

Pro JZ Preamp, models will vary. Battery not included.

Installation Video - www.audereaudio.com/Video/ProJZ_Install.htm
Frequently Asked Questions - www.audereaudio.com/FAQ_Installation.htm

Tools needed

- Small screwdriver - #0 or 2.4mm fit well. Do not force fit a large bit
- Wire stripper/cutter/pliers
- Matches or Hot Air Source - for reducing heat shrink

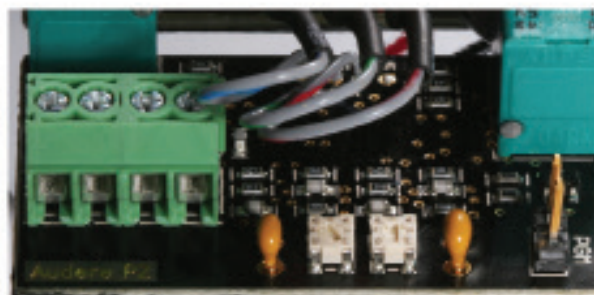
Regarding the Instrument Cavity:

The preamp is designed to drop into the existing cavity of most jazz style basses; the cavity size needed is 1.2" deep, 1.1" wide (1.02" at the battery end), and 4.8" long.

A few jazz bodies do not have standard cavities; if you find you need to make modifications to your instrument in order to install this product, please take extra care. Audere Audio is not responsible for damage or modifications you make to your instrument as part of the product installation.

See our limited warranty for restrictions.

Green connector labeled for wire insertion and Board Components Identified



Wire Connector		Neck		Bridge		2 Pin Connector for optional Z-mode reprogramming Switch
Neck	Bridge	C	G	G	C	
H	C	a	a	a	a	
o	o	p	i	i	p	
t	t	n	n	n	n	
m	m					
o	o					
n	n					

• Caps adjust High Z Peak Frequency
• Pots adjust Low Z Gain

Do Not Ground the Commons!

Installation

- Remove your existing control plate, save the screws for installing the new preamp.
- Remove existing pickup connections, bridge and cavity ground connections.
- The pickup and ground wires should have the insulation stripped back 0.2" to expose clean bare wire.
- Insert the wires into the green connector as labeled in photo above; tighten the connector screws to hold the wire. Do not use an oversized screwdriver.
- A loose Grey/White wire comes off the center jack tab, attach this wire to the bridge and cavity ground wires using the crimp connector. Crimp with pliers; slide the heat shrink over the crimp and reduce. See the the crimp steps in the photo below.



- Install a 9V battery into the battery snap. Notice how the battery fits into the cut-out in the circuit board. The tab on the board fits behind the battery.
- Drop the battery into the cavity first. Make sure it is laying down flat.
- Insert the preamp into the cavity - keep all wires to the pot side and make sure they are not trapped in-between the bottom of the circuit board and the battery.
- Some vintage bodies may be a bit narrow at the battery jack end of the cavity. If the jack touches the side wall, the outer wire tab can be pressed in slightly.
- Insulating the jack contact springs from conductive paint on the cavity wall is rarely required but can be achieved by applying electrical tape to the cavity face.
- Verify no wires are caught between the plate and the body.
- Attach the plate to the bass body using your original screws.
- Insert a mono cable into the jack and verify the battery LED flashes, see next section for flash patterns.
- Power up your power amp, plug into the passive input and test your bass.

Battery LED Monitor

When a standard guitar cable (a mono not stereo cable) is plugged into the output jack, the negative side of the battery is connected to ground and the circuit is powered up. The blue LED will flash in one of four patterns to indicate the battery strength.

- New Battery** - A Bright Flash of 2 seconds.
- Good** - 3 flash sequence, 1) bright 2) dimmed 3) bright (photo below). The center flash represents your battery strength. The intensity of the center flash will slowly decrease over weeks of time.
- Critically Low** - 2 flashes per second for 5 seconds. Change the battery before you next gig!
- No Flash** - Not enough juice to power up.

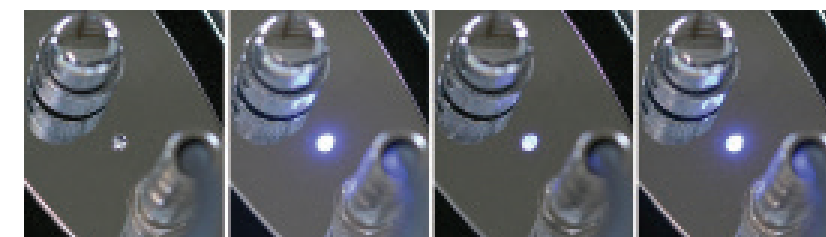


Photo of Flash Pattern for a Good battery (occurs when jack is inserted)

LED OFF Flash is 1) Full On 2) Power Level Indicator 3) Full On

Grounding Note

Every pickup has at least 2 wires, Hot and Common. Commons must be connected to our board at the green screw connector as labeled in the circuit board photo. If you have a 3rd wire and it is a braided shield, this is a ground wire and can be connected to the cavity ground. **Do NOT connect the Common wire of the Pickups to the Cavity Ground.** Doing so would increase the power pull and cause distortion and could shut down the preamp. If you have 4 wires you may have two Hot wires for split coils. Check with the pickup manufacturer on how to connect the 4 wire pickups for Series (recommended) or for Parallel operation.

Low Z Gain Adjustment

Audere's Low Z-Mode captures the low frequencies more completely. We pre-adjust the gains for Fender Jazz pickups. To fully realize this benefit, you may need to make a gain level adjustment to match your pickups. The circuit board photo shows the Neck and Bridge gain pots. Turning the controls clockwise will increase the gain of the Low Z-Mode. Adjust the gain until you get the desired sound level compared with the Mid Z setting. Too high a gain setting will introduce distortion.

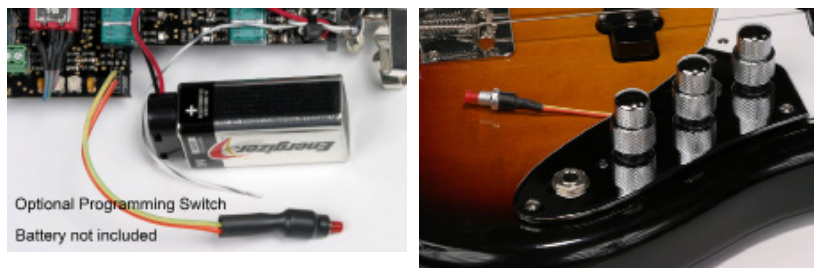
High Z Changeable Capacitors (optional)

Each Pickup has a capacitor (cap) installed in sockets on the board; 680pF for the Neck and 330pF for the Bridge. These values were chosen based on player preferences but can be changed to other values which will move the frequency peak location in High Z-Mode. See the website for more information on pickups and the frequency peak.

We offer a kit of 8 cap values as an option or you can source your own. The lead spacing is 0.100" with a lead diameter of 0.020".

If you change the caps, trim the leads to about 0.15" length. The sockets are a firm fit to ensure good contact, so insert with care, pushing straight down.

The Z-Mode Switch (see other side)



The Z-Mode Switch Function

The Z-Mode switch is an internal electronic switching system that connects different electronic loads to each pickup which changes the way the pickup responds. Changing the load electronically is an extension to a traditional technique used to change the sound of a passive control setup. For example, many players will debate, for a specific type of pickup, whether a 250K volume pot sounds better than a 500K pot. In a standard passive bass setup, the effects of the 2 volume pots + the tone pot & it's cap + your amplifier's input loading determines the electrical load on the pickups and thereby how the bass sounds. By changing the pots you will change the loading a small amount and get a slightly different sound.

Audere's Z-Mode system extends this concept with larger variations of the loading for each pickup. Now a broader selection of organic sounds can be obtained from your pickups and you are not dependent on the loading of the amplifier that you are plugged into. Mid Z-Mode gives you your traditional passive bass sound, it matches a passive load setup, plus you have the added versatility of the High and Low Z-Mode settings, each offering a different sound profile for more flexibility. For many players, High Z excels for slapping, while Low Z is favored when the bass needs to be ultra-deep.

The Z-Mode system includes a 3 position mini toggle switch which puts 3 different load configurations at your disposal. To change the pickup load configuration you simply move the switch – the preamp reconfigures it's self internally to the new mode. The factory settings for the Z-Mode switch (see column 4 in the table) are Low, Mid and High Z-Mode loads applied to both the neck and bridge pickups. You may hear a slight click when moving the Z-Mode switch as the preamp is doing a major reconfiguration.

Programming the Z-Mode Switch (Optional)

Your preamp has been optimized for standard jazz pickups but a different pickup load may be preferred depending on your pickups and musical style. To give you the fullest range of options each of the 3 switch positions can be set individually to any 1 of the 9 different Z-Mode configurations shown in the table that follows. This allows you to get the best sound from your bass. The switch is available as optional accessory.

For example, some pickups do not have much of a distinct high Z-Mode response. These pickups have a low number of turns in their coil windings and this creates a limited amount of inductance such that the resonant peak is smaller and at a high frequency not easily heard. But these types of pickups have a bigger separation in the sound of Mid Z-Mode compared with Low Z-Mode. For this type of pickup you may want to set your 3 modes to be 1) Low, Low, 2) Low', Mid, and 3) Mid, Mid. With other types of pickups built with a different winding pattern you might favor the High or High' Z-Mode settings to get the most interesting sounds from your bass.

Note when 2 different Z-Mode combinations are chosen for the neck and bridge pickups the mixing control (balance or volume pair) becomes more powerful and slight movements of your hand to select a different location from the bridge to neck will have a larger impact on the sound. However the noise cancelling ability of single coil pickups is reduced because of the 2 different loadings, in this case pickup shielding may be especially helpful (see our FAQs on-line).

Z-Mode settings: (LED flash count)	Neck Z-Mode	Bridge Z-Mode	Factory Setting Switch Position
1	Low	Low	Toward Neck
2	Low '	Mid	
3	Low '	High	
4	Low '	High '	
5	Mid	Mid	Centered
6	Mid	High	
7	Mid	High '	
8	High	High	Toward Bridge
9	High	High '	

High' is equivalent to High Z-Mode without the loading capacitor. Low ' is similar to Low Z-Mode but even darker - i.e. the pickup signal has less high frequency content.

Reprogram the Z-Mode switch load settings:

Re-programming the Jazz's Z-Mode switch is done with an optional external switch, which is removed after programming. This temporary switch includes a connector plus wires to allow the switch to be located external to the cavity. The 2 pin connector plugs onto the jazz board, (orientation does not matter) and the wires are fed upward and snaked out the cavity below the plate. The plate should not be screwed down tightly while programming up the Z-Modes so that you do not crush the wires. See photo.

- 1) Place the Z-Mode switch in any of its 3 positions – you are going to program this selected switch position to any one of the Z-Mode configurations from the above table.
- 2) Press and release (click) the programming button
 - a) The number of the current Z-Mode setting will be flashed on the LED. For example, in the center switch position if the LED flashes 5 times, it is programmed for the factory default of Mid, Mid Z-modes.
 - b) If the desired mode is already programmed into this switch position – simply stop for approximately 5 seconds – you will see the LED flash fast and the programming operation will be aborted leaving the Z-Mode in the present configuration.
 - c) If you want to change the Z-Mode setting, click the programming button the number of times shown in column 1 to set this new mode into this Z-Mode switch position.
 - i) The LED will light each time you press in the button
 - ii) After you are done – stop for approximately 5 seconds – the LED will flash the count of the mode stored.
 - iii) If you enter an invalid number of button presses, (10 for example) the LED will fast flash and the programming operation will be aborted.
 - iv) If you move the Z-Mode switch during programming – the LED will fast flash and the programming operation will be aborted.

After you have programmed up your Z-Mode selections – pull up the preamp, remove the programming switch and store it so that you can reprogram the Z-Mode selections in the future if you want to, then simply re-install the preamp without the programming switch.

Have Questions?

Please visit our website for extensive information on the preamp, including a FAQ section specific to installation and a video showing a typical preamp installation. If you don't find the answers, please go to the contact us section and send us an email.

LIMITED WARRANTY

What this warranty covers:

Audere Audio warrants its Products to be free from defects in materials and workmanship for one year from the purchase date and is available to the original purchaser.

The limited warranty does not cover:

- Damage caused by misuse or abuse;
- Exposure to environmental extremes;
- Products that have been modified;
- Shipping damages of any sort;
- Damage due to use that is not in conformity with factory specifications;
- Normal wear and tear or parts intended to be replaced due to normal use;
- Claims based on the subjective issue of tonal characteristics;
- Product if the serial number has been defaced, modified, or removed.

What Audere Audio will do:

If, in our sole determination, the defect is covered by the Limited Warranty, Audere Audio will promptly repair or replace the product, at our option, and return it prepaid to the purchaser. If the defect is not covered or is excluded from this Limited Warranty it will be returned without repair or replacement, shipping and insurance to be paid by purchaser.

AUDERE ENGINEERING IS NOT LIABLE FOR MODIFICATIONS MADE TO YOUR INSTRUMENT EVEN IF THOSE MODIFICATIONS WERE MADE TO FACILITATE PRODUCT INSTALLATION. YOU SHOULD EVALUATE THE PRODUCT FULLY PRIOR TO A FULL INSTALLATION.

IN NO EVENT SHALL AUDERE AUDIO BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. THIS LIMITED WARRANTY IS GIVEN AS YOUR EXCLUSIVE REMEDY AND IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY

In the case of conflicting terms and conditions between this Limited Warranty and any purchase order, contracts or invoices, this Limited Warranty is the controlling document.

Shipping instructions:

1. Contact Audere Audio within the warranty period and obtain a Return Authorization (RA) number and ship to address prior to shipping.
2. Package the product for safe shipping. Mark the RA number prominently on the outside of the box.
3. Include inside the box the RA number, your name, and address.
4. Ship the product prepaid and insured within 14 days of the RA date.

Your rights under state law:

This limited warranty gives you specific legal rights and you may have other rights which vary from state to state; for example some states do not allow all of the limitations on warranties.

Audere Audio
www.audereaudio.com