



## Digital Audio Converter — 5.1 Channel

# Quick Installation Guide

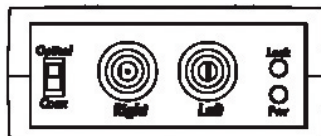
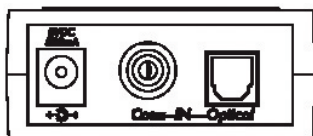
### 1. Overview

The Digital Audio Converter, 5.1 Channel (IC081A) converts one LPCM-encoded or one 5.1 Channel Digital coaxial (S/PDIF) or optical (TOSLink) digital audio signal to a standard left/right analog audio output, thereby allowing a digital audio source such as a DVD or CD player without RCA analog audio output to be connected to an audio-video receiver or TV.

Applications include commercial and residential audio systems, boardroom systems, collaborative PC systems, and medical information systems.

### 2. Installation

1. Identify the connectors on the Digital Audio Converter as indicated on the product panels.



2. To install the Digital Audio Converter:
  - 2a. Connect the converter input to the digital audio source with an Optical (TOSLink) or 75-ohm coaxial (S/PDIF) cable.
  - 2b. Set the input switch to the appropriate signal.
  - 2c. Connect the converter output to the analog audio receiver with a stereo audio compliant cable.

#### Customer Support Information

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)  
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax  
724-746-0746 • Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence,  
PA 15055-1018 • Web site: [www.blackbox.com](http://www.blackbox.com) • E-mail: [info@blackbox.com](mailto:info@blackbox.com)

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3. Connect the 5 VDC power supply to the converter first, and then plug the power supply into an AC power outlet. If power is present, the green power LED of the Digital Audio Converter will be ON.

*NOTE: Power-on the Digital Audio Converter only after all connections are made.*

4. Power-on the audio source and receiver and verify the audio quality.
5. The following diagrams show the final configurations.

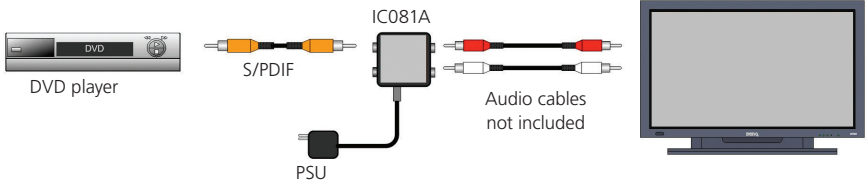


Figure 1. S/PDIF application.

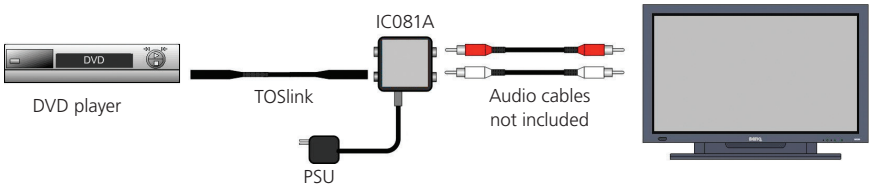


Figure 2. TOSlink application.

3. Troubleshooting

The following table describes some of the symptoms, probable causes and possible solutions in respect to the installation of the Digital Audio Converter—5.1 Channel.

Table 3-1. Troubleshooting tips.

Symptom	LEDs		Probable Causes	Possible Solutions
	Power	Lock		
No Sound	OFF	OFF	No power	Check power connections
No Sound	ON	OFF	Optical/Coaxial Cable	Check the Optical/Coaxial cables.
No Sound	ON	ON	Stereo audio cable	Check the stereo audio cable.
No Sound	ON	ON	Wrong input on receiver	Check if the selected input on the receiver can receive analog stereo audio.
No Sound	ON	ON	Audio source outputs a unsupported compressed bitstream such as DTS.	Configure the source to only output a uncompressed LPCM or 5.1 Channel Digital bitstream.
Choppy sound	ON	ON	Weak connections.	<ul style="list-style-type: none"><li>• Check cable connections.</li><li>• Check the optical/coaxial cable quality.</li></ul>

NOTE: If you still cannot diagnose the problem, contact Black Box Technical Support at 724-746-5500 or [info@blackbox.com](mailto:info@blackbox.com).

## Black Box Tech Support: FREE! Live. 24/7

### 4. Specifications

Table 4-1. Specifications.

Approvals	Compliance: FCC, CE, RoHS; Flammability: 94V0
Bit Depth	24 bit S/PDIF compress and uncompress bitstream
Devices	DVD, CD players, TV, PC, laptops
Distortion	<0.001% at 1 KHz
Enclosure	ABS fire-retardant plastic
Environment	Temperature Tolerance: Operating: 32° to 104° F (0° to 40° C); Storage: -4° to +185° F (-20° to +85° C); Humidity Tolerance: Up to 95%, noncondensing
Sample Rate	32, 44.1, 48, and 96 kHz
SNR	>90 dB (20 Hz–20 kHz)
Switch	Selects between S/PDIF and TOSLink
Transmission	Transparent to the user
Interface	Digital audio, 5.1 Channel or LPCM
Connectors	(1) coaxial, (1) TOSLink, (2) RCA  <i>NOTE: Audio cables are not included.</i>
Power	Power Supply: 110–240 VAC, 5 VDC power supply with interchangeable blades; Consumption: 1.75 watts
Dimensions	1"H x 2.4"W x 2.25"D (2.5 x 6.1 x 5.5 cm)
Weight	1 lb. (0.45 kg)

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