

HUB1408

DIGITAL MATRIXES

8 outputs digital zoner with DSP



PRODUCT OVERVIEW

HUB1408 is a digital zone manager with 14 inputs and 8 outputs. It has the HANGAR embedded web-server application (control from standard web browser in Windows / MacOS, etc.) for its configuration; remote control from physical wall installation panels, call (paging) stations and applications for mobile devices (Android, iOS). Includes DSP with specific functions for both inputs and outputs.

HUB Series offers multiple possibilities, being intuitive and easy to configure. From the least experienced user to the most expert, you can set up a professional audio installation in a matter of minutes (Plug & Play). It is the perfect solution for any type of sound that requires managing and controlling different zones.



KEY FEATURES

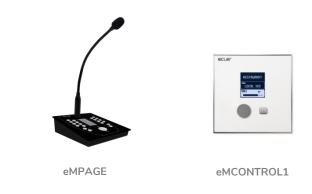
- 14 inputs, 8 outputs digital zoner with integrated DSP
- Easy programming and control by embedded web application, HANGAR, and standard web browser
- Control from the front panel and user remote control by:
 - eMCONTROL1 wall panels (up to 8)
 - eMPAGE paging consoles (up to 2)
 - Ecler pilot application, compatible with Android and iOS: control graphic panels set to user needs (pilot panels)
 - TP-NET protocol (RS-232 interface with DB9 connector) for control and integrating with third party systems
- Control available, by zone (output): selection of audio source (input), volume adjustment and MUTE, 3 band tone adjustment and general volume
- Four priority levels, ducker/pager functions
- Available DSP: frequency shifter, link stereo, delay, crossover filters, 8-band graphic EQ, compressor/limiter and much more
- Predefined setups for a quick installation (plug and play)
- MUTE port can be activated by closing the external dry contact, affecting programmed outputs to this effect

APPLICATIONS

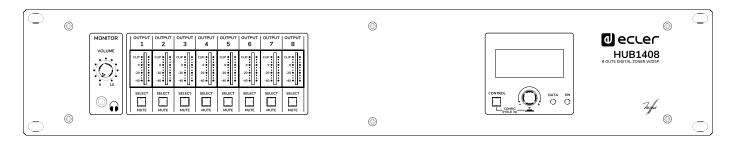
- Commercial
- Hospitality
- Education
- Corporate
- Sports and wellness

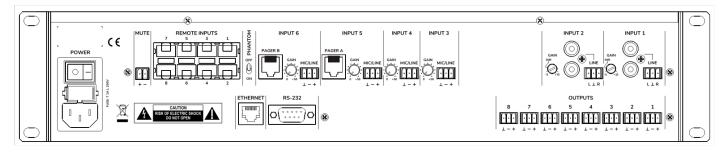
ACCESSORIES & COMPATIBLE DEVICES

- eMPAGE
- eMCONTROL1



MECHANICAL DIAGRAMS







TECHNICAL SPECIFICATIONS

HUB14	INQ
LIODIA	FUO

HUB1408	
DIGITAL	
DSP	
CPU	Floating point 32/64bit
Sampling rate	48 kHz
Latency	<1.5 ms.
Converters	
Resolution	24 bit, AKM
Dynamic range	AD:111dB, DA: 115dB
ANALOGUE	//B.IIIdB, D/K. IIOdB
Input 1, 2 (Line)	
Sensitivity	+5 / -15dBV External potentiometer adjustment
•	>13k
Impedance	
Input headroom	12dBV
Connector	RCA female with Euroblock stack
Type	Unbalanced
Input 3, 4, 5 ,6 (Mic/Line)	0 / 50 IDV 5
Sensitivity	+0 / -50dBV External potentiometer adjustment
Impedance	>24k electronically balanced
Input headroom	12dBV
Connector	Euroblock (Symmetrical)
Туре	Balanced
Pagers	Input 5 and 6 (by RJ45 connector)
Phantom	+48VDC (rear panel switch)
CMRR	>60dB (20Hz - 20kHz)
Input 7 to 14 (Remote Input)	
Sensitivity	0dBV without adjustment
Impedance	>24k electronically balanced
Input headroom	12dBV
Connector	RJ45 Connector
Туре	Balanced
CMRR	>60dB (20Hz - 20kHz)
Outputs 1 to 8 (Line)	
Max output level	12dBV
Connector	Euroblock 3-pin
Type	Balanced
Headphones output	
Selectable output	From Out1 to Out8
Power	>200mW – 200Ω
Connector	Mini-Jack 3,5mm
General	
External mute	Normally open. Assignable to any output zone
Frequency response	<10Hz ~ 20kHz (+0dB / -0.5dB)
Output noise floor (FFT)	>110dB (from 20Hz to 20kHz)
THD + Noise)	< 0.005% (1kHz, 1Vrms)
Crosstalk	>90dB, 20Hz - 20kHz
Ciosstaik	- 000B, 20112



CMRR	>60 dB Typical		
Flatness	Better than ±0.1dB		
PROCESSING			
Input level (x14)			
Volume	From Off to 0 dB		
Mute	On-Off		
Metering	Vumeter post fader		
Stereo	On-Off (Inputs 3 to 6)		
Polarity	On-Off		
High pass filter	50Hz to 150Hz (Inputs 3 to 6)		
Frequency shifter	On-Off; 5Hz (Inputs 3 to 6)		
Noise gate (x4)			
Inputs	Input 3 to 6, Bypass ON - OFF		
Threshold	From -80dBV to +12dBV		
Depth	From 0 dB to 80 dB		
Attack	From 0.1ms to 500ms		
Hold	From 10ms to 3000ms		
Release	From 10ms to 1000ms		
Input EQ (x14)	D 1112 FO		
Туре	Baxandall 3 way EQ		
Gain	-10dB ~ +10dB in 0.1dB steps		
Frequency	Low 200Hz Mid 1kHz High 6.3kHz		
Output level (x8) Volume	From Off to 0 dB		
Mute	On-Off		
Metering	Vumeter post fader		
Stereo	On-Off		
Polarity	On-Off		
Output EQ (x8)			
Type	Baxandall 3 way EQ		
Gain	-10dB ~ +10dB in 0.1dB steps		
	Low 200Hz Mid 1kHz High 6.3kHz		
Output graphic EQ (x8)	3		
Туре	8-Band Graphic EQ		
Gain	-10dB ~ +10dB in 0.1dB steps		
Frequency	63Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4kHz, 8kHz		
Output compressor (x8)			
Bypass	On-Off		
Mode	Compressor / Limiter		
Threshold	-36 dB to +12 dB		
Ratio	1 to 100		
Knee	Soft / Hard		
Attack	0.1ms to 500ms		
Release	10ms to 1000ms		
Make-up gain	0 dB to 10 dB		
Output delay (x8)			
Outputs	1 to 8		
Bypass	On-Off		
Delay	0 to 300ms		



Unit	ms, meters, feet
Output crossover (x8)	ms, meters, reet
Outputs	1 to 8
Bypass	On-Off
Mode	High Pass Filter / Low Pass Filter
Frequency	20Hz to 20kHz
General volume	
Volume	From Off to 0dB
Selectable outputs	Out 1 – Out 8
Ducker	T
Input	IN3 to IN6. In 5 and 6 selectable: DUCKER or PAGER
Outputs	Selectable: 1-8 zones
Priority	Four levels (1max-4min)
Priority volume	-40 dB to +6 dB
Threshold	-80dB to +12dB
Depth	0dB to 80 dB
Attack	5ms to 2000ms
Release	50ms to 3000ms
Hold	10ms to 3000ms
Pager	
Input	IN5 and IN6 selectable: DUCKER or PAGER
Outputs	Selectable: 1-16 zones
Functions	Two function buttons (F1, F2)
Priority	Four levels (1max-4min)
Priority volume	-40 dB to +6 dB
Chime volume	-12dB to +0dB
Chime wolding	None, Melody 1, Melody 2
·	OdB to 80 dB
Depth Attack	5ms to 2000ms
Release	50ms to 3000ms
Pilot panels	O. Off Public Label Heave and 7
General	On-Off, Public, Label, Users and Zone
Volume control	On-Off, Label and Style
Source selection	On-Off, Label and Allowed sources
Equalizer	On-Off, Label, and Style
Color	Controls, Text and Background
OTHERS	
Mechanical	
Dimensions	482,6 x 88,0 x 210,0mm / 19.0"x 3.5" x 8,3" (WxHxD)
Weight	3,60kg / 7.93 lb.
Power supply	
Mains	90-240 VAC, 50-60Hz
Power consumption	20W
Connectivity	
Management Connectivity	Ethernet Base-Tx 10/100Mb Auto X-Over CAT5 up to 100m
Remote bus	RS485
Aux. Power Supply for Remotes	+12VDC, 0,6A max. (short circuit protected)
Programming and control	Hangar (embedded web application), Ecler pilot (Andorid/iOS
i rogramming and control	applicaction), TPNET (UDP/RS232)

ECLER TECHNICAL DATA SHEET



A&E SPECIFICATIONS

The Multi-Zone audio system shall comprise of 8 independent controllable output zones, 6 audio inputs, containing 4 balanced microphone inputs with priority function and phantom power possibility, and 8 remote audio inputs with RJ45 connection. The zone outputs shall be balanced and equipped with Terminal Block connectors.

Native remote management shall be available via smart devices, standard Internet browser and remote wall-panels. Remote control from third-party systems shall be available using TP-NET control protocol through Ethernet or RS-232 ports. The digital zoner shall include a factory setup and predefined configuration management for a plug & play installation. The system shall include an integrated web-server for device's configuration, on which a fully functional web-based user interface is running, which can be accessed through a web browser without installing additional software.

On the front panel, the zoner shall include Power ON and Data status LEDs, outputs signal level indicator, monitor output jack and monitor level knob. On the rear panel, the matrix shall include power on switch, 2 unbalanced stereo inputs with Euroblock and RCA connectors, 4 balanced mic/line inputs with Euroblock connector, 2 pager RJ45 ports, phantom switch, 8 RJ45 remote inputs and 8 zone outputs with Euroblock connector. Also a MUTE dry contact, RS-232 port (DB9 connector) and Ethernet RJ-45 port.

All internal processing shall be digital (DSP). Audio conversion shall have a resolution of 24-bit, and sampling rate should be 48 kHz in an architecture of 32/64 bit. The dynamic range shall not be lower than 111 dB for AD conversion and 115 dB for DA conversion .Possibilities at the inputs shall include: treatment of channels in mono or stereo mode, phase adjustment, feedback suppressor algorithm, high-pass filter, noise gate, level adjustment, mute and level indicators. Possibilities at the outputs shall include: treatment of channels in mono or stereo mode, phase adjustment, external MUTE, 8 band parametric EQ, delay, compressor / limiter, crossover filter, level adjustment, mute and vumeters level indicators. In addition, 4 priority modules management including 2 physical paging consoles.

The zoner shall operate on a 100-240V AC - 50/60 Hz mains network and shall be equipped with a removable power cord having a standard shuko (CEE 7/7) AC plug. The connector on the zoner chassis shall be a fused IEC C14 type. The zoner chassis shall be a two rackspace 19" housing. Depth from mounting surface to rear supports shall be 210 mm and the weight shall not exceed 3,60 Kg.

The digital zoner shall be the ECLER HUB1408.





All product characteristics are subject to variation due to production tolerances. **NEEC AUDIO BARCELONA S.L.** reserves the right to make changes or improvements in the design or manufacturing that may affect these product specifications.

For technical requests address to your supplier, distributor or fill the contact form in our website, at Support / Technical Request.

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