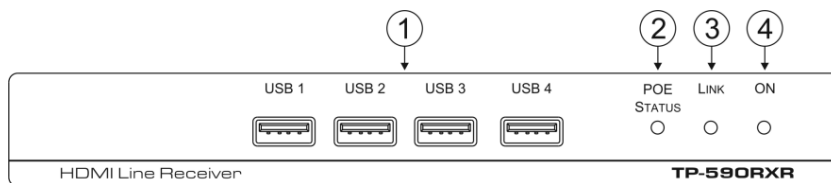# KRAMER

TP-590RXR Quick Start Guide

This guide helps you install and use your **TP-590RXR** for the first time.

Go to www.kramerav.com/downloads/TP-590RXR to download the latest user manual and check if firmware upgrades are available.
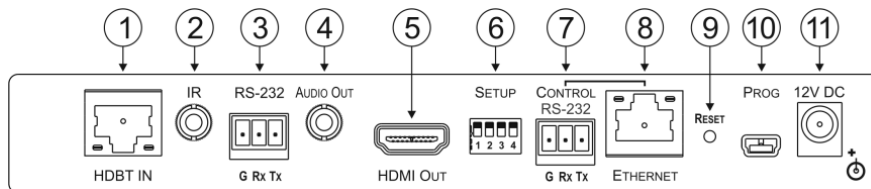
Step 1: Check what's in the box

- ☑ **TP-590RXR** HDMI Line Receiver
- ☑ 4 Rubber feet
- ☑ 1 Bracket set
- ☑ 1 Power supply (12V DC)
- ☑ 1 Quick start guide

Step 2: Get to know your TP-590RXR

#	Feature	Function
1	*USB 1 – 4* Connectors	Connect to the USB peripheral devices, (for example, USB camera, computer mouse, or keyboard).
2	*POE STATUS* LED	Lights green when power is received over the TP connection.
3	*LINK* LED	Lights green when the HDBT link is valid.
4	*ON* LED	Lights green when the device receives power.

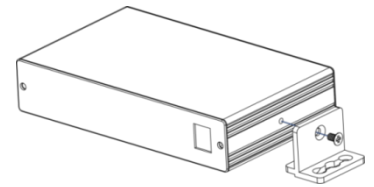| #	Feature		Function
1	*HDBT IN* RJ-45 Connector		Connect to the HDBT OUT RJ-45 connector on the HDBT transmitter.
2	*IR* 3.5mm Mini Jack Connector		Connect to an external infrared transmitter or sensor.
3	*RS-232* 3-pin Terminal Block		Connect to an RS-232 device to be controlled, for example, a projector.
4	*AUDIO OUT* 3.5mm Mini Jack Connector		Connect to the stereo, analog audio acceptor.
5	*HDMI OUT* Connector		Connect to the HDMI acceptor.
6	*SETUP* 4-way DIP-switch		Set the device behavior (see Step 4).
7	*CONTROL*	*RS-232* 3-pin Terminal Block	Connect to the serial controller for this device.
8		*ETHERNET* RJ-45 Connector	Connect to the Ethernet controller to control this device or to a LAN to pass network traffic.
9	*RESET* Switch		Press and hold for 5 seconds to reset the device to factory default settings. Press and immediately release to power-cycle the device (Reset).
10	*PROG* Mini USB Connector		Connect to a PC to perform firmware upgrades.
11	*12V DC* Power Connector		Connect to the supplier power adapter if power is not supplied from a PoE device via the TP cable.

P/N: 2900- 300860QS   Rev: 2
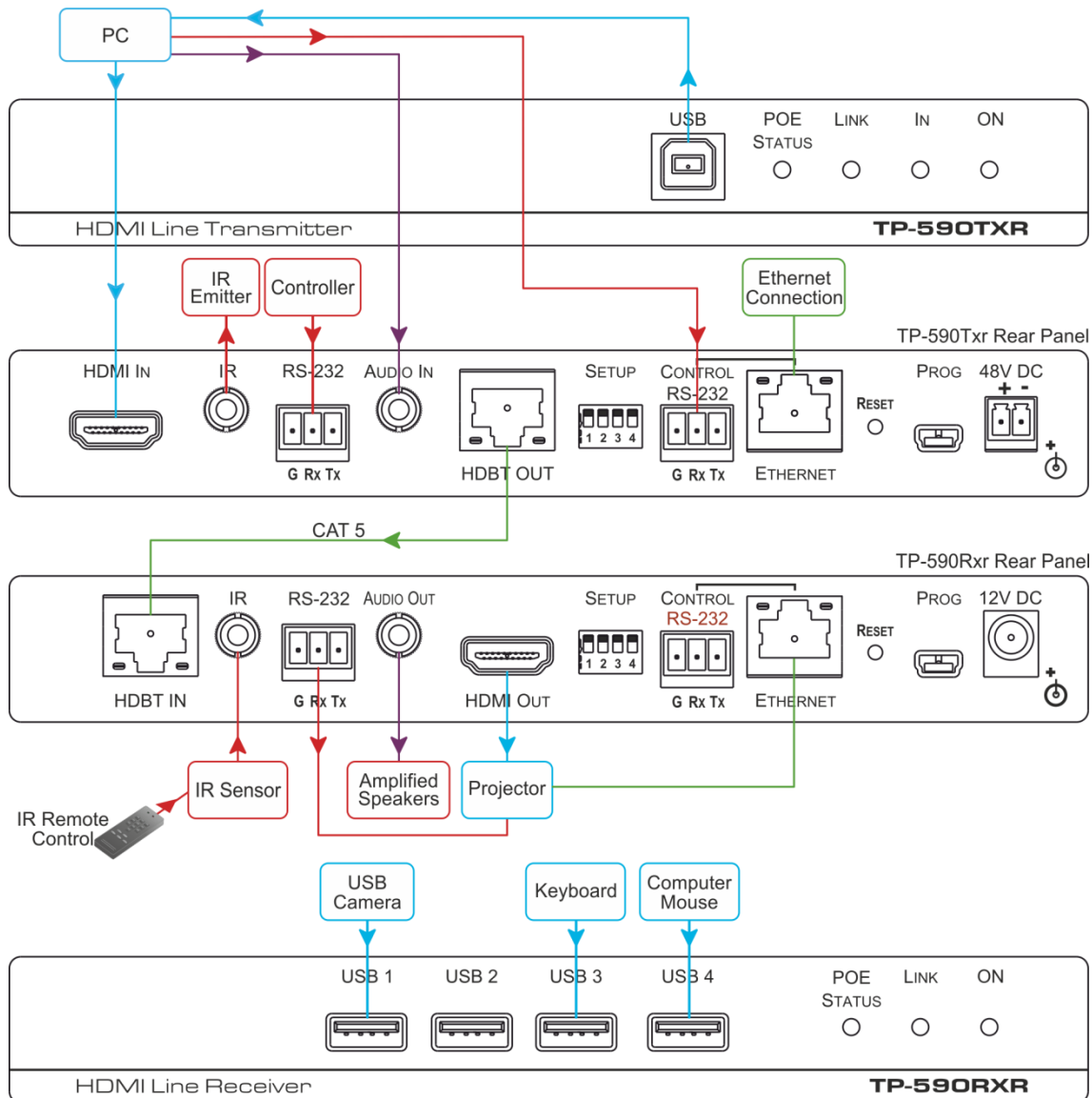
Step 3: Install TP-590RXR

Install **TP-590RXR** using one of the following methods:

- Attach the rubber feet and place the unit on a flat surface.
- Fasten a bracket (included) on each side of the unit and attach it to a flat surface.
  For more information go to www.kramerav.com/downloads/TP-590RXR.
- Mount the unit in a rack using an optional **RK-T2B** rack adapter.

Step 4: Connect the inputs and outputs

Always switch OFF the power on each device before connecting it to your **TP-590RXR**. For best results, we recommend that you always use Kramer high-performance cables to connect AV equipment to **TP-590RXR**.

Setting the DIP Switches

Set the DIP-switches using the table on the right. The ON/OFF positions are as follows:

- Switch down = ON
- Switch up = OFF

Note: Changes to the DIP-switches only take effect on power-up.

	Function	Status
1	Range mode	Off—Extended range (provides increased range at a reduced bandwidth) On—Normal range (factory default)
2	Reserved	Off—Factory default
3	EDID lock	Off—Automatic EDID acquisition (factory default) On—Lock (locks the current EDID so that changes on the output do not result in changes to the EDID)
4	Reserved	Off—Factory default

Step 5: Connect the power

Connect the 12V DC power supply to **TP-590RXR** and plug it into the mains electricity.

Safety Instructions

Caution: There are no operator serviceable parts inside the unit.
Warning: Use only the Kramer Electronics power supply that is provided with the unit.
Warning: Disconnect the power and unplug the unit from the wall before installing.
See www.KramerAV.com for updated safety information.

Step 6: Operate TP-590RXR

Operate **TP-590RXR** via:

- Remotely, using Protocol 3000 commands via RS-232 or Ethernet
- Embedded web pages via the Ethernet
- Remotely, using an IR remote control transmitter

Default Parameters

Parameter	Value
Name	KRAMER_
Model	TP-590RXR
IP Address	192.168.1.39
UDP Port	50000
TCP Port	5000
Network Mask	255.255.0.0
Gateway Address	192.168.0.1
RS-232 Baud Rate	115200
HDCP Mode	Follow output
Audio Selection Mode	Auto
Video Signal Loss Timeout (no 5V)	0 seconds
Video Signal Loss Timeout (5V present)	10 seconds

Protocol 3000 Commands

Command	Description
#	Protocol handshaking
AV-SW-TIMEOUT	Set/get video auto-switch timeout
BUILD-DATE?	Read device build date
CPEDID	Copy EDID data from the output to the input
DIR	List files in device
DISPLAY?	Valid / Invalid output
ETH-PORT	Set/get Ethernet port protocol
FACTORY	Resets the device to factory default
FS-FREE?	Get file system free space
GEDID	Read EDID data
GET	Get file
HDCP-MOD	Set/get HDCP mode
HDCP-STAT?	Get HDCP signal status
HELP	Get command list or help for specific command
LDEDID	Write EDID data to input
LDFW	Load new firmware
LOAD	Load new firmware
LOCK-EDID?	Get EDID lock status

Command	Description
LOGIN	Set/get protocol permission
LOGOUT	Cancel current permission level
MODEL?	Read device model
NAME	Set/get machine (DNS) name
NAME-RST	Reset machine name to factory default (DNS)
NET-DHCP	Set/get DHCP mode
NET-GATE	Set/get gateway IP
NET-IP	Set/get IP address
NET-MAC?	Get MAC address
NET-MASK	Set/get subnet mask
PASS	Set/get Password
PROT-VER?	Get device protocol version
RESET	Reset device
SECUR	Start / Stop Security
SIGNAL?	Get input signal lock status
SN?	Read device serial number
UPGRADE	Perform firmware upgrade
VERSION?	Read device firmware version

Using the Embedded Web Pages

The **TP-590RXR** can be operated remotely using the embedded web pages. Access the web pages from the control computer using a web browser and an Ethernet connection.

Before attempting to connect:

- Ensure that your browser is supported.
- Ensure that JavaScript is enabled.

Note: In the event that a Web page does not update correctly, clear your Web browser's cache.

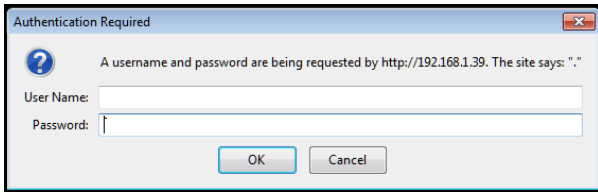**Note**: Only one instance of the web pages can be open at a time.

To browse the TP-590RXR web pages:

1. Open your Internet browser.
2. Type the IP number of the device (default = 192.168.1.39) in your browser.
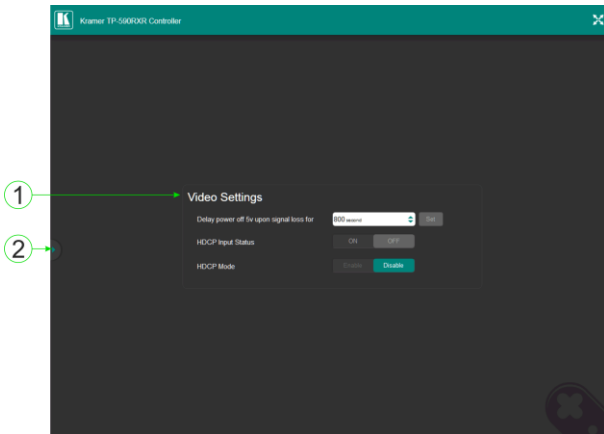

   If authentication is enabled, the following window appears.

3. Enter the valid username and password to access the web pages.

   Following a successful logon, the Default page appears.

#	Item	Description
1	Video Settings	View the current video settings.
2	Reveal Button	Click to reveal the Page Selection panel.

4. Click the Reveal button to open the left hand side page panel.
5. Select the required page from the Page Selection Panel to configure the device:

Video Settings Page: Modify the video and timeout parameters.

Device Settings Page:

- View some of the device characteristics (for example, model and web version)
- Edit IP settings
- Load and save configurations
- Reset the device to factory default settings

EDID Management Page:

- Copy EDID data to either or both of the inputs
- Lock the EDID on each input independently

Note: Do not power up the display before locking the EDID.

Firmware Upgrade Page:

- View the current firmware version
- Upgrade the firmware

Authentication Page: Assign or change logon authentication details.

About Page: View the Web page version and Kramer Electronics Ltd company details.