headfirst Alta P1

1RU Tube Preamp with Two notes Torpedo Embedded

Instructions

Please carefully read and understand the instructions inside this user's manual before attempting to operate your new preamp. This instruction manual includes essential information regarding the use and maintenance of the preamp.

Grounding - The preamp must be grounded to earth at all times, only use the device with an IEC power cable that has a safety earth pin. Under no circumstances should the device ever be used with a power cable that has the earth pin removed.

Fuses - Only replace fuses with the correct rating. The mains fuse T500mA is located in a pull out drawer in the IEC socket. There are two fuses that are internal and can be accesses via removing the top panel of the preamp via removing the 9 screws holding it in place. The internal fuses ratings are T500mA for the HV rail and T2A for the 12V DC rail.

AC Mains Voltage - The Alta P1 utilises a switch mode power supply and is able to operate from 100V to 240V 50Hz or 60Hz worldwide without modification

Introduction

When Headfirst founder Jason Tong set out to design a new preamp solution for Slipknot's Jim Root, the brief was simple yet uncompromising: deliver the unmistakable responsiveness and harmonic depth of the Alta100 head, but in a compact, tour-ready format that could run direct to front-of-house without compromise.

The result is the Alta P1 — a three-channel, all-tube preamp that fuses analog warmth with the flexibility of Two notes' Torpedo Embedded technology. It's a full-fledged direct-to-DAW/FOH/FRFR rig in a 2.2kg chassis, designed for the modern guitarist who needs the best of both worlds.

Armed with three 12AX7 preamp tubes, MIDI switching, Vintage/Modern voicing, and a Compression control per channel, the Alta P1 delivers an astonishing tonal range:

Channel 1 offers shimmering Fender-style cleans.

Channels 2 and 3 are lifted straight from the revered Alta100, delivering everything from classic crunch to modern high gain.

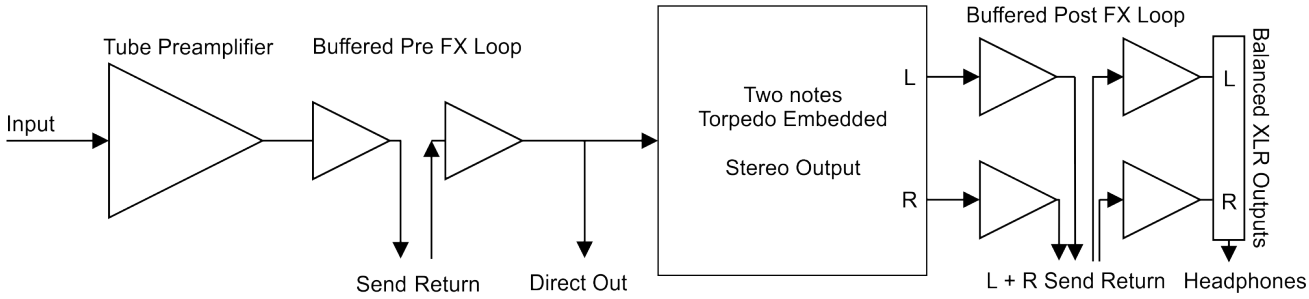
Beyond its analog core lies the Torpedo Embedded technology — the same digital engine trusted by professionals worldwide. Featuring the EL34 Alta100 tube power amp simulation, full access to DynIR cabinets, plus EQ, Enhancer, Stereo Reverb, Twin Tracker, and Noise Gate, this integrated system redefines hybrid tone shaping.

With stereo XLR outputs, dual FX loops, USB/Bluetooth connectivity, and global compatibility, the Alta P1 stands as a pinnacle of smart design — a preamp that replaces the traditional modeller while retaining every nuance of true tube performance.

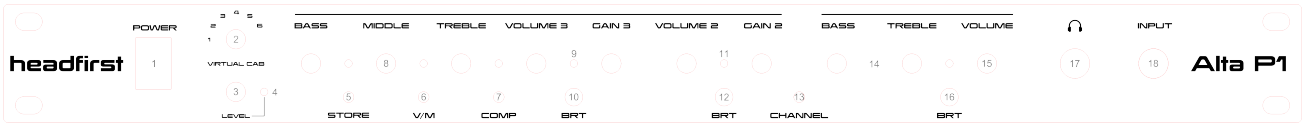
Alongside the Alta P1, Headfirst and Two notes unveil the Headfirst DynIR Cabinet Collection — a curated suite of five official cabinet captures, each meticulously recorded to deliver unparalleled realism, harmonic richness and musical depth.

Captured using world-class microphones, boutique preamps and elite studio outboard, each DynIR brings a unique facet of the Headfirst sonic DNA to life.

Block Diagram



Front Panel Controls



1. Main power switch. There is a 5 second power on delay where the XLR outputs are muted while the unit powers up. Try to remember to power the Alta P1 on first in you signal chain before your downstream power amps and mixing consoles. Whilst the Alta P1 does have startup mute protection on the XLR outputs there is still a small amount of startup ‘click’.

2. 6 way rotary switch for controlling the first 6 presets on the Torpedo Embedded. This works in the same way and the Captor X and other Two notes products. Note, this rotary dial does not control the preamps MIDI presets. Who recalling a Torpedo preset via MIDI, preset setting will override the position of the physical knob

3. Controls the Torpedo Embedded’s output volume. This sets the send level out to the stereo Post FX Loop (which is unity gain) as well as the XLR output level. Note that this is a digital encoder, the setting can and will be stored with the Torpedo preset allowing you to control output volume via MIDI PC or CC messages. When recalling a preset the preset setting will override the position of the physical knob

4. Clipping indicator LED. Will flash Red if the Torpedo gets pushed into digital clipping, which can happen by either over driving the input or output levels. You can use the Torpedo Remote software to monitor the in and out levels keeping the signal levels just touching orange is ideal. The LED doubles as an error state indicator, in the rare event the firmware on the Torpedo Embedded board needs to be refreshed you can follow the instructions for the Captor X already detailed on the Two notes website

5. Stores the switching state (Channel, V/M and Comp) of the Alta P1 analog preamp into the Alta’s MIDI memory into the current PC slot. To program your preamp presets follow this simple procedure; send the desired MIDI PC number from your MIDI controller to the preamp, select your channel and option settings with the soft button switches then press and hold the Store button for a second. When you release the button you will see the LED blink a few times confirming that it has been stored. Going forward when you send the preamp that PC message your saved settings will be recalled. Note that you are storing just the analog preamps switching and option state here, separately use the Two notes Torpedo Remote to manage it’s presets

6. Vintage / Modern mode. For the preamps channel 2 and 3, gives two distinct voicing and gain options which can be stored with your MIDI PC preset allowing 4 different tonalities across the 2 channels. Vintage mode is lower gain, is a little looser and has a slightly bigger bottom end. Modern mode is higher gain with a tight bottom end. When the LED is lit you are in Modern mode

7. Compression switch. This activates clipping diodes for channel 2 & 3 which increases distortion and gives more compression 'under the fingers'. Clipping diodes act like a limiter compressing the audio signal so you will notice a volume drop when activated. As per the V/M option you can store this setting per MIDI PC preset allowing you to pull another range of tones from each of the channels

8. Bass, Middle, Treble - shared EQ for channels 2 & 3. It's a tube driven tone stack and behaves just like a traditional tube amp

9. Separate Gain and Volume for channel 3, you know you're on channel 3 because this LED will light up

10. 3 way bright switch for channel 3. Centre position is off, to the right you have the first level of bright and to the left it's the max level. To the right you have top end cutting through and to the left you'll get a decent amount mid-range too. The bright settings work with the Gain pot and become more pronounced as you dial the gain back. When the gain pot is on 10 they have no impact

11. Separate Gain and Volume for channel 2, you know you're on channel 2 because this LED will light up

12. 3 way bright switch for channel 2. Same as for channel 3 centre position is off, to the right you have the first level of bright and to the left it's the max level

13. Channel selection button. This is a 3 state switch, every time you press it it will advance the selected channel. 1 - 2 - 3 - 1 - 2 - 3 - 1 etc

14. Bass and Treble for the clean channel 1

15. Volume for channel 1

16. 3 way bright switch for channel 1. Same as for channel 2 & 3 centre position is off, to the right you have the first level of bright and to the left it's the max level. The bright settings for the clean channel are less aggressive than for the gain channels and are there to let you dial in the amount of sparkle and shimmer you're after. The bright settings work with the Volume pot and become more pronounced as you dial the Volume back

17. Headphone output jack. A 1/4" TRS stereo jack outputting the same stereo signal that goes to the main XLR outputs. This is after the stereo effects post loop so you'll be getting all the goodness from any stereo effects you may be running. The headphone output level is adjustable via the Level control (3)

18. 1/4" input jack for your guitar. The first thing the input jack hits is a tube gain stage, so you can run any type of boost or overdrive in front of the Alta P1 with stellar results

Rear Panel

1. Guitar input. It's a 1:1 with the front input but can be used for a rack setup where the inputs are coming in from the rear keeping the front super clean and tidy. The front input jack overrides the rear

2. Buffered FX send of the serial Pre Loop which is after the tube preamp and before the Torpedo Embedded functionality

3. Sets the send level to LO -20db instrument level or HI +4db line level. Accordingly if set to LO the Return input will be configured to increase the gain of the return signal back to line level. Be careful to not dial in lots of extra gain with whatever you put in this loop, it's better to be at unity gain or slightly above as you will send the Torpedo into digital clipping

4. Return for the Pre Loop. A cool feature here is that you can use other preamps you may have and insert the outputs of those into this Return jack giving you direct access to the Two notes Torpedo capability

5. Direct Output. Line level output for sending to an external power amp and guitar cab. This output is after the Pre Loop

6. 7, 9 & 10. Stereo serial effects loop taken directly from the output of the Torpedo. You'd want to match the pairs up for your stereo effects; L send to L return and so on. You can run a mono send out of either the L or R send and then return in stereo, if setting up this way you'd want to make sure your Torpedo preset is set to Dual Mono output

8. Sets the send level to LO -20db instrument level or HI +4db line level. Accordingly if set to LO the Return input will be configured to increase the gain of the return signal back to line level. Make sure any effects plugged into this loop are set for unity gain to avoid driving the return stage into clipping!

11. MIDI IN. All incoming MIDI is counted to both the Alta P1's tube pre switching control brain and to the Torpedo Embedded. The unit features an 8 pin DIN socket with the outer pins providing 12VDC phantom power for your MIDI for controller, it works with a 7 pin DIN cable. The Alta pre's MIDI channel is set to 1 by default and the Torpedo is MIDI channel 2.

12. MIDI THRU. Whatever comes in via the MIDI IN jack is sent back out the MIDI Thru verbatim

13. Two note Torpedo reset switch. In the rare event you need to reset your Torpedo board back to factory and reload the firmware, this is the hardware reset switch accessible with a paper clip. Follow the instructions on the Two notes website for resetting the Captor X

14. & 16. Stereo balanced XLR outputs, connect these direct to your FRFR speakers, FOH or console. These carry the fully processed stereo sound - refer to the block diagram

15. Ground lift switch for the XLR outputs. Try lifting the ground if you have a ground loop hum once connected to your console

17. USB connection for the Two notes Torpedo Remote software.

18. IEC power in socket with mains fuse. The Alta P1 works worldwide without the need to set and switch or rewire anything internally

Two notes Torpedo Remote

The Alta P1 is supported by the standard production release of the Torpedo Remote software which is available for MacOS and Windows via USB, or via any Android/iOS phone and tablet wirelessly. You can download the Torpedo Remote software directly from the Two notes website here:

Torpedo Remote

The Alta P1s Torpedo firmware was custom built specifically for use with a preamp. The firmware includes Alta100 tube power amp modelling where the power amp is always on other than when setting the Torpedo into Dual Mono mode and setting the Right channel to Bypass.

Bluetooth

The Alta P1 includes bluetooth connectivity for the Two notes Torpedo Remote software. Download Torpedo Remote from your app store, open it up and pair with your unit. The pairing code is based on your serial numbers last 4 digits. E.g. If your serial is 7E9001 then your bluetooth pairing code will be 9001. You can find your serial number next to the IEC power input and it will also be displayed in the window title of the Torpedo Remote software when connected to a PC or Mac via USB.

MIDI

As already mentioned, all incoming MIDI is counted to both the Alta P1's tube pre switching control brain and to the Torpedo Embedded. The Alta pre's MIDI channel is set to 1 by default and the Torpedo is MIDI channel 2.

Along with using MIDI PC messages to recall stored preamp and Torpedo presets, you can also control individual features via MIDI CC messages.

Alta preamp only:

CC message	Parameter	Comment
102	0 - 128	Resets the preamps presets and settings to factory
103	0 - 16	Sets the MIDI channel. 0 is Omni (all). Once you change this the preamp will only respond to inbound messages on that channel
104	0 - 128	Will save the current settings to the active MIDI program slot. This is the same as pressing the Store button on the front of the unit
105	0 - 128	Set the switching mute time in ms. The preamp momentarily mutes the audio to prevent any loud pops when switching between settings. The default is 35ms. Setting this parameter to 0 disables the mute
89	0-128	Vintage / Modern mode. Each message receives toggles between the two states
90	0-128	Comp. Each message receives toggles between the two states
85	0-128	Selects channel 1
86	0-128	Selects channel 2

CC message	Parameter	Comment
87	0-128	Selects channel 3

The Two notes Torpedo has an extensive list of CC controllable parameters, please refer to the Captor X user manual for details. The link for the Guide can be found here:

Torpedo Captor X User's Manual

Two notes DynIR Cabinets

Included in the Alta P1's Two notes firmware is the Headfirst DynIR Cabinet Collection — a curated suite of five official cabinet captures, each meticulously recorded to deliver unparalleled realism, harmonic richness and musical depth.

Captured using world-class microphones, boutique preamps and elite studio outboard, each DynIR brings a unique facet of the Headfirst sonic DNA to life.

Headfirst 412 Origin Cream 75

Inspired by—and captured from—a custom-built closed-back 4×12 loaded with Celestion® Creamback 75s. Big, bold, and balanced — smooth highs, defined lows, and a powerful midrange growl. The definitive modern Headfirst sound: rich, dynamic, and built to move air.

Headfirst 412 Origin Cream 65

Inspired by—and captured from—a custom-built closed-back 4×12 loaded with Celestion® Creamback 65s. Vintage warmth meets modern articulation, with full, focused lows and a sweet, open top end. Responsive, expressive, and perfectly voiced for touch-sensitive tone.

Headfirst 412 Origin Vint

Inspired by—and captured from—a custom-built closed-back 4×12 outfitted with Celestion® Vintage 30s. Tight lows, assertive mids, and refined top-end bite make this a modern rock essential. Focused, punchy, and engineered for high-gain authority.

Headfirst 412 Brit90 Green

Inspired by—and captured from—an early-’90s Marshall® “B” style 4×12, loaded with Celestion® 6402 reissue Greenbacks. Thick mids, creamy breakup, and a vocal top end define this golden-era powerhouse. Vintage crunch meets modern clarity — pure attitude in a box.

Headfirst 412 Eldorado Vint

Inspired by—and captured from—an early-’90s Soldano® 4×12 armed with original Celestion® Vintage 30s. Articulate, tight, and harmonically rich, it’s the blueprint for refined high-gain tone. Iconic, muscular, and unmistakably Headfirst.

Torpedo Embedded Presets

1. Straight Up

Jason's favourite Alta P1 setting as a starting point for exploring the tonal possibilities of the preamp. A classic Dyn 57 and Rbn 121 combo on Jason's own red 4x12. A little bit of thickness from the Enhancer adds weight with a touch of stereo reverb for some tonal width.

2. JR

Jim Root's default setting for his high gain channel 3 setting. Based on the DynIR of his most famous cab this one delivers an articulate, percussive and tight tone.

3. Live

Jason's Live preset used in his Alta P1 that he gigs with. The guitar is direct to the desk and this stereo preset with the Twin Tracker presents a wide guitar tone to FOH and importantly to Jason's in-ears!

4. Big and Wide

An expansive preset that utilises the Torpedos Twin Tracker combined with the Hall B reverb algorithm with a sizeable pre-delay, this one is super fun to play direct to your studio monitors.

4. Headphones

A great setup for home practice with your headphones. Warmer tones here from the greenbacks for less ear fatigue, this one will have you clocking up the practice hours without disturbing the peace at home!

4. No Cabs

This preset is specifically setup for when you might be running out to a linear solid state (or tube) power amp and then into regular guitar cabinets. The built in Alta100 power amp modelling along with the Enhancer will make your solid state power amp fell and sound way more tube like. Add some stereo reverb or the Twin Tracker if you have two cabs running in a stereo configuration!