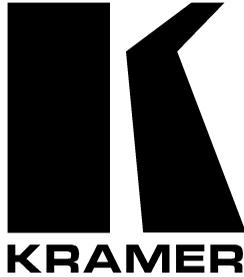


**Kramer Electronics, Ltd.**



# **USER MANUAL**

**Model:**

**PT-1FW**

*DV Line Protector*

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## 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 350-plus different models now appear in 8 Groups<sup>1</sup>, which are clearly defined by function.

Congratulations on purchasing your unique **PT-1FW**, which is ideal for DV editing studios, home DV applications, and computer I/O FireWire<sup>2</sup> connections. The package includes the following items:

- **PT-1FW DV Line Protector**
- One 6 pin to 6 pin Connector Cable
- This user manual<sup>3</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>4</sup>

## 3 Overview

The Kramer **PT-1FW DV Line Protector** is a small device that solves a huge problem in DV studios (or in any other DV professional or home DV application). Often when connecting a "live" DV source to a receptor, an electrical potential difference or any other element creating a high voltage

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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 FireWire is a serial bus standard (originally developed by Apple™ and published as IEEE 1394 by the Institute of Electrical and Electronics Engineers) that enables quick universal interfacing between video and computer hardware items. FireWire is simple to use and operates independently of the host system. In addition, FireWire is bi-directional and supports Plug and Play, hot swapping (you can connect and disconnect inputs and outputs dynamically, without having to restart the PC or cycle power), and isochronous (video / audio applications require constant transfer rates, which the serial bus provides by supporting isochronous transfers), as well as asynchronous applications

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

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

(such as ESD or a live chassis) may permanently damage one or both of the connected devices. This high voltage may be seen as a spark occurring at the instant of connection, or may not be seen at all, but nevertheless can result in costly damage.

The Kramer **PT-1FW** is installed between two cables—without requiring a power supply—and suppresses all transient high voltages down to the allowed level. It is a "lifesaver" for all studios and other DV applications using the 6-pin FireWire connector.

Achieving the best performance means:

- Positioning your **PT-1FW** away from moisture and excessive sunlight and dust, and avoiding interference from neighboring electrical appliances
- Connecting 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)

#### 4 Your PT-1FW DV Line Protector

Figure 1 and Table 1 define the **PT-1FW DV Line Protector**:

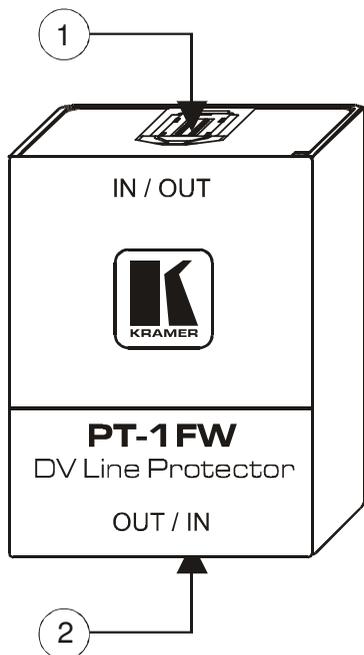


Table 1: PT-1FW DV Line Protector Features

#	Feature	Function
1	IN / OUT 6-pin PORT	Connect to the cable that connects to the device
2	OUT / IN 6-pin PORT	Connect to the cable that connects to the device

Figure 1: PT-1FW DV Line Protector

## 5 Using the PT-1FW DV Line Protector

You can connect your **PT-1FW DV Line Protector**<sup>1</sup>—via two 1394 cables with 6-pin connectors—between two DV devices, for example, a laptop and a digital video camera, as the example in Figure 2 illustrates:

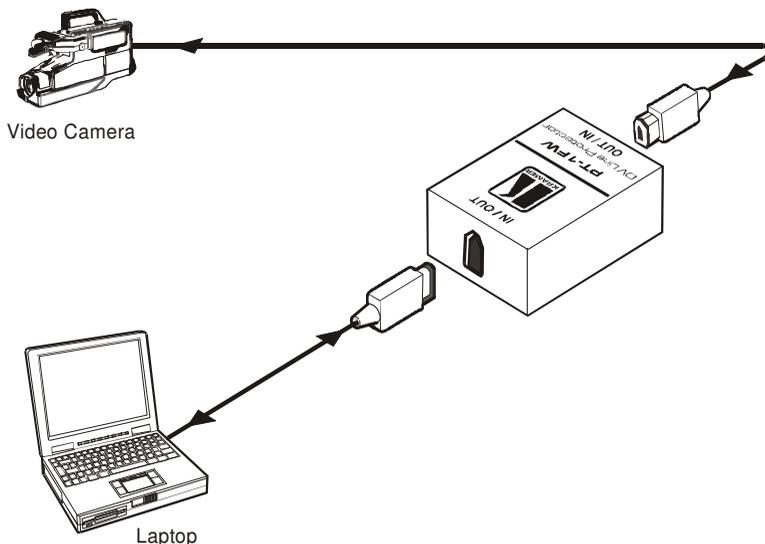


Figure 2: Connecting the PT-1FW DV Line Protector

## 6 Technical Specifications

Table 2: Technical Specifications<sup>2</sup> of the PT-1FW DV Line Protector

PORTS:	2 serial 1394
STANDARD:	Compliant with IEEE 1394
DIMENSIONS:	3.82cm x 2.12cm x 5.0cm (1.5" x 0.83" x 1.97"), W, D, H.
WEIGHT:	0.040 kg (0.09lbs.) approx.
ACCESSORIES:	One 6 pin to 6 pin Connector Cable

<sup>1</sup> The PT-1FW, which does not require a power supply, suppresses all transient high voltages down to the allowed level

<sup>2</sup> Specifications are subject to change without notice

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## 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 three 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.**



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**Kramer Electronics, Ltd.**

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