d:16

compact I versatile I powerful

The d:16 is a unique solution for any multi-channel application in medium and high power range. Due to its outstanding performance measures and compact design, the d:16 sets new standards in science, industrial, professional and home install.

The 16 independent amplifier modules with 250W (at 4Ω) each guarantee for an easy and reliable setup of multi-channel audio systems while saving valuable rack space with its slim 3U.

If equipped with one of three digital input options (MADI, Dante or AES3) the d:16 can boast its incredibly high SNR and THD figures as required by world leading scientific institutes.

Features

- 16x 250W per channel at 4Ω top notch class-D amplifier modules

- 6.5" resistive touch interface for metering, control and routing

- Network remote-able via a web application and a RESTful API for integration in your automation system

- Controllable fan speeds for minimum noise or maximum cooling efficiency

- Digital inputs via MADI, Dante™ or AES3 option boards with highest grade DACs (optional)

- DSP enabled delay, EQ, compression and limiting for each channel (optional) *)

- Panic Mute toggle for immediate hardware mute of all channels

- Compact size (3U, standard rack depth)

- Light weight (approx. 20kg)

specifications

power

RMS output power (1 kHz sine, 15dBu)

	load	power	THD+N
single channel	4Ω	250W	0.05%
	8Ω	125W	0.04%
bridged	8Ω	495W	0.04%
	16Ω	250W	0.07%

ac mains

voltage	230VAC ±10V
frequency	50Hz
connector	Neutrik PowerCON
soft start	yes
ext. over-current release	20A (B20/C16)
typ. inrush current	±36A (<0.25ms)

idle losses

idle power	< 500W
standby	< 2.5W

performance

frequency response	-3dB @10Hz
	-2dB @50kHz
phase response	±25° (20Hz-20kHz)
voltage gain	17dB ±0.5dB
power bandwidth	10Hz - 55kHz
SNR	> 110dB
channel cross talk	< -60dB
max. THD (10Hz-30kHz)	
15dBu	0.05%
0dBu	< 0.01%
-20dBu	0.03%

analog inputs

connectors	2x SubD-25 (Tascam)
required level for 250W	15dBu
input impedance	95kΩ
max. input level	15dBu

digital input options

supported sample rates	44.1, 48, 88.2, 96kHz
MADI	1x optical SC in/out
	1x BNC in/out
	1x wordclock out
Dante™	1x RJ45
AES3 (AES/EBU, S/PDIF)	2x SubD-25 (Tascam)
	(16+8 ch. async.)

output

connectors	4x Neutrik NL8
output impedance	< 100mΩ
min. load impedance	≥ 4Ω (single channel)
	≥ 8Ω (bridged)
hi-Z per ch, unloaded	ca. $32V_{RMS}$
DC output offset	< 10mV

protection

DC output error	yes, per channel [*]
over-current protection	yes, per channel [*]
over-voltage main protections	yes

further connectors & buttons

ethernet	RJ45 (etherCON)
panic mute	6.3mm jack
power on/off	latching

user interface

touch display	resistive, 6.5"

dsp

t.b.d.

cooling

type	active, front-to-rear
fans	3 automatic
	(adjustable via UI)
environmental temp. range	0°C - 30°C
recommended clearance	1U above & below

fusing

internal fuses	4x SMPS, 1x SMU
	1x analog PSU,
	(1x DAC board)

accessories

power cord & mounting brackets for rear rack support
panic mute multiplier (optional)

dimensions & weight

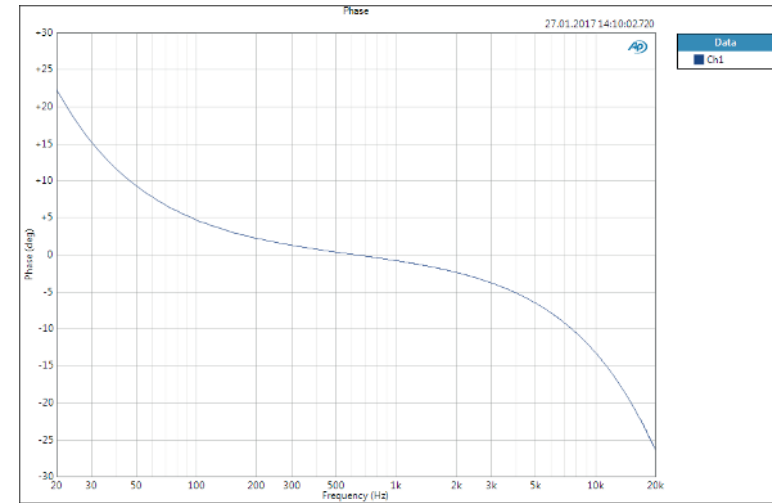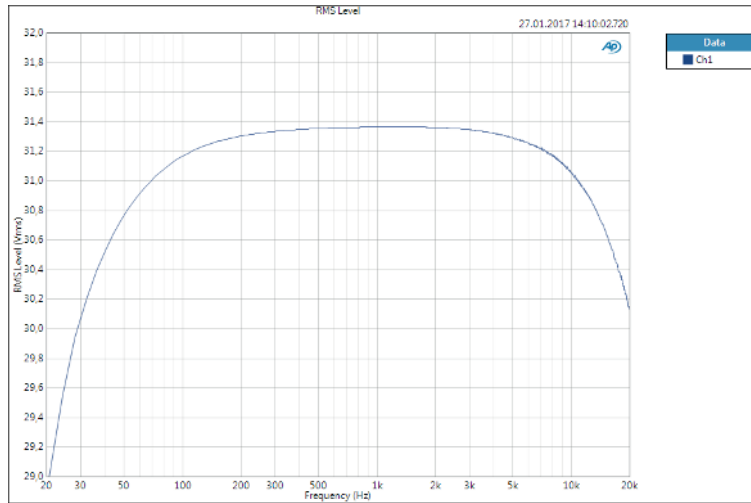|	
WxHxD	482,6mm x 132,5mm x 451mm
weight	approx. 20kg (44 lbs)

[*] each channel affects a respective group of four output channels (1-4, 5-8, 9-12, 13-16)

exemplary measurement

input signal	20Hz - 20kHz stepped sine sequence
input level	15dBu
output load	4Ω

frequency response /
phase response

voltage gain /
THD ratio