GeerFab
AUDIO

D.BOB (Digital Breakout Box)
Hi-Res Audio Disc Digital Extractor
DSD64 and up to 24/192 PCM from HDMI Input
S/PDIF Coax & Toslink Optical Stereo Outputs

Blu-ray Disc
HIGH FIDELITY
PURE AUDIO

SUPER AUDIO CD

GeerFabAudio.com
Designed in Milwaukee | Manufactured in China
U.S. Patent Pending

User Manual
VER 1.0

1. Warranty

Each individual GeerFab Audio D.BOB undergoes comprehensive quality control and a complete test before shipping. This D.BOB is warranted by GeerFab Audio to the original purchaser against defects in workmanship and materials used in manufacture for a period of three (3) years from the date of purchase. Faults due to customer misuse, unauthorized modifications or accidents are not covered by this warranty. No other warranty is expressed or implied.

If you suspect that your product is faulty, please contact the retailer from which you purchased the unit and the retailer will contact GeerFab Audio. Sometimes a defect is simply a transport or DAC not properly setup or a DAC that does not support DoP via S/PDIF Coax (see System Requirements below). If a purchaser wishes to return a unit because of system incompatibility, it is at the retailer's discretion to accept a return or exchange. GeerFab Audio is not responsible for customer's system incompatibility.

Prior to shipping, customer or retailer must obtain an RMA number from GeerFab Audio for warranty services. Units sent without RMA number will not be accepted. GeerFab Audio will repair or replace a defective unit with a new or refurbished unit at its sole discretion. The warranty from the original unit will stay in effect through the original term.

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2. System Requirements

A. Universal player must output DSD64 and up to 24/192 PCM via HDMI. If there is only one HDMI output, use the HDMI OUT on the D.BOB to send video to a monitor or TV.

B. External DAC must accept DSD via the DoP protocol through S/PDIF Coax (preferable) or Toslink inputs. The D.BOB does not have a USB output.

Thank you for purchasing this product

For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

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 in order to protect and extend the life of your equipment.

IMPORTANT – <u>POWER ON THE D.BOB FIRST</u>

Power On Sequence in an Audio System:

Power amplifiers have a specific power on sequence and so does the D.BOB. Because of the complicated nature of the data extraction and routing the D.BOB is required to perform, for every audio system power on sequence, the D.BOB should always be the first component to be turned on. If this rule is not followed, sometimes the DAC screen may read NO LOCK. Should this occur, turn off the D.BOB, the disc player and the DAC and re-power on the D.BOB first.

Table of Contents

3. Introduction

This high performance product supports one HDMI input to one HDMI output (for TV or monitor – for Blu-ray menus) and separate S/PDIF coax and Toslink optical audio outputs. It extracts from the HDMI data stream digital audio formats of PCM up to 24/192 coax and 24/176.4 Toslink optical and DSD64 via the DOP protocol over both coax and optical. It also supports video resolution up to 4K60Hz YCbCr 4:2:0. It includes two power supplies – internal AC and a DC power port, both controlled by a back panel switch. HDMI bandwidth is 10.2Gbps. Mini-USB input for firmware upgrades.

4. Features

☆ HDMI 1.4b, HDCP1.4 and DVI 1.0 compliant
☆ Inputs: 1 HDMI
☆ Outputs: 1 HDMI, 1 S/PDIF coax and 1 S/PDIF Toslink optical
☆ 1 mini-USB input for firmware upgrades
☆ Video resolution up to 4K60Hz YCbCr 4:2:0
☆ HDMI bandwidth up to 10.2Gbps
☆ HDMI audio format: PCM 2.0 and DSD64 2.0
☆ Audio sample rates up to PCM 24/192KHz and DS64
☆ Supports 10bits HDR (High Dynamic Range) pass through
☆ Compact design for easy and flexible installation

5. Package Contents

① D.BOB Digital Breakout Box
② 100 ~ 240V AC 50/60Hz Power Cable
③ International Power Cable Adapters
④ User Manual

6. Specifications

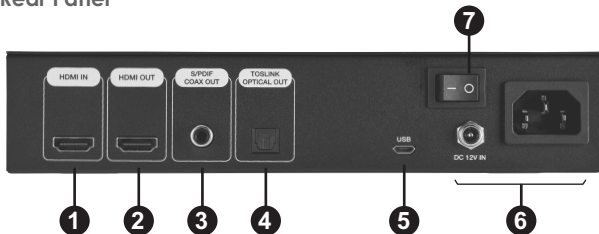| Technical	
HDMI Compliance	HDMI 1.4b
HDCP Compliance	HDCP 1.4
Video Bandwidth	10.2Gbps
Video Resolution	Up to 4K60Hz YCbCr 4:2:0
Color Space	RGB/YCbCr 4:2:0, YCbCr 4:4:4, YCbCr 4:2:2
Color Depth	8/10/12-bit (1080P60Hz) 8-bit (4K60Hz, 4K24Hz)
Coax / Optical Audio Formats	PCM 2.0, DSD64 2.0
HDMI Audio Formats	PCM 2.0 16/20/24-bit, DSD64
ESD Protection	Human-body Model: ±8kV (Air-gap discharge) , ±4kV (Contact discharge)
Connections	
Input ports	HDMI Type A [19-pin female] Mini-USB (firmware updates)
Output ports	HDMI Type A [19-pin female] S/PDIF Coaxial Audio [RCA] S/PDIF Optical Audio [Toslink]
Mechanical	
Housing	Metal
Color	Black, Light Grey Lettering
Dimensions	218mm(W)×120mm(D)×45.5mm(H) 8.5 in (W) x 4.75 in (D) x 1.75 in (H) (2.00 in w/feet)
Weight	1 kg (2.2 lbs)
Power Supply	Input: AC100~240V 50/60Hz Output: DC 12V/1A(US standards, CE/FCC/UL certified)
	100 ~ 240V AC 50/60Hz
Power Consumption	0.84W
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)

7. Operation Controls and Functions

7.1 Front Panel

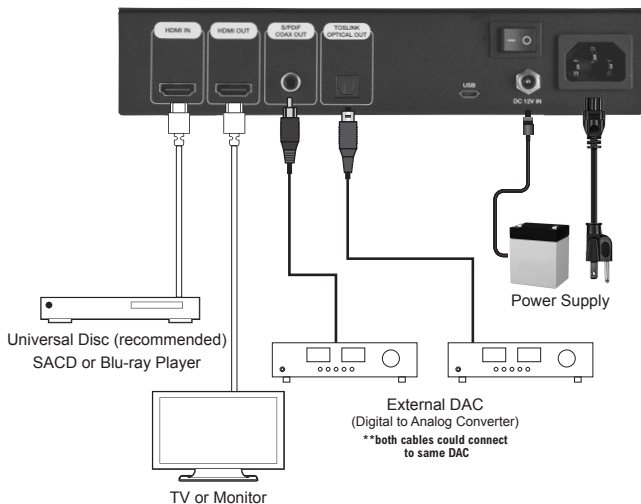| Number	Name	Function description
1	Power LED	The blue LED will illuminate when the product is connected to power via the AC or DC power inputs and the power switch is turned on.

7.2 Rear Panel

Number	Name	Function description
1	HDMI IN	Connect with HDMI cable to HDMI output source device such as universal disc player
2	HDMI OUT	Connect with HDMI cable to HDMI display device such as TV or monitor
3	COAX OUT	Connect to external DAC with 75 ohm coaxial cable
4	OPTICAL OUT	Connect to external DAC with Toslink optical cable

Number	Name	Function description
5	MINI-USB PORT	For firmware updates
6	AC POWER IN	Connect AC power with AC power cable.
	DC 12V IN	Connect 12V/1A adapter to AC wall outlet for power supply or connect to 12V batteries
7	Power switch	Turn on/off the power supply.

8. Application Example

Universal Disc (recommended)
SACD or Blu-ray Player

Power Supply

External DAC
(Digital to Analog Converter)
**both cables could connect
to same DAC

TV or Monitor

Premium High Speed HDMI and Premium Coax and Toslink cables are highly recommended.

Recommended player settings (may vary by manufacturer):

SACD Priority	Stereo
HDMI Audio	Auto
Coax/Optical Output	Bitstream
SACD Output	Auto

Since the D.BOB has an HDMI out for a TV, it can provide stereo hi-res DAC conversion for Blu-ray movies.

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