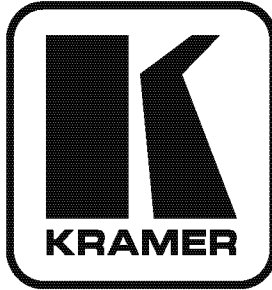


**Kramer Electronics, Ltd.**



# **USER MANUAL**

**Models:**

**PT-1SPDIF, *Digital Audio Converter***

**PT-2SPDIF, *Digital Audio Converter***

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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 11 groups<sup>1</sup> that are clearly defined by function.

Congratulations on purchasing your Kramer **PT-1SPDIF** and/or **PT-2SPDIF** *Digital Audio Converter*. The **PT-1SPDIF** and **PT-2SPDIF** are ideal for:

- Professional audio applications
- Consumer audio applications

The package includes the following items:

- **PT-1SPDIF** or **PT-2SPDIF**
- Power adapter (12V DC Input)
- This user manual<sup>2</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>3</sup>

### 2.1 Quick Start

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

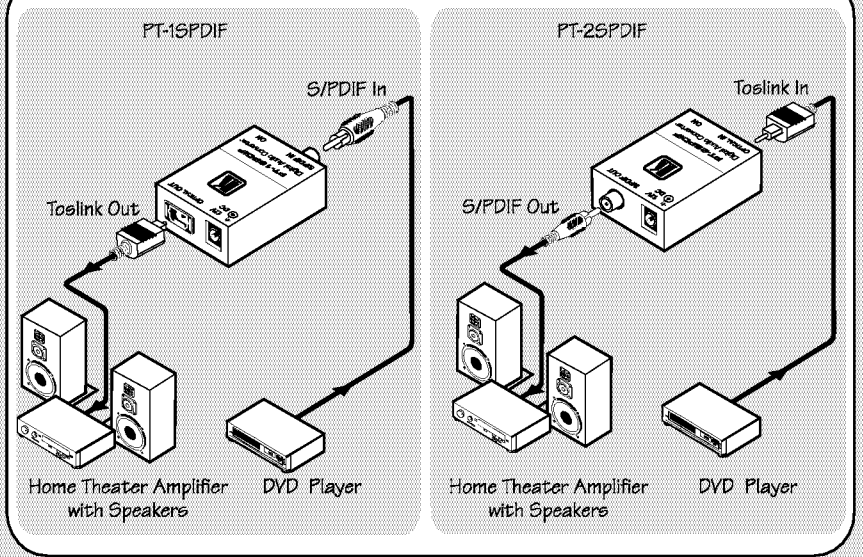
---

1 GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Matrix Switchers; 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 Sealers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters; GROUP 11: Sierra Products

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

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

**Step 1: Connect the Input/output - see section 5**



**Step 2: Connect the power**

### 3 Overview

The **PT-1SPDIF** is a high quality digital audio converter that accepts a digital audio S/PDIF input and converts it to an optical TosLink® audio output.

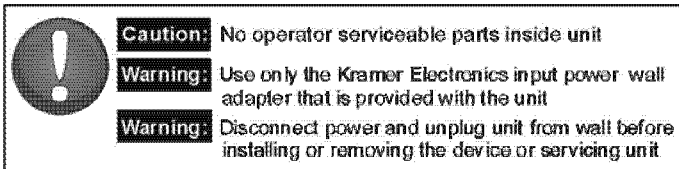
The **PT-2SPDIF** is a high quality digital audio converter that accepts an optical TosLink® audio input and converts it to a digital audio S/PDIF.

The **PT-1SPDIF** and **PT-2SPDIF** output the same data stream as the input, without any conversion. In this way all existing and even future audio formats are supported. Both are:

- 12V DC fed
- Housed in a small enclosure

Achieving the best performance means:

- 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)
- Avoiding interference from neighboring electrical appliances that may adversely influence signal quality and positioning your **PT-1SPDIF** and/or **PT-2SPDIF** in a location free from moisture and away from excessive sunlight and dust



### 4 Your PT-1SPDIF / PT-2SPDIF

This section describes the:

- **PT-1SPDIF** (see section [4.1](#))
- **PT-2SPDIF** (see section [4.2](#))

### 4.1 Your PT-1SPDIF Digital Audio Converter

Figure 1 and Table 1 define the **PT-1SPDIF** *Digital Audio Converter*:

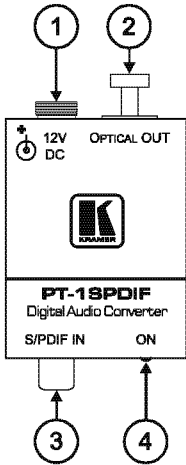


Figure 1: PT-1SPDIF

Table 1: PT-1SPDIF Features

#	Feature	Function
1	12V DC	+12V DC connector for powering the unit
2	OPTICAL TosLink® OUT Connector	Connect to the digital audio acceptor
3	S/PDIF IN (coaxial) RCA Connector	Connect to the digital audio source
4	ON LED	Illuminates when receiving power

### 4.2 Your PT-2SPDIF Digital Audio Converter

Figure 2 and Table 2 define the **PT-2SPDIF** *Digital Audio Converter*:

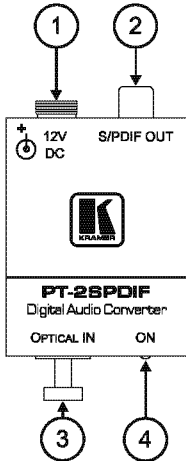


Figure 2: PT-2SPDIF

Table 2: PT-2SPDIF Features

#	Feature	Function
1	12V DC	+12V DC connector for powering the unit
2	S/PDIF OUT (coaxial) RCA Connector	Connect to the digital audio acceptor
3	OPTICAL TosLink® IN Connector	Connect to the digital audio source
4	ON LED	Illuminates when receiving power

## 5 Connecting the PT-1SPDIF / PT-2SPDIF

This section describes the:

- **PT-1SPDIF** (see section [5.1](#))
- **PT-2SPDIF** (see section [5.2](#))

### 5.1 Connecting the PT-1SPDIF Digital Audio Converter

To connect the **PT-1SPDIF** *Digital Audio Converter*, as the example in [Figure 3](#) illustrates, do the following<sup>1</sup>:

1. Connect the digital audio source (for example, the digital audio from a DVD player) to the S/PDIF IN (coaxial) RCA connector.
2. Connect the OPTICAL TosLink® OUT connector to the digital audio acceptor (for example, a home theater amplifier).
3. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.

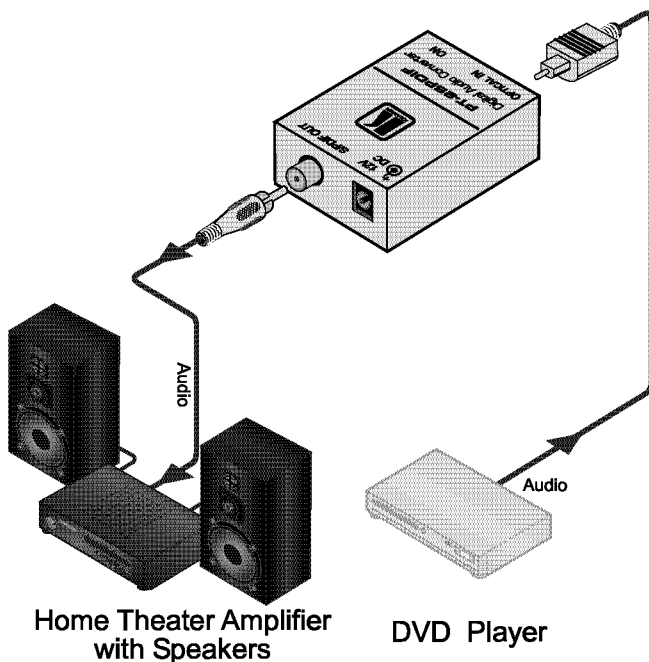


Figure 3: Connecting the PT-1SPDIF Digital Audio Converter

<sup>1</sup> Switch OFF the power on each device before connecting it to your PT-1SPDIF. After connecting your PT-1SPDIF, switch on its power and then switch on the power on each device

## 5.2 Connecting the PT-2SPDIF Digital Audio Converter

To connect the **PT-2SPDIF Digital Audio Converter**, as the example in [Figure 4](#) illustrates, do the following<sup>1</sup>:

1. Connect the digital audio source (for example, the digital audio from a DVD player) to the OPTICAL TosLink® IN connector.
2. Connect the S/PDIF OUT (coaxial) RCA connector to the digital audio acceptor (for example, a home theater amplifier).
3. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.

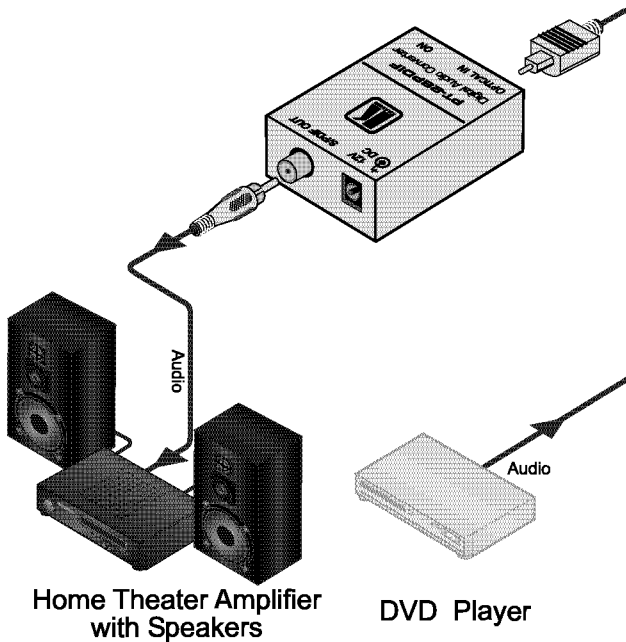


Figure 4: Connecting the PT-2SPDIF Digital Audio Converter

<sup>1</sup> Switch OFF the power on each device before connecting it to your PT-2SPDIF. After connecting your PT-2SPDIF, switch on its power and then switch on the power on each device



## 6 Technical Specifications

Table 3 and Table 4 define the technical specifications<sup>1</sup>:

*Table 3: Technical Specifications of the PT-1SPDIF Digital Audio Converter*

INPUT:	1 S/PDIF (digital audio) on an RCA connector
OUTPUT:	1 Optical (digital audio) on a Toslink® connector
SAMPLING:	32kHz to 192kHz
POWER SOURCE:	12 VDC 50mA
DIMENSIONS:	4.27cm x 2.2cm x 5.64cm (1.68" x 0.87" 2.22"), W, D, H
WEIGHT:	0.3kg (0.67lbs) approx.
ACCESSORIES:	Power supply
OPTIONS:	Kramer cables

*Table 4: Technical Specifications of the PT-2SPDIF Digital Audio Converter*

INPUT:	1 Optical (digital audio) on a Toslink® connector
OUTPUT:	1 S/PDIF (digital audio) on an RCA connector
SAMPLING:	32kHz to 192kHz
POWER SOURCE:	12 VDC 90mA
DIMENSIONS:	4.27cm x 2.2cm x 5.64cm (1.68" x 0.87" 2.22"), W, D, H
WEIGHT:	0.3kg (0.67lbs) approx.
ACCESSORIES:	Power supply
OPTIONS:	Kramer cables

<sup>1</sup> 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](http://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 installation 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 your 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.  
\* FCC and CE approved using STP cable (for twisted pair products)



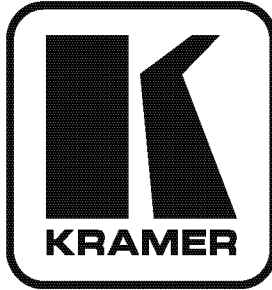
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For the latest information on our products and a list of Kramer distributors, visit our Web site: [www.kramerelectronics.com](http://www.kramerelectronics.com), where updates to this user manual may be found. We welcome your questions, comments and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

 <p><b>Caution</b></p>	<p><b>Safety Warning</b> Disconnect the unit from the power supply before opening/servicing.</p>
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**Kramer Electronics, Ltd.**



# **USER MANUAL**

**Models:**

**PT-1SPDIF, *Digital Audio Converter***

**PT-2SPDIF, *Digital Audio Converter***

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We recommend that you:

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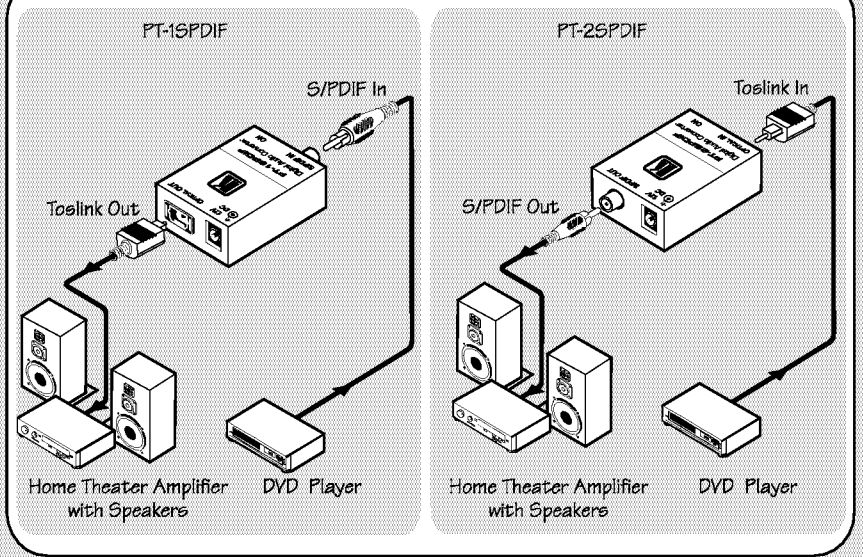
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**Step 1: Connect the Input/output - see section 5**



**Step 2: Connect the power**

### 3 Overview

The **PT-1SPDIF** is a high quality digital audio converter that accepts a digital audio S/PDIF input and converts it to an optical TosLink® audio output.

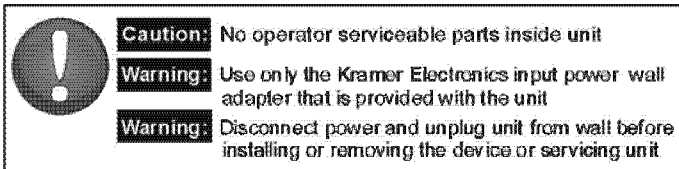
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- 12V DC fed
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Achieving the best performance means:

- 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)
- Avoiding interference from neighboring electrical appliances that may adversely influence signal quality and positioning your **PT-1SPDIF** and/or **PT-2SPDIF** in a location free from moisture and away from excessive sunlight and dust



### 4 Your PT-1SPDIF / PT-2SPDIF

This section describes the:

- **PT-1SPDIF** (see section [4.1](#))
- **PT-2SPDIF** (see section [4.2](#))



### 4.1 Your PT-1SPDIF Digital Audio Converter

Figure 1 and Table 1 define the **PT-1SPDIF** *Digital Audio Converter*:

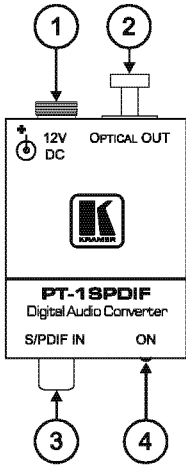


Figure 1: PT-1SPDIF

Table 1: PT-1SPDIF Features

#	Feature	Function
1	12V DC	+12V DC connector for powering the unit
2	OPTICAL TosLink® OUT Connector	Connect to the digital audio acceptor
3	S/PDIF IN (coaxial) RCA Connector	Connect to the digital audio source
4	ON LED	Illuminates when receiving power

### 4.2 Your PT-2SPDIF Digital Audio Converter

Figure 2 and Table 2 define the **PT-2SPDIF** *Digital Audio Converter*:

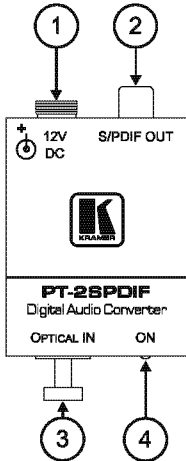


Figure 2: PT-2SPDIF

Table 2: PT-2SPDIF Features

#	Feature	Function
1	12V DC	+12V DC connector for powering the unit
2	S/PDIF OUT (coaxial) RCA Connector	Connect to the digital audio acceptor
3	OPTICAL TosLink® IN Connector	Connect to the digital audio source
4	ON LED	Illuminates when receiving power

## 5 Connecting the PT-1SPDIF / PT-2SPDIF

This section describes the:

- **PT-1SPDIF** (see section [5.1](#))
- **PT-2SPDIF** (see section [5.2](#))

### 5.1 Connecting the PT-1SPDIF Digital Audio Converter

To connect the **PT-1SPDIF** *Digital Audio Converter*, as the example in [Figure 3](#) illustrates, do the following<sup>1</sup>:

1. Connect the digital audio source (for example, the digital audio from a DVD player) to the S/PDIF IN (coaxial) RCA connector.
2. Connect the OPTICAL TosLink® OUT connector to the digital audio acceptor (for example, a home theater amplifier).
3. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.

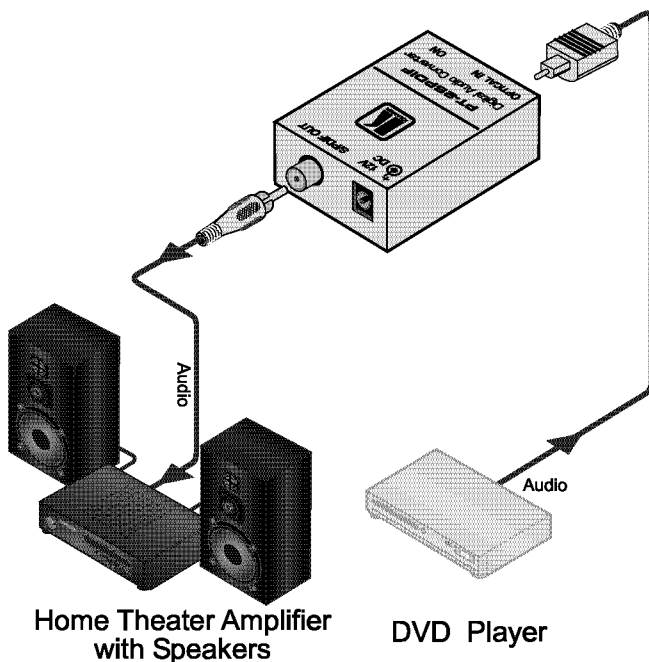


Figure 3: Connecting the PT-1SPDIF Digital Audio Converter

<sup>1</sup> Switch OFF the power on each device before connecting it to your PT-1SPDIF. After connecting your PT-1SPDIF, switch on its power and then switch on the power on each device

## 5.2 Connecting the PT-2SPDIF Digital Audio Converter

To connect the **PT-2SPDIF Digital Audio Converter**, as the example in [Figure 4](#) illustrates, do the following<sup>1</sup>:

1. Connect the digital audio source (for example, the digital audio from a DVD player) to the OPTICAL TosLink® IN connector.
2. Connect the S/PDIF OUT (coaxial) RCA connector to the digital audio acceptor (for example, a home theater amplifier).
3. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.

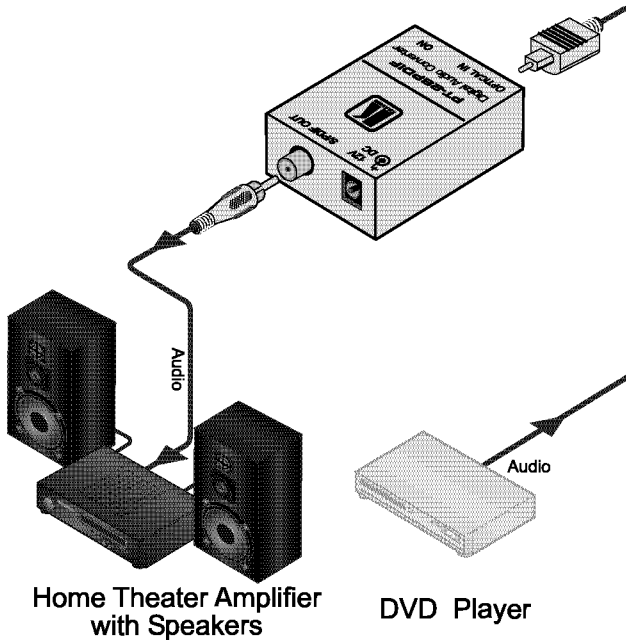


Figure 4: Connecting the PT-2SPDIF Digital Audio Converter

<sup>1</sup> Switch OFF the power on each device before connecting it to your PT-2SPDIF. After connecting your PT-2SPDIF, switch on its power and then switch on the power on each device

## 6 Technical Specifications

Table 3 and Table 4 define the technical specifications<sup>1</sup>:

*Table 3: Technical Specifications of the PT-1SPDIF Digital Audio Converter*

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ACCESSORIES:	Power supply
OPTIONS:	Kramer cables

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3. Damage, deterioration or malfunction resulting from:
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  - 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)
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### 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:

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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.  
\* FCC and CE approved using STP cable (for twisted pair products)



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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.

 <p><b>Caution</b></p>	<p><b>Safety Warning</b> Disconnect the unit from the power supply before opening/servicing.</p>
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