



# EXTDA

**Digital Audio Extender kit for both  
Optical and Analog formats**

User Manual

**VER 2.0**

## **Thank you for purchasing this device**

The Simplified MFG EXTDA is designed to provide years of reliable service. At Simplified MFG, we want the experience with this device to be the best possible and are committed to helping achieve that experience.

## **Surge protection device recommended**

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended to protect and extend the life of your equipment. Set top boxes (STB) that are connected to the outside world can introduce surges through the system and cause components to fail. These devices should have surge protection on all outputs including HDMI and audio.

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## 1. Introduction

The EXTDA is an audio extender that will transmit optical and analog audio formats over category cable up to 100m at 192kHz. Distance can be extended by using lower sampling rates up to 300m. There are optical and RCA analog inputs on the transmitter that coincide with an optical and RCA analog outputs at the receiver. The RX has a switch to determine the audio function. First position is RCA analog to RCA analog, the second position is for Optical to optical, however, if the display is set to PCM, the RCA analog outputs should output audio simultaneously with the optical output in stereo. Power is supplied by a Micro USB port and only one supply is needed (either end will work).

## Features

- Both optical and RCA analog formats are supported
- Both can be used at the same time
- Supports 192kHz./96kHz./48kHz audio
- Built in DAC to convert optical stream to analog stereo audio that is output via RCA connectors
- Sample rates supported are 32kHz., 44.1kHz, 48kHz., 96kHz., and 192kHz. Up to 24-bit resolution.
- LPCM, DTS, Dolby Digital, & Dolby Digital Plus is supported in digital-to-digital transmission
- Single power supply at either end powers both units

## 2. Package contents

1x Transmitter

1x Receiver

1x 5V/1A Power Supply

1x Micro USB cable

4x Metal mounting brackets with screws

1x Manual

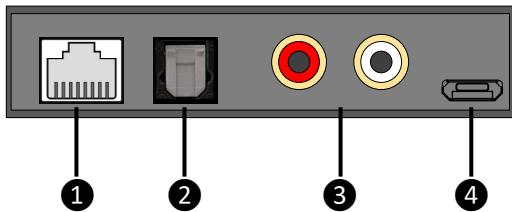
### 3. Specifications

<b>Technical</b>	
Bit Rate by distance	192kHz. – 100m, 96kHz. – 150m, 48kHz. – 300m
Digital-to-Digital Audio formats	LPCM, DTS, Dolby Digital, Dolby Digital+
Sample Rates	32kHz., 44.1kHz., 48kHz., 96kHz., 192kHz. up to 24-bit resolution
ESD Protection	Human-body Model: $\pm 8\text{kV}$ (Air-gap discharge), $\pm 4\text{kV}$ (Contact discharge)
<b>Connections TX</b>	
Input ports	1x Optical (Toslink) 2x RCA 1x Micro USB (power)
Output ports	1x RJ45
<b>Connections RX</b>	
Input ports	1x RJ45
Output ports	1x Optical (Toslink) 2x RCA 1x Micro USB (power)

<b>Mechanical</b>	
Housing	Metal Enclosure
Color	Black
Dimensions	90mm (3.54") [W] × 73mm (2.875") [D] × 20mm (.79") [H]
Weight	TX 173g/6.125oz. RX 176g/6.125oz.
Power Supply	Input: AC100~240V 50/60Hz, Output: DC5V/1A (US/EU standards, CE/FCC/UL certified)
Power Consumption	1W (max)
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (non-condensing)

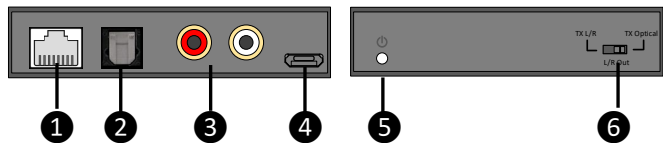
## 5.Operation Controls and Functions

### 5.1 Transmitter (TX)



Number	Name	Function description
1	Cat Output	Connects the TX to the RX via category cable
2	Optical In (Toslink)	Optical audio input port for audio input from an optical output (Toslink)
3	RCA Connectors	Connects to analog audio source
4	Micro USB	Provides power to both units from either RX or TX

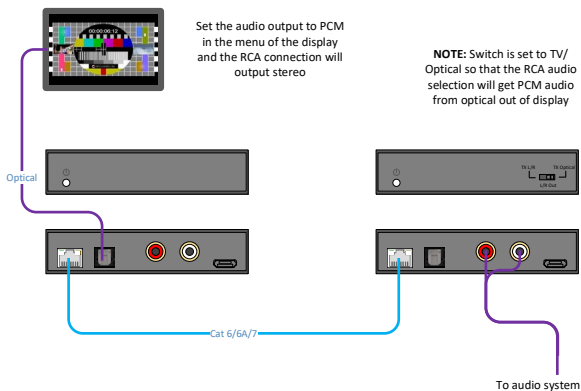
## 5.2 Receiver (RX)



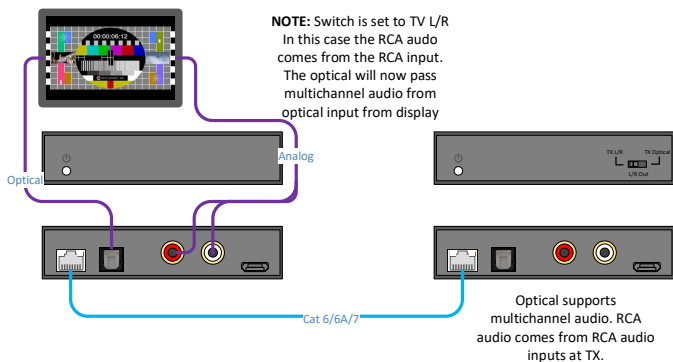
Number	Name	Function description
1	Cat Input	Connects RX to TX via category cable
2	Optical In (Toslink)	Optical audio output
3	RCA	Analog out from TX
4	Micro USB	Provides power to both units
5	Power LED	Indicates power connection
6	Switch	Selects RCA output options. RCA in or Toslink in



## 6. Application Example 1



## Example 2



## 7.Trouble Shooting

<b>Symptom</b>	<b>Possible Cause(s)/Check</b>
No Power at RX	If Micro USB is plugged in to RX, check power supply and/or USB cable. If powered at TX, examine category cable
No Power at TX	Same as above but in reverse
No Digital Audio	Output is disabled at display or toslink cable has failed. There should be light at end of the toslink cable
No Analog Audio	Make sure there is RCA output going into the RCA connection at the TX. If using toslink make sure switch is set to "TV Optical" and that the display is set to PCM audio in the display's set up menu

## 8. Warranty

Should you feel that this product does not function adequately due to defects in materials or workmanship, we (referred to as "the warrantor") will, for the length of the period indicated below (starting from the original date of the purchase) either a) repair the product with new or refurbished parts. Or b) Replace the product with new or refurbished product. All Simplified MFG products are covered by a 3-year warranty. During this period there will be no charge for unit repair, replacement of unit components or replacement of the product if deemed necessary. The decision to repair or replace is made by the warrantor. The purchaser must mail in the product during the warranty period. This limited warranty only covers the product purchased as new and is extended to the original purchaser only. It is non-transferable to subsequent owners, even during the warranty period. A purchase receipt or other proof of purchase date is required for the limited warranty service.

## 9. Contact

Sales and Tech Support

P. 833-HDMI-411 (833-436-4411)

E. [info@simplifiedmfg.com](mailto:info@simplifiedmfg.com)



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