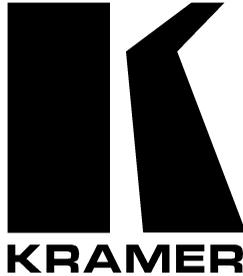


**Kramer Electronics, Ltd.**



# **USER MANUAL**

**Models:**

**PT-4 iR, *IR Repeater***

**WP-4 iR, *IR Repeater***

## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Getting Started</b>	<b>1</b>
2.1	Quick Start	2
<b>3</b>	<b>Overview</b>	<b>3</b>
<b>4</b>	<b>Your IR Repeater</b>	<b>4</b>
4.1	Your PT-4 iR IR Repeater	4
4.2	Your WP-4 iR IR Repeater	5
<b>5</b>	<b>Connecting the PT-4 iR IR Repeater</b>	<b>6</b>
<b>6</b>	<b>Technical Specifications</b>	<b>8</b>

## Figures

Figure 1: PT-4 iR IR Repeater	4
Figure 2: WP-4 iR IR Repeater	5
Figure 3: Connecting the IR Emitter	6
Figure 4: Connecting the PT-4 iR	7

## Tables

Table 1: Features and Functions of the PT-4 iR	4
Table 2: Features and Functions of the WP-4 iR	5
Table 3: Technical Specifications of the PT-4 iR and the WP-4 iR	8

## 1 Introduction

Welcome to Kramer Electronics (since 1981): a world of unique, creative and affordable solutions to the infinite 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 8 Groups<sup>1</sup>, which are clearly defined by function.

Congratulations on purchasing your Kramer Pico TOOLS **PT-4 iR IR Repeater**, and/or Kramer Wall Plate **WP-4 iR** (European and US version), which are particularly ideal for:

- High quality home cinema installations
- Studios, airports, offices and hospitals
- Security and military applications

The package includes the following items:

- **PT-4 iR** or **WP-4 iR**
- One IR emitter cable<sup>2</sup>
- Power supply<sup>3</sup>, and this user manual<sup>4</sup>

## 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<sup>5</sup>

---

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 Sealers; and GROUP 8: Cables and Connectors

2 The 3.5mm to IR Emitter Control Cable (C-A35/IRE-10)

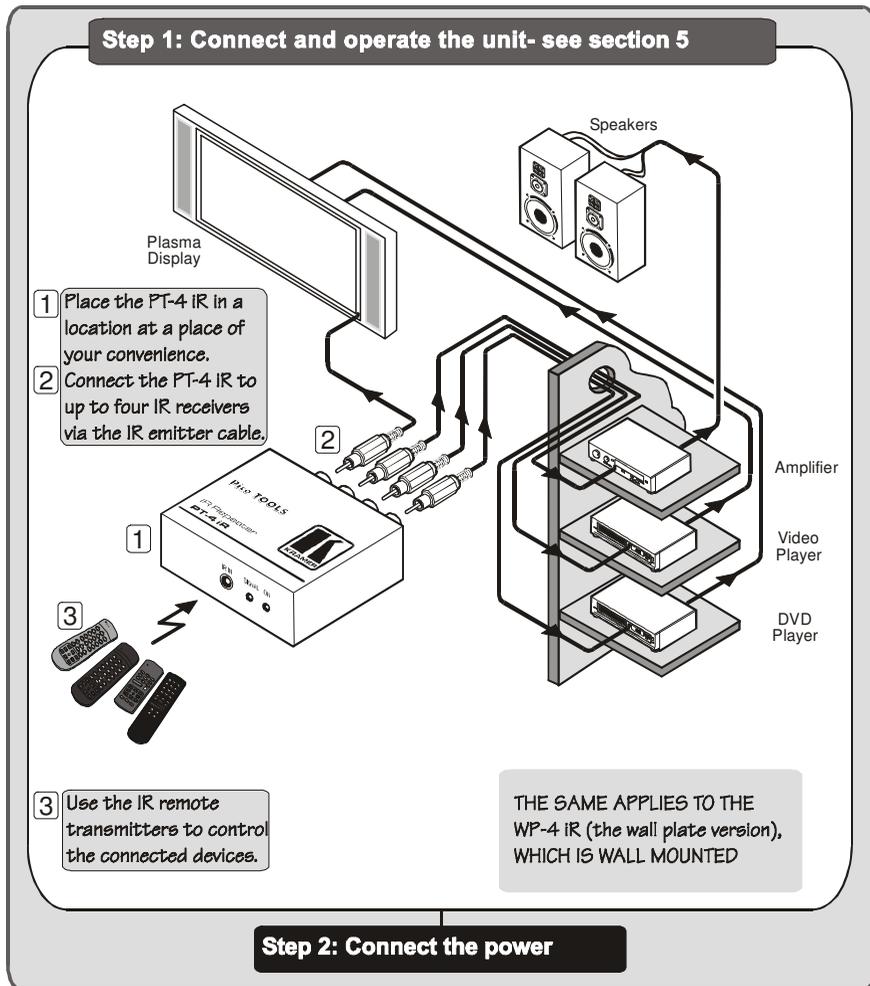
3 A separate power supply is included with each product

4 Download up-to-date Kramer user manuals from the Internet at this URL: <http://www.kramerelectronics.com>

5 The complete list of Kramer cables is on our Web site at <http://www.kramerelectronics.com>

## 2.1 Quick Start

This quick start chart summarizes the basic setup and operation:



### 3 Overview

The IR repeater—the Pico TOOLS **PT-4 iR** or the Wall Plate **WP-4 iR**<sup>1</sup> lets you control up to four machines<sup>2</sup> via their remote control transmitter from a distance.

In particular, the IR repeater:

- Can operate at a distance of approximately 75 meters<sup>3</sup> (between the controlled machine and the IR repeater)
- Allows operation of machines that are stacked away in closets, cabinets, and even other rooms
- Has an IR sensor
- Is 12V DC fed

To achieve the best performance:

- Connect only good quality connection cables, thus avoiding 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 **PT-4 iR** and **WP-4 iR** 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<sup>4</sup>.

**Warning** – Disconnect power and unplug unit from wall before installing or removing device or servicing unit.

<sup>1</sup> Available in three versions: one for the USA, one for Belgium and Germany, and one for the UK and most of Europe (excluding Belgium and Germany)

<sup>2</sup> For example, a video player, DVD player, air conditioning system, and any other remote controlled machine

<sup>3</sup> By using the IR emitter extension cables (see Table 3)

<sup>4</sup> For example: model number AD2512C, part number 2535-000251

## 4 Your IR Repeater

This section defines the:

- **PT-4 iR IR Repeater** (see section 4.1)
- **WP-4 iR IR Repeater** (see section 4.2)

### 4.1 Your PT-4 iR IR Repeater

Figure 1 and Table 1 define the **PT-4i R** unit:

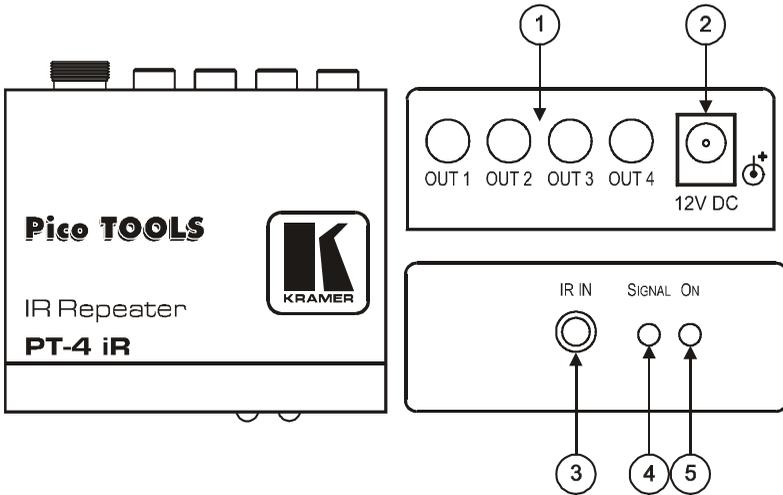


Figure 1: PT-4 iR IR Repeater

Table 1: Features and Functions of the PT-4 iR

#	Feature	Function
1	OUT 3.5mm Mini Connector	Connect to the IR emitter cable (from 1 to 4)
2	12V DC	+12V DC connector for powering the unit
3	IR IN	IR sensor red glass window
4	SIGNAL LED	Lights when an IR link is established
5	ON LED	Lights when the unit is powered

## 4.2 Your WP-4 iR IR Repeater

The **WP-4 iR** is available in three versions: one for the US, one for Belgium and Germany, and one for the UK and most of Europe<sup>1</sup>, as Figure 2 and Table 2 define:

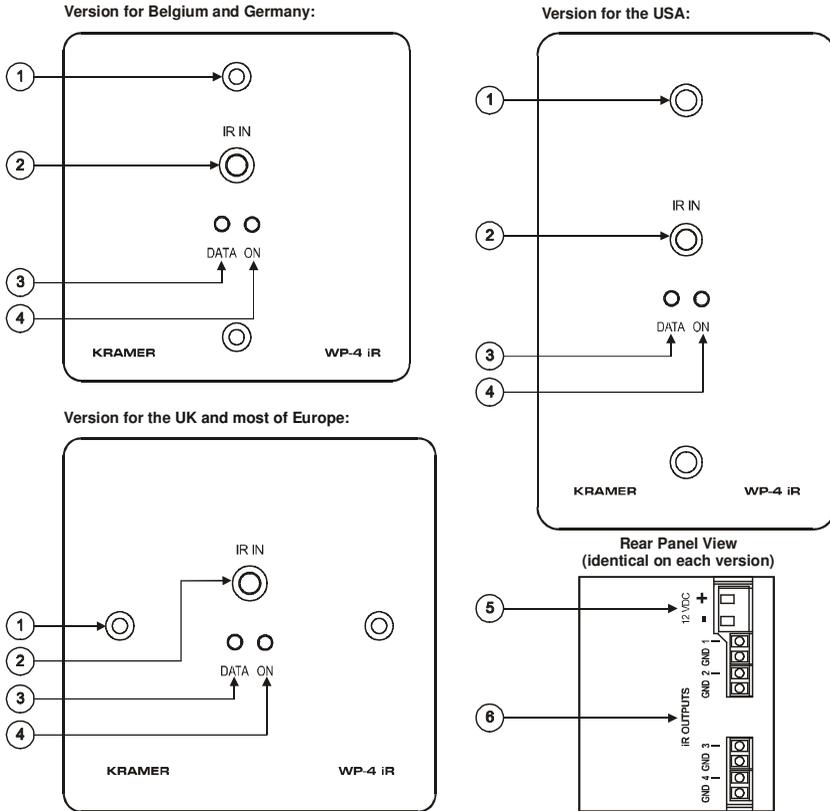


Figure 2: WP-4 iR IR Repeater

Table 2: Features and Functions of the WP-4 iR

#	Feature	Function
1	Holes (2)	For fastening the wall plate in place
2	IR IN	IR sensor glass window
3	DATA LED	Lights when an IR link is established
4	ON LED	Lights when the unit is powered
5	12V DC	Connect (-) to the Ground; connect (+) to the connector for powering the unit
6	IR OUTPUTS Terminal Block Connectors	Connect to the IR emitter cable (from 1 to 4)

<sup>1</sup> Excluding Belgium and Germany

## 5 Connecting the PT-4 iR IR Repeater

To connect the **PT-4 iR IR Repeater**<sup>1</sup>, as illustrated in the example in Figure 4, do the following:

1. Connect the **OUT**<sup>2</sup>, 3.5mm mini connector<sup>3</sup> (from 1 to 4) to the following IR receivers<sup>4</sup> via the IR emitter cable (see Figure 3):
  - OUT 1 to a DVD player
  - OUT 2 to a video player
  - OUT 3 to an amplifier
  - OUT 4 to a plasma display
2. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.

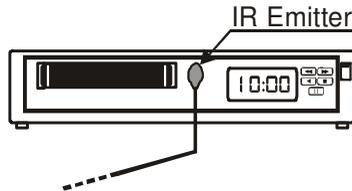


Figure 3: Connecting the IR Emitter

To operate any of the connected machines, use a remote control<sup>5</sup> pointed to the IR Repeater<sup>6</sup> that is located at a place of your convenience. The IR signal from the remote control is transmitted from the **PT-4 iR** or the **WP-4 iR**, via an IR emitter cable, to the appropriate machine.

---

1 The same procedure applies to the WP-4 iR which is wall-mounted

2 You can connect up to four IR receivers

3 For the WP-4 iR, terminal block connectors are used

4 Stick the IR emitter to the IR receiver window (usually located on the front panel of the video player)

5 You can use a machine's original remote control or a universal remote control

6 Either the Pico TOOLS PT-4 iR or the Kramer Wall Plate WP-4 iR

## Connecting the PT-4 iR IR Repeater

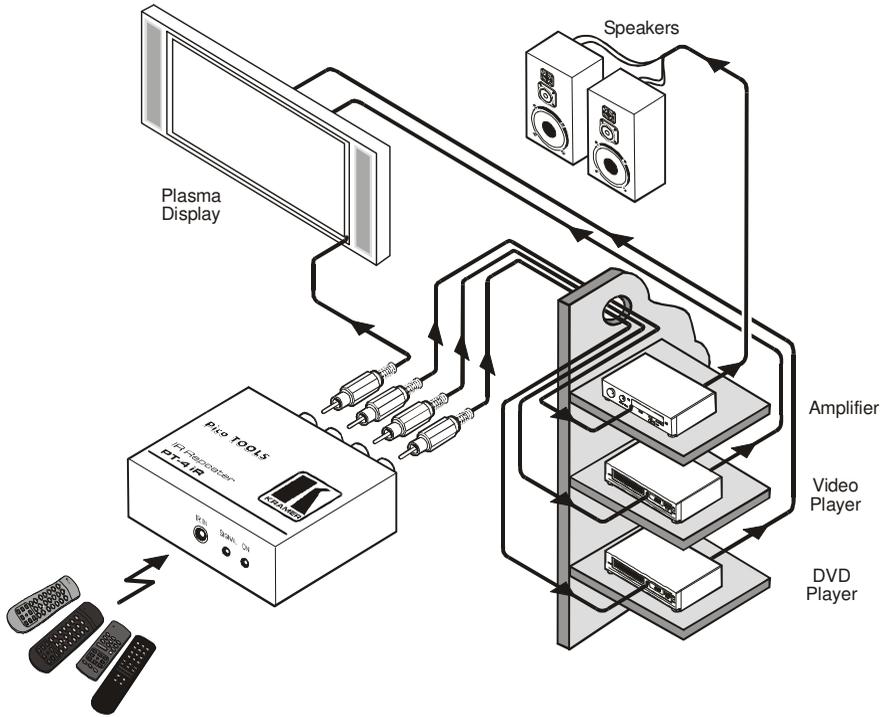


Figure 4: Connecting the PT-4 iR

## 6 Technical Specifications

Table 3 defines the technical specifications:

*Table 3: Technical Specifications<sup>1</sup> of the PT-4 iR and the WP-4 iR*

	<b>PT-4 iR</b>	<b>WP-4 iR</b>
INPUT:	1 IR Receiver	1 IR Receiver
OUTPUTS:	4 IR emitters on 3.5mm mini connectors	4 IR emitters on terminal block connectors
POWER SOURCE:	12V DC, 95mA	
DIMENSIONS:	6.22cm x 5.24cm x 2.41cm (2.45" x 2.06" x 0.95") W, D, H	USA: 6.9cm x 4.4cm x 11.4cm (2.72" x 1.74" x 4.5", W, D, H)
		Belgium and Germany: 8cm x 4.4cm x 8cm (3.15" x 1.74" x 3.15", W, D, H)
		UK and most of Europe <sup>2</sup> : 8.6cm x 3.8cm x 8.6cm (3.39" x 1.74" x 3.39", W, D, H)
WEIGHT:	0.15 kg. (0.55 lbs) approx.	
ACCESSORIES:	Power Supply, 3.5mm to IR Emitter Control Cable (C-A35/IRE-10)	
OPTIONS	15 meter cable and 20 meter IR Emitter Extension Cables	

<sup>1</sup> Specifications are subject to change without notice

<sup>2</sup> Excluding Belgium and Germany

---

## 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](http://www.kramerelectronics.com).
2. Any product, on which the serial number has been defaced, modified or removed.
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](http://www.kramerelectronics.com), where updates to this user manual may be found. We welcome your questions, comments and feedback.**



**Caution**

**Safety Warning:**

Disconnect the unit from the power supply before opening/servicing.



---

**Kramer Electronics, Ltd.**

Web site: [www.kramerelectronics.com](http://www.kramerelectronics.com)

E-mail: [info@kramerel.com](mailto:info@kramerel.com)

P/N: 2900-000241 REV 2