation instructions.

The **T-RC-76** and **T-RC-78** come with assembly instructions.

5.2   Installing the Inner Frame

To install the inner frame:

1. Place the inner frame inside the **TBUS-10xl** enclosure.

2. 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:

1. Place the cut out template (that is included with your **TBUS-10xl**) on the surface of the table exactly where you want to install the **TBUS-10xl**.

2. Attach the template to the table with the included screws (if using the cut out template).

3. Following the **inside** edge of the template, cut a hole in the table surface with a sabre or keyhole saw according to the dimensions shown in Figure 9 (not to scale).

> The thickness of the table should be 76.2mm / 3 inches or less.
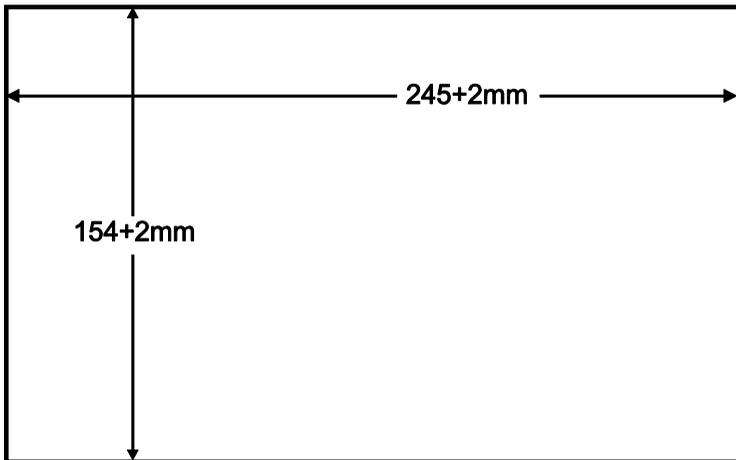

Figure 9: Cut out Dimensions

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 the TBUS-10xl through the Cut Out Opening

To install **TBUS-10xl** in the opening:

1. Remove the protective rubber guard from around the outer rim of the **TBUS-10xl** housing. **Beware of the sharp edge!**

2. Carefully insert the unit into the prepared opening (see Figure 10).

3. Take the support clamps under the table and place them into the support clamp grooves on both sides of the unit (see Figure 1).

4. Verify proper alignment of the unit before tightening the mounting screws.

5. Tighten both mounting butterfly screws upward until they reach the table surface (from underneath). Tighten firmly (see Figure 10).

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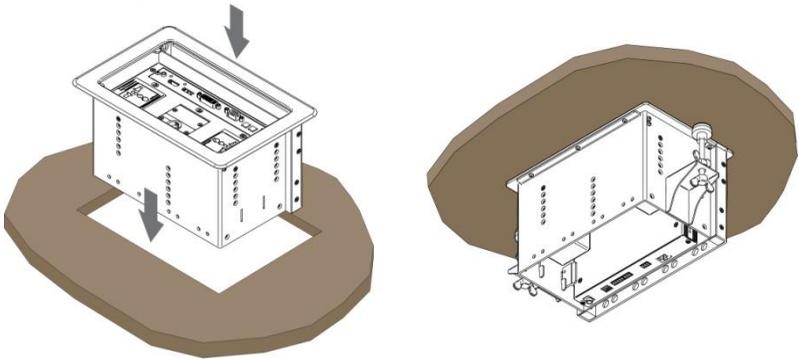

Figure 10: Inserting TBUS-10xl into the Prepared Opening

5.5 Connecting the Cables

When replacing blank inserts with connector inserts (for example, VGA, audio, HDMI and so on):

1. Insert the cables to their appropriate connectors from underneath.

2. Secure the cables to the tie holes using the included self-locking ties.
   Do not secure the cables too tightly or too loosely. Leave a small amount of slack.

After the **TBUS-10xl** is connected to mains power and the proper cables, it is ready for use.

5.6 Inserting Pass-through Cables

When replacing inserts with the pass-through insert, for example, to connect a laptop, do the following:

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.

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, perform the following:

1. Remove the four 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 the TBUS-10xl

Once the **TBUS-10xl** 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 11.
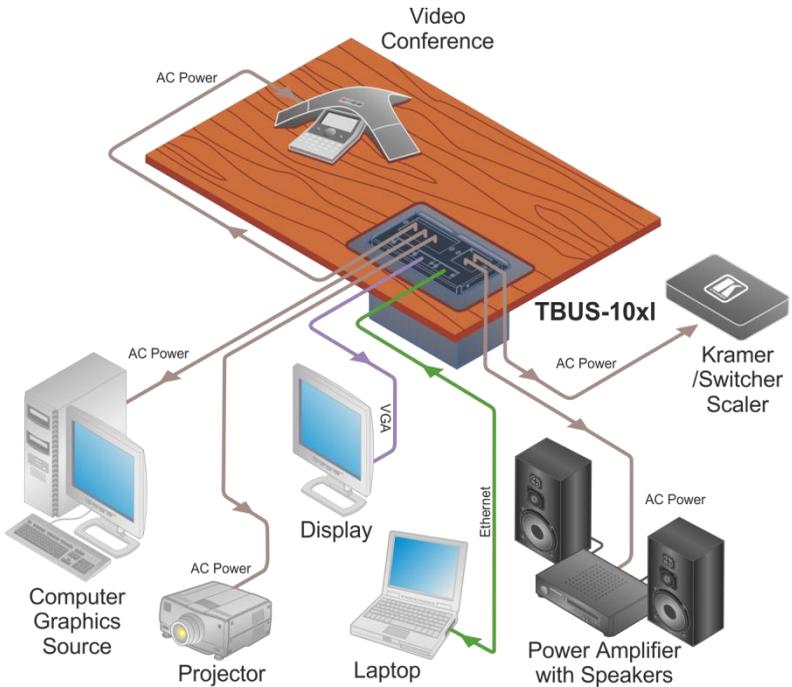

Figure 11: TBUS-10xl Boardroom Installation

7 Technical Specifications of the Assembled TBUS-10xl

POWER SOURCE (AC power limits):	Single Socket Assemblies:	
	Universal	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 (you should order country specific sockets instead). **Not compatible** with South African plugs.	
	USA	100-125V AC, 50/60Hz, 5A Maximum 5A per power outlet
	Belgium and France	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
	Italy	100-240V AC, 50/60Hz, 5A Maximum 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
	Israel	100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet
	South Africa	100-240V AC, 50/60Hz, 5A Maximum 5A per power outlet
	Australia	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	100-125V 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
	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
	Israel	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
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	
STORAGE HUMIDITY RANGE:	5 to 95% RHL, non-condensing	
DIMENSIONS:	Top plate: 171.6mm x 261mm (6.8" x 10.3") W, D Enclosure: 203mm x 121mm x 130mm (8.0" x 4.8" x 5.1") W, D, H	
WEIGHT:	1.35kg (2.98lbs) approx. Table clamps: 0.25kg (0.55lbs)	
ACCESSORIES:	Six self-locking ties, cut out template, template screws	
OPTIONS:	Inner frames, passive wall plates and interfaces, power socket kits, power cord, T-2INSERT kit, T-RC-8IR kit, T-RC-76 kit, T-RC-78 kit, Kramer K-Able Box (furniture-mounted cable extension)	
Specifications are subject to change without notice at www.kramerav.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.

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

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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:

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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.

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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.

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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.

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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.

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CE

SAFETY WARNING
Disconnect the unit from the power supply before opening and servicing

P/N: 2900-300688   Rev: 4