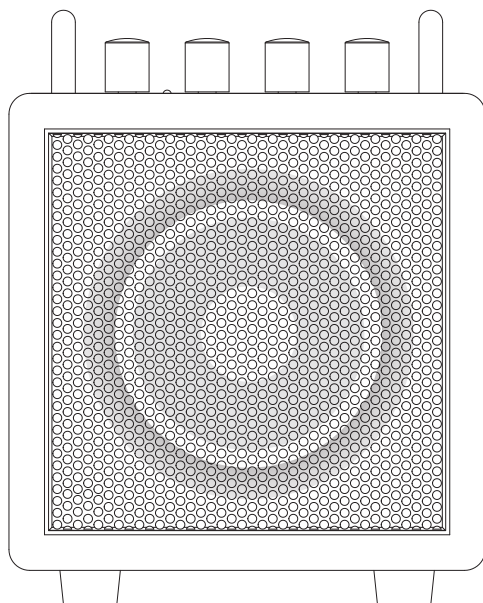




**PHIL JONES BASS**



**NANO BASS X4C**

**COMBO AMPLIFIER**


(Keyboards-Guitar-Bass)

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**OWNER'S MANUAL**

Thank you for purchasing the **NANOBASS X4C**. 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 **NANOBASS X4C**, 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, able-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 NANOBASS X4C**

The **NANOBASS X4C** is a single channel combo amplifier for multiple instruments such as Bass, Guitar, ukulele, violin, E-drum. That has an 6.35 Jack input socket for instrument, an 3.5 stereo jack auxiliary input for iPad/Smart phone, or drum machine, and a 3.5 stereo jack for your headphone. It features 3 band EQ that is perfectly tailored for your instruments, it also can play music with the Blue Tooth 5.0 with aptX HD function.

Using our extensive R&D facility which includes the largest anechoic chamber in the bass guitar amplifier industry and the KLIPPEL transducer measurement system (it uses lasers!), we were able to develop the perfect 4 inch loudspeaker. We analyzed the neodymium magnetic system, the cone behavior at all frequencies in 3D representation, cone suspension and frame, etc., until we had achieved a transducer beyond what anyone would have ever thought possible. Then we looked at the acoustic loading using the acoustic simulation software and calculated exactly the full power cone displacement at every frequency.

We designed a custom Rectangular Auxiliary Low Frequency Radiator (RALFR®). It also reduces the cone excursion of the speakers, allowing greater power handling.

The proprietary PJB NeoPower 4-inch speakers have full frequency range to the highest audio frequencies. Not only does this give greater clarity and transparency to your instrument, but also a high-fidelity sound to any backing track fed into the auxiliary input.

The cabinet may be as small as a shoe box, but it is built to the same standards of all PJB cabinets, heavily braced internally and damped with acoustic damping materials to prevent cabinet coloration that can kill the true sound of your instrument. What you hear from the **NANOBASS X4C** is the closest you can get to how your instrument actually sounds.

Audio front end on the Amp system of **NANOBASS X4C** is one ADC chip PCM1861 from Texas Instrument. With special configuration, the ADC is running at 96KHz sampling rate to get wider frequency range and higher precision from the two analog inputs. Amplifier system of **NANOBASS X4C** is built with one piece high-efficient Class-D power amplifier TAS5805 also from Texas Instrument. The chip is wired in Parallel BTL mode to drive the woofer, and its 768KHz output PWM carrier frequency is ideal for rendering high resolution sound. With low-ripple switch-mode power supply and integrated DSP-based active crossover and dynamic range control, the amplifiers provide sufficient horse power for the speaker driver.

**NANOBASS X4C** also features an integrated Bluetooth audio receiver, which is built with Qualcomm's latest V5.0 chipset QCC3031. The chipset can support aptX HD codec, offering lower distortion and higher resolution Bluetooth audio playback than what traditional SBC can provide.

**NANOBASS X4C** may be built for practice use, while it sounds a lot more than that. The sound image it renders exceeds its figure, and you may find it hard to believe the overwhelming sound wave are coming from such a tiny cube.

#### **FCC Statement**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

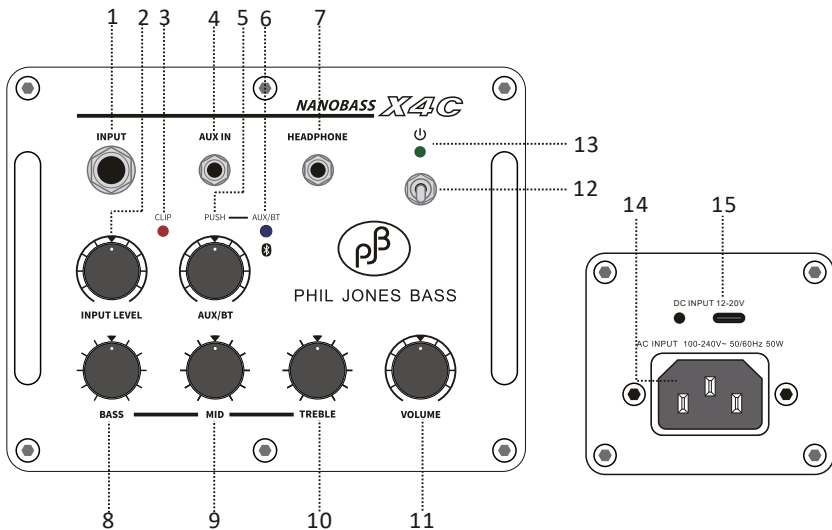
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

## AMPLIFIER FEATURES

- PJB N52 Neo-Power 4-inch full range speaker driver.
- 35watts Digital Amp with DSP-based active crossover and dynamic range control.
- PJB 3 Band EQ.
- Stereo Aux input for Drum machine or iPad/Smart phone.
- Bluetooth5.0 (aptX HD).
- Worldwide AC voltage Input. (100~240V).

## CONTROL FUNCTIONS



### 1. Input Jack

This is a high impedance input and is designed for all passive and active instruments.

### 2. Input Level Control

Different instruments and also different playing styles and even players will affect the signal level so adjust this control so that the signal overload Clip light does not light up. This optimizes the best signal to noise ratio between amp and instrument and will give you the full extent of the amplifiers tone and power.

### 3. Clip Light

when the power amplifier is overloaded and causes distortion, the CLIP light will light up in red.

### 4. Auxiliary Input(3.5mm stereo)

This is a stereo mini jack and can accept any signal from iPod, iPad, smartphone or drum machine.

## **5. Auxiliary / Bluetooth Level Control & Mode Select**

**Rotate:** Increase or reduce the input level for AUX and Bluetooth;

**Press:** switch AUX/BT input mode, keep press will disconnect the Bluetooth.

## **6. Aux/BT Mode Indicator**

**Blue light steady lit:** Bluetooth;

**Green light steady lit:** Aux input.

**Note:** For initial pairing, the blue light will flash when Bluetooth input is selected, after pairing is successful, the blue light will be steady lit.

## **7. Headphone Jack**

You can use any kind of stereo headphones on this jack but remember you will only sound good in your headphones if they are high quality.

## **8. Bass Control**

Boosting or cutting this will have significant effect on the weight of the tone.

## **9. Mid Range Control**

Boosting or cutting Mid-range.

## **10. Treble Control**

Boosting or cutting treble.

## **11. Master Volume**

This controls the volume of instrument input.

## **12. Power Switch**

This switches off the amplifier from the DC supply but AC signal will still be in the external supply. We advise that you disconnect the power supply from AC source if you do not intend to use the NANOBASS for long periods of time.

## **13. Power Indicator**

Will light up when you have power cable connected and amp switched on.

## **14. AC Input Socket**

Connects the amplifier to the AC power supply

**\*NOTE:** TURN THE VOLUME DOWN on the NANOBASS X4C before plugging in your instrument.

## **15. Type-C Port**

Dc input (USB Type-C port) connection supports mobile power bank of USB PD (Power Delivery) Protocol.

1. This port is only used for power input but not for power supply.

**2. Supports USB PD Protocol ( 12V / 1.5A; 15V / 2.0A; 20V / 2.25A ).**

3. After it is successfully connected to a PD mobile power pack, the DC INPUT indicator will be lit. The product is ready for use.

4. When the power of POWER BANK is lower than 10%, It may cause the sound cut off or intermittent.

5. The maximum power output of power source and speakers:

DC12V/Speaker: 15W Max.

DC15V/Speaker: 23W Max.

DC20V/Speaker: 40W Max.

6. The dis-charge time when use the power bank via Type-C (for reference );

\* About 17 hours continue working with A 10000mAh power bank it output 12V/1.5A;

\* About 11 hours continue working with A 20000mAh power bank it output 20V/2.25A.

## TRANSPORTING AND STORING

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 in a dry location preferably at room temperature.
- Do not store 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 X4C permanently connected to a power source.

## SPECIFICATIONS

**Amplifier:** Digital Amplifier with DSP

**Power Output:** 35watts

**Speaker:** 1xPJB N52 Neopower 4-inch Full range Speaker  
1xRectangular Auxiliary Low Frequency Radiator

**Speaker Frequency Response:** 68Hz-15KHz

**EQ:** 3Band EQ

Bass shelf 100 Hz, +/-15dB

Mid shelf 1KHz Bandwidth 120Hz-10Kz, +/-15dB

Treble shelf 10KHz, +/-15dB

**Input Mode:** Instrument Input

Aux in (3.5mm Stereo Jack)

Bluetooth 5.0(apTX)

**Input Levels:** Instrument: 60 mV-2V

AUX: 300mV(MAX)

Bluetooth: 400mFFS

**Output:** Headphone Out

**Main Valtage:** AC 100-240V~ 50/60Hz

DC INPUT 12-20V

**Dimensions (WxHxD):** 6.3 x 7.9 x 7.8 inch (160 x 200 x 197mm)

**Weight:** 5.7 lbs / 2.6 kg

## SERVICE / WARRANTY INFORMATION

The NANOBASS X4C 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;
- Speakers are not covered for damages caused by incorrect connection, or when powered beyond the limit described in the user manual. Manufacturing defects are typically detected during early usage.
- Repairs or modifications by anyone other than authorized PJB service agent;
- Damages/defects caused by forces of nature 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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