# Owner's Manual

## Bass Instinct Series™ Cabinets

CERAMIC · NEO / LITE · HYBRID LH

Passive Bass Speaker Cabinets · Made in U.S.A.

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SECTION 1

# Safety Instructions

**WARNING — HEARING & HANDLING**

This cabinet can produce sound levels capable of causing permanent hearing loss. Do not operate for long periods at any level that is uncomfortable. Cabinets are heavy — use correct lifting technique and a second person where noted.

**CAUTION — DRIVERS & CONNECTIONS**

Always power down the amplifier before connecting or disconnecting speaker cables. A hot-patch transient can damage transducers. Never exceed the cabinet's rated power or drop below the amplifier's minimum load.

## INSTRUCTIONS FOR SAFE USE

1. Read and follow all instructions provided by the factory.
2. Do not use this product near water, and do not expose it to rain or moisture.
3. This product can produce sound levels capable of causing permanent hearing loss. Protect your hearing.
4. Do not block the bass-reflex ports. Make sure nothing interferes with the cabinet's ports or grille in use.
5. Locate the cabinet away from heat sources such as radiators or heat registers.
6. Do not allow liquids or foreign objects to enter the enclosure through the ports or grille.
7. Always turn off the amplifier power before making or breaking speaker connections.
8. Use only high-quality speakON® speaker cables of adequate gauge. Never use instrument cables for speaker connections.
9. Observe the minimum impedance rating of your amplifier when connecting one or more cabinets. See Section 5.
10. Do not exceed the power-handling rating printed on the cabinet's rear spec plate.
11. Do not use excessive force when handling connectors, the attenuation control, or hardware.
12. Lift with care. Use the side handle(s); use two people for larger cabinets and roll caster-equipped cabinets whenever possible.
13. Refer all servicing to qualified, Form Factor–authorized personnel. See Section 6.

Form Factor Audio assumes no responsibility for any damage or injury that results from improper use or service.

SECTION 2

# Specifications & Cabinet Lineup

Every Bass Instinct cabinet is a passive enclosure with an internal crossover and a side-mounted high-frequency attenuator. Three series share the same engineering and voicing, differing in transducer type and enclosure material. All models are available in 4 Ω and 8 Ω. Specifications are nominal and subject to revision without notice.

| Model | Configuration | HF Device | Impedance | Power (RMS) |
|---|---|---|---|---|
| **CERAMIC SERIES — BALTIC-BIRCH ENCLOSURE, CERAMIC TRANSDUCERS** | | | | |
| **1B12** | 1 × 12″ ceramic | 1.4″ compression driver | 4 Ω / 8 Ω | see spec plate |
| **1B15** | 1 × 15″ ceramic | 1.4″ compression driver | 4 Ω / 8 Ω | see spec plate |
| **2B10** | 2 × 10″ ceramic | 1.4″ compression driver | 4 Ω / 8 Ω | see spec plate |
| **4B10** | 4 × 10″ ceramic | 1.4″ compression driver | 4 Ω / 8 Ω | see spec plate |
| **NEO / LITE SERIES — ITALIAN LITE PLY, ITALIAN NEODYMIUM TRANSDUCERS** | | | | |
| **1B12L** | 1 × 12″ neo | compression driver | 4 Ω / 8 Ω | see spec plate · ≈ 28 lb |
| **1B15L** | 1 × 15″ neo | compression driver | 4 Ω / 8 Ω | see spec plate |
| **2B10L** | 2 × 10″ neo | 1.4″ comp. driver · 90×60 horn | 4 Ω / 8 Ω | 800 W · ≈ 35 lb |
| **4B10L** | 4 × 10″ neo | 1.4″ compression driver | 4 Ω / 8 Ω | see spec plate |
| **HYBRID LH SERIES — TRIPLE-PLY HYBRID ENCLOSURE, NEODYMIUM TRANSDUCERS** | | | | |
| **4B8LH** | 4 × 8″ neo | high-output tweeter | 4 Ω / 8 Ω | 800 W · 46 lb |
| **2B12LH** | 2 × 12″ neo | high-output tweeter | 4 Ω / 8 Ω | 800 W |
| **1B15LH** | 1 × 15″ neo | high-output tweeter | 4 Ω / 8 Ω | see spec plate |

### Construction (all series)

CNC-milled, precision-jointed enclosures with internal cross-bracing and a dual-component polyurethane finish. Powder-coated steel grille. Side-mounted handle(s); larger cabinets are available with a removable caster board.

### Reading the spec plate

Each cabinet's exact impedance and power rating are laser-printed on the rear spec plate beside the connectors (for example, **2B10L-B · 8 Ω · 600 W**). The serial number on the same plate is required for warranty service — do not remove or deface it.

SECTION 3

# Front Baffle & HF Attenuation

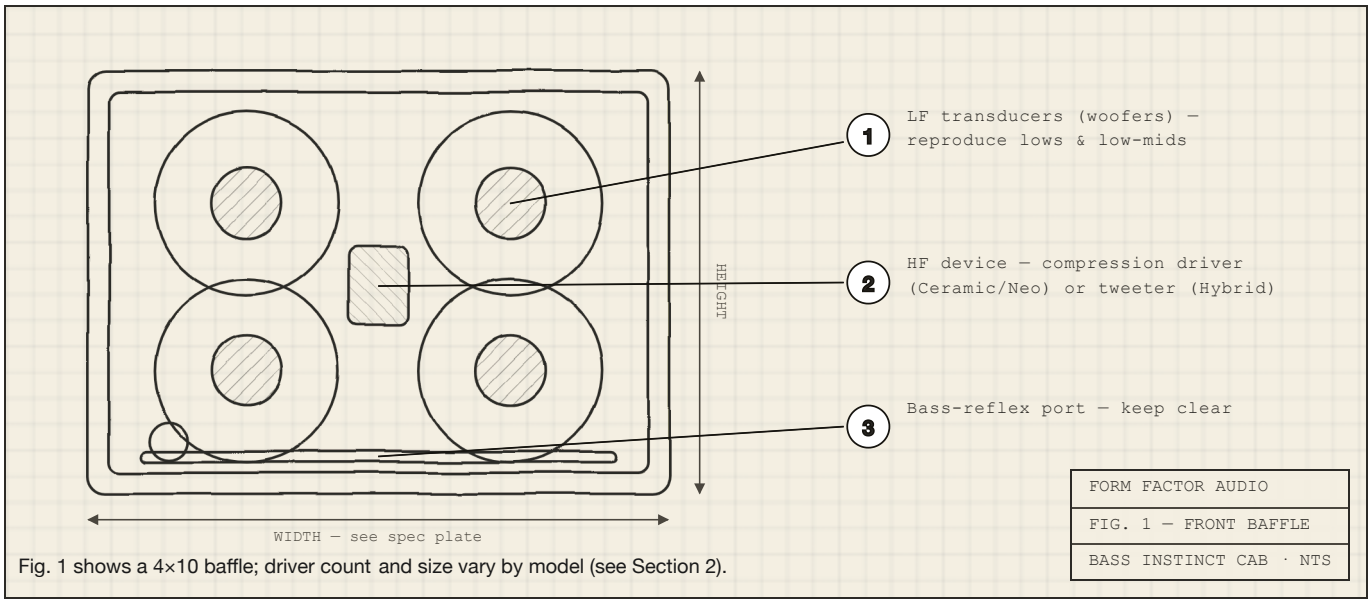



*Fig. 1 — Front baffle layout (4×10 shown). All baffle components are field-replaceable with original parts only (Section 6).*

### THE HIGH-FREQUENCY ATTENUATION CONTROL

Every Bass Instinct cabinet has a single rotary **HF Attenuation** control on the rear connector plate. It sets how much high-frequency energy reaches the cabinet's high-frequency device — a **compression driver** on Ceramic and Neo/Lite cabinets, or a **tweeter** on Hybrid LH cabinets. The woofers are not affected.

Importantly, this is a **passive, electro-mechanical attenuator (an L-pad) wired after the internal crossover** — it sits between the crossover's high-pass output and the HF device, reducing the signal level fed into that driver. It is not a tone or EQ control on the input. Turn it down to tame brightness or sibilance in a live room; turn it up for more articulation, "air," and finger/pick detail. Fully counter-clockwise effectively silences the HF device, leaving woofers only.

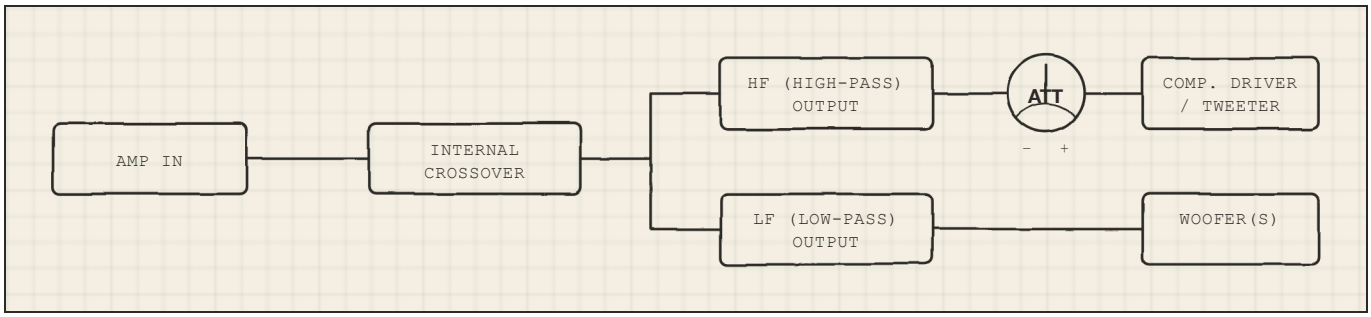



*Fig. 2 — The attenuator (L-pad) sits after the crossover, on the high-frequency branch only.*

SECTION 4

# Rear Panel & Connections

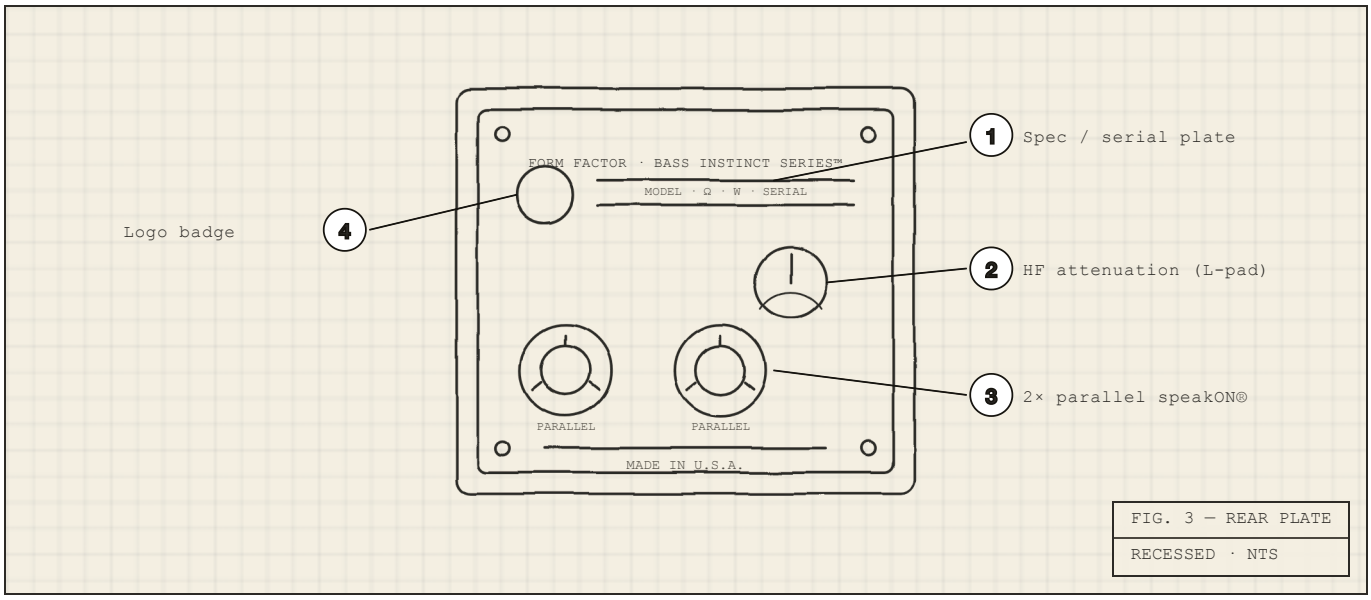



*Fig. 3 — Rear connector plate. Layout varies slightly by model; all cabinets carry two parallel speakON® jacks.*

## CONNECTORS

**Two parallel speakON® jacks.** The two connectors are wired in parallel — either may be used as the input, and the second passes the same signal through to "daisy-chain" a second cabinet (see Section 5).

**Genuine Neutrik® only.** Form Factor Audio fits only original Neutrik® speakON® connectors. Use original Neutrik cable ends; substitute connectors can compromise contact, reliability, and warranty coverage.

## HF ATTENUATION

The rotary attenuator on the rear plate sets the level of the high-frequency device (compression driver or tweeter). See Section 3 for how it works. It is a passive control wired after the crossover and may be adjusted safely while the amplifier is running at low volume.

Note: the spec/serial plate carries the model, impedance, power rating, and serial number. Keep the serial intact for warranty.

SECTION 5

# Connecting & Impedance

## CONNECTING A SINGLE CABINET

1. Power the amplifier **OFF** and engage Mute.
2. Connect a speakON® cable from the amplifier's speaker output to either jack on the cabinet.
3. Confirm the cabinet's impedance (rear plate) meets your amplifier's minimum load.
4. Power the amplifier on and disengage Mute.

## DAISY-CHAINING TWO CABINETS

Use the second, parallel speakON® jack to feed a second cabinet from the first. Because the jacks are in parallel, the two cabinets' impedances combine in parallel:

- 8 Ω + 8 Ω → **4 Ω total**
- 8 Ω + 4 Ω → **≈ 2.7 Ω total**
- 4 Ω + 4 Ω → **2 Ω total**

> ⚠ **MIND THE MINIMUM LOAD**
>
> Never present the amplifier with a total impedance below its minimum rating. Form Factor Mark III amplifiers have a **4 Ω minimum**, so they will safely drive a single 4 Ω cabinet *or* two 8 Ω cabinets — but not two 4 Ω cabinets.

## PAIRING WITH FORM FACTOR AMPLIFIERS

Form Factor cabinets pair best with Form Factor amplifiers, but any quality amplifier is welcome — just respect the minimum-load rule above and match power sensibly to the cabinet's rating.

### Cabling

Use only genuine speakON® speaker cable of adequate gauge. Never use a shielded instrument (¼″) cable for speaker connections — it cannot carry speaker-level current safely and will degrade tone and reliability.

## POWER-DOWN DISCIPLINE

Always power the amplifier down (or engage Mute and bring Master to zero) before connecting or disconnecting any cabinet. Hot-patching a live speaker output can send a transient spike into the transducers and the HF compression driver.

SECTION 6

# Care, Service & Replacement Parts

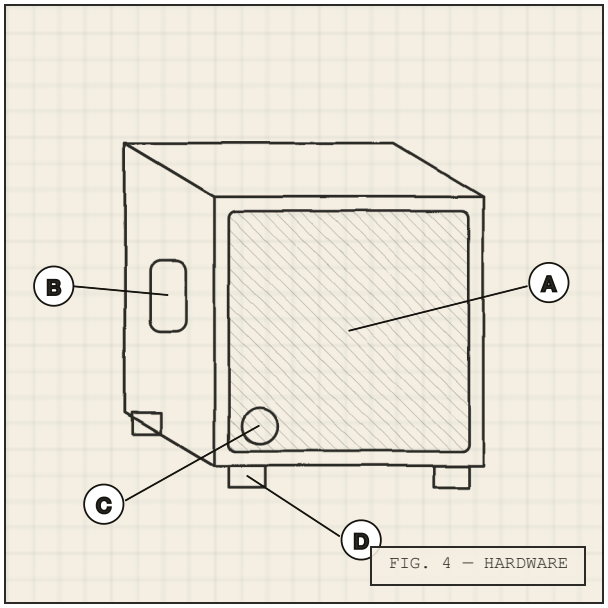


FIG. 4 — HARDWARE

- (A) Powder-coated steel grille
- (B) Side carry handle
- (C) Form Factor metal badge
- (D) Rubber feet / corners / casters

## ROUTINE CARE

Clean the enclosure with a dry or slightly damp cloth only — no solvents. Keep the cabinet dry and out of direct heat. Check that grille and handle fasteners are snug before transport.

## AUTHORIZED SERVICE ONLY

Servicing of the cabinet should be carried out only by a Form Factor–authorized professional using original parts. **Field servicing is not recommended** except when on tour and performed by a professional repair technician using original parts. Original parts are available worldwide, shipped from our Orange County, California facility.

## THE INTERNAL CROSSOVER

The internal crossover and any electronic components inside the cabinet must **never be tampered with or repaired**. If a fault occurs, the crossover is **replaced, not repaired**, and only by an authorized person using original Form Factor parts.

## REFINISHING

Any painting, repainting, or resurfacing must be performed **at the factory only**. We offer refinishing as a service for older cabinets — contact us to arrange it.

## REPLACEABLE HARDWARE

Wear items — rubber feet, corners and casters, the side handle, the front steel grille, and the metal badge — can be replaced when necessary, but **only with original Form Factor parts** fitted by an authorized person.

SECTION 7

# 2-Year Limited Warranty

At Form Factor, we focus on delivering the best bass equipment possible — and the best ownership experience possible. While we operate within our warranty, we go above and beyond to make sure players have the gear they need, when they need it. If an issue arises, you're never more than a call or an email away from a speedy solution.

### COVERAGE PERIOD

Two (2) years from date of purchase, U.S.A. and Canada. Transducers and compression drivers are covered for one (1) year against defects in parts and workmanship; failure of transducers or compression drivers due to irregular use is not covered.

### WHO IS COVERED

The original purchaser when purchased from an Authorized Form Factor Dealer, and any transferee of a retail purchaser. Endorse the sales receipt to a subsequent purchaser to keep the warranty intact. Retain your sales receipt as proof of purchase.

### SERVICE

Defective products will be repaired or replaced (at FFA's discretion) without charge. The product must be sent directly to the Form Factor Audio factory, or through the Authorized Form Factor Dealer who originally sold it, with proof of purchase. Your dealer should be your first point of contact for service. Transportation costs are not covered.

### EXCLUSIONS

Damage from alteration, misuse, accident, or neglect; service performed by anyone other than the Form Factor Audio factory or an Authorized Form Factor Dealer acting on FFA's behalf; tampering with or unauthorized repair of the internal crossover; and units with defaced or removed serial numbers are not covered.

Full warranty terms — see the Form Factor Audio 2-Year Limited Warranty Card included with this product, or visit formfactoraudio.com/warranty.

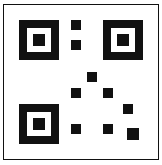
SECTION 8

# Register Your Warranty

Registering your cabinet takes about a minute and gives us the information we need to support you quickly if anything ever needs attention. Two ways to register:

OPTION 1

## Register online



Scan the QR code or visit:

**formfactoraudio.com/warranty**

OPTION 2

## Use the warranty card

- Fill in owner, product, and dealer information.
- Record the model and serial number from the rear spec plate.
- Sign and date the card; return as instructed.
- Keep your sales receipt as proof of purchase.

SERVICE & SUPPORT

## We're a phone call away.

If anything ever needs attention, contact your Form Factor dealer first — they're typically the fastest path to a fix. We're U.S.-based and available for direct support when your dealer can't resolve it. Original parts ship worldwide from Orange County, California.

Web: formfactoraudio.com · Email: support@formfactoraudio.com