MODEL:

**RC-43T**
Remote Controller

P/N: 2900-300301 Rev 3
RC-43T Remote Controller

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

- RC-43T Remote Controller
- Screwdriver
- Quick Start Guide

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

Step 2: Connect the RC-43T

Connect the RC-43T to the room controller via the K-NET connector.

![Diagram of RC-43T connections]

Warning: Do not connect the power to the wall plate until after the front panel is mounted.

Always switch off the power to each device before connecting it to the RC-43T.

Step 3: Program the Room Controller

Connect the Room Controller to a PC and use the Kramer K-Config software to configure the six buttons of the RC-43T.

Step 4: Install the RC-43T

Install the RC-43T in a suitable wall mounting box.
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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 13 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; and GROUP 13: Audio.

Congratulations on purchasing your Kramer RC-43T which lets you control an A/V system with ease in applications such as, multimedia classrooms or conference 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 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).

This user manual is written for the end user and does not contain details regarding installation and configuration. This information can be found in the K-Config Configuration Guide, available from http://www.kramerelectronics.com.

2.1 Achieving the Best Performance

To achieve the best performance:

- Use only good quality connection cables (we recommend Kramer high-resolution, high performance 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 RC-43T away from moisture, excessive sunlight and dust

This equipment is to be used only inside a building. It may only be connected to other equipment that is installed inside a building.
2.2 **Safety Instructions**

- **Caution:** There are no operator serviceable parts inside the unit
- **Warning:** Use only the power cord that is supplied with the unit
- **Warning:** Do not open the unit. High voltages can cause electrical shock! Servicing by qualified personnel only
- **Warning:** Disconnect the power and unplug the unit from the wall before installing

2.3 **Recycling Kramer Products**

The Waste Electrical and Electronic Equipment (WEEE) Directive 2002/96/EC aims to reduce the amount of WEEE sent for disposal to landfill or incineration by requiring it to be collected and recycled. To comply with the WEEE Directive, Kramer Electronics has made arrangements with the European Advanced Recycling Network (EARN) and will cover any costs of treatment, recycling and recovery of waste Kramer Electronics branded equipment on arrival at the EARN facility. For details of Kramer’s recycling arrangements in your particular country go to our recycling pages at [http://www.kramerelectronics.com/support/recycling/](http://www.kramerelectronics.com/support/recycling/).
3 Overview

The RC-43T is a remote control keypad with six touch-sensitive, backlit buttons. It is designed to be used in conjunction with room controllers, such as the SL-1.

Using the Kramer K-Config software, each button on the RC-43T can be programmed on the room controller with a function, where each function can comprise multiple individual actions.
4 Defining the RC-43T Remote Controller

Figure 1 shows the six, touch-sensitive, backlit buttons on the front panel of the RC-43T.

Figure 1: RC-43T Remote Controller Front Panel

<table>
<thead>
<tr>
<th>#</th>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Six Touch-sensitive Buttons</td>
<td>Program the button functions on the connected room controller</td>
</tr>
<tr>
<td>2</td>
<td>Six LEDs</td>
<td>Flashes yellow when the button is touched. The LED can also be custom programmed to light on specific actions</td>
</tr>
</tbody>
</table>
Figure 2: RC-43T Remote Controller Rear View

<table>
<thead>
<tr>
<th>#</th>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mounting Holes</td>
<td>Attach the RC-43T to the wall mounting box with the screws provided (see Section 6.2)</td>
</tr>
<tr>
<td>2</td>
<td>Front Panel</td>
<td>Cosmetic panel that covers the PC Board and houses the removable buttons</td>
</tr>
<tr>
<td>3</td>
<td>PC Board Frame</td>
<td>Mounting panel that houses the PC Board</td>
</tr>
<tr>
<td>4</td>
<td>PC Board</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>SW7 K-NET Termination Switch</td>
<td>Use to set the K-NET bus termination (see Section 5.2)</td>
</tr>
<tr>
<td>6</td>
<td>KNET 4-pin Captive-screw Terminal Block</td>
<td>Connect to a master room controller or to another auxiliary device (see Section 5.1). <strong>Note:</strong> The RC-43T is always device ID 2 on the K-NET bus. This cannot be changed</td>
</tr>
<tr>
<td>7</td>
<td>PC Board Frame Alignment Tongue</td>
<td>Align this tongue with the cutout in the front panel when mounting the PC Board frame to the front panel</td>
</tr>
</tbody>
</table>
Figure 3 shows an exploded rear view using the same identification table as Figure 2.

Figure 3: RC-43T Remote Controller Exploded Rear View
5  Connecting the RC-43T

Always switch off the power to each device before connecting it to your RC-43SL. After connecting your RC-43SL, connect its power and then switch on the power to each device.

You do not have to connect all the inputs and outputs, connect only those that are required.

Do not connect the power to the unit until after the front plate is mounted.

Figure 4: Connecting the RC-43T Remote Controller
To connect the RC-43T as illustrated in the example in Figure 4:

- Connect the RC-43T to a room controller, (for example, the SL-1) via the K-NET 4-pin, (see Section 5.1) terminal block on the rear panel of the RC-43T

Each time the front panel is removed and remounted you must recalibrate it by powering off and powering on the unit.

5.1 K-NET Wiring

Do not connect the power to the unit until after the front plate is mounted.

The K-NET connector on the RC-43T must be connected to a room controller via a four wire cable as shown in Figure 5.

![Image: RC-43T K-Net Wiring Diagram]

Figure 5: RC-43T K-Net Wiring

Note: The RC-43T is always device ID 2 on the K-NET bus and cannot be changed.

To connect the RC-43T to a room controller:

- Connect pin 1 on the K-NET connector to pin 1 on the room controller K-NET connector (+12V to +12V)
- Connect pin 2 on the K-NET connector to pin 2 on the room controller K-NET connector (A to A)
- Connect pin 3 on the K-NET connector to pin 3 on the room controller K-NET connector (B to B)
- Connect pin 4 on the K-NET connector to pin 4 on the room controller K-NET
5.2 Terminating the K-NET Bus

The devices at both ends of the K-NET bus must be terminated.

![Figure 6: RC-43T K-Net Bus Termination Switch](image)

To terminate the K-NET bus on the RC-43T:

- Slide SW7 (see SW7) into the position shown in Figure 6

5.3 Installing the Configuration Software

Download the K-Config configuration software from our Web site and install it (refer to the K-Config User Manual).
Installing the RC-43T

Installing the RC-43T consists of the following steps:

- Installing the required buttons (see Section 6.1)
- Connecting the RC-43T to the room controller or other auxiliary devices (see Section 5.1)
- Programming the room controller for the RC-43T
  Note: Programming is covered by the K-Config User Manual and therefore not described here.
- Installing the RC-43T in the wall mounting box (see Section 6.2)

6.1 Installing the Front Panel Buttons

The RC-43T is supplied with preprinted buttons from which you can choose the six that best represent the functions you wish to assign the buttons.

To install the front panel buttons:

1. Remove the front panel (see Figure 2 and Figure 3) by carefully prying it away from the PC Board frame using a small screwdriver being careful not to damage it.

2. Remove the stock buttons from the front panel.

3. Remove the six required buttons from the plastic tree.

4. Insert the buttons into the front panel taking care to insure that they are oriented correctly.

5. Place the PC Board and frame onto the front panel insuring that the mounting orientation tongue is in line with the cutout on the front panel.

6. Press the front panel and PC Board frame together securely.
6.2 Installing the RC-43T in the Wall Mounting Box

Figure 7: Mounting the RC-43T in a Wall Box

To install the RC-43T in the wall mounting box:

1. Remove the front panel of the RC-43T.

2. Insert the RC-43T into the wall mounting box and secure it using the two M3 x 10mm screws supplied.

3. Replace the front panel of the RC-43T.
# Technical Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>PORT</td>
<td>1 K-NET on a 4-pin removable terminal block</td>
</tr>
<tr>
<td>POWER CONSUMPTION</td>
<td>12V DC, 100mA</td>
</tr>
<tr>
<td>OPERATING TEMPERATURE</td>
<td>0° to +40°C (32° to 104°F)</td>
</tr>
<tr>
<td>STORAGE TEMPERATURE</td>
<td>–40° to +70°C (–40° to 158°F)</td>
</tr>
<tr>
<td>HUMIDITY</td>
<td>10% to 90%, RHL non-condensing</td>
</tr>
<tr>
<td>DIMENSIONS</td>
<td>6.9cm x 1.6cm x 11.4cm (2.72” x 0.63” x 4.5”) W, D, H</td>
</tr>
<tr>
<td>WEIGHT</td>
<td>0.3kg (0.66lbs) approx.</td>
</tr>
<tr>
<td>INCLUDED ACCESSORIES</td>
<td>Four 6/32x1/2” screws</td>
</tr>
<tr>
<td></td>
<td>One white faceplate</td>
</tr>
<tr>
<td></td>
<td>One black faceplate</td>
</tr>
<tr>
<td>OPTIONS</td>
<td>K-NET cable</td>
</tr>
</tbody>
</table>

Specifications are subject to change without notice at [http://www.kramerelectronics.com](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 excessive 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 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?
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What Kramer Electronics will do
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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 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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