

Kramer Electronics, Ltd.



USER MANUAL

Model:

TP-125, UXGA / Audio / Data Line Transmitter

TP-126, UXGA / Audio / Data Line Receiver

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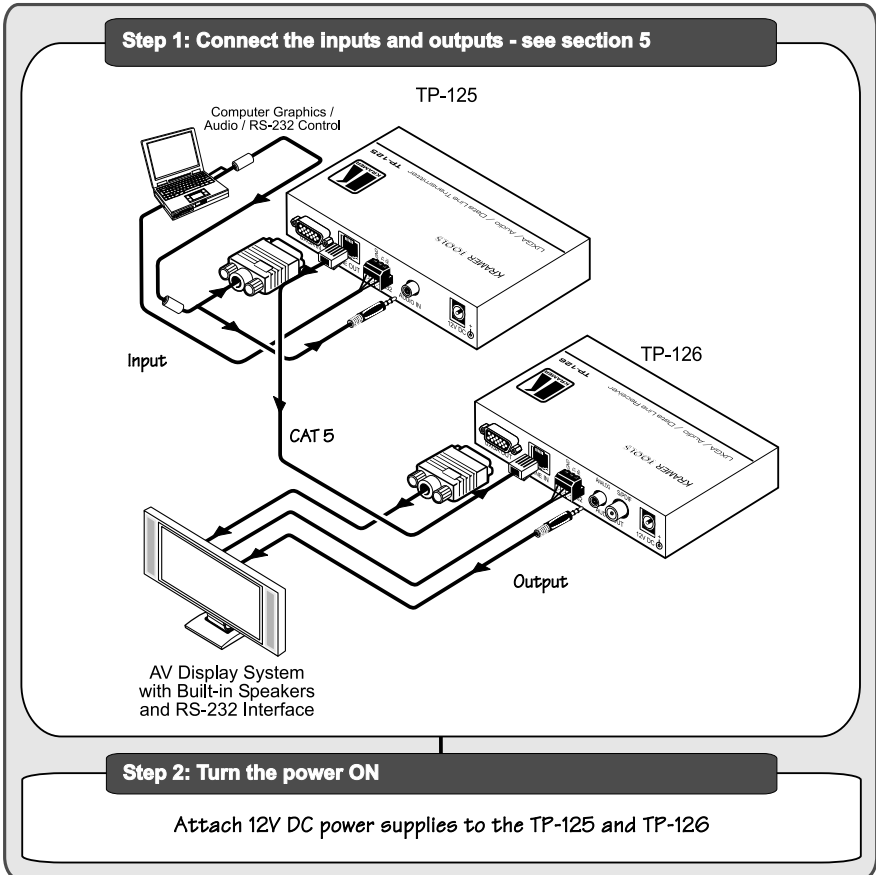
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2.1 Quick Start

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



3 Overview

This user manual describes the following Kramer TOOLS:

- **TP-125 UXGA / Audio / Data Line Transmitter**, see section 4.1
- **TP-126 UXGA / Audio / Data Line Receiver**, see section 4.2

This section describes:

- Using shielded twisted pair (STP) / unshielded twisted pair (UTP), see section 3.1
- Recommendations for achieving the best performance, see section 3.2

3.1 Shielded Twisted Pair (STP) / Unshielded Twisted Pair (UTP)

The decision whether to use shielded twisted pair (STP) cable or unshielded twisted pair (UTP) cable depends on the nature of the application.

In applications with high interference, shielded twisted pair (STP) cable is recommended. However, the cable shield creates a capacitance that degrades the frequency response of the device. For distances of 50 meters or less shielded twisted pair (STP) cable is preferred because it provides interference protection without any apparent degradation.

In applications where either: 1) the source and transmitter or receiver and destination monitor are disconnected from common ground, or 2) the source area (building) and destination area have no common ground – STP cable is preferred.

For long-range applications, unshielded twisted pair (UTP) cable is preferred. However, unshielded twisted pair (UTP) cable should be installed far away from sources of electromagnetic interference such as electric cables and motors.

It is recommended to use shielded twisted pair (STP) skew-free Kramer cable **BC-SXTP** for transmitting VGA signals, and shielded twisted pair (STP) non-skew-free Kramer **BC-STP** cable for digital signals.

3.2 Recommendations for Achieving the Best Performance

To achieve the best performance:

- Use only good quality connection cables¹ to avoid interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low-quality cables)

¹ Available from Kramer Electronics on our Web site at <http://www.kramerelectronics.com>

- Avoid interference from neighboring electrical appliances that may adversely influence signal quality and position your Kramer **TP-125/TP-126** 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 unit¹.

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

4 Your TP-125 / TP-126

This section defines the:

- **TP-125**, *UXGA / Audio / Data Line Transmitter* (see section 4.1)
- **TP-126**, *UXGA / Audio / Data Line Receiver* (see section 4.2)

4.1 Your TP-125 UXGA / Audio / Data Line Transmitter

The **TP-125** is a high-performance transmitter that accepts:

- A computer graphics input signal
- An unbalanced stereo analog audio signal
- RS-232 control commands

The **TP-125** codes the signals and transmits them over CAT 5 cable to a **TP-126** receiver.

The stereo analog audio signal is converted to the digital audio (S/PDIF) stream before transmitting, thus preserving the quality of the audio source signals.

Commands and data can flow in both directions via the RS-232 interface, allowing status requests and control of the destination unit.

The **TP-125 / TP-126** pair has a transmission range of more than 300 feet (more than 100 meters) over UTP cabling. Resolution is up to UXGA.

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

Figure 1 and Table 1 define the **TP-125**:

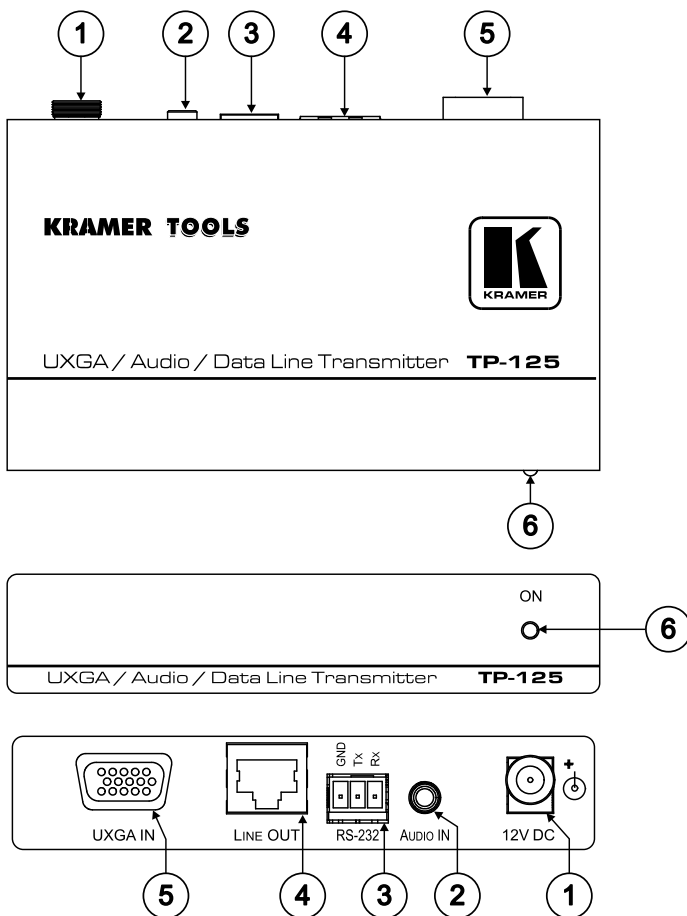


Figure 1: TP-125 UXGA / Audio / Data Line Transmitter

Table 1: TP-125 UXGA / Audio / Data Line Transmitter Features

#	Feature	Function
1	12V DC	+12V DC connector for powering the unit
2	AUDIO IN 3.5mm Mini Jack	Connects to the audio source
3	RS-232 Terminal Block Connector	Connects to the PC or the Remote Controller (see section 5.1)
4	LINE OUT RJ-45 Connector	Connects to the LINE IN RJ-45 connector on the TP-126 UXGA / Audio Line Receiver
5	UXGA IN HD15F Connector	Connect to the UXGA source
6	ON LED	Illuminates when receiving power