# Kramer Electronics, Ltd.

# USER MANUAL

## Model:

**PL-15**

*5 Port K-Net Hub*

# Contents

## Figures

## Tables

# 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, and presentation professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better! Our 500-plus different models now appear in eight groups[1] that are clearly defined by function.

Thank you for purchasing the Kramer TOOLS **PL-15** *5 Port K-Net Hub,* which is ideal for providing the following K-Net[2] solutions:

- Linking and powering up to five K-Net devices
- Simplifying node cabling topology

Each package includes the following items:

- **PL-15** *5 Port K-Net Hub*
- +12V DC/ 2.1A power adapter
- This user manual[3]

# 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
- Use Kramer high-performance, high-resolution cables[4]

---

1 GROUP 1: Distribution Amplifiers; GROUP 2: Video and Audio Switchers, Matrix Switchers and Controllers; GROUP 3: Video, Audio, VGA/XGA Processors; GROUP 4: Interfaces and Sync Processors; GROUP 5: Twisted Pair Interfaces; GROUP 6: Accessories and Rack Adapters; GROUP 7: Scan Converters and Scalers; and GROUP 8: Cables and Connectors
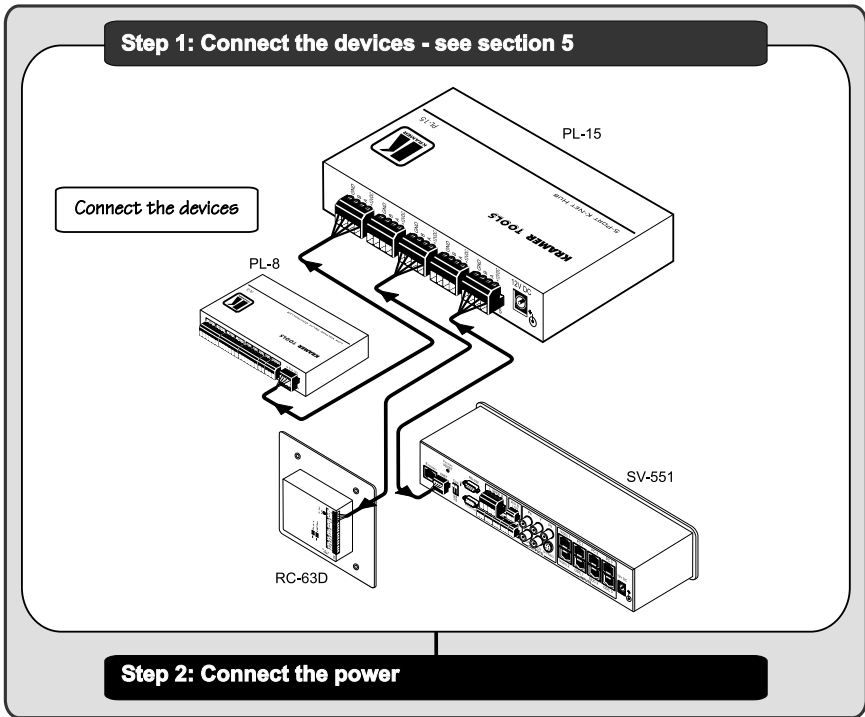
2 K-Net is a proprietary Kramer protocol for interconnecting Kramer units

3 Download up-to-date Kramer user manuals from our Web site at http://www kramerelectronics com

4 The complete list of Kramer cables is on our Web site at http://www kramerelectronics com

## 2.1 Quick Start Guide

This quick start chart summarizes the basic setup and operation steps.



## 3 Overview

The **PL-15** is a 5-port hub for connecting up to five devices in a K-Net network. It features:

- Five K-Net terminal block connections
- A +12V DC power input
- Transmit and receive activity LEDs

To achieve the best performance:

- Use only good quality connection cables to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables).
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality and position your Kramer **PL-15** away from moisture, excessive sunlight and dust

| | |
|---|---|
| ⚠ | **Caution** – No operator-serviceable parts inside unit. |
| | **Warning** – Use only the Kramer Electronics input power wall adapter that is provided with this unit[1]. |
| | **Warning** – Disconnect power and unplug unit from wall before installing or removing device or servicing unit. |

## 4    Your PL-15 5 Port K-Net Hub

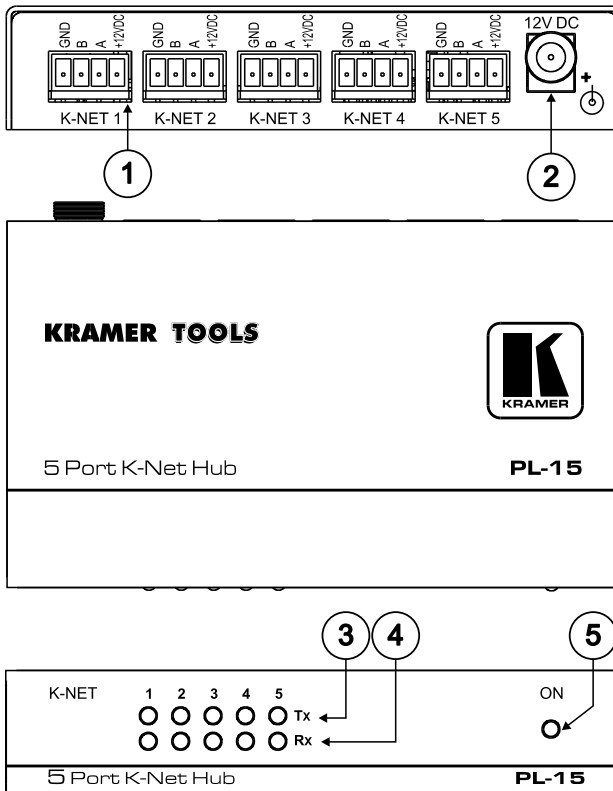*Figure 1* and *Table 1* define the unit.



*Figure 1: PL-15 5 Port K-Net Hub Front and Rear*

---

1 For example: model number AD2512C, part number 2535-000251

Table 1: PL-15 5 Port K-Net Hub Functions

| # | Feature | Function |
|---|---------|----------|
| 1 | *K-NET*[1] Terminal Block Connectors | PIN GND is for the Ground connection[2]; PIN B (-) and PIN A (+) are for RS-485, and PIN +12V is for powering the unit (from 1 to 5) |
| 2 | *12V DC* | +12V DC connector for powering the unit |
| 3 | *Tx* LED | Illuminates red when the ports are transmitting data (1 to 5) |
| 4 | *Rx* LED | Illuminates green when the ports are receiving data (1 to 5) |
| 5 | *ON* LED | Illuminates green when receiving power |

# 5    Connecting the PL-15 5 Port K-Net Hub

To connect the **PL-15**:

1.  Connect the terminal block connector from the cable of each external device into any unused port (see *Figure 2*).

2.  Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.
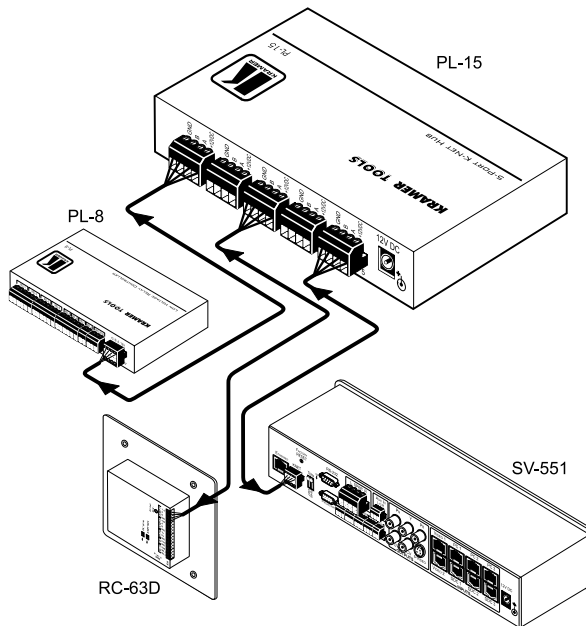


Figure 2: Connecting the PL-15 5 Port K-Net Hub

1 K-Net is a proprietary Kramer protocol for interconnecting Kramer units

2 The ground connection is sometimes connected to the shield of the RS-485 cable (in most applications, it is not connected)

# 6    Technical Specifications

The **PL-15** technical specifications are shown in *Table 2*:

*Table 2: PL-15 Technical Specifications*[1]

| POWER SOURCE: | 12V DC, 2.1A |
|---|---|
| DIMENSIONS: | 12cm x 7.2cm x 2.4cm (4.7" x 2.8" x 1.0") W, D, H |
| WEIGHT: | 0.3kg (0.7lbs) |
| ACCESSORIES: | 12V DC, 2.1A power supply |

---

1 Specifications are subject to change without notice

**LIMITED WARRANTY**

Kramer Electronics (hereafter *Kramer*) warrants this product free from defects in material and workmanship under the following terms.

**HOW LONG IS THE WARRANTY**

Labor and parts are warranted for seven years from the date of the first customer purchase.

**WHO IS PROTECTED?**

Only the first purchase customer may enforce this warranty.

**WHAT IS COVERED AND WHAT IS NOT COVERED**

Except as below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

1. Any product which is not distributed by Kramer, or which is not purchased from an authorized Kramer dealer. If you are uncertain as to whether a dealer is authorized, please contact Kramer at one of the agents listed in the Web site www.kramerelectronics.com.

2. Any product, on which the serial number has been defaced, modified or removed, or on which the WARRANTY VOID IF TAMPERED sticker has been torn, reattached, removed or otherwise interfered with.

3. Damage, deterioration or malfunction resulting from:
   i) Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
   ii) Product modification, or failure to follow instructions supplied with the product
   iii) Repair or attempted repair by anyone not authorized by Kramer
   iv) Any shipment of the product (claims must be presented to the carrier)
   v) Removal or installation of the product
   vi) Any other cause, which does not relate to a product defect
   vii) Cartons, equipment enclosures, cables or accessories used in conjunction with the product

**WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR**

We will pay labor and material expenses for covered items. We will not pay for the following:

1. Removal or installations charges.

2. Costs of initial technical adjustments (set-up), including adjustment of user controls or programming. These costs are the responsibility of the Kramer dealer from whom the product was purchased.

3. Shipping charges.

**HOW YOU CAN GET WARRANTY SERVICE**

1. To obtain service on you product, you must take or ship it prepaid to any authorized Kramer service center.

2. Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage, and should be included in any shipment of the product. Please also include in any mailing a contact name, company, address, and a description of the problem(s).

3. For the name of the nearest Kramer authorized service center, consult your authorized dealer.

**LIMITATION OF IMPLIED WARRANTIES**

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

**EXCLUSION OF DAMAGES**

The liability of Kramer for any effective products is limited to the repair or replacement of the product at our option. Kramer shall not be liable for:

1. Damage to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or:

2. Any other damages, whether incidental, consequential or otherwise. Some countries may not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from place to place.

**NOTE:** All products returned to Kramer for service must have prior approval. This may be obtained from your dealer.

This equipment has been tested to determine compliance with the requirements of:

EN-50081:    "Electromagnetic compatibility (EMC);
             generic emission standard.
             Part 1: Residential, commercial and light industry"
EN-50082:    "Electromagnetic compatibility (EMC) generic immunity standard.
             Part 1: Residential, commercial and light industry environment".
CFR-47:      FCC Rules and Regulations:
             Part 15: "Radio frequency devices
             Subpart B  Unintentional radiators"

**CAUTION!**

⊠ Servicing the machines can only be done by an authorized Kramer technician. Any user who makes changes or modifications to the unit without the expressed approval of the manufacturer will void user authority to operate the equipment.

⊠ Use the supplied DC power supply to feed power to the machine.

⊠ Please use recommended interconnection cables to connect the machine to other components.

**For the latest information on our products and a list of Kramer distributors, visit our Web site: www.kramerelectronics.com where updates to this user manual may be found. We welcome your questions, comments and feedback.**



**Safety Warning**:
Disconnect the unit from the power supply before opening/servicing.

**Caution**