



QD Series

Real Sound has expanded the touring-standard QD Series amplifier line with three models: QD-5 and QD-7. All three feature newly upgraded circuitry for improved performance with sustained very low-frequency program material.

The QD-5 is the flagship of the series, with total output power measured at a staggering 14,000 W total (2 × 7000 W at 2 ohms or 14,000 W bridged at 4 ohms). The Class TD output stage of the QD-7 is optimized to effortlessly satisfy and control today's massive, power-hungry subwoofers. In addition, the Regulated Switch Mode Power Supply (R.SMPS) has been updated to provide more sustained high power during extended bursts of low frequency content. The result is an amplifier that delivers thunderous low-end impact without bottoming out, and yet is equally comfortable delivering natural midrange or crystal-clear high frequency content.

The QD-5 fills the need for output power scaled to the demands of midrange and high-frequency drivers in line array and monitor systems. For these applications, the QD-7 offers all the benefits of the QD Series technology at a cost-effective price point.

The QD-5 or QD-7 slides into the middle of the QD Series, offering exceptional flexibility across a range of tour sound applications. Well-suited to mid-frequency bands in line array systems, the QD-7 is also an excellent choice for low-frequency or full-range assignments in stage monitor systems.

几经研发测试，瑞尔噪已成功推出体积小、重量轻、功率大的QD系列专业功放机，QD-5、QD-7便是该系列的拳头产品，这个系列的产品采用最新电路整合技术，极大提高音箱系统超低频的工作效率。

QD-7是该系列的先驱，总输出功率可达14000瓦（2 X 7000W @ 2 Ohm 或者桥接模式下 14000W @ 4 Ohm）。QD-7的TD阶段经过优化可极大满足推动超大功率低音炮的能量需求，而且，常规开关电源功放产品更新换代以提供大功率低音音箱持续工作所需的稳定能量。QD-7轻松推动大功率低音炮完美演绎低频效果的同时，中频的自然、高频的干净清晰仍可同时驱动实现。QD-7极适合线阵系统内推动中、高频喇叭，对于同时推动低频和舞台监听系统中的全频也是不错的选择。

QD-5适合线阵音箱系统，低、中、高频喇叭和舞台返听系统的驱动，此类音响系统应用中，QD-5集合了QD系列的技术优势，应用中较QD-5有更客观的性价比。

产品特征

- 可选用立体声，并联，桥接三种方式
- 具有直接保护，过载保护，短路保护，过热保护，输入压限保，采用IC保护电路，灵敏，快速使机器更加安全
- D5/D7采用四风扇设计（80x80mm），是散热器系统不管工作在4Ohm或8Ohm都能有效的解决升温问题
- 精心检测过的电子元件搭配先进合理的电路设计，使音质更加完美
- 具有低噪音，开关机冲击小的特点
- 桥接是输出采用L/R电位器同时控制

特点

- 体积小、重量轻、功率大
- 可连续重负载工作
- 良好的方波响应和超低的相移
- 能在240V电压下工作的高电压承受能力
- 高刚性整体互联的机箱
- 温控双速风扇
- 过热、直流输出，短路保护
- 闭环控制的自适应限幅器
- 采用独立的整流滤波电流供应设计



QD Series

QD-5




QD-7

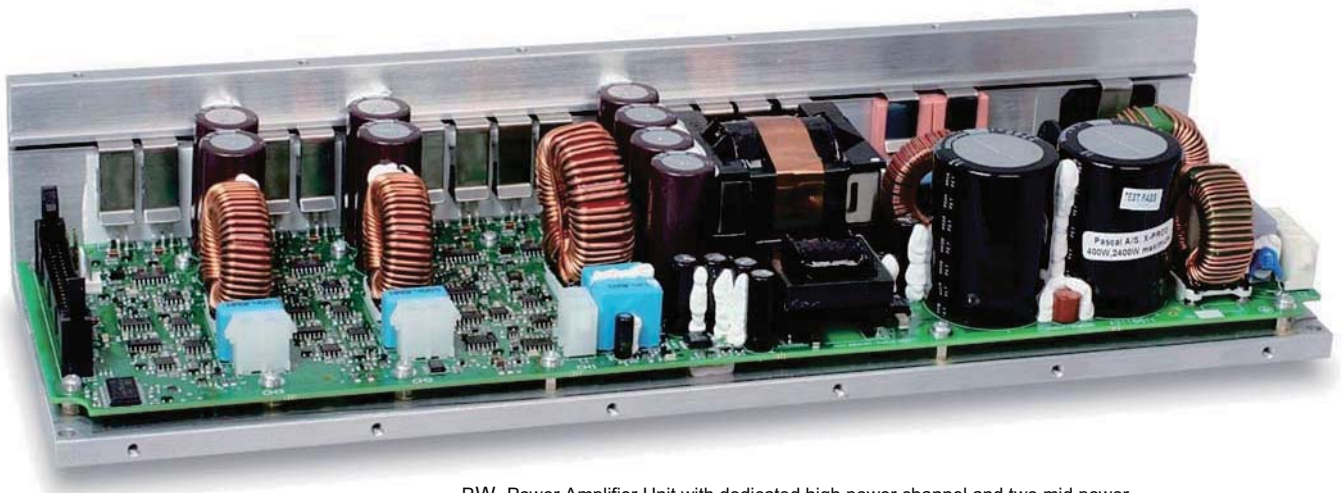
Stereo power 2Ω	4x2500W	2x7000W
Stereo power 4Ω	4x2100W	2x4400W
Stereo power 8Ω	4x1300W	2x2350W
Stereo power 16Ω	2x660W	1x1200W
1KHz0.1%THD 4Ω	2x5000W	1x14000W
Bridge mono Power 8Ω	2x4200W	1x8800W
Indicator	Protect/clip/signal/bridge	Protect/clip/signal/bridge
Control	Ch1 -Ch4 Volume mode/tone/matrix mixer	Ch1 Ch2 Volume mode/tone/matrix mixer
THD 20 Hz - 20 kHz for 1 W	<0.01%	<0.01%
THD at 1 kHz and 1 dB below clipping	<0.05%	<0.05%
Signal To Noise Ratio	>112dBA	>112dBA
Channel separation (Crosstalk) at 1 kHz	>70dB	>70dB
Frequency response (1 W into 8 ohms) +0/-3 dB	2Hz -34KHz	2Hz -34KHz
Input impedance	20KOhm	20KOhm
Input Common Mode Rejection, CMR	54dB	54dB
Output impedance @ 100 Hz	56mOhm	56mOhm
Amplifier gain selectable (all channels)	23, 26, 29, 32, 35, 38, 41, 44 dB	23, 26, 29, 32, 35, 38, 41, 44 dB
Input connectors (per ch.)	3-pin XLR, electronically balanced	3-pin XLR, electronically balanced
Output connectors (per ch.)	Binding Posts 2-pole	Binding Posts 2-pole
Slew Rate	30v/μs(Stereo)	30v/μs(Stereo)
Main power supply	~230V 50/60Hz FUSE:T10A	~230V 50/60Hz FUSE:T10A
Dimensions mm(HxWxD)	88x482x420(2U)	88x482x420(2U)
Weight kg	13	13



Real Sound PW Series





	PW-1 1 channel up to 2400 W	Drive	HFT-150\DFT-180 DFT-150\DFT-180	2pcs
	PW-2 1 st channel up to 2400 W 2 nd channel up to 700 W	Drive	HFT-610\DFT-610 HFT-715\740 DFT-715\740	2pcs
	PW-3 1 st channel up to 2400 W 2 nd channel up to 700 W 3 rd channel up to 700 W	Drive	HFT-910\DFT-910	2pcs




PW Power Amplifier Unit with dedicated high power channel and two mid power


The RealSound PW series is a dedicated pro audio platform for 1, 2 and 3-way self-powered loudspeakers. The PW series has a dedicated high power channel and mid powered channels to match the asymmetrical power requirements of multi-way loudspeakers.


 **Ultra High Power**
The RealSound PW series has a dedicated high power channel and up to two mid power channels. This asymmetrical power distribution matches the power requirements of typical multi-way loudspeakers or small loudspeaker systems. The unique XPC™ circuitry enables the high power channel to deliver up to 2400 Watts on a loudspeaker load.

 **Fully Self-Protected**
The amplifier module protection scheme is the most comprehensive in the pro audio industry and is designed after an audio-at-all-times principle. All relevant protection features have been implemented individually for the SMPS as well as for each amplifier channel ensuring high reliability.

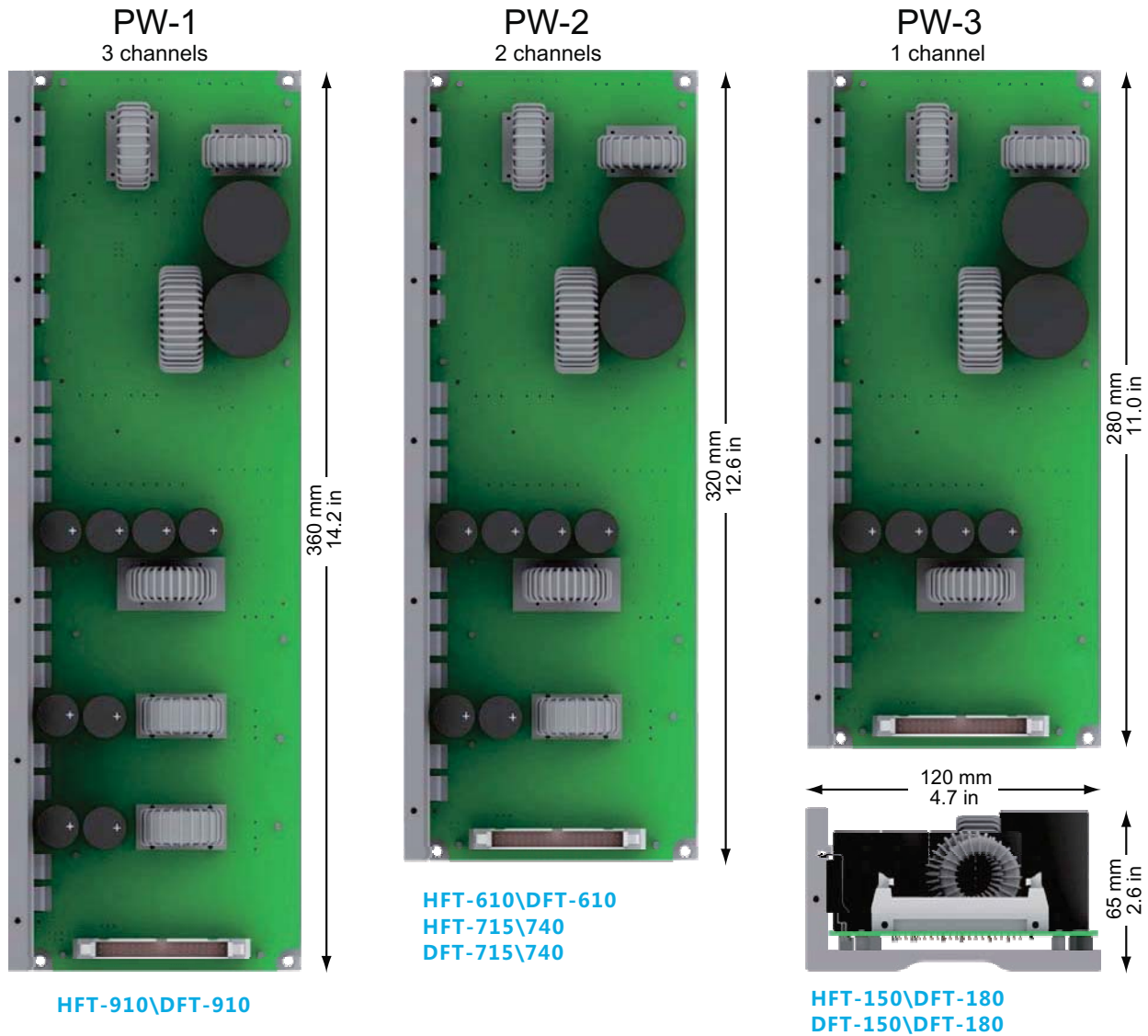
 **Unmatched Sonic Performance**
Thanks to RealSound proprietary UMAC™ Class-D technology, Realsound amplifier modules delivers unmatched audio specifications. This UMAC™ technology is the reason the Pascal PW series has the highest dynamic range and the lowest distortion in the pro audio industry.

 **Advanced Readouts for DSP/Network**
In addition to the conventional readouts and auxiliary power, the RealSound PW series offers a wide range of advanced real time readouts, such as voltage, current and temperature. This offers the possibility to fully interface to even the most advanced DSP- and network solutions.

 **Universal Mains**
RealSound UREC™ power supply technology integrated in RealSound amplifier modules provides universal mains operation for 120 V and 230 V, eliminating the need for market specific selfpowered loudspeakers and related reliability issues. The power supply is regulated delivering consistent power world-wide.

 **Safety Approved - EMC Compliant**
RealSound amplifier modules are safely approved and verified for EMC compliance. CB test certificates are available for easy market approval of the final selfpowered loudspeaker.

Specifications:



Power Ratings (RMS @ 1% THD @ 230Vac)

Load	16Ω	8Ω	4Ω	Peak
1 st channel driven	800 W	1550 W	2400 W* / 2000 W	4000 W
2 nd channel driven	200 W	400 W	700 W	1400 W
3 rd channel driven	200 W	400 W	700 W	1400 W

Output Circuitry	UMAC™ Class D - full bandwidth PWM modulator with ultra low distortion
Output Voltage	LF: 160V _p / 320 V _{pp} unloaded MF, HF: 80V _p / 160 V _{pp} unloaded
Amplifier Gain	LF: 32 dB MF, HF: 26 dB
Signal To Noise-Ratio	> 120 dB (A-weighted, 20 Hz - 20 kHz, 8 Ω load)
THD+N (typical)	< 0,05 % (20 Hz - 20 kHz, 8Ω load, 3 dB below rated power)
Frequency Response	20 Hz - 20 kHz 0,15 dB (8 Ω load, 1 dB below rated power)
Damping Factor	> 1000 (8Ωload, 1 kHz and below)
Protection Circuits	Input limiter, short circuit protection, DC protection of output, under & over voltage protection, intelligent mains fuse protection, power stage overload protection, temperature protection of transformers and heat-sinks
Readouts for DSP/Network	Protect/Disable (mute), Heatsink temperature, Clip (for each channel), Output voltage (for each channel), Output current (for each channel), SMPS Limit (power supply limiter)
Power Supply	UREC™ universal & regulated switch mode power supply
Operation Voltage	Universal Mains, 85-268V (dual voltage auto selection)
Control Options	Sleep Mode (only +7 V live), Disable outputs (mute), Temperature reduction ON/OFF
Aux. Power for DSP	15 V (150 mA), +7 V (1 A, delivered by standby power supply)
Weight	PW-1: 2,0 kg/4,4 lbs - PW-2: 2,3 kg/5,1 lbs - PW-3: 2,6 kg/5,7 lbs

All specifications are typical values

* Power rating on typical loudspeaker load enabled by the XPC™ (Excessive Power Control) circuitry