

# **OWNER'S MANUAL**

# PERFORMER CROSS-OVER BASS

# MODEL PB-304

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# INTRODUCTION

Congratulations on your purchase of the ZETA Performer Cross-Over Bass. Zeta's Cross-Over Basses are designed to give the bass player the ability to successfully produce the sound of an acoustic bass - whether playing in a strapped-on bass guitar position, or when played in an upright

position on the endpin or tripod stand. The Cross-Over is made from lightweight alder, swamp ash, and maple tonewoods and is designed to be comfortable to play with the ergonomic chest brace. To properly maintain and familiarize yourself with your instrument, please read this owner's manual completely.

Please Note: Keep this manual in a safe location for future reference.

Warranty: Visit <a href="www.ZetaMusic.com">www.ZetaMusic.com</a> to register your warranty online. Or, please fill out and mail in the supplied warranty card.

#### PERFORMANCE APPLICATIONS

The Cross-Over<sup>TM</sup> Bass provides the best of both worlds – the smooth sound of a fretless bass guitar, and the easily accessible feel of an upright bass. To play as a bass guitar, simply place a standard guitar strap on the strap pins on the back of the Cross-Over<sup>TM</sup> Bass. Upright style playing can be accomplished on either the Telescoping Endpin or the ZOS-5 Tripod Stand. The arched fingerboard of the Cross-Over<sup>TM</sup> Bass allows for both pizzicato style playing (with your fingers), as well as arco style playing (with a bow – in this case, a cello bow works best).

#### **CONTROL FUNCTIONS**

**VOLUME KNOB** Controls the volume of the instrument signal output. This knob is

located closest to the bridge, near the center of the instrument.

**TREBLE** This control is a 12dB treble boost/cut, with center detent, located next

to the volume control in the next position in line.

BASS This control is a 12dB bass boost/cut with center detent, located next to

the bass control and third in line of the controls.

MID-RANGE A mid-range boost/cut with center detent and frequency sweep for

semi-parametric EQ, located furthest from the bridge, in an offset position. This is a stacked knob, with intensity on top and frequency

sweep on the bottom.

LINE OUT A powered balanced 1/4" mono-output jack. The volume knob

determines the output level of this jack. Use a standard 1/4" instrument

cord.

#### PICKUP SYSTEM AND PREAMP

The heart of your instrument is Zeta's patented Strados™ bridge pickup. Under each string are special piezo pickups positioned to maximize tone and signal output while rejecting feedback. The Cross-Over's Strados™ pickup projects warmth and clarity at any volume. The pickup has a full-frequency response of 20-20Khz. The pickup's audio signals are processed through an active preamp system internally mounted within the instrument. This preamp system is powered by two 9-volt batteries and has individual gain controls for each string, with a master level output control as well. These controls allow adjustment of the individual strings to provide even string balance. The controls are pre-set at the factory, but can easily be adjusted to suit or taste or needs (see: Internal Mixing Board, below).

### INTERNAL MIXING BOARD

The Cross-Over Bass features an internal mixing board, where individual string volume and master volume can be adjusted. To access the internal mixing board, simply remove the back electronics plate using a small Phillips screwdriver. The internal mixing board is located on the main PC board, and can be identified by the row of 6 "trim pots" along one edge, with one additional "trim pot" in the lower right hand corner of the board. Please refer to the diagram on PAGE 6.

Internal trim pots for volume can be adjusted using a small standard screwdriver. Clockwise rotation <u>decreases</u> volume; counter-clockwise rotation <u>increases</u> volume. To ensure an even volume balance, it is recommended that you have the instrument plugged into an amplifier while adjusting the trim pots, and check each string's volume by plucking the string after making adjustments.

If you are not comfortable making internal volume adjustments, please refer servicing to a qualified technician or your local Authorized Zeta Dealer.

# TELESCOPING ENDPIN AND UPPER BOUT GUIDE

These accessories convert the Cross-Over so that it can be played in an upright position. Simply insert the telescoping endpin into the base of the instrument and turn it clockwise until the screw threads engage and hold it in position. The upper bout guide is screwed in place with the two thumb screws onto the upper back of the instrument, and features thumb screws for adjusting the playing angle of the Cross-Over. The upper bout guide is designed to simulate the contours of an acoustic upright bass, and provides support of the bass by leaning against the player's midsection.

#### TRIPOD MOUNTING SYSTEM

The optional ZOS-5 Tripod Stand mounts in the lower body cavity, in place of the Telescoping Endpin. While the instrument is mounted on the ZOS-5 Tripod Stand, please be certain that the tripod feet are fully expanded as the instrument could be accidentally knocked over.

# **LIGHTWEIGHT TUNERS**

Gotoh lightweight tuning machines are designed to hold the strings at pitch for long periods of time without needing readjustment. Gotoh lightweight tuning machines have a 20:1 tuning ratio.

### **STRINGS**

Please note: For optimum instrument performance, strings should be changed at least once every month.

Factory Supplied Strings:

ZETA XBS-4 or XBS-5 CrossOver Bass Strings, High Finish Ribbon Wound, Soft Gauge, Long Scale (34"):

G: 1.14mm/.045 inch

D: 1.65mm/.065 inch

A: 2.03mm/.080 inch

E: 2.54mm/.100 inch

ZETA strings are available at your Authorized ZETA Dealer. ZETA strings are manufactured in collaboration with the D'Addario String Company.

### **INSTRUMENT CARE**

CLEANING. Do not clean your instrument with chemical solvents such as benzene or alcohol. Wipe only with a clean dry cloth or use a high quality non-abrasive instrument polish.

SET UP. ZETA recommends that you have your neck adjusted seasonally by a qualified instrument repair person or luthier, or at your local Authorized ZETA Dealer.

# **BRIDGE ADJUSTMENTS**

There are two thumb screws beneath the bridge. The bridge may be raised or lowered on both sides to accommodate your playing style. It is recommended that the strings be slightly loosened before making any adjustments. Do not use pliers on the thumbscrews as the instrument's finish and screws may be damaged. Also, intonation may be adjusted by changing the angle at which the bridge meets the strings.

# DOUBLE ADJUSTING TRUSS ROD

The truss rod is located where the neck meets the body. Turning the truss rod clockwise adds tension and up-bow to your neck; turning the truss rod counter-clockwise relieves tension and adds down-bow to your neck. We recommend that you have your neck adjusted seasonally by a qualified instrument repair person or luthier, or at your local Authorized ZETA Dealer.

#### **BATTERY**

This instrument contains quiet pre-amplified electronics within the compartment on the back of the instrument. Two 9-volt batteries power the circuitry and should be changed after 1,000 hours of playing use. Plugging in the ½" cable activates the preamp. When the instrument is not in use (overnight), unplug the amplifier cord from the ½" jack so that the battery is not being discharged.

# TROUBLESHOOTING

#### Don't Panic!

#### No Output

- 1. Try increasing volume.
- 2. Try using a different <sup>1</sup>/<sub>4</sub>" cable.
- 3. Try replacing the internal 9-volt batteries with fresh ones.

# String(s) Dead or Low Level Output

- 1. Check to see if the string is sitting properly on the bridge.
- 2. Check to ensure that the steel ball at the end of the string is in good contact with the tailpiece. If necessary, scrape away any thread winding on the string that may be preventing a clean metal-to-metal contact.
- 3. Try replacing the internal 9-volt batteries with a fresh ones.
- 4. Try raising the internal volume of the affected string(s).

### Hum, Hiss or Distortion

- 1. Try using a different <sup>1</sup>/<sub>4</sub>" cable.
- 2. Your amplifier may not be properly grounded. If your amplifier has a "ground reverse" or "ground lift" switch, try changing it's position.

#### RETURNING UNITS FOR SERVICE

If your unit requires service, please follow these steps:

- 1. Contact your authorized Zeta Dealer for a Return Authorization (RA) number.
- 2. Pack the unit in its original carton with packing materials.
- 3. Please include a note with the following information:
  - a. A brief explanation of the problem you are experiencing.
  - b. Your full contact information: Full name, street address, city, state, zip, country (if not USA), phone number(s), and email address.
  - c. Copy of your original purchase receipt.
- 3. Write the RA number on the outside of the shipping container. Shipments sent to ZETA without an RA number are refused.

- 4. Ship via UPS, Federal Express, or US. Postal Service. You will be responsible to pay the freight to and from the ZETA factory. (We also recommend that you insure the unit.)
- 5. If the unit is under warranty, ZETA will perform the servicing at no charge. Be sure to send a copy of your original purchase invoice for proof of warranty coverage.
- 6. If the unit is not under warranty, ZETA will bill you for the servicing and return shipping charges. We require payment in advance or cash on delivery (COD) for these charges.

# LIMITED WARRANTY

All ZETA products carry a 2-year Limited Warranty for parts and labor. ZETA electronics such as the pickup system and preamp carry a 2-year Limited Warranty. ZETA will replace defective parts and make necessary repairs at no charge if factory inspection reveals faulty workmanship or material. This warranty does not cover strings, tuners, batteries, and finishes. This warranty does not cover damage due to misuse, accident or neglect. ZETA retains the exclusive right to make such determination on the basis of factory inspection. ZETA shall not be liable, under any circumstances, for damage based upon inconvenience, loss of use of the unit, loss of time, interrupted operation or commercial loss, or any other damages, whether incidental, consequential or otherwise, except damages which may not be excluded under applicable law.

Products returned to the factory must first receive authorization from ZETA and must be shipped prepaid. The Return Authorization (RA) number must be printed on the outside of the container or shipment will not be accepted by ZETA. The RA number will be valid for 30 days. This warranty remains valid only if repairs are performed by ZETA, and provided that the serial number on the unit has not been defaced or removed.

This warranty is expressly in lieu of all other warranties either expressed or implied.

#### **SPECIFICATIONS**

**GENERAL** 

Case: Padded gig bag
Weight: 7 lbs, 12 oz
String length: 34"

**BODY** 

Material: Swamp Ash, or Maple top with Alder back

Finish: Oil or high gloss urethane

Std. colors: Natural Oil, Black, HoneyBurst, TransAmber

 Body width:
 11 1/2"

 Body length:
 23 3/4"

 Body depth:
 1 5/8"

NECK

Type: 2-piece Hardrock Maple, bolt-on

Finish: Satin
Shape: Oval
Fingerboard: Shedua
Nut: Ebony

Truss Rod: Double flex, adjustable at body

Neck width at nut:1 1/2"Neck width at end of neck:2 9/16"String spacing at bridge:1/2"

**ELECTRONICS** 

Type: Active Battery: Two 9-volt

Controls: Volume, bass and treble boost (+12dB)

Mid-range semi-parametric EQ with frequency sweep

Pickups: Piezo-electric elements in Strados™ bridge

Battery compartment: Batteries mounted inside control cavity
Shielding: Conductive paint in cavity and on cover

**HARDWARE** 

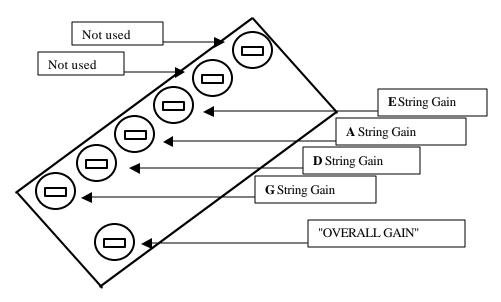
Bridge: Zeta composite
Tailpiece: Machined aluminum
Tuners: Gotoh, enclosed

**CUSTOM OPTIONS:** Left-handed; custom colors and woods

ACCESSORIES: Omni Swivel Tripod Stand; cello bow

# ZETA MUSIC SYSTEMS, INC.

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[View of Internal Mixing Board inside of the Crossover Bass. Orientation: bass neck pointing up]