



HSD KP Series Amplifier



- Extra-large TFT display, capacitive touch panel user interface
- 64 bit double-precision 96kHz DSP process
- High performance 96kHz/24 bits AD/DA converters
- Available versions with AES67 (ATMOS and RAVENNA compatible), Dante™ and AES3 Digital inputs
- Two ports Ethernet switch for daisy chain connection
- USB port for firmware update and DSP control
- High voltage output for high headroom performances
- Similar power per channel in any impedance
- Advanced power management to squeeze until the last watt of your speakers
- Exceptional power sharing in asymmetrical loads
- Powerful and fast response cooling system

DSP management: HSD OCS and amplifier display:

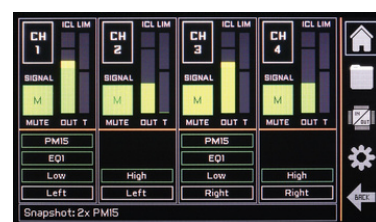
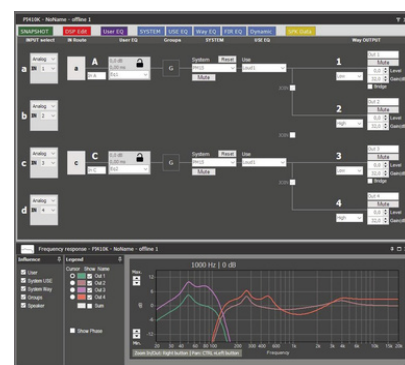
Two general working modes: User and Advanced (manufacturer)

• User functionalities:

- Input Routing/Matrix (basic or advanced)
- Input EQ section with 7 filters and 20 memories
- Input EQ Mode section, predefined by the manufacturer
- Speaker Preset selection, predefined by the manufacturer
- Snapshot library management (up to 20 snapshots)
- Advanced Control Groups

• Advanced functionalities (manufacturer):

- Input EQ Mode section creation (10 filters, 20 Modes)
- Way routing section (Locked/Unlocked)
- IIR EQ section: XOver, Gain, Delay, and 12 EQ filters
- FIR EQ section: 22 linear phase XOver and EQ filters, 20 Phase filters or custom file up to 1000 taps
- RMS and Peak Dynamic control
- Snapshot library management up to 20 presets (Locked/Unlocked)
- Speaker Preset library management (up to 100 presets)
- 5 Security levels definition to limit final user functionality



DSP Specifications - HSD_OCS Control

Overall:

- High performance 96kHz/24 bits AD/DA converters
- 64 bit double-precision 96kHz DSP process
- 0.85 ms minimum process latency time
- Custom FIR process up to 1000 taps
- AES67, Dante and AES3 input versions

Input Section (x4):

- Gain, Mute and Phase inversion
- Delay: in In A: 333ms (114ms), In B/C/D: 90ms (31ms)
- Input EQ: 36 filters (Param., Shelving, LP, HP, BP, SB, AP)

Output Section (x4):

- Crossover Filters: FIR and IIR (up to 48dB/oct, Butterw./LR/Bessel)
- Output Delay: 0 to 31 meters (90ms) per channel
- Output IIR EQ: 12 filters per channel (Param., Shel, LP, HP, BP, SB, AP)

- Output FIR EQ: 22 filters per channel (Parametric, Shelving, LP, HP, BP, SB, AP), or Custom. Up to 1000 taps
- RMS and Peak limiter per channel

Communications:

- Two port Ethernet switch for daisy chain connection
- USB 2.0 Type B port

Miscellaneous:

- 100 Manufacturer system preset memories library
- 20 User preset memories library
- 20 User snapshot memories library
- Manufacturer/User passwords
- User control groups for virtual Equalization, Gain and Delay
- Zones definition for library management and alerts information
- Smaart® analysis software integration



HSD KP Series Amplifier

Power Table

Model	HSD 2-3KP	HSD 2-5KP	HSD 4-6KP	HSD 4-10KP
# of Channels	2	2	4	4
Total Output Power	3,000 W	5,000 W	6,000 W	10,000 W
2 Ω	2 x 1,450 W / 1 x 1,450 W	2 x 2,500 W / 1 x 2,500 W	4 x 1,450 W / 1 x 1,450 W	4 x 2,500 W / 1 x 2,500 W
4 Ω	2 x 1,500 W / 1 x 1,750 W	2 x 2,500 W / 1 x 2,800 W	4 x 1,500 W / 1 x 1,900 W	4 x 2,500 W / 1 x 3,000 W
8 Ω	2 x 1,100 W / 1 x 1,150 W	2 x 1,600 W / 1 x 1,700 W	4 x 1,100 W / 1 x 1,200 W	4 x 1,600 W / 1 x 1,800 W
Bridge @ 4 Ω	2,900 W	5,000 W	2 x 2,900 W	2 x 5,000 W
Bridge @ 8 Ω	3,000 W	5,000 W	2 x 3,000 W	2 x 5,000 W
Hi-Z 70 V	2 x 1,500 W	2 x 2,500 W	4 x 1,500 W	4 x 2,500 W
Hi-Z 100 V	2 x 800 W	2 x 2,500 W	4 x 800 W	4 x 2,500 W

Technical Specifications

Amplifier Model	HSD 2 - 3KP	HSD 2 - 5KP	HSD 4 - 6KP	HSD 4 - 10KP
Max Output Voltage	144 Vpeak	176 Vpeak	144 Vpeak	176 Vpeak
Max Output Current	38 Apeak	50 Apeak	38 Apeak	50 Apeak
Total Harmonic Distortion	<0.05%	<0.05%	<0.05%	<0.05%
Crosstalk (20 Hz - 1 kHz)	>70 dB	>70 dB	>70 dB	>70 dB
Voltage Gain	26 dB - 44 dB	26 dB - 44 dB	26 dB - 44 dB	26 dB - 44 dB
Signal to Noise Ratio	106 dB	107.5 dB	106 dB	107.5 dB
Operating Voltage (60 Hz)	100 V - 125 V AC	100 V - 125 V AC	100 V - 125 V AC	100 V - 125 V AC
Consumption $\frac{1}{2}$ power (120 V)	13.6 A / 1080 W	15.9 A / 1257 W	29.2 A / 2315 W	30.7 A / 2434 W
Dimensions	19 x 3.5 x 14 in 483 x 89 x 355 mm	19 x 3.5 x 14 in 483 x 89 x 355 mm	19 x 3.5 x 14 in 483 x 89 x 355 mm	19 x 3.5 x 14 in 483 x 89 x 355 mm
Net Weight	15.4 lbs / 7 kg	15.4 lbs / 7 kg	19.8 lbs / 9 kg	19.8 lbs / 9 kg

Protections: Soft-start, Turn-on Turn-off transients, Muting at turn-on, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, ICL™, PCM™

IEC filtered pink noise signal (40Hz-5kHz, 12dB crest factor)

PMS can limit output to prevent excessive current draw tripping the mains breaker.

SSP can limit output to prevent excessive heating.