

HALO-4B300

AMPLIFIERS

Networkable Amplifiers



PRODUCT OVERVIEW

HALO-4B300 is a 4-channel Class D amplifier with networked DSP, delivering 4 × 300 W in low-impedance mode at 4 Ω or 8 Ω. Its four output channels can be bridged to drive high-impedance 70 V or 100 V loudspeaker lines.

It features 4 balanced analogue inputs, 4 Dante®/AES67 digital inputs and outputs, 2 balanced auxiliary outputs, and a flexible 4 × 6 digital matrix. Its comprehensive DSP includes input and output parametric equalization, graphic output equalization, crossovers, delay, and configurable peak and RMS limiters.

The built-in web application provides intuitive configuration, control and monitoring of the amplifier. Two Ethernet ports with integrated switch functionality allow network daisy-chaining and provide access to control, Dante®/AES67 audio transport and remote management. HALO-4B300 also supports customizable user control panels and integration with EclerCLOUD and the PULSO digital control panel series.

KEY FEATURES

- 4 amplified outputs
- 4 Dante®/AES67 outputs (2 flows) and 4 Dante®/AES67 inputs (2 flows).
- 4 analogue inputs.
- 2 Ethernet ports for Dante®/AES67 and Control management.
- MicroSD/SDHC audio player.
- Internal matrix and signal processing.
- Web application for device configuration.
- Event control and scheduling for automation.
- Customizable user panels.
- Remote control user app for iOS/Android/Web.
- Ultra-low power consumption mode.
- Compatible with the Remote Monitoring & Control Platform EclerCLOUD.

APPLICATIONS

- Retail
- Hospitality
- Education
- Corporate
- Sport & Wellness

ACCESSORIES & COMPATIBLE PRODUCTS

- **PULSO Series**



TECHNICAL SPECIFICATIONS

HALO-4B300

CHANNELS		
Number of Outputs channels	4	
Output connection type	2-pin Euroblock. Pitch: 7,62 mm	
Output configuration	4 Lo-Z connections, bridgeable for Hi-Z	
Number of Inputs channels	4	
Input connection type	3-pin Euroblock. Balanced. Pitch: 3,5 mm	
Number of digital inputs	4	
Input configuration	Digital matrix 4 in x 6 out	
AUXILIAR OUTPUTS		
Number of auxiliar outputs	2	
Auxiliar output connection type	3-pin Euroblock. Balanced. Pitch: 3,5 mm	
DIGITAL OUTPUTS		
Number of digital outputs	4	
Digital output connection type	Ethernet, managed via Dante®/AES67 Controller	
OUTPUT POWER All channels driven @1kHz @CF9dB @ 1%THD		
Max output power @ 8Ω	300 W	
Max output power @ 4Ω	300 W	
Max output power @ 8Ω bridge mode	600 W	
Max output power @ 100V	550 W	
Max output power @ 70V	600 W	
OUTPUT POWER Single channel driven @1kHz @CF9dB @ 1%THD		
Max output power @ 8Ω	300 W	
Max output power @ 4Ω	300 W	
Max output power @ 8Ω bridge mode	600 W	
Max output power @ 100V	550 W	
Max output power @ 70V	600 W	
OUTPUT POWER - All channels driven @ 1%THD		
Max output power @ 8Ω	300 W	
Max output power @ 4Ω	300 W	
Max output power @ 8Ω bridge mode	600 W	
Max output power @ 100V	550 W	
Max output power @ 70V	600 W	
OUTPUT POWER - Single channel driven		
Max output power @ 8Ω	300 W	
Max output power @ 4Ω	300 W	
Max output power @ 8Ω bridge mode	600 W	
Max output power @ 100V	550 W	
Max output power @ 70V	600 W	
SIGNAL		
Voltage gain	28 to 40 dBV 30,2 to 42,2 dBu	
Input sensitivity	0dBV to +12dBV	
Input impedance	>5kΩ Single Ended >10kΩ Differential Pair	

Max input level	+18 dBV +20,2 dBu
Frequency response	20Hz - 25kHz
THD + Noise	< 0,1 % 0,03 Typical @ 1kHz, from 0,1W to Full Power
SNR	>85 dB
Crosstalk	>80 dB
CMRR	>65 dB Typical
Damping factor	>500 @ 8Ω, from 20Hz to 1kHz
ELECTRICAL	
Power supply	Universal, regulated SMPS with PFC
AC mains requirement	100-240 V @ 50-60Hz (±10%)
Power factor correction	> 0,8 (Total Output Power > 300W)
AC mains connector	IEC C14 inlet
POWER CONSUMPTION	
Power Consumption (1/8 POWER, @ 4Ω all channels driven)	224 W 314 VA
Power Consumption (IDLE)	32 W 76 VA
Power Consumption (STBY/SLEEP)	12 W 32 VA
POWER & HEAT @230VAC	
1/4 POWER, @ 4Ω (all channels driven)	
Power	405 W 506 VA
Current Draw	2,3 Arms
Thermal Loss	358 BTU/h 90 kcal/h
1/8 POWER, @ 4Ω (all channels driven)	
Power	224 W 314 VA
Current Draw	1,4 Arms
Thermal Loss	252 BTU/h 63 kcal/h
IDLE (all channels driven)	
Power	32 W 76 VA
Current Draw	0,33 Arms
Thermal Loss	109 BTU/h 28 kcal/h
STANDBY/SLEEP MODE (all channels driven)	
Power	12 W 32 VA
Current Draw	0,14 Arms
Thermal Loss	41 BTU/h 10 kcal/h
POWER & HEAT @120VAC	
1/4 POWER, @ 4Ω (all channels driven)	
Power	407 W 440 VA

1/8 POWER, @ 4Ω (all channels driven)	Current Draw	3,6 Arms
	Thermal Loss	365 BTU/h 92 kcal/h
	Power	225 W 252 VA
IDLE (all channels driven)	Current Draw	2,1 Arms
	Thermal Loss	256 BTU/h 65 kcal/h
	Power	30 W 58 VA
STANDBY/SLEEP MODE (all channels driven)	Current Draw	0,5 Arms
	Thermal Loss	102 BTU/h 26 kcal/h
	Power	12 W 24 VA
	Current Draw	0,2 Arms
	Thermal Loss	41 BTU/h 10 kcal/h
TECHNOLOGIES		
	Amplification technology	Class D
	Energy saving	Auto standby function programmable per channel Sleep Mode function selectable
	Efficiency	74% (1/4 POWER, @ 4Ω, 230VAC IN)
	Cooling	Fan
	Maximum fan noise	49 dBA (Maximum acoustical noise @1m)
DSP		
	AD converters	32 Bit @ 48 kHz - AKM 111 dB Dynamic Range, -103 dB THD+N
	DA converters	32 Bit @ 48 kHz - AKM 115 dB Dynamic Range, -107 dB THD+N
	Sample rate converter	48 kHz
	Internal precision	32 / 64 bit floating point
	Latency	5,6 ms
	Memory/Presets	20 presets
	Delay	Up to 1s at outputs
	Equalizer	Graphic EQ - 8 bands at Outputs Parametric EQ - 12 bands both Inputs and Outputs
	Crossover	With Parametric EQ
	Limiters	Output Peak and RMS Limiter, configurable by user
	Inputs processing	PEQ
	Outputs processing	PEQ, GEQ, Delay, Limiters
PROTECTIONS		
	DC protection	Yes
	HF protection	Yes
	Short-circuit protection	Yes
	Clip limiter	Yes
	Long term limiter	Yes
	Thermal protection	Yes

REMOTE CONTROL CONNECTIONS		
	ON / OFF	No
	GPIs	x4 GPIs (0-12V)
	External MUTE	Yes, contact
LOCAL CONTROL		
	Attenuators	Programmable Front panel knobs
	Output mode settings	Output mode selection per channel in Lo-Z modes: 4 Ω , 8 Ω . Output mode selection per pair of channels in Hi-Z modes (bridge): 100V, 70V, 8 Ω BR
	RUN/SLEEP mode	Yes, front panel push-button
	Power ON/OFF	Yes, back panel switch
SETTINGS		
	Filters	20/35/50/70 Hz, high pass filter selectable per output Fixed 15Hz 3rd order Butterworth
	Output settings	Lo - Z 4 Ω / 8 Ω configurable each channel Hi - Z 8 Ω / 70V / 100V configurable bridged pair
	Gain	28 to 40 dBV 30,2 to 42,2 dBu
	Auto standby function	Yes, configurable by user
	Auto standby threshold	-30dB to -80dB in -10dB steps
	Auto standby time	30s to 1h, configurable via steps
	Power ON/OFF	Yes, front panel switch
CONNECTIVITY		
	Ethernet	Ethernet Base-Tx 10/100/1000Mb Auto X-Over 2 Ports Ethernet Switch capability
	DANTE Protocol	Dante [®] /AES67 4x Tx / 4x Rx channels (2/2 flows)
	Programming and control	Embedded web application
MONITORING		
	Signal Present	SP/CLIP LED (Green - Orange - Red) per channel
	Clipping	SP/CLIP LED (Green - Orange - Red) per channel
	Protect	PROT LED (Red) per channel
	Standby / Mute	MUTE / STBY LED (Red, Orange) per channel
	Thermal	THERMAL LED (Orange) per channel
	Dante	DANTE LED (Green / red) per unit
	Data	DATA LED (White) per unit
	On	ON LED (Green) per unit
DIGITAL ENGINE		
	Processor	Quad core 64bits 1,5GHz
AUDIO CONVERTERS		
	Sampling rate	48 kHz
	Resolution	24 bit
	Dynamic range	111 dB
REAL-TIME CLOCK		
	Retention time	30 days
	Accuracy	1 minutes /month
LOCAL STORAGE		
	Micro SD	SDXC
	Capacity	Up to 2TB
	File system	FAT16, FAT 32, VFAT (read/write) NTFS (read) Multi-partition up to 1

Playable audio files	mp3, ogg, WAV, FLAC, AIFF
Files analysis	65354 playable folders 65354 playable folders within each folder 65354 playable files within each folder
Folder hierarchy	Up to 8 containing the root directory
Sorting	UNICODE, in alphabetical order Up to 100 folders / files by folder Folders/files over 100 sorted in the FAT order
PHYSICAL	
Operating temperature	Min.: 0 °C / 32 °F Max.: 50 °C / 122 °F Performance may be reduced above 40 °C / 104 °F
Operating humidity	5 - 85% RH, non-condensing
Storage temperature	Min.: -10 °C / 14 °F Max.: 50 °C / 122 °F
Storage humidity	5 - 85% RH, non-condensing
Installation options	Rack 19" installation & desktop
Included accessories	Schuko AC cable, Euroblock Connectors (inputs /outputs), Desktop feet, rack 19" installation hardware
Optional accessories	Compatible with Ecler PULSO Series.
Dimensions (WxHxD)	Handles incl.: 482.5 x 44 x 405,6 mm. / 19 x 1.73 x 15.97 in. Handles excl.: 482.5 x 44 x 372 mm. / 19 x 1.73 x 14.65 in.
Weight	5.8 kg / 12.79 lb
Shipping dimensions (WxHxD)	583 x 75 x 580 mm / 22.95 x 2.95 x 22.83 in.
Shipping weight	8.30 Kg / 18.30 lb.

MECHANICAL DIAGRAM

