Phil Jones Bass

PJB ROADCASE



OWNER'S MANUAL

Thank you for purchasing the PJB ROADCASE. A great deal of dedication and passion went into designing and building this no-compromise, high performance compact-combo amplifier. It was conceived to be a dedicated amplifier for the "connoisseur" bassist. Reading this manual will enable you to get the best performance from it so that you may enjoy many years of service.

READ THIS FIRST

- Before using the ROADCASE 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 dealer.
- Keep all original packing.
- Do not use this amplifier in a way that would compromise its ventilation system. When operating, never cover the heat sink on rear panel.
- Do not locate this amplifier near any heat source.
- This amplifier must be connected only to a power source specified in this manual.
- For safety do not leave the amplifier plugged into a power source for long periods of time when not in use.
- Do not let any liquid or foreign objects fall into any openings on the amplifier.
- Never use this amplifier if it has:
 - 1. Suffered any physical damage.
 - 2. Been subjected to any liquids, rain or moisture.
 - 3. Damaged cables connected to it.

If any of the above occurs, the amplifier should be examined by qualified service personnel.

- Always operate this amplifier with the correctly rated fuse.
- Never use this amplifier without proper grounding.
- The mains plug is used as disconnect device, the disconnect device shall remain readily operable.
- Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.
- 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.
- The apparatus shall not be exposed to dripping or splashing.

OVERVIEW OF THE ROADCASE

The ROADCASE is a compact, powerful combo (750 watt RMS) amplifier dedicated to the reproduction of all bass instruments. Although it is a dedicated bass amplifier, this unit will work ideally for other instruments such as keyboards, due to its natural hi-fi sound character. The full power of this amplifier is utilized across the 12 internal loudspeakers so there is no need for an extension loudspeaker connection.

The control panel features two instrument channels plus a separate auxiliary input for other devices such as MP3 player or Drum machine.

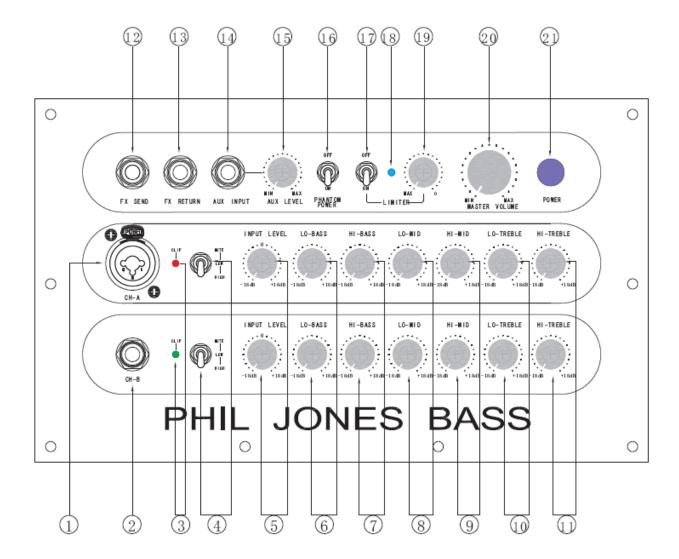
The twelve 5-inch proprietary PJB NEOPWER drivers have been acoustically optimally loaded by precise computer analysis to provide a full-range, dynamic sound that can play down to an open B string and lower with ease. All PJB amplifiers provide significant bass extension when compared to other brand bass amplifiers when it comes to reproduction of fundamental tones. All 12 drive units operate across the full audio spectrum and since there is no crossover to soak up amplifier power, or horns to blow out. The reliability and sound quality is second to none. 2 of the speakers are set at an angle so the player can hear the same tone that is emanating out to the audience or rest of the band.

There is a corner handle to the rear of the control panel and tilt back wheels for ease of moving the unit plus a recessed handle on the bottom to allow two people to carry the unit up or down a staircase with ease.

FEATURES

- Two Channel with Active / Passive inputs and muting.
- Phantom power for condenser microphones.
- Auxiliary input. For stereo sources.
- Two 6 Band Rotary EQ
- Global Optical Limiter
- Headphone Output
- Pre-amp Output
- Balanced Line Output with ground lift.
- Dual AC Voltage 120/240v Operation
- Sophisticated protection circuitry
- Special "Soft-Clipping" 750watt Amplifier
- Ultra low noise pre amplifier circuit ideal for recording studio applications.

TOP PANEL OVERVIEW



TOP PANEL DESCRIPTION

1. INPUT CHANNEL ONE.

This input accepts standard 1/4inch jacks as well as balanced line XLR plugs. On balanced line in mode phantom power can be applied to power condenser microphones (switch #16 on above diagram).

2. INPUT CHANNEL TWO.

Apart from the different input plug on Channel One, this is an identical channel.

3. CLIP/CHANNEL MUTE INDICATOR LED.

4. INPUT LEVEL / MUTE SWITCH.

For active bass instruments use switch to low sensitivity and for passive basses use high level setting.

5. INPUT SENSITIVITY CONTROL.

To get the best signal to noise of your system, adjust this control so that when you play hard the Clip Indicator (3) blinks. Then just back off the level a little so the light no longer comes on. The input is then optimized.

6. LOW BASS LEVEL.

This controls the very lowest frequencies of your bass particularly the fundamental tones of the A, E and B strings.

7. HIGH BASS LEVEL.

This controls the fundamental tones of D, G and C strings plus the first harmonics of your lower strings.

8. LOW MID LEVEL.

Controls lower harmonics of all strings.

9. HI MID LEVEL.

Controls lower harmonics of all strings.

10. LOW TREBLE LEVEL.

Adds attack to harmonics.

11. HI TREBLE LEVE.

Add presence to strings. This is especially noticed with piezo type pickups.

12 &13. FX SEND & RETURN SOCKETS.

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

14. AUXILLARY INPUT.

This accepts mono or stereo ¼ inch jack sockets and is useful for Drum machine or MP3/CD player.

15. AUXILLARY LEVL CONTROL.

16. PHANTOM POWER SWITCH.

This is to switch on phantom power for channel one. This should only be used for capacitor type microphones that need to be powered.

17. LIMITER ON/OFF SWITCH.

This applies the limiter to both channels.

18. LIMITER INDICATOR.

This 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.

19. COMPRESSION ADJUSTMENT LEVEL.

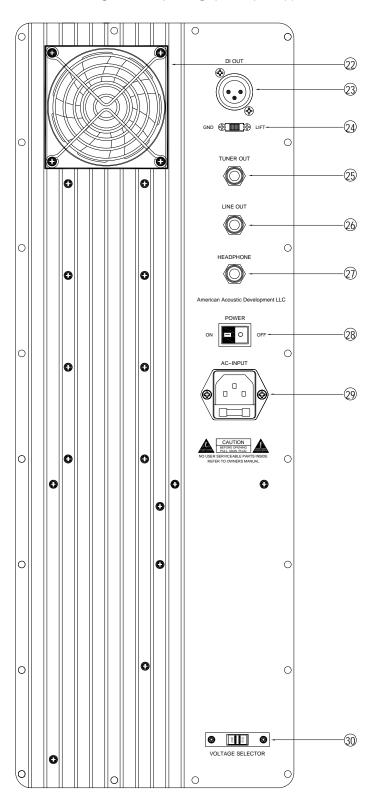
This will vary the level the limiter threshold. The compression ratio is 3dB to 1. Adjust this to suit your playing style and output power of your instrument.

20. MASTER VOLUME CONTROL.

Controls the final level of all inputs.

21. POWER ON/OFF INDICATOR.

BACK PANEL OVERVIEW



BACK PANEL DESCRIPTION

22. COOLING FAN.

Always allow space to let air circulate through amplifier.

23. XLR- DIRECT OUTPUT SOCKET.

This is an ultra-low impedance (200ohm) 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. TUNER OUTPUT.

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

26. LINE OUTPUT JACK.

This can be used to drive additional amplifiers.

27. HEADPHONE OUTPUT JACK.

This jack accepts ½ inch stereo headphone jacks. When a headphone is connected to the jack, the speakers will still be disconnected and therefore no sound from them.

28. POWER ON/OFF SWITCH.

This switches the main power on and off in the amplifier. Do not leave the amplifier plugged into a power source for long periods of time when not in use.

29. 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 ¾ inch fuse rated at 10 amp 220-240V or 15 amp fuse for 110-120V.

30. 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 possibly cause major damage to the amplifier.

<u>BEFORE SWITCHING ON POWER</u> – 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

<u>CAUTION</u> -TURN THE VOLUME DOWN on the ROADCASE before plugging in your instrument.

Positioning the ROADCASE 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 that are 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.

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 ROADCASE will ultimately affect your low frequency limit. Placing the ROADCASE with the back close to a wall will help reinforce the lower notes. For maximum bass impact, position it in a room corner.

Room size also makes a large difference in how deep the bass will sound. 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 ROADCASE 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 set fully clockwise. Now switch on the limiter. Start playing and turn control counter-clockwise. You will see the blue light start to come on and that is the indication that the limiter is now working. Set this control to suit your taste.

TRANSPORTING AND STORING THE SUPER FLIGHTCASE

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 ROADCASE in a dry location preferably at room temperature.
- Do not store the ROADCASE 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 ROADCASE connected to a power source.

SPECIFICATIONS

Speaker

Computer Optimized Vented Enclosure Speaker Frequency Response: 35Hz – 15KHz

Speaker Compliment: 12 x 5 inch proprietary, extended-range drivers

Speaker Sensitivity: 104dB/W/M
Internal Speaker Impedance: 6 Ohm
Dimonsions: 15 4W v. 18 0D v. 26 2H

Dimensions: 15.4W x 18.9D x 36.2H inch

Weight: 74 lbs.

Amplifier

PJB 750watt, class A/B amplifier with digital switch mode power supply.

Frequency Response

Passive and Active input: 35Hz -120KHz Low Cut Filter: 24dB/Octave at 35Hz.

Maximum Output Power

750 watts RMS

Signal to Noise Ratio

Better than 96 dB (EQ off, Volume on Full.)

Impedance

Passive Input: $>4M\Omega/22pF$ Active Input: $>100K\Omega/22pF$

Line Input: $>75K\Omega$

Pre Amp Line Out: $< 2K\Omega$

Bal. Out: <200Ω

Levels

Low Input: 10mV-2.5V High Input: 20mV-5V Pre Amp Out: 1.2V

FX send: 1V

Bal. Line Out: Typical 600mV

Compressor / Limiter

Gain: 0dB

Compression Ratio: 3dB: 1dB **EQ CENTER FREQUENCIES**

50, 160, 630, 2.5K, 10K, 15K at +/- 18dB

Included Parts

12 ft AC Power Cord Allen Key

SERVICE/WARRANTY INFORMATION

The ROADCASE has a warranty period of 2 years, starting from the date of purchase. The buyer must complete and return the enclosed warranty card within 14 days of purchase.

This warranty covers defect in materials or workmanship that occurs in normal use. Within warranty period PJB 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 this manual and amplifier 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 of the speakers in any way that does not comply with the technical or safely 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.

Should you need any warranty service, please bring the **ROADCASE** back to the dealer from whom you purchased, along with your sales receipt. Depending on the complexity of the repair work, your dealer may return the defect unit to PJB service center for repair or replacement.

Phil Jones Bass
American Acoustic Development LLC

8559 Page Avenue St. Louis, MO 63114 USA

Phone: 314 814 1264 Fax: 314 628 9941

www.philjonespuresound.com

support@philjonespuresound.com

Phil Jones Bass is a division of American Acoustic Development LLC.

www.philjonespuresound.com