

# Technical specifications

## Inputs (notes 1, 2, 4)

**channel 1** High impedance, unbalanced input for instruments (pick-ups) and line-level sources  
Mono jack socket, ¼" (6.35 mm)  
Sensitivity: 22 mV (-33 dBV)  
High/low (attenuator) switch: -10 dB  
Impedance: 2.2 Meg  
Equivalent input noise, A-weighted:  
1 µV (-120 dBV)  
Phantom power (optional): 9 V DC / max. 100 mA, short-circuit protected

**channel 2** Switchable instrument or microphone input  
Combo socket, XLR + jack ¼" (6.35 mm)

### line mode

High impedance, unbalanced input for instruments (pick-ups) and line-level sources  
Jack socket only  
Sensitivity: 27 mV (-31 dBV)  
Impedance: 1 Meg  
Equivalent input noise, A-weighted:  
2.4 µV (-112 dBV)

### mic mode

XLR (balanced), stereo jack (balanced), or mono jack (unbalanced) input  
Sensitivity: 3.3 mV (-50 dBV)  
Impedance (balanced mode): 1.2 k  
Impedance (unbalanced mode): 2.7 k  
Voice filter: -10 dB at 270 Hz (referred to 10 kHz)  
Equivalent input noise, A-weighted:  
0.8 µV (-122 dBV)  
Phantom power (XLR only): 48 V, max. 10 mA, short-circuit protected

**clip indicators** for ch. 1 and 2 Headroom: min. 8 dB

**return** Input from external parallel effect loop, or supplementary input, before master volume  
Mono jack, ¼" (6.35 mm)  
Sensitivity: 320 mV (-10 dBV)  
Impedance: 20 k (note: impedance changes to 5 k while external effect is switched OFF by footswitch)

## Outputs (note 3)

**phones** Headphones output. When plugged in, internal speaker is muted.  
Stereo jack socket, L/R connected, ¼" (6.35 mm)  
Max. output power: 2 x 100 mW / 1000 ohm  
Input sensitivity for 2 x 50 mW / 1000 ohm:  
23 mV (-33 dBV) at channel 1 input  
Impedance: 470 ohm (common for L and R)  
**Note:** Suitable for headphones with stereo jack. Does not work with mono jacks.

**tuner** Tuner output  
Mono jack socket ¼" (6.35 mm)  
Output voltage: 340 mV (-9 dBV)

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

**Di-out** Balanced XLR output before master, after tone controls, without effects  
1 = ground  
2 = positive  
3 = negative  
Differential output voltage: 140 mV (-17 dBV)

**send** Output to external parallel effect loop  
Before master, after tone controls  
Mono jack, ¼" (6.35 mm)  
Output voltage: 1.4 V (+3 dBV)

## Footswitch connector

**footswitch** Stereo jack socket ¼" (6.35 mm) for a dual footswitch  
Tip = internal effect on/off  
Ring = external effect on/off  
Sleeve = common (ground)

Effect is OFF when the footswitch is ON.

## Tone controls

**ch. 1** **colour** -3 dB at 700 Hz, +10 dB at 8 kHz  
**bass** ±8 dB at 100 Hz (shelf type)  
**middle** ±6 dB at 800 Hz  
**treble** ±8 dB at 10 kHz (shelf type)

**ch. 2** **bass** ±8 dB at 100 Hz (shelf type)  
**treble** ±11 dB at 10 kHz (shelf type)

## Effects

**Internal effects** 1 Reverb 1  
2 Reverb 2  
3 Delay  
4 Chorus

**External effect** Parallel effect loop (see also **send** and **return**).

**eff. pan** Blends both internal and external effects between channels 1 and 2, with reverse direction of rotation for the external effects.

## Power

**Power amp** 60 W / 4 ohm, DMOS, monolithic I.C.  
Dynamic range, A-weighted: 92 dB (note 2)

**Limiter threshold** 50 W

**Analog signal processing** Dedicated equalizer, 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 AC, 50-60 Hz  
Power consumption: max. 120 W

**Mains fuse** 5 x 20 mm  
T 1 A L / 250 V for 230 and 240 V models  
T 2 A L / 250 V for 100 and 120 V models

## General

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

**Finish** Waterbased acrylic, black spatter finish (standard model)

**Dimensions** 260 mm (10.2") high  
325 mm (12.8") wide  
235 mm (9.25") deep

**Weight** 6.5 kg (14.3 lbs)

## Notes:

### 1. Sensitivity

Input sensitivities refer to 50 W into 4 ohm, full gain and master settings, neutral tone control settings, and 1 kHz sine-wave test signal.

### 2. Noise and dynamic range

Equivalent input noise voltages are typical values obtained by measuring noise voltage at speaker output and dividing by the voltage gain of the amplifier for white noise. Full gain and master settings, neutral tone control settings, input shorted, measuring bandwidth 20 Hz - 20 kHz.  
Dynamic range of power amplifier: Ratio of between output signal at limiter threshold to A-weighted output noise with **master** in zero position.

### 3. Output levels

Output levels refer to 50 mV / 1 kHz sine-wave test signal at channel 1 input, full gain and master settings, neutral tone control settings, send fully clockwise.

### 4. Options

Gain of channel 2 in mic mode can be decreased by 4.6 dB by an internal jumper.

48 V phantom power can be deactivated by an internal jumper.

9 V phantom power for channel 1 can be applied by an internal jumper to the "ring" terminal of the input jack. **Caution:** Use this option with care. Read the operating instructions.

Specifications and appearance subject to change without notice.

TD20120605

