

# Universal Digital/Analog Audio Converter with Dolby and DTS Decoder - # 15403



**Operation Manual**

## Introduction

The Universal Digital/Analog Audio Converter with Dolby Digital and DTS 2.0+Digital Out Decoder can convert among Optical, Coaxial and analog audio signals. With the ability to convert digital signals into analog and analog signals into digital, this device supports the simultaneous conversion of audio formats so when converting Optical into analog audio you can also convert it into Coaxial. Therefore, if you find yourself limited by multiple audio formats the Universal Digital Out Decoder is the perfect choice.

## Applications

- Analog audio to digital audio signal conversion (ADC)
- Digital audio to analog audio signal conversion (DAC)
- Simultaneous digital and analog audio output
- Downmixing of Dolby Digital signals
- Downmixing of DTS 2.0+Digital signals

## Features

- Dolby Digital Decoder technology embedded
- DTS 2.0+Digital Out Decoder technology embedded
- Integrated digital interpolator filter and Digital-to-Analog Converter (DAC)
- Integrated Analog-to-Digital Converter (ADC)
- Supports sampling rates from 32 to 96 KHz
- Provides electromagnetic-noise-free transmission
- Supports last power memory function
- Easy to install and operate
- Compact and elegant design

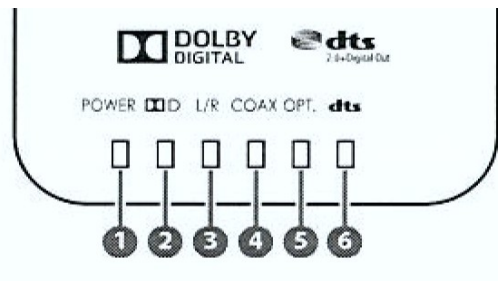
## System

### Requirements

Audio source equipment such as a CD/DVD Player with connection cable(s) and an AV receiver or similar device for audio output.

## Operation Controls and Functions

### Front Panel



#### 1. POWER LED:

The LED will illuminate green when connected to power and in red when switched off. When connected to an AC wall outlet the unit will automatically turn on

#### 2. Dolby Digital LED:

When the source is Dolby Digital formatted the LED will illuminate in red and will remain off if not.

#### 3. L/R IN LED:

The LED will illuminate blue to indicate that the L/R input is selected.

#### 4. COAX IN LED:

The LED will illuminate blue to indicate that the COAX input is selected.

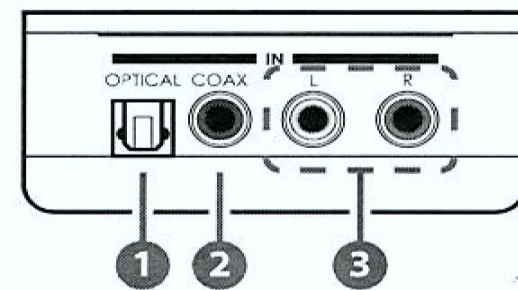
#### 5. OPTICAL IN LED:

The LED will illuminate blue to indicate that the OPTICAL input is selected.

#### 6. DTS 2.0+ Digital Out LED Indicator:

When the source is DTS 2.0+ Digital Out formatted the LED will illuminate in red and will remain off if not..

### Right Panel



#### 1. OPTICAL IN:

Connect to the OPTICAL output of the audio source.

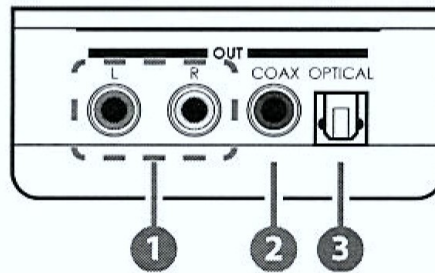
#### 2. COAX IN:

Connect to the COAX output of the audio source.

#### 3. L/R IN:

Connect to the analog (L/R) output of the audio source with a stereo RCA cable.

## Left Panel



### 1. L/R OUT:

Connect to the analog (L/R) audio input of the audio system such as a TV or amplifier with a stereo RCA cable.

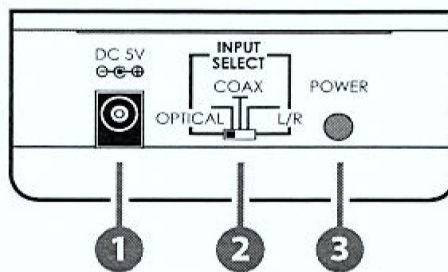
### 2. COAX OUT:

Connect to the audio system's coaxial input.

### 3. OPTICAL OUT:

Connect to the audio system's optical input.

## Rear Panel



### 1. DC 5V:

Connect the 5V/1A DC power supply to the unit and plug the adaptor to an AC wall outlet.

### 2. INPUT SELECT:

Selects the required audio source, either optical, coaxial or L/R (Analog).

### 3. POWER:

Push the button to turn the unit on or off. The device supports last time memory function therefore, when the power supply is reconnected it will bring up the last power status

## Specifications

<b>Input Ports</b>	1×Optical, 1×Coaxial, 1×Analog Stereo (L/R)
<b>Input Format</b>	LPCM 2CH & Dolby Digital/DTS 2.0+Digital from Optical or Coaxial
<b>Sample Rates</b>	32-96KHz
<b>Output Ports</b>	1×Coaxial, 1×Optical, 1×Analog Stereo (L/R)
<b>L/R Input Impedance</b>	47KΩ
<b>L/R Output Impedance</b>	600Ω
<b>ESD Protection</b>	Human body model: ±10kV (air-gap discharge) ±6kV (contact discharge)
<b>Power Supply</b>	5V/1A DC (US/EU standard, CE/FCC/UL certified)
<b>Dimensions</b>	97mm (W)×85mm (D)×35mm (H)
<b>Weight</b>	108g
<b>Chassis Material</b>	Plastic
<b>Color</b>	White
<b>Operating Temperature</b>	0 °C~40 °C / 32 °F~104 °F
<b>Storage Temperature</b>	-20 °C~60 °C / -4 °F~140 °F
<b>Relative Humidity</b>	20~90% RH (non-condensing)
<b>Power Consumption</b>	1W

## Audio Specifications

OUT IN	Output	Output Level	T.H.D+N (A-Weight)	Frequency Response	SNR	Crosstalk
Optical 0dBFS	Optical	0 dBFS	<0.00001%	0 dBFS	>144 dB	<-161 dB
	Coaxial	0 dBFS	<0.00001%	0 dBFS	>144 dB	<-161 dB
	Line-Out	1.8Vrms±0.1	<0.01%	<0.5 dB	>109 dB	<-100 dB
Coaxial 0dBFS	Optical	0 dBFS	<0.00001%	0 dBFS	>144 dB	<-161 dB
	Coaxial	0 dBFS	<0.00001%	0 dBFS	>144 dB	<-161 dB
	Line-Out	1.8Vrms±0.1	<0.01%	<0.5 dB	>108 dB	<-100 dB
Line 2Vrms	Optical	0 dBFS	<0.00001%	<0.5 dB	>96 dB	<-113 dB
	Coaxial	0 dBFS	<0.00001%	<0.5 dB	>96 dB	<-113 dB
	Line-Out	1.8Vrms±0.1	<0.01%	<1 dB	>95 dB	<-100 dB

## Input Audio and Output Audio Chart

Audio Input	Input Format	Audio Output		
		Analog L/R	COAXIAL	OPTICAL
Analog L/R	Analog 2CH	Analog 2CH	LPCM 2CH	
COAXIAL or OPTICAL	LPCM 2CH	Analog 2CH	LPCM 2CH	
	Dolby Digital	Decoding Lt/Rt	Bitstream/Pass-through	
	DTS	Decoding Lo/Ro	Bitstream/Pass-through	

## Connection Diagram

