## **Technical specifications**

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 k $\Omega$
	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 k $\Omega$
	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 k $\Omega$ (5 k $\Omega$ 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 $\Omega$ (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
Di out	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)
F	Output voltage: 450 mV (–7 dBV)
	connector
footswitch	Connector for a dual footswitch
	Stereo jack, ¼" (6.35 mm) tip = internal effect on/off
	up = internal effect off/off

Tone cont	rols
colour	-3 dB at 700 Hz, +10 dB at 8 kHz, switchable
(input 2)	
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	Parallel effect loop (effect blended with dry
effect	sound), see <b>send</b> and <b>return</b> .
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	Subsonic filter, adaptive peak limiter
signal	
processing	
Speaker	8" (200 mm) twin cone full-range speaker,
system	bass reflex enclosure
Mains	Mains voltage (depending on model):
power	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	260 mm (10.24") high
	265 mm (10.43") wide
	235 mm (9.25") deep
Weight	6.2 kg (13.7 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  $\Omega$  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.

TD20111206



Alpha - 2011\_12\_GB

ring = external effect on/off

sleeve = common (ground)
Effect is OFF when the footswitch is ON.