

# **PHIL JONES BASS**

## **SUITCASE COMPACT BG-400**



## **OWNER'S MANUAL**

Thank you for purchasing the PJB SUITCASE COMPACT BG-400. A great deal of dedication and passion went into designing and building this no-compromise, high performance combo amplifier. It was conceived to be a dedicated amplifier for the "connoisseur" bassist. Reading and following this manual will enable you to get the best performance from the amp and ensure its longevity.

## READ THIS FIRST

- Before using the SUITCASE COMPACT please read ALL the instructions.
- On receipt of product, check for any signs of physical damage arising from shipping. If any damage is visible, contact your retailer.
- Do not install this equipment in a confined or building-in space such as a bookcase or similar unit. The amp should remain in well ventilation conditions at an open site. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, table-cloths, curtains, etc.
- **WARNING:** Only use attachments/accessories specified or provided by the manufacturer.
- **WARNING:** To reduce the risk of fire or electric shock, do not expose the amp to rain or moisture. The amp shall not be exposed to dripping or splashing. Objects filled with liquids such as a coffee cup shall not be placed on top of the amp.
- When not in use and during movement, please take care of the power cord, e.g. tie up the power cord with cable tie. It shall be free from sharp edges which can cause abrasion of the power cord. When put into use again, please make sure the power cord being not damaged. If any damages found, please replace it with one specified by the manufacturer or with the same specifications as the original one.
-  Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

## OVERVIEW OF THE SUITCASE COMPACT

This model is based on the superlative and un-compromised performance of the original PJB Suitcase. It is more powerful but physically smaller, in fact the same size as our Compact 4 bass cabinet. It has an incredibly punch sound cutting through air as "a knife through butter", with a solid and powerful low end response normally associated with a physically much larger combo.

It features a two-channel pre amp with our unique 3 band EQ. Simple to find "your sound", this EQ has amazing control and transparency that allows you to unmistakably hear the true characters of your own playing and instrument.

In the heart of this amp lies a formidable ultra high-energy power supply. It feeds an efficient class D power amplifier which utilizes almost 95% of this energy to drive the four internal PJB "Piranha" speakers.

The Suitcase Compact puts out a healthy 300 watts RMS onto its own speakers. Adding a Compact 4 cabinet it becomes 500 watts, and adding a Compact 8 it becomes 575 watts.

The future of amps is trending to: "smaller and better" but with the Suitcase Compact bass combo, the future is here now!

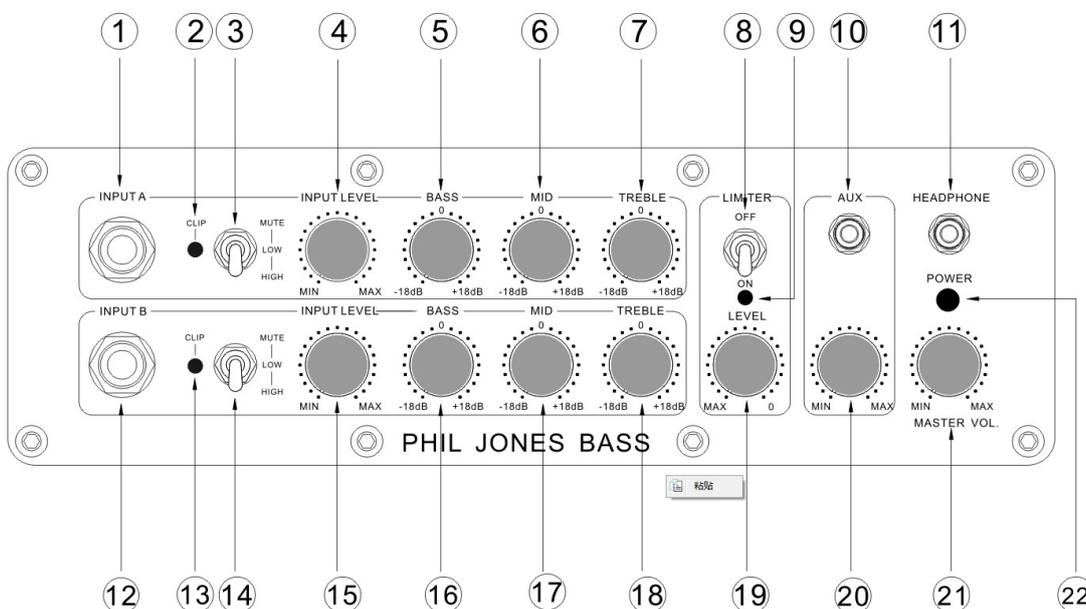
## FEATURES

Two Switchable LOW(Active) / HIGH (Passive) inputs with mute function.

- Two 3 Band EQ.

- Stereo input for Drum machine or I-pod/MP3 player.
- Optical Limiter.
- Headphone Output.
- Pre-amp Output.
- Balanced Line Output with ground lift.
- Extension speaker output can drive 8-16 ohm speakers.
- Dual AC Voltage 120/240V Operation.
- Sophisticated protection circuitry.
- Special “Soft-Clipping” 500watt Amplifier.
- Ultra low noise pre amplifier circuit.

## FRONT PANEL OVERVIEW



### 1. INSTRUMENT INPUT JACK CHANNEL A

This is a standard ¼ inch mono jack socket. This is a high impedance input that can be used with Piezo pickups on double basses.

### 2. CLIP/ MUTE INDICATOR

When the amplifier output is clipping, the LED will light up in red. When muted, the LED will light up in green.

### 3. INPUT GAIN SWITCH CHANNEL A

High: higher sensitivity, high impedance input. for passive guitars.

Low: lower sensitivity input setting for guitars with onboard electronics.

Mute: mute the input stage, when switch on, the clip LED will light up in green.

### 4. INPUT LEVEL SENSITIVITY CHANNEL A

### 5. BASS EQ CONTROL.

## **6. MID RANGE EQ CONTROL**

## **7. TREBLE EQ CONTROL**

## **8. LIMITER IN/OUT SWITCH**

Sends signal through limiter or bypass.

## **9. LIMITER INDICATOR**

This blue L.E.D (Light Emitting Diode) will light up when the signal is being compressed. This will vary on how hard the instrument is played and how the threshold is adjusted

## **10. AUX Input**

Stereo input for Drum machine or I-pod/MP3 player.

## **11. HEADPHONE OUTPUT JACK**

This jack accepts ¼ inch stereo headphone jacks.

## **12. INSTRUMENT INPUT JACK CHANNEL B**

This is a standard ¼ inch mono jack socket. This is a high impedance input that can be used with Piezo pickups on double basses.

## **13. CLIP/ MUTE INDICATOR**

When the amplifier output is clipping, the LED will light up with red. When muted, the LED will light up with green.

## **14. INPUT GAIN SWITCH CHANNEL B**

High: Higher sensitivity, high impedance input for passive guitars.

Low: Lower sensitivity input setting for guitars with onboard electronics.

Mute: mute the input stage. When switch on, the clip LED will light up in green.

## **15. INPUT LEVEL SENSITIVITY CHANNEL B**

## **16. BASS EQ CONTROL.**

## **17. MID RANGE EQ CONTROL**

## **18. TREBLE EQ CONTROL**

## **19. COMPRESSOR THRESHOLD LEVEL CONTROL**

This will vary the level and the limiter threshold. The compression ratio is 3 dB to 1. Adjust this to suit your playing style and output power of your instrument. The blue LED will light up when the signal is being compressed. This will vary on how hard the instrument is played and how the threshold is adjusted.

## **20. AUX INPUT VOLUME CONTROL**

Control the level of backing/rhythm track.

## **21. MASTER VOLUME CONTROL**

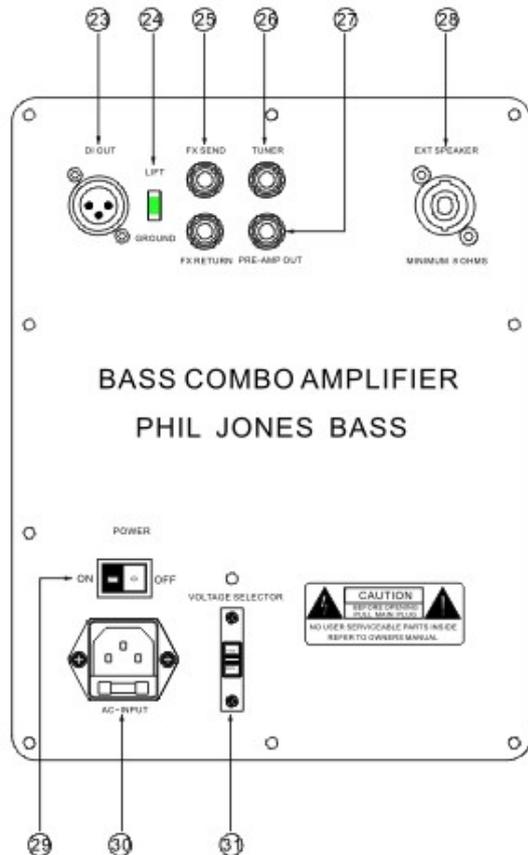
This is the master volume control. It controls how much power you send to the speakers as well as the line out socket on the back of the amp. When setting up your tone or plugging in your instrument, you should keep this control at a low level. Instruments are all different when it comes to how much output is from the pickups. It is likewise for players depending on how hard or soft you play. Note this control is a true “Audio Taper” control so that the level position may be set higher compared to amps that use a “Linear Taper” control. An “Audio Taper “ control has far more precision in controlling your output and uses the full rotation to control the level. A Linear control on the other hand uses the first few degrees of turn to give the impression that the amplifier has more volume than what it actually does.

## **22. POWER LED INDICATOR**

With power switched on, the LED light will turn bright blue.

NOTE: When power is on, the indicator will light up, if no signal come in the standby mode will active after 30 minutes, power indicator will turn off. When signal come in from INPUT or AUX socket, the amplifier will restart in about 2 seconds.

## **BACK PANEL OVERVIEW**



### 23. XLR-DIRECT OUTPUT SOCKET

This is an ultra-low impedance (200) balanced line out for use with recording or PA mixing consoles. This output is not controlled by the volume control. Changing the level on your instrument will however, vary the DI output.

### 24. GROUND LIFT SWITCH

This allows the grounding of balanced out socket to be disconnected. This is useful if you are experiencing hum caused by grounding loops/problems.

### 25. FX SEND & RETURN SOCKETS.

Connect the FX send to auxiliary FX unit input. Connect the FX Return to auxiliary FX unit output.

### 26. TUNER OUTPUT.

Connect to instrument tuner. This output can also be used as an additional line out.

### 27. PRE AMPLIFIER OUTPUT JACK

These are used for driving a second amplifier such as the PJB BP-800 amplifier or even a tuner.

### 28. EXTENSION SPEAKER OUTPUT

This output is for driving an additional 8 ohm speaker such as the PJB Compact-4. Do not use a speaker with an impedance of less than 8 ohms as the amp will get too hot and shut down. A "Speakon" connector is used instead of a conventional jack since the amplifier's output is strong and therefore delivers higher current than jack sockets can handle.

## 29. POWER ON/OFF SWITCH

This switches the main power on and off in the amplifier. When you turn on the power, it will have about 2 seconds delay to protect the speaker.

Do not leave the amplifier plugged into a power source for a long period of time when not in use.

## 30. AC INPUT SOCKET & FUSE

Connects the amplifier to AC power supply. Always use a grounded plug and make sure the AC cable is more than 3A rating at 250-volt AC. If you require a longer AC power cord, we recommend the PJB heavy duty 20 foot power cords. These are available as an accessory. Use a slow blow ¼ inch fuse.

## 31. AC INPUT-VOLTAGE SELECTOR

Switches the amplifier to run on either 110-120 volt or 220-240 volt AC power. Never try to run the amplifier on a 220-240 volt supply when switched to 110-120 volt. This can cause major damage to the amplifier.

## GETTING STARTED

**BEFORE SWITCHING ON POWER** – Check that the voltage selector is set to the correct voltage in your country. (110volt-120volt USA / Japan or 220-240V Europe/ Australia.)

ALWAYS USE A HIGH QUALITY GROUNDED AC POWER CABLE.  
NEVER USE THIS AMPLIFIER WITH THE GROUND CONNECTION REMOVED. We recommend you use original PJB cables.

## OPERATION & POSITIONING

TURN THE VOLUME DOWN on the SUITCASE COMPACT before plugging in your instrument.

### Positioning the SUITCASE COMPACT for Best Sound

Often, playing in different venues will cause your bass to sound different. This is partially due to the acoustics of the hall influencing the low frequency waves coming from your speaker. Bass waves are large and room dimensions heavily influence them when the walls reflect the sound waves, causing them to collide by adding together or canceling each other out. This causes some fundamental notes (the ones you feel more than hear) to ring out louder than others, and some notes not to be heard at all.

Here is an indication of where fundamental bass frequencies are, showing open string's approximate frequencies and acoustic wavelength:

F# string	24Hz	46 feet
B string	31Hz	36 feet
E string	41Hz	27 feet
A string	55Hz	20 feet
D string	73Hz	15 feet
G string	98Hz	11 feet
C string	130Hz	9 feet

This may give you some indication of the offending notes (frequencies) that may be booming or resonating louder or quieter than others. For example if your speakers are five feet from a wall, the

open A string may sound weak. That could be because the path length of the reflected sound off the wall from your speaker is exactly corresponding to half a wavelength on the open A string, causing at that particular note to cancel out.

Where you position the SUITCASE COMPACT will ultimately affect your low frequency limit. For best results, keep the SUITCASE COMPACT on the floor. Placing it on objects off the floor will cause it to sound thin and lack bass punch. Placing the SUITCASE COMPACT with the back close to a wall will help reinforce the lower notes. Placing it in a room corner, will further enhance the low notes.

Room size makes a large difference in how deep the bass will sound. The further the distance to the listener, the less the bass will be. This is due to the physics of acoustics not the unit itself.

Unfortunately for bass players, low frequencies are always very difficult to control with room acoustics. The reproduced wavelengths of the notes you are playing often correspond to the room dimensions, in which case the reflected sound off the walls interferes with the sound from the speaker as you get further away from it.

## **Setting Up the Limiter**

Although a limiter is not essential to bass amplification, it can be a useful tool in smoothing out the character of your instrument or playing style. The SUITCASE COMPACT limiter has a preset compression ratio of 3 to 1. For each additional increase of 3dB above the set threshold, the increase in level is actually 1dB. So the dynamic range of your instrument is reduced.

First set up the limiter by having the compression control (7) set fully clockwise. Now switch on the limiter (15). Start playing and turn control (7) counter-clockwise. You will see the blue light start to come on which is the indication that the limiter is now working. Set this control to suit your taste.

## **TRANSPORTING AND STORING SUITCASE COMPACT**

When transporting in a vehicle, it is recommended that you use an external case or heavy duty cover to prevent it being damaged by falling over or other objects falling on it.

### **When Storing:**

- Keep the SUITCASE COMPACT in a dry location preferably at room temperature.
- Do not store the SUITCASE COMPACT in temperatures below -20 Degrees C or above 40 Degrees C.
- Do not allow it to get wet. If this occurs, never turn it on in this condition.
- Do not leave the SUITCASE COMPACT connected to a power source.

## **SPECIFICATIONS**

### **Speaker**

Computer Optimized Vented Enclosure

Speaker Frequency Response: 35Hz–15KHz

Speaker Compliment: 4 x 5inch proprietary, extended-range drivers

Speaker Sensitivity: 93dB/W/M

Internal Speaker Impedance: 8 Ohms

Dimensions(WxDxH): 14.2 x 12.8 x 13.4 inch

Weight: 40 lbs.

### **Amplifier**

PJB 500 watt D CLASS amplifier with soft clip feature

### **Frequency Response**

Passive and Active input: 10Hz -30KHz

### **Maximum Output Power**

LOAD	OUTPUT (Watts RMS)
8Ω	300
4Ω	500

### **Signal to Noise Ratio**

≥85dB(A) (EQ off, Volume on Full.)

### **Levels**

High Input: 30mV-1.2V

Low Input: 80mV-2.7V

Pre Amp Out: 1.2V

FX send: 600mV

Bal. Line Out: Typical 350mV

### **Compressor / Limiter**

Gain: 0dB

Compression Ratio: 3dB: 1dB

### **Graphic EQ**

80, 1K, 12K at +/- 18dB

### **Protection Circuits**

1. AC line filter.
2. Slow-blow Fuse: 6.3A / 250V for 110V~120V, 4A / 250V for 220V~240V
3. AC Transformer: auto cut off at 130°C, auto reset at 80°C.
4. Transistor Thermal Protection: auto cut off at 90°C.
5. Loudspeaker Short-Circuit Protection.
6. DC Output Protection.

### **Included Parts**

6 ft AC Power Cord

## **SERVICE/WARRANTY INFORMATION**

The Suitcase Compact BG-400 carries a 2-year limited warranty on parts and labor.

Products must be purchased from an authorized PJB dealer.

Buyer must complete and return the enclosed warranty card within 15 days of purchase, or register online by [www.pjbworld.com](http://www.pjbworld.com)

This warranty covers defect in materials or workmanship that occurs in normal use. Within warranty period PJB or its local distributor will repair or replace the defect unit free of labor and parts charge. It is the buyer's responsibility to use the unit strictly according to instructions written in the owner's manual.

This warranty is not transferable; it is provided to original owner only.

Damage/defects caused by the following conditions are not covered by this warranty:

- Improper handling, neglect or failure to operate the unit in compliance with the instructions given in user manual;
- Connection or operation in any way that does not comply with the technical or safety

- regulations applicable in the country where the product is used;
- Repairs or modifications by anyone other than authorized PJB service agent;
- Damages/defects caused by force majeure or any other condition that is beyond the control of PJB.

**IMPORTANT:**

- In all warranty issues your first line of communication should be to the retailer you purchased from, even if you have purchased product from an online source.
- When a local distributor is available, customer who prefers to purchase across country online maybe required to pay shipping charges to retailer in order to obtain service.

**Warranty policies differ in countries outside of USA. Please check with local distributors for warranty information in your region. Register first with your local distributor if available will give you better and quicker service when needed.**

Further questions, please contact your local distributors, or PJB by email [info@philjonespuresound.com](mailto:info@philjonespuresound.com).

**PHIL JONES BASS**

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For servicing outside USA please contact our distributor in your country.  
Information can be found on our website.

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