

# Technische Daten: Alpha plus

## Inputs

**input 1** Switchable line or microphone input  
Combo socket, XLR + jack ¼" (6.35 mm)

### line mode (jack only)

Unbalanced high-impedance input for instrument pick-ups and line-level sources  
Min. input voltage: 16 mV (-36 dBV)  
Max. input voltage: 7 V (+17 dBV)  
Input impedance: 2 MΩ || 300 pF  
Equivalent input noise, A-weighted: 2.1 µV (-114 dBV)

### mic mode (jack or XLR)

XLR (balanced), stereo jack (balanced), or mono jack (unbalanced) microphone input  
Min. input voltage: 2 mV (-54 dBV)  
Max. input voltage: 1 V (0 dBV)  
Input impedance (balanced): 1.2 kΩ  
Input impedance (unbalanced): 2.7 kΩ  
Voice filter: -10 dB at 260 Hz (ref. to 10 kHz)  
Equivalent input noise, A-weighted: 0.7 µV (-123 dBV)  
Phantom power: 48 V (XLR only), R = 6.8 kΩ per terminal, total current max. 10 mA, short circuit protected.

**input 2** Unbalanced high-impedance input for instrument pick-ups and line-level sources  
Mono jack, ¼" (6.35 mm)  
Min. input voltage: 14 mV (-37 dBV)  
Max. input voltage: 5 V (+14 dBV)  
**High / low switch:** attenuator -10 dB  
Input impedance: 2.2 MΩ || 300 pF  
Equivalent input noise, A-weighted: 1.2 µV (-118 dBV)  
Optional phantom power (see notes): 9 V DC at "ring" terminal, max. 100 mA, short circuit protected

**return** Return input for effect loop  
Mono jack, ¼" (6.35 mm)  
Min. input voltage: 150 mV (-17 dBV)  
Max. input voltage: 5 V (+14 dBV)  
Input impedance: 20 kΩ (5 kΩ if effect is switched off by footswitch.)

**clip LED** Headroom: min. 8 dB

## Outputs

**headphones** Headphones output. When plugged in, the internal speaker is switched off.  
Stereo jack, ¼" (6.35 mm), L / R connected  
Max. output power: 2 x 65 mW / 1000 Ω  
Input sensitivity for 2 x 50 mW / 1000 Ω : 19 mV (-35 dBV) at input 1, line mode  
Output impedance: 470 Ω (shared by L and R)  
**Note:** Suitable for headphones with stereo jack. Does not work with mono jacks.

**line out** Preamplifier output after master volume  
Mono jack, ¼" (6.35 mm)  
Output voltage: 1.4 V (+3 dBV)

**tuner** Tuner output  
Mono jack, ¼" (6.35 mm)  
Output voltage: 450 mV (-7 dBV)

**DI-out** Balanced XLR output before master, after tone controls, without effects  
Output voltage (differential): 190 mV (-15 dBV)

**send** Send output for effect loop, before master, after tone controls  
Mono jack, ¼" (6.35 mm)  
Output voltage: 450 mV (-7 dBV)

## Footswitch connector

**footswitch** Connector for a dual footswitch  
Stereo jack, ¼" (6.35 mm)  
tip = internal effect on/off  
ring = external effect on/off  
sleeve = common (ground)  
Effect is OFF when the footswitch is ON.

## Tone controls

**colour (input 2)** -3 dB at 700 Hz, +10 dB at 8 kHz, switchable  
**bass** ±8 dB at 100 Hz, shelf type  
**middle** ±6 dB at 800 Hz  
**treble** ±8 dB at 10 kHz, shelf type

## Effects

**Internal effect** Built-in digital reverb  
**External effect** Parallel effect loop (effect blended with dry sound), see **send** and **return**.

## Power

**Power amp** 40 W / 4 Ω at 1% THD, DMOS, monolithic I.C.  
Dynamic range, A-weighted: 92 dB

**Limiter** Threshold 35 W / 4 Ω

**Analog signal processing** Subsonic filter, adaptive peak limiter

**Speaker system** 8" (200 mm) twin cone full-range speaker, bass reflex enclosure

**Mains power** Mains voltage (depending on model): 100, 120, 230, or 240 V-; 50-60 Hz.  
Power consumption: max. 100 W

**Mains fuse** Size: 5 x 20 mm  
For 230 and 240 V models: T 1 A L  
For 100 and 120 V models: T 2 A L

## General

**Cabinet** 12 mm (0.47") birch plywood

**Finish** Waterbased acrylic, black spatter finish

**Dimensions** 265 mm (10.4") high  
330 mm (13") wide  
235 mm (9.25") deep

**Weight** 7.2 kg (15.9 lbs)

## Definitions and conditions

**Input and output voltages** are RMS values for a sine signal and 1 kHz unless stated otherwise.

**Tone controls** in neutral position unless stated otherwise.

**Min. input voltage:** Required input voltage for 35 W / 4 Ω output, gain and master fully clockwise.

**Max. input voltage:** Allowable input voltage that does not cause more than 1% total harmonic distortion, assuming suitable control settings.

**Output voltages** refer to 50 mV (-26 dBV) at input 1, line mode, gain and master max.

**Equivalent input noise voltage:** Noise voltage at speaker divided by voltage gain of amplifier for white noise, for the input under test. Gain and master fully clockwise, input shorted, 20 Hz - 20 kHz, gain of unused inputs in zero position.

**Dynamic range** of power amplifier: Ratio of output voltage at limiter threshold to A-weighted noise voltage with master in zero position.

### XLR connectors pin assignment:

1 = ground, 2 = positive (+), 3 = negative (-)

## Options

**Microphone input** can be attenuated by 5 dB by an internal jumper, increasing the max. input voltage to 1.6 V (+4 dBV).

**9 V phantom power** for input 2 can be activated by an internal jumper. When activated, operation without phantom power is still possible by using a mono jack connector.

**48 V phantom power** for the XLR input can be deactivated by an internal jumper. (The jack input does not have 48 V.)

**Warning:** External equipment may be damaged by inappropriate use of phantom power.

Specifications and appearance subject to change without notice.

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