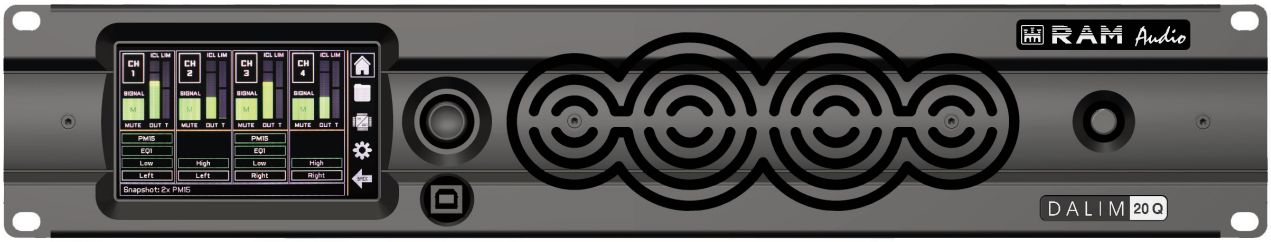
RAM Audio® DALIM Series

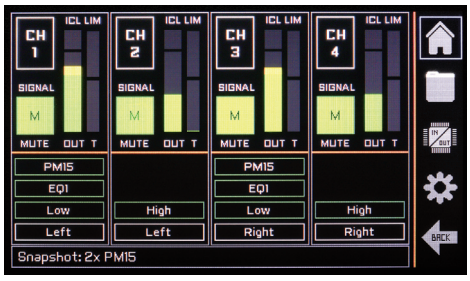


- Large IPS display, capacitive touch panel user interface
- 64 bit double-precision 96kHz DSP process
- Optional AES67 (ATMOS and RAVENNA compatible), Dante™ and AES3 Digital inputs
- Two ports Ethernet and USB port for DSP control
- High efficiency class D topology
- Universal power supply with PFC
- Up to 20000 W in 4 channels
- 8, 4 and 2 Ohm low impedance operation
- 100, 70, 50 and 35 V high impedance modes
- RAM Audio Power Control Management (PCM™)
- Optional GPIO module for 5Q and 10Q
- Neutrik® XLR and Speakon® connectors
- Up-side-down design to avoid fan dust accumulation
- Temperature controlled, front to back cooling
- Neutrik® PowerCon connector (32A for 14/20Q models)

DSP management: RAM 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





OUTPUT POWER	DALIM-5Q	DALIM-10Q	DALIM-14Q	DALIM-20Q
2 ohms	4x 1250 W	4x 2500 W	4x 3500 W	4x 5000 W
4 ohms	4x 1250 W	4x 2500 W	4x 3500 W	4x 5000 W
8 ohms	4x 1250 W	4x 1250 W	4x 1800 W	4x 2500 W
Hi-Z 100V	4x 1250 W 1x 2500 W	4x 2500 W 1x 2500 W	4x 3500 W 1x 4200 W	4x 5000 W 1x 5000 W
Hi-Z 70V	4x 1250 W 1x 1800 W	4x 2500 W 1x 2500 W	4x 2950 W 1x 2950 W	4x 3500 W 1x 3500 W

DSP Specifications - RAM_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 (114m), In B/C/D: 90ms (31m)
- 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 ports Ethernet switch for daisy chain connection
- USB 2.0 Type B port

Miscellaneous:
- 100 Manufacturer Speaker Preset library
- 20 User Preset memories library
- 20 User Snapshot memories library
- Manufacturer/Tech/User passwords
- User control groups for virtual Equalization, Gain and Delay
- Zones definition for library management and alerts information
- Smaart® analysis software integration

DALIM Technical Specifications

	DALIM-5Q	DALIM-10Q	DALIM-14Q	DALIM-20Q
Number of channels	4	4	4	4
Total output power	5000 W	10000 W	14000 W	20000 W
Output Power* (All ch driven/single ch)				
2 ohm	4x 1250 / 1x 1250 W	4x 2500 / 1x 2500 W	4x 3500 / 1x 3500 W	4x 5000 / 1x 5000 W
2.67 ohm	4x 1250 / 1x 1700 W	4x 2500 / 1x 3300 W	4x 3500 / 1x 4700 W	4x 5000 / 1x 6700 W
4 ohm	4x 1250 / 1x 2500 W	4x 2500 / 1x 2500 W	4x 3500 / 1x 3750 W	4x 5000 / 1x 6000 W
8 ohm	4x 1250 / 1x 1250 W	4x 1250 / 1x 1300 W	4x 1800 / 1x 1900 W	4x 2500 / 1x 3000 W
4 ohm Bridged	2x 2500 W	2x 5000 W	-	-
8 ohm Bridged	2x 2500 W	2x 5000 W	-	-
Hi-Z 100V	4x 1250 / 1x 2500 W	4x 2500 / 1x 2500 W	4x 3500 / 1x 4200 W	4x 5000 / 1x 5000 W
Hi-Z 70V	4x 1250 / 1x 1800 W	4x 2500 / 1x 2500 W	4x 2950 / 1x 2950 W	4x 3500 / 1x 3500 W
Max output voltage	150 V_{peak}	150 V_{peak}	189 V_{peak}	235 V_{peak}
Max output current	36 A_{peak}	50 A_{peak}	59 A_{peak}	71 A_{peak}
Total Harmonic Distortion	<0.05%			
Crosstalk (20Hz-1kHz), typical	>70dB			
Voltage Gain	26dB to 44dB			
SNR	111 dBA	111 dBA	113 dBA	115 dBA
Nominal Mains Voltage	100V-240V AC, 50Hz-60Hz (Operating: 90V-265V AC)			
Consumption				
230 V AC - 1/8 rated power (4 Ohm)	3.7 A / 900 W	7.3 A / 1634 W	10 A / 2288 W	14 A / 3268 W
120V AC - 1/8 rated power (4 Ohm)	7.2 A / 900 W	14 A / 1634 W	19.2 A / 2288 W	26.8 A / 3268 W
Idle	0.7 A / 85 W	0.7 A / 85 W	1 A / 112 W	1 A / 112 W
Thermal Dissipation (1/8 rated power 4ohm)	655 BTU/h	1310 BTU/h	1834 BTU/h	2620 BTU/h
Dimensions W x H x D	483x89x355 mm / 19x3.5x14 in			
Weight Net	7 kg / 15.4 lb	7 kg / 15.4 lb	9 kg / 19.8 lb	9 kg / 19.8 lb

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)

Dante™ AES67

RAM Audio®

©2023 by C.E. Studio-2 s.l. Pol.Ind. La Figuera - C/Rosa Luxemburgo nº34 - 46970 Alaquas - Valencia - SPAIN
Phone:+34 96 127 30 54 - ramaudio.com - e-mail: info@ramaudio.com
RAM Audio®, PCM™, ICL™ and QuantaPulse™ are registered trademarks of C.E. Studio-2 s.l.. All other names are trademarks of their respective companies.