BIT & BEAT

BLUEDAC

HIGH DEFINITION BLUETOOTH DIGITAL CONTROLLER
DSD 256, 384kHz / 32bit

INSTRUCTION BOOK

DAC, DDC Audio Controller
Digital audio playback centered on Computer, Smart devices
Low-cost, high-quality sound reproduction

High-quality sound playback capabilities surpass CDs
32bit / 384kHz, DSD256 studio original sound playback
Streaming service available via network

Convenient expandability
Easy to use via USB
Wireless connection possible via Bluetooth
DDC, DAC function allow connection to existing audio systems

High-quality headphone amplifier
Adopts a highly versatile 3.5mm stereo headphone terminal

- Be sure to read the "User's manual" before use and use it correctly.

- The contents of this user manual may be changed without prior notice to improve product performance.

DSD
Direct Stream Digital

CONTENTS

Introduction

BIT & BEAT's BLUEDAC is the latest audio trend, the latest Hi-Fi USB-DAC capable of playing DSD64(2.8MHz) / DSD128(5.6MHz) / DSD256(11.2MHz).

In particular, wireless transmission using Bluetooth will create HI-FI sound that was previously difficult to experience in a wireless environment, creating a convenient and enjoyable music life using smart devices.

Features

BIT & BEAT BLUEDAC is a cutting-edge product that has the following functions to reproduce excellent sound. Using X-Core microprocessor from British company X-MOS it supports 32bit 384kHz and DSD Native DSD256 through the USB High Speed interface to play music in various file formats.

◉ DSD direct playback method

　DSD64, 128, 256 sound source playback through DSD Native function

◉ XMOS USB Solution

　Equipped with XMOS chipset for PC-FI users

◉ Wireless transmission function

　Convenient music enjoyment using smart devices Bluetooth function

◉ MQS(Mastering Quality Sound) playback function

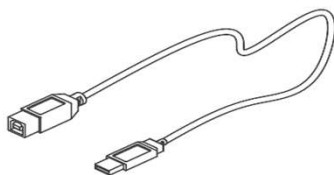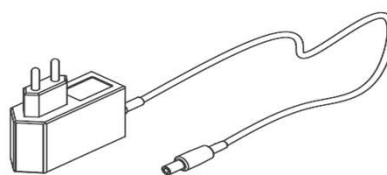　32bit / 384kHz sound file playback function

Components

BLUEDAC
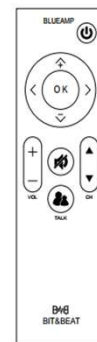
Remote Control
(Batter included)
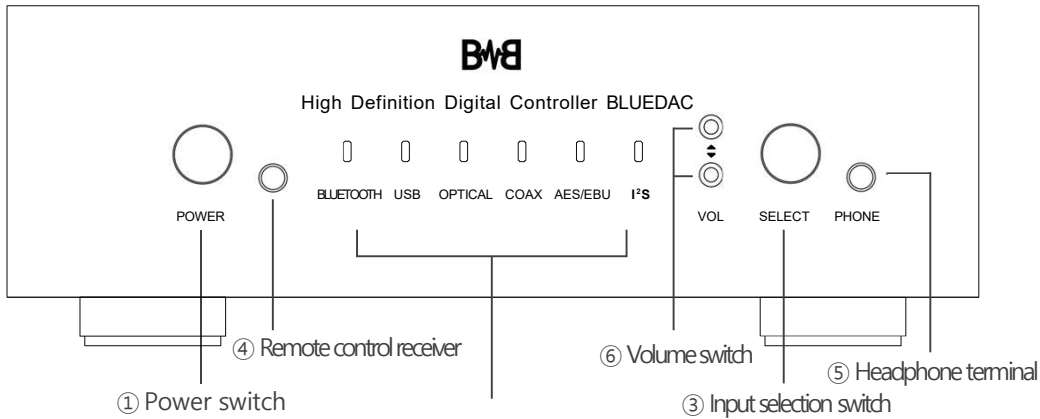
USB cable

Power adapter

Antenna

1) The image of this product manual is for user's understanding and may differ from the actual product and may be changed without prior notice. Other ones than basic components can be purchased separately.
2) This manual can be downloaded from https://www.bitnbeat.com Customer Support - Downloads.

Structure

Front

High Definition Digital Controller BLUEDAC

BLUETOOTH USB OPTICAL COAX AES/EBU I²S   VOL SELECT PHONE

POWER

④ Remote control receiver

⑥ Volume switch

⑤ Headphone terminal

③ Input selection switch

① Power switch
Power ON / OFF

When turned off, the power switch button must be pressed for 1.5 seconds.

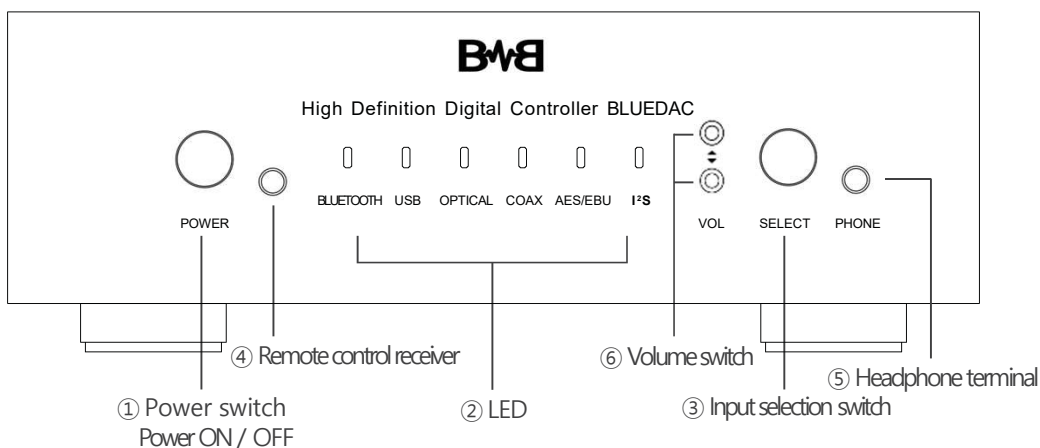| ② LED		
BLUETOOTH	BLUETOOTH selection LED	Volume UP : Red Volume DOWN : Green Volume Max/Min : Orange
USB	USB selection LED	
OPTICAL	OPTICAL selection LED	
COAX	COAXIAL selection LED	
AES/EBU	AES/EBU selection LED	
I²S	I²S selection LED	

Rear

Remote Control

power

* DAC

Volume Up — Input — Mute — Input — Volume Down

Volume Up/Down — Mute — Channel — Talk

* Amplifier
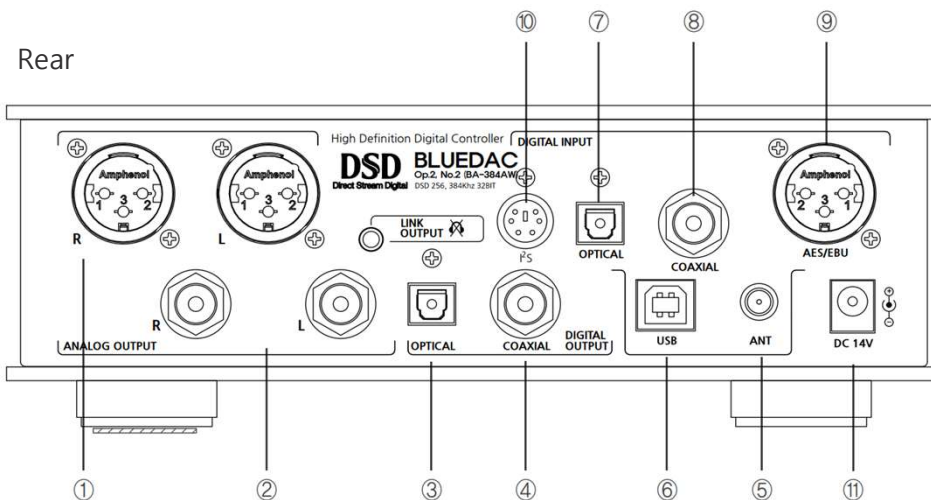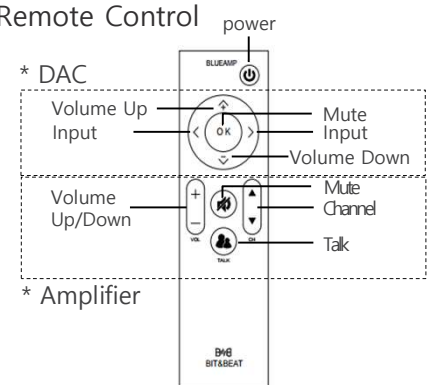
| Analog Output	①	BALANCE Output	LINE OUTPUT TERMINAL
	②	UNBALANCE Output	LINE OUTPUT TERMINAL
Digital Output	③	OPTICAL Output	
	④	COAXIAL Output	
Digital Input	⑤	Wireless ANT	BLUETOOTH ANT (Wireless connection to laptops and smart devices)
	⑥	USB Input	USB INPUT TERMINAL (PC, laptop USB terminal connection)
	⑦	OPTICAL Input	
	⑧	COAXIAL Input	
	⑨	AES/EBU	
	⑩	I²S Input	
Power	⑪	Power Input	DC 14V 1A CONNTECT ADAPTER (For power, the included adapter or constant voltage adapter is recommended.)

Product Usage

BᴧB

High Definition Digital Controller BLUEDAC

| | | | | | | | | | |
| BLUETOOTH | USB | OPTICAL | COAX | AES/EBU | I²S | | VOL | SELECT | PHONE |

POWER

④ Remote control receiver   ⑥ Volume switch

① Power switch   ② LED   ⑤ Headphone terminal

Power ON / OFF   ③ Input selection switch

---

① POWER(Power Switch)

ON	Press lightly
OFF	Press for about 1.5 seconds or more

③ Input selection switch

(Setting mode when used simultaneously with power switch)
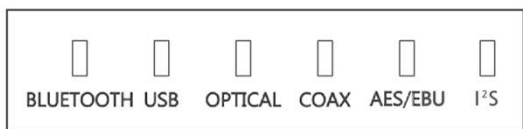
**② LED(Power ON) Default selection**

USB LED ON

Select(③) Change one channel at a time when button is selected

---

BLUETOOTH

Select connection	Connected	Play
BLUETOOTH	BLUETOOTH	BLUETOOTH
Green blink	Green fix	Orange Fix

VOL(Volume Switch)

▲ Volume UP	The volume up button is operated, Bluetooth red LED blinks. At the highest volume lights switches to orange LED.
▼ Volume DOWN	The volume down button is operated, Bluetooth green LED blinks. At the lowest volume light switches to orange LED.
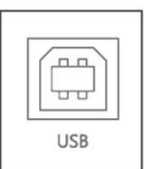
USB input selection (OPTICAL, COAX, and AES/EBU selection LEDs simultaneously express the resolution of DSD sound sources.)

Select Input	Red
Connect USB	Green
PLAY	Orange

|		BLUETOOTH	USB	OPTICAL	COAX	AES/EBU	I²S
PLAY	DSD64		Orange	Green			
	DSD128		Orange		Green		
	DSD256		Orange			Green	
	PCM		Orange				

■ Green   ▨ Orange

※ How to fix INPUT selection

: If you press the POWER button and the SELECT button at the desired location at the same time for 2 seconds, it will be automatically saved, and the volume value setting will also be automatically saved.

※ Auto-set volume value: Press the POWER button and SELECT button simultaneously and save the last volume value.
- Headphone Volume
- LINE OUT Volume

※ Please contact the manufacturer for compatibility with the I2S terminal.
☞ Provide information on the usage environment through a separate notice in the future.

Set up Wireless Connection

1. Set up wireless (Bluetooth) with your smartphone
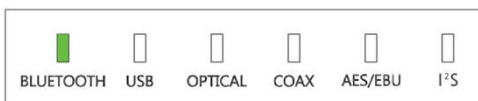

Smartphone   BLUEDAC
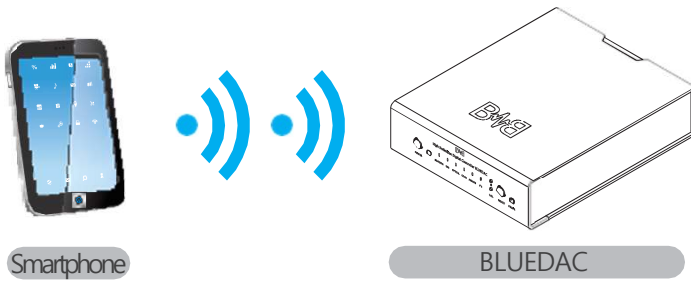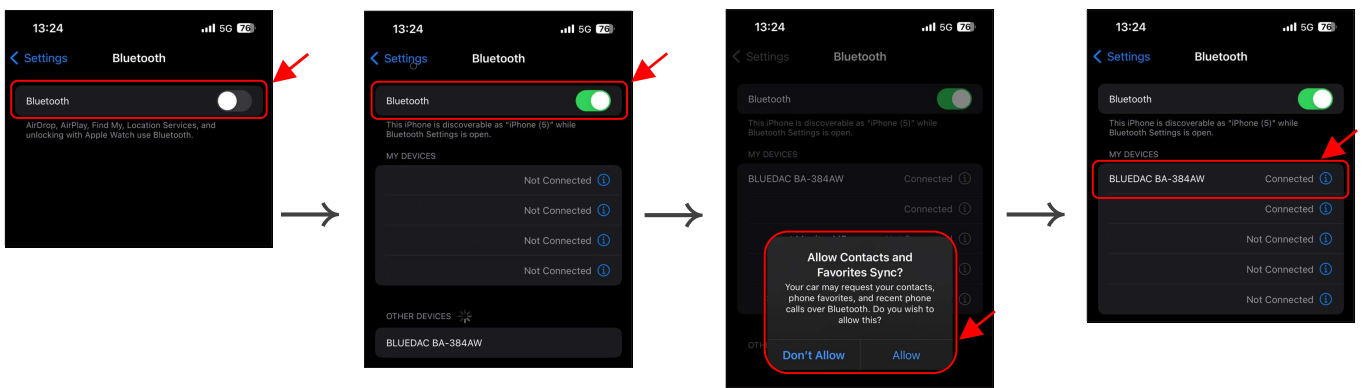
1) Connect BLUEDAC.

① Go to environment
   settings.

② When you turn on
   bluetooth, recognizeable
   devices will appear.
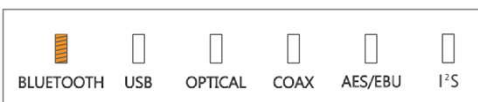
③ Select BLUEDAC
   BA-384AW

④ BLUEDAC BA-384AW
   Is connected.

2) The green LED lights on when the connection is complete.

3) When you play various playable applications such as music, video playback, YouTube, etc., sound sources are output.

4) When BLUEDAC outputs an audio sound source, the orange LED stays lit and the sound source is output.
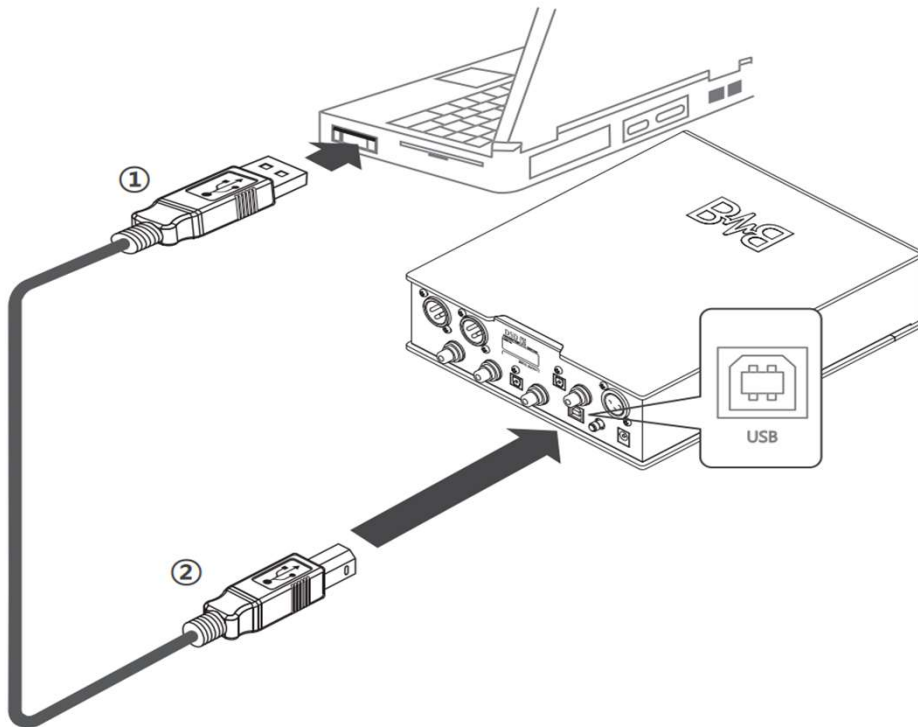

5) If the connected device disappears without terminating the connection, it enters connection
  standby mode. At this time, the green LED waiting for connection blinks.

BIT & BEAT BLUEDAC
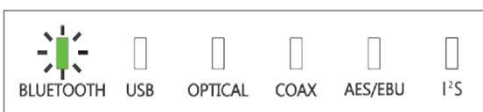
Driver Installation

1. Connect computer

Connect the USB cable to the computer and BLUEDAC main unit in the correct direction.

Press the Power button to turn the power on.
If the driver file is not installed, the USB selection LED on the front is displayed in red.
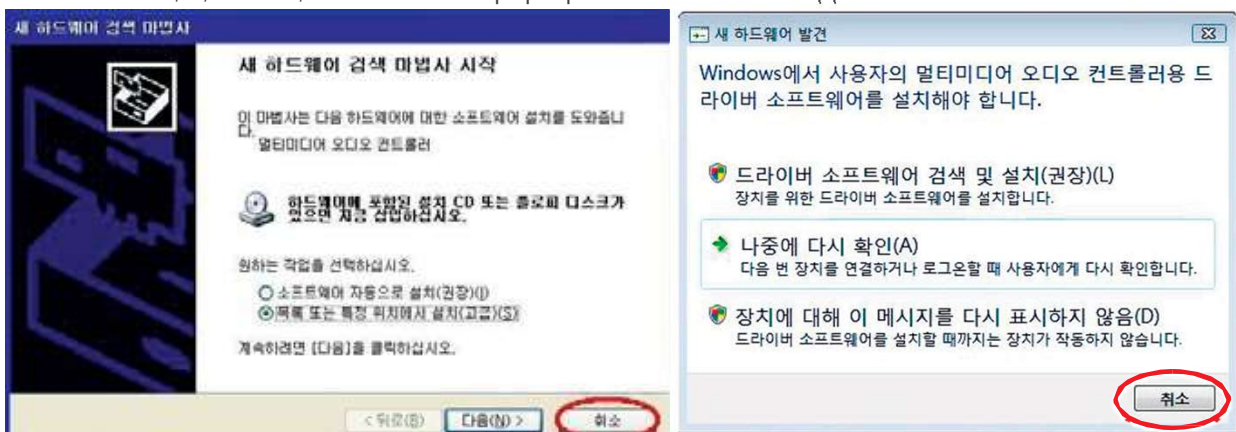When the driver file is successfully installed, it is displayed in green.

2. USB driver installation
- WINDOWS driver installation

When you connect the USB port, the "Add New Hardware Wizard" will appear as shown in the picture below using the Plug & Play function.
*In Windows 7, 8, and 10, the installation pop-up window does not appear.

<WINDWOS XP>   <WINDOWS Vista>

After clicking "Cancel" as shown in the picture above, select and run the driver file from the website (www.bitnbeat.com) according to your Windows environment. Select "Next" as shown in the picture below to automatically install the driver.
(Please note that the above window does not appear in Windows 7, 8, and 10, so you can proceed with driver installation right away.)

Driver Installation

* You can download the latest driver file from the Bit & Beat website (www.bitnbeat.com).
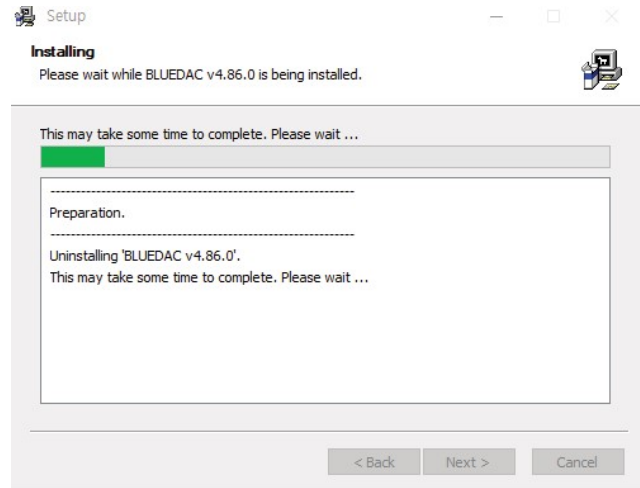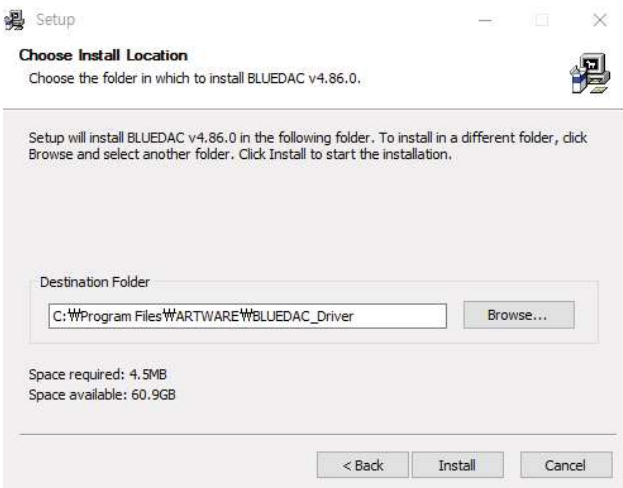
Driver Installation
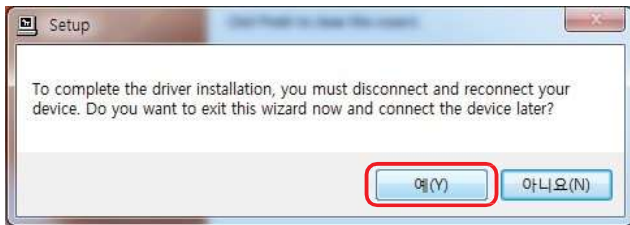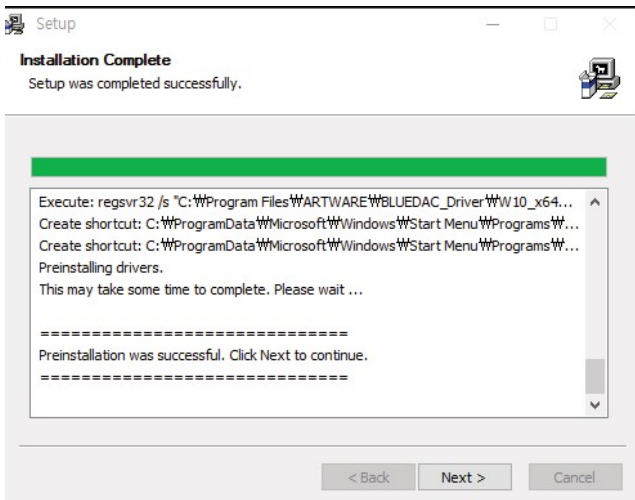
Select Yes, then disconnect BLUEDAC Audio from the computer and reconnect it.

If BLUEDAC is not recognized after installing the driver, please check Windows updates to keep it up to date.

Press the SELECT button to set the desired mode and enjoy music.

** Mac installation method
- MAC OS can be automatically recognized and used without installing a separate driver.

Specifications

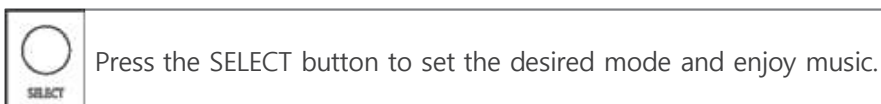| Model	W X H X D[mm]	BLUEDAC Op.2.No.2 (BA-384AW)		
Dimension		200mm X 60mm X 240mm(Terminals and ANT excluded)		
Weight		About 1.6kg		
Input		Bluetooth radio input (PC, smartphone wireless connection support) USB input terminal OPTICAL input terminal COAXIAL input terminal AES/EBU input terminal I2S input terminal		
Output	Analog	BALANCE Output Terminal (XLR)		
		UNBALANCE Output Terminal (RCA)		
	Digital	OPTICAL Output Terminal		
		COAXIAL Output Terminal		
Radio Communication	Bluetooth	ISM 2.4GHz Communication distance : 10m (CLASSII) Supporting Codec : APT-X, SBC (if connected to an APT-X unsupported device, it is automatically changed to the SBC type)		
LED	Bluetooth	Select Bluetooth Input		
	USB	Select USB Input		
	OPTICAL	Select OPTICAL Input (On if inputting DSD64		
	COAXIAL	Select COAXIAL Input (On if inputting DSD128		
	AES/EBU	Select AES/EBU Input (On if inputting DSD256)		
	I2S	Select I2S Input		
S / N		110dB		
Outout Impedance		Within 50 ohm		
Service Temperature		0°C ~ 40°C		
Power		14V / 1A		
Power Consumption		4.8W		
Support Sampling	USB	Max 32bit 384kHz		
	Native DSD	DSD64 (2.8MHz) / DSD128 (5.6MHz) / DSD256 (11.2MHz)		
	DXD	DXD 24bit 352.8 kHz ~ 32bit 348 kHz		
	PCM	Bit depth : 16/24/32 bit Sample rate : 44.1, 48.0, 88.2, 96.0, 176.4, 192.0, 352.1, 384 kHz		
	Digital In / Out	S/PDIF Optical, Coaxial on TOS-LINK 44.1 ~ 192 kHz IEC-60958, S/PDIF Compatible		

Safety Precautions

⚠️ **WARNING**

-This product is a one that generates a basic heat, so a heat may be detected when used for a long time.
- Install the product at a distance from the walls and peripherals to ensure proper ventilation

- Use this device at normal room temperature.
- Avoid hot places like flames. Stoves, and flammable materials.
- Avoid places with high humidity. It may cause electric shock or malfunction.

- In case of thunder or lighting, please unplug the power cord. It may cause damage to the product due to overcurrent.
- In case of damage due to an accident such as foreign matter entering the product or falling, please remove the power plug.

- Use only accessories or components authorized by the seller or manufacturer.
- Failure to do so may result in injury, overheating, or fire due to abnormal operation.
  The seller or the manufacturer can not be held responsible for any damage or malfunction of the product caused by user's arbitrary change or modification.

⚠️ **CAUTION**

- Short the speaker terminals (+/-) and never operate

- Do not handle this device with wet hands, as it is an electronic device that is supplied with power.

- Be careful not to apply strong impact to the device. Internal important parts or transformer fixing parts can be damaged.
- Insert the power plug firmly. In case of shaking or unstable condition, it may cause fire or other accidents.

- Be careful that the power cord is not pressed against heavy objects such as furniture or caught by feet, and the damaged power cord should be replaced immediately.

- Do not place containers, lights or candles containing liquids such as vases, flower pot, or cups near the products.
- When cleaning the product, please use a dry towel. There is a risk of product variation.

! If you notice odor or noise when using the product, stop using it and contact your dealer immediately for action.

Troubleshooting

This manual will help you solve the most common problems.

Power is not turned on.
+ Check if the power cord is properly connected.

No sound is heard.
+ Check if the cable is properly connected to the input and output terminals of the product.
+ Make sure the device connected to the input matches the selected number.

Sound quality is poor and distorted.
+ Are all the cables connected correctly? If necessary, turn off the power, disconnect the connector, and then reconnect it. Then turn the power on again.

! This product requires aging time on the nature of the device.
! If you have any questions about using the BLUEAMP device, please contact your dealer.

Troubleshooting

You may experience difficulty operating BLUEDAC until you become familiar with it. This guide will help you solve the most frequently encountered problems.

No power
+ Check whether the power cable is properly connected to the adapter and the adapter's DC cable is properly connected to the product.

There is no sound
+ Please check whether the cables are properly connected to the input and output terminals of the product.

The sound quality is poor and distorted.
+ Are all cables connected correctly? If necessary, turn off the power, disconnect the connector, and then reconnect. After that, turn the power back on.

Noise/interference occurs when playing USB sources
+ Are the drivers provided on your computer installed and operating properly?
+ Are you using a genuine USB cable?

What to do when wireless connection does not work
+ If the wireless connection is terminated abnormally, the device's connection information may be incorrect.
+ After removing the registered device from Settings -> Bluetooth On
+ You can reconnect by searching and selecting BLUEDAC BA-384AW.

Check Page 4
To set up wireless reference
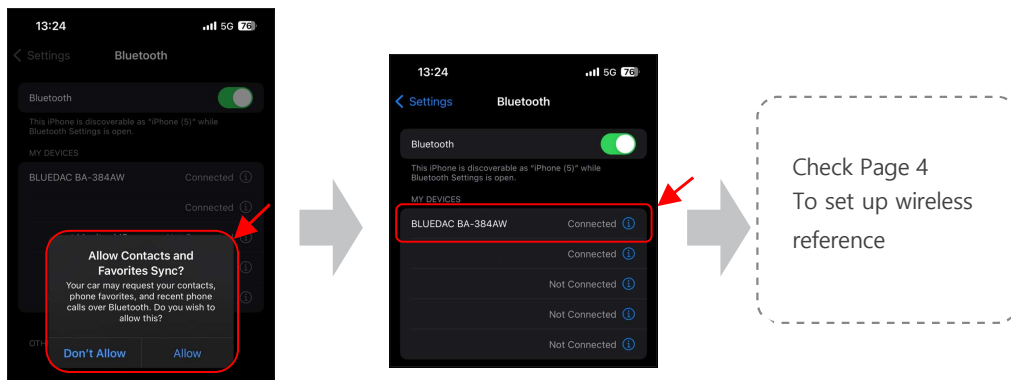
When there is no sound

+ Check whether power is supplied properly.

+ Check whether the cable connection to the connected device is properly made.

+ Make sure there is a wireless connection via Bluetooth.

+ Make sure the volume of the connected device is turned off.

> ! Due to the nature of this product, Aging time is required.

How the power switch works

When you press the power switch on the main unit to turn it on, all power is turned on at the same time.
You can then turn it on/off with the power switch on the remote control.
When you turn off the power using the remote control, the system returns to the ready state.
At this time, if you press the power switch on the main unit to turn it off, all power will be cut off and you will not be able to turn it on with the remote control.
In this case, press the power switch on the main unit to turn it ON once and then use the power switch on the remote control.

> ! If you have any other questions regarding the use of BLUEDAC devices, please contact your sales representative.

BIT & BEAT BLUEDAC

Product Warranty

About the Product - Based on the consumer compensation regulations, a warranty for the product will be provided, as shown below.

| Product name | | Purchase Date | | Serial No. | | **Warranty period: 1 (one) year from date of purchase** |
| Model name | | Where to purchase | | Sale Price | | |

Consumer Damage types		failures and defects in performance, functions that occurs naturally during normal use within retention period of the parts	Compensation details	
			Within the warranty period	After the warranty period
If the product is in need of major repairs within 10 days after purchased			Product replacement Or refund of the purchase price	—
If critical parts are in need of repairs within 1 month after purchased			Product replacement	
If the replaced product is in need of major repairs within a month after replaced			Refund Of The purchase price	
When replacement of parts is not possible				
Repairs Available	If defects in the product are caused		Free repair	Paid repair
	After repairing, the same defects of a product are generated 4th times		Product replacement Or Refund Of Purchase price	—
	Failures of the various parts are repaired, but a failure is regenrated (5th times)			
Repair is Not Possible	When repair is not possible			
	If repair parts cannot be repaired after the retention period has passed			
	Damage caused during transportation and installation process when purchasing products		Product replacement	—

*Refunds : Refund the purchase price (receipts to be submitted)
Please contact us for maintenance and repair at following phone number. If you send us brief information about a fault condition
In case a failure, it will be more convenient

The following failures will be treated at cost.

- Failure due to user negligence

- Connection to the power supply other than rated power

- Failure due to user negligence

- Deliberate disassembly and repair by the user

- Breakdown by natural disasters (fire, flood, earthquake, lightning, etc.)

- When supplies are replaced

Contact : Sales

BIT & BEAT BLUEDAC

BIT & BEAT BLUE DAC

High Definition Bluetooth Digital Controller