

VIDA-24Q

AMPLIFIERS

Digital Amplifiers



USER MANUAL



PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

TABLE OF CONTENTS

1. PRECAUTIONS	3
1.1 <i>Important Remark</i>	3
1.2 <i>Important Safety Instructions</i>	4
1.3 <i>Cleaning</i>	4
2. PACKAGE CONTENTS	5
3. DESCRIPTION and FEATURES	5
3.1 <i>Main Features</i>	6
4. INSTALL & CONNECT	6
4.1 <i>Location, Assembly and Ventilation</i>	7
4.2 <i>Mains Connection</i>	7
4.3 <i>Analogue Input Connections</i>	8
4.4 <i>Player and Micro SD Card</i>	8
4.5 <i>Digital Audio Inputs and Outputs</i>	9
4.6 <i>Amplified Output Connections</i>	9
4.6.1 <i>OUT MODE</i>	9
4.6.2 <i>Operation Example</i>	10
4.7 <i>Auxiliary Output Connections</i>	10
4.8 <i>GPI Ports</i>	11
4.8.1 <i>Connecting the GPI Remote Control Ports</i>	11
4.9 <i>GPO Ports</i>	12
4.10 <i>External Mute</i>	12
4.11 <i>Ethernet Ports</i>	13
5. START-UP and OPERATION	14
5.1 <i>Start Up</i>	14
6. PANEL FUNCTIONS	15
6.1 <i>Front Panel</i>	15
6.2 <i>Rear Panel</i>	15
7. TECHNICAL DATA	16
7.1 <i>Technical Specifications</i>	16
7.2 <i>Mechanical Diagram</i>	21

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

1. PRECAUTIONS

1.1 IMPORTANT REMARK



WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING (If applicable): The terminals marked with symbol of “⚡” may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made leads or cords.

WARNING: To prevent fire or shock hazard, do not expose this equipment to rain or moisture.

WARNING: A device with Class I construction shall be connected to a mains socket-outlet with a protective earthing connection.



WARNING: This product must not be discarded, under any circumstance, as unsorted urban waste. Take to the nearest electrical and electronic waste treatment centre.

T.O.C.	PRECAUTIONS	PACKAGE CONTENTS	DESCRIPTION & FEATURES	INSTALL & CONNECT	START-UP & OPERATION	PANEL FUNCTIONS	TECHNICAL DATA
--------	-------------	------------------	------------------------	-------------------	----------------------	-----------------	----------------

1.2 IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this device near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other device (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the device.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug the device during lightening sorts or when unused for long periods of time.
13. Refer all servicing to qualified personnel. Servicing is required when the device has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. Disconnecting from mains: When switching off the POWER switch, all the functions and light indicators of the unit will be stopped, but fully disconnecting the device from mains is done by unplugging the power cable from the mains input socket. For this reason, it always shall remain easily accessible.
15. Equipment is connected to a socket-outlet with earthing connection by means of a power cord.
16. The marking information is located at the bottom of the unit.
17. The device shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on device.

1.3 CLEANING



Clean the unit with a soft, dry clean cloth or slightly wet with water and neutral liquid soap only, then dry it with a clean cloth. Be careful that water never gets into the unit through any hole. Never use alcohol, benzine, solvents or abrasive substances to clean this unit.

NEEC AUDIO BARCELONA, S.L. accepts no liability for any damage that may be caused to people, animal, or objects due to failure to comply with the warnings above.

T.O.C.	PRECAUTIONS	PACKAGE CONTENTS	DESCRIPTION & FEATURES	INSTALL & CONNECT	START-UP & OPERATION	PANEL FUNCTIONS	TECHNICAL DATA
--------	-------------	------------------	------------------------	-------------------	----------------------	-----------------	----------------

**Thank you for choosing our device Ecler VIDA-24Q!
We appreciate your trust.**

It is **VERY IMPORTANT** to carefully read this manual and to fully understand its contents before any connection in order to maximize your use and get the best performance from this equipment.

To ensure optimal operation of this device, we strongly recommend that its maintenance be carried out by our authorised Technical Services.

Ecler VIDA-24Q comes with a 5-year warranty.

2. PACKAGE CONTENTS


- VIDA-24Q unit.
- Universal Mains cords.
- Euroblock Connectors (inputs /outputs).
- Desktop feet, rack 19" installation hardware.
- Guarantee Card.

3. DESCRIPTION and FEATURES

VIDA-24Q is a 2400W digital amplifier, with 4 amplified outputs that can be independently configured in high (100/70V) or low (8/4/2ohm) impedance. The VersaPower technology, developed by Ecler, allows an asymmetrical power distribution, and thanks to the Smart VersaPower tool it helps installers by facilitating a smart and fast configuration. In addition, the Class D amplification technology as well as the configurable 4-outputs auto standby and sleep mode functions, both configurable, further improve energy efficiency.

This device offers a wide range of possibilities thanks to its 4 analogue and 4 Dante™ digital inputs, audio player - with microSD slot for local audio files – as well as signal generator, plus 2 auxiliary line outputs and 4 Dante™ digital outputs.


All these features are managed from its intuitive web application which, among other functionalities, allows signal routing - matrix -, audio signal processing - such as equalisation or limiters -, priority management, GPIO configuration through events, as well as calendar events, playlist management and SD card content, thus facilitating the start-up of the audio-visual installation, its maintenance and customisation.


 Thanks to the **Android/iOS/Web application available** to the end user, the audio installation can be managed by them in an easy, intuitive, and customised way.

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

3.1 MAIN FEATURES

- 4 amplified outputs VersaPower 2400W.
- 4 Dante™ outputs and 4 Dante™ inputs.
- 2 auxiliary outputs.
- 4 analogue inputs.
- MicroSD/SDHC card slot audio player.
- Internal matrix and signal processing.
- Web application for device configuration.
- Smart power management Smart VersaPower.
- Control and scheduled events for automation.
- Customize user panels.
- Remote control user application for iOS/Android/Web.
- Energy saving (Ultra-low power consumption mode).

 **VersaPower** is the amplification technology, developed by Ecler, that allows asymmetrical power distribution among amplified outputs, independent of load.


 **Smart Versapower** is the tool that allows automatic gain and sensitivity adjustment, to distribute in an easy and quick way, the total power among the amplified outputs.

4. INSTALL & CONNECT

The equipment **must be correctly grounded** (ground resistance, $R_g = 30 \text{ Ohm}$ or less). The environment must be dry and dustless. Do not expose the unit to rain or water splashes, and do not place liquid containers or incandescent objects like candles on top of the unit.

Do not obstruct the ventilation grilles with any kind of material. If the device requires any intervention and/or connection/disconnection, it must be first powered off.

Do not handle the speaker output terminals with your device turned on, there are high voltages. The output cabling should be connected by a qualified technician. Otherwise only use pre-made flexible cables. There are no user serviceable parts inside the amplifier.

 **Non-compliance with the instructions or neglecting warnings may cause malfunction or even damage the unit.**

- **Avoid turning on the device without the speakers connected** to its outputs and without having previously set the volume/gain controls to minimum level.
- **Always use shielded cables** to make connections between devices.
- **In an amplifier, avoid placing the speaker output cables close to other signal cables** (micro, line...). This may cause the system to oscillate, damaging the amplifier and speakers.

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

4.1 LOCATION, ASSEMBLY AND VENTILATION

Vida series devices have a **19" rack format (2RU)**.

It is very important not to enclose the amplifier or expose it to extreme temperatures as it generates heat. **It is also necessary to promote the passage of fresh air through the ventilation holes of the chassis.** The ventilation system forces the air flow, front to back, through the unit.

If multiple products are installed in the same rack or in a cabinet with closed doors, it is highly recommended to install fans in their upper and lower ends for a forced airflow from the bottom up. This upward air flow will help to dissipate the heat generated inside.

! It is advisable **not to place power amplifiers under other appliances**, but upon these ones, leaving at least one rack unit off between each device and installed above and below it in the rack frame.

4.2 MAINS CONNECTION

VIDA **operates on alternating voltages from 90 to 264V and 47 to 63Hz.** This device is equipped with an oversized power supply capable of adapting **without any type of adjustment to the mains voltage of any country in the world.**

On the **rear panel**, next to the IEC power connector, there is an **On/Off switch** for the unit.



On the **front panel** there is button **ON/SLEEP** with its LED indicator, that illuminates when the unit is in operation, and soft-blinks when it is in sleep mode.



! **Do not allow the mains cable to run parallel to the shielded cables** carrying the audio signal, as this may cause humming.

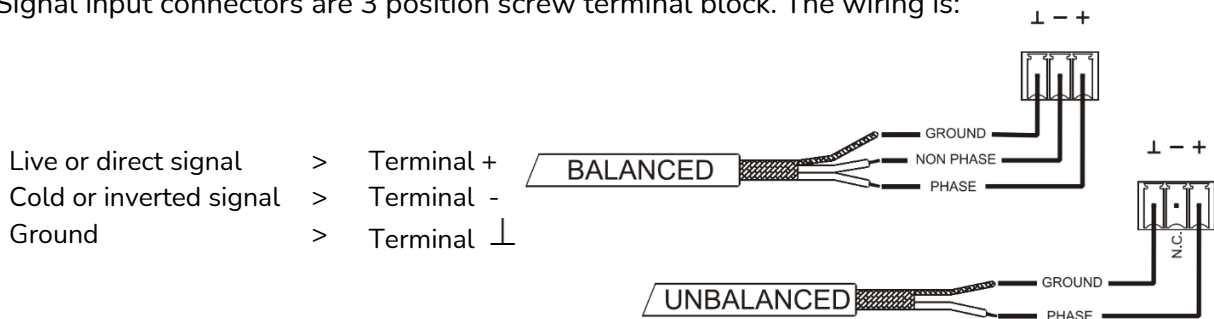
T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

4.3 ANALOGUE INPUT CONNECTIONS

VIDA rear panel provides analogue, balanced, line level signal inputs. The selection of hardware inputs and their routing and mixing towards either amplifier channel is performed from its embedded web application. Please refer to the web application manual (available soon) for more information on www.ecler.com.



Signal input connectors are 3 position screw terminal block. The wiring is:



For **unbalanced connection** short-circuit pin ⊥ to pin -.

4.4 PLAYER AND MICRO SD CARD

VIDA integrates a **stereo audio player able to play audio files from local storage device (microSD card)**, for background music or voice messages. Includes playlist management and integration with device's calendar events for automation. Also available for customizable user panels. Fully configurable, through VIDA web application. Refer to the web application manual (available soon) for more information.

MicroSD Card slot is located in the rear panel. Insert the microSD card into the slot, until a click sound is heard. To extract it, push the microSD card inside the slot, until a click sound is heard, then, it will be released.




T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

4.5 DIGITAL AUDIO INPUTS AND OUTPUTS

VIDA allows the reception of 4 channels of digital audio DANTE™ and the sending of 4 channels of digital audio DANTE™ through an Ethernet network compatible with the transport of digital audio over IP through the DANTE™ protocol.


The routing of the digital audio signals DANTE™ through the Ethernet network, as well as the network configuration of the ports DANTE™ (IP addresses, mask, etc.) of the VIDA, is managed by the software application Dante Controller.

 For more information, please refer to the developer's documentation: www.audinate.com/products/software/dante-controller

4.6 AMPLIFIED OUTPUT CONNECTIONS

The rear panel is fitted with **two position screw terminal block for each amplified output.**





 Always respect the relative polarity for outputs (+ and – on each output connector), wiring and speakers.

4.6.1 OUT MODE

Allows configuring each amplified output, individually, to operate with high or low impedances.

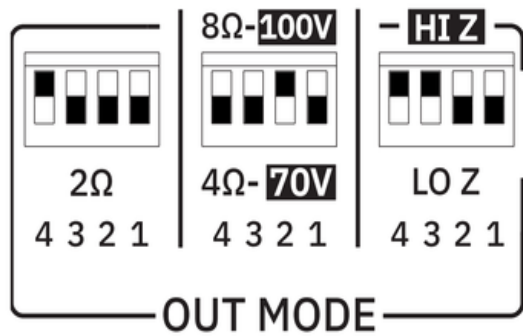


 Select the appropriate operation mode to do not damage the loudspeakers. **Never connect loads below 2 ohms when working in low impedance mode.**

 Make sure to match the impedance of the total load connected to the loudspeakers, when working in low impedance for a correct performance. If impedance values do not match, select the closer one above.

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

4.6.2 OPERATION EXAMPLE



AMP OUT1: HIZ-100V

AMP OUT2: HIZ-70V

💡 When **HIZ** is selected, 2ohm switch has no effect.

AMP OUT3: LOZ-8ohm

AMP OUT4: LOZ-2ohm

💡 When **LOZ** is selected, and 2ohm switch is in 2ohm position (down), switch 4/8ohm has no effect.

⚠️ The connection cable that joins the amplifiers outputs and the loudspeakers must be of good quality, sufficient section and as short as possible. This is most important when the distances to cover are long ones i.e., up to 10 meters it is recommended to use a section not inferior to 2.5mm² and for superior distances 4mm².

4.7 AUXILIARY OUTPUT CONNECTIONS

VIDA rear panel provides **two analogues, balanced, line level auxiliary outputs**. Their independent routing, mixing, and processing is performed from VIDA embedded web application.

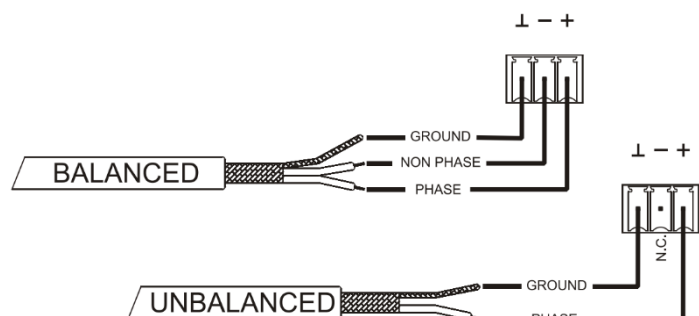


💡 Please refer to the web application manual (available soon) for more information.

⚠️ For **unbalanced connection** short-circuit pin ⊥ to pin -.

- 💡 • If an auxiliary output is connected to an amplifier or audio device with a balanced input, all terminals must be connected point by point and between the two devices.
- When connecting an output channel to an amplifier or device with an unbalanced audio input, leave the - terminal unconnected.

- Live or direct signal > Terminal +
- Cold or inverted signal > Terminal -
- Ground > Terminal ⊥



T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

4.8 GPI PORTS

VIDA rear panel provides four 0-10VDC remote control ports, labelled "GPI 1-4", to which you can connect analogue devices such as the WPa series wall panels. With the VIDA web application, a function can be assigned to each of these ports: a GPI port can control remotely volume of sources, outputs (amplified, auxiliary or digital), and local and network groups, including general volume. Also, loading presets or playlists.



Please refer to the web application manual (available soon) for more information.

4.8.1 CONNECTING THE GPI REMOTE CONTROL PORTS

The GPI connectors are Euroblock type. The assignment of the connection is as follows:

Positive, + 10 VDC	>	Pin +
Variable voltage, 0-10 VDC	>	Pin 1-4
Ground	>	Pin ⊥



- Up to 16 remote control ports can be connected in parallel to the same hardware control potentiometer. Ground connections of all devices those ports belong to must be joined.
- The connection cables can be up to 500m long if a section of 0.5mm² is used.
- Consult the available accessories at www.ecler.com

4.9 GPO PORTS

VIDA has on its **rear panel 4, relay outputs NO / NC (normally open / normally closed)**. Each of these outputs can have its status change associated with a user preset by means of a specific function programmed through VIDA web application, such as a calendar event or the touch of a key available on a user panel. In this way, it is possible to interact with external equipment, such as motors for projection screens or movable partition walls, lights, sirens, GPI inputs from other equipment, etc.



4.10 EXTERNAL MUTE

VIDA has on its **rear panel a control input, or EXT. MUTE port (Normally Open = MUTE OFF / Closed = MUTE ON)**, which allows the activation /deactivation of the mute of audio outputs (zones) of the unit by means of a push button, relay or external potential free contact closure.



- The assignment of **outputs affected by the MUTE port is configured from VIDA web application.**
- Please refer to the VIDA web application manual (available soon) for more information.

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

4.11 ETHERNET PORTS

The **RJ-45-type ETHERNET connectors on the rear panel**, named NET1 and NET2, allows the equipment to be connected to an Ethernet network, or directly to a computer or other device with an Ethernet interface, point-to-point.



This connection enables, within a local network, the following:

- **Global programming and management** of the VIDA unit using the VIDA embedded web application and a standard web browser running on a computer, tablet, etc.
- **Connection of client devices for end-user management** of areas of the installation through the VIDA application, compatible with Android and iOS, or through standard web browsers running on computers, tablets, etc.
- **Connection to Internet for clock synchronization** (calendar events), automatic, firmware updates and other tools.
- **Reception of 4 channels of digital audio Dante™** and sending of 4 channels of digital audio Dante™
- **Connection of third-party devices for integration in control systems** (Crestron®, Extron®, AMX®, Vity®, Medialon®, etc., registered trademarks by their manufacturers), using the NET protocol embedded in VIDA devices. Refer to the NET protocol manual (available soon) for more information.

Dante™ digital audio license is included.

VIDA features two ports with RJ-45 interface in its rear panel:

- **Net1 (Control):** WebGUI, control panels, third party control and other control packages are sent/received over Net1.
- **Net2 (Control + Dante™):** control and Dante™ Audio perform over the same network.

Use Net1 and Net2 in different networks. Configuring both, Net1 and Net2, over the same local network might cause malfunctioning in network features of the device.

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

5. START-UP and OPERATION

5.1 START UP

When the rear panel Power switch is pressed, the amplifier is powered and can be switched on, briefly holding the front ON/SLEEP button or remotely from the VIDA web application or with the NET protocol.



! In a complete audio installation, it is important to start up the equipment in the following sequence:

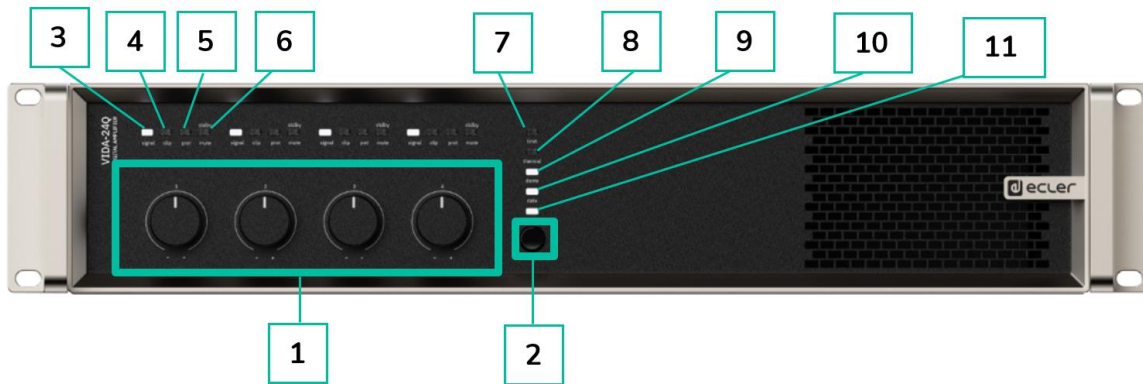
1. sound sources
1. mixer
2. equalizers
3. active filters
4. processors
5. power amplifiers.

To turn them off the sequence should follow an inverse pattern.

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

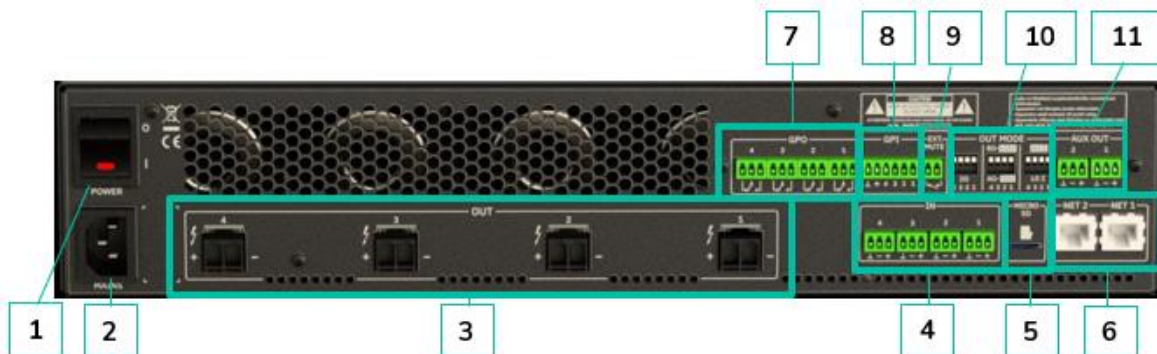
6. PANEL FUNCTIONS

6.1 FRONT PANEL



- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Control knobs, KNOB1-4 2. On/Sleep Button 3. Signal indicator LED 4. Clip indicator LED 5. Protection indicator LED 6. Standby/mute indicator LED | <ol style="list-style-type: none"> 7. Limit indicator LED 8. Thermal indicator LED 9. Dante™ indicator LED 10. Data indicator LED 11. On/Sleep indicator LED |
|---|---|

6.2 REAR PANEL



- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Power switch 2. Mains socket base 3. Amplified outputs, OUT1-4, 2-pin Euroblock. Pitch: 7,62 mm 4. Analogue inputs, IN1-4, 3-pin Euroblock, balanced, pitch 3,5 mm 5. MicroSD slot 6. RJ-45 ethernet network ports, NET1-2 | <ol style="list-style-type: none"> 7. GPO ports, GPO1-4 8. GPIs ports, GPI1-4 9. External mute port 10. Outputs configuration dip switches, OUT MODE 11. Auxiliary outputs, AUX1-2, 3-pin Euroblock, balanced, pitch 3,5 m |
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T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

7. TECHNICAL DATA

7.1 TECHNICAL SPECIFICATIONS

VIDA-24Q

INPUTS	
Number of Inputs	4 analogue input channels 4 DANTE™ Network Rx channels 1 embedded player, 1 embedded signal generator
Analogue input connection type	IN1-4: 3-pin Euroblock, balanced, pitch 3,5 mm.
Digital input connection type	Ethernet, managed via Dante™ Controller
Input configuration	Digital matrix 4 in x 6 out (Settings by embedded web application)
AMPLIFIED OUTPUTS	
Number of amplified outputs	4
Amplified output connection type	2-pin Euroblock. Pitch: 7,62 mm Ref: DEGSON 5EDGRC-7.62
Output configuration	Lo-Z/Hi-Z, 70V/100V, 4Ω/8Ω/2Ω Output mode selection per channel Rear panel DIP SWITCH selectors
VERSAPOWER	
SYMMETRICAL - All channels driven @1kHz @CF9dB @ 1%THD	
Max output power @ 8Ω	600W
Max output power @ 4Ω	600W
Max output power @ 2Ω	600W
Max output power @ 100V	600W
Max output power @ 70V	600W
ASYMMETRICAL - Single channel driven @1kHz @CF9dB @ 1%THD	
Max output power @ 8Ω	1400W
Max output power @ 4Ω	2400W
Max output power @ 2Ω	1600W
Max output power @ 100V	2400W
Max output power @ 70V	2000W
AUXILIAR OUTPUTS	
Number of auxiliar outputs	2
Auxiliar output connection type	AUX1-2: 3-pin Euroblock, balanced (Euroblock pitch 3,5 mm. Settings by embedded web application)
DIGITAL OUTPUTS	
Number of digital outputs	4
Digital output connection type	Ethernet, managed via Dante™ Controller

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

SIGNAL	
Voltage gain	28 to 40 dBV 30,2 to 42,2 dBu
Input sensitivity	-6 to +6 dBV -3,78 to 8,2 dBu 0,5 to 2 Vrms (adjusted by means of Smart Versa Power utility)
Input impedance	>24k (balanced)
Max input level	+18 dBV +20,2 dBu (@ Gain 34 dBV)
Frequency response	15Hz-25kHz (-3dB, 1W any load)
THD + Noise	< 0,1 % 0,015 Typ (@ 1kHz, from 0,1W to Full Power)
SNR	95 dBA (40dB Gain, from 20Hz - 20kHz)
Crosstalk	>80dB (@ 1kHz)
CMRR	> 65 Typ (from 20Hz-20kHz)
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	> 0,96 (Output Power > 500W)
AC mains connector	IEC C14 inlet (10Amax)
POWER & HEAT @230VAC	
1/4 POWER, @ 4Ω (all channels driven)	
Power	848 W 888 VA
Current Draw	3,88 Arms
Thermal Loss	214,1kcal/h 849,8BTU/h
1/8 POWER, @ 4Ω (all channels driven)	
Power	498 W 536 VA
Current Draw	2,33 Arms
Thermal Loss	122,1kcal/h 484,6BTU/h
IDLE (all channels driven)	
Power	72 W 122 VA
Current Draw	0,52 Arms
Thermal Loss	61,9kcal/h 245,7BTU/h
SLEEP MODE (all channels driven)	
Power	4,1 W 23,8 VA
Current Draw	0,1 Arms
Thermal Loss	3,5kcal/h 14BTU/h

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

POWER & HEAT @120VAC

1/4 POWER, @ 4Ω (all channels driven)

Power	855 W 865 VA
Current Draw	7,37 Arms
Thermal Loss	227,9kcal/h 904,4BTU/h

1/8 POWER, @ 4Ω (all channels driven)

Power	483 W 493 VA
Current Draw	4,16 Arms
Thermal Loss	115,2kcal/h 457,3BTU/h

IDLE (all channels driven)

Power	68 W 89 VA
Current Draw	0,75 Arms
Thermal Loss	58,5kcal/h 232,1BTU/h

SLEEP MODE (all channels driven)

Power	3,6 W 10,2 VA
Current Draw	0,09 Arms
Thermal Loss	3,1kcal/h 12,3BTU/h

TECHNOLOGIES

Amplification technology	Class D
Energy saving	Auto standby function programmable per channel Sleep Mode function selectable
Efficiency	72% (1/4 POWER, @ 4Ω)
Cooling	Fan (forced air, front to back airflow. Temperature controlled continuously variable speed)
Maximum fan noise	45dB (maximum acustical noise @1m)

PROTECTIONS

DC protection	Yes (protects loudspeaker and installation against DC and infrasonic signals at the outputs)
HF protection	Yes (protects the loudspeakers against non audible, strong, non musical high frequency signals)
Short-circuit protection	Yes (protects the amplifier from overcurrent, short circuit or other stressful events for the output stages with output reduction or MUTE (automatic protection reset)
Clip limiter	Yes (prevents severely clipped waveforms from reaching loudspeakers, while still maintaining full peak power output).
Long term limiter	Yes (protects the loudspeaker and amplifier against steady long term rms signals (sine wave, non-music) reducing maximum output)
Thermal protection	Yes (output power reduction when output stages operating temperature up to 90 °C (194 °F). Mute when output stages operating temperature up to 100 °C (212 °F)

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

REMOTE CONTROL CONNECTIONS	
ON / OFF	No
GPIs	x4 GPIs (0-10V) Function and settings by embeded web application 5-pin Euroblock connector, rear panel. Euroblock pitch 3,5 mm
GPOs	x4 NC / NO contacts 4x 3pins Euroblock connector, rear panel Euroblock pitch 3,5 mm
External MUTE	Yes, contact (2 pins Euroblock connector, rear panel, Euroblock pitch 3,5 mm)
LOCAL CONTROL	
Attenuators	Programmable Front panel knobs (defaults: Amplified OUTs attenuators)
Output mode settings	Lo-Z/Hi-Z, 70V/100V, 4Ω/8Ω/2Ω Output mode selection per channel (Rear panel DIP SWITCH selectors)
RUN/SLEEP mode	Yes, front panel push-button (operate when pressed more than 0,5 seconds)
Power ON/OFF	Yes, back panel switch (red LED indicator)
CONNECTIVITY	
Ethernet	Ethernet Base-Tx 10/100/1000Mb Auto X-Over (CAT5 up to 100m. Settings by embeded web application)
DANTE™ Protocol	Dante™ 4x Tx / 4x Rx channels Primary and secondary capability. RJ-45 ports (Settings by embeded web application)
Programming and control	Embedded web application
MONITORING	
Signal Present	SP LED (White) per channel (trigger @- 40 dBV)
Clipping	CLIP LED (Red) per channel (Clip, Versa power limiter, Peak power, Power supply overload)
Protect	PROT LED (Red) per channel (Current overload, Output short circuit, Under voltage, Over Voltage, DC OUT (slow blink), HF protect (fast blink)
Standby / Mute	STBY/MUTE LED (White) per channel (ON when STBY, BLINK when MUTE)
Limit	LIMIT LED (Red) per unit (Power (power supply) overload)
Thermal	THERMAL LED (Red) per unit (Temperature limiter)
Dante™	DANTE™ LED (White) per unit (OFF NO WIRE, ON when MASTER, BLINK when SLAVE)
Data	DATA LED (White) per unit (ON when DATA)
On	ON LED (White) per unit (ON when RUN, SLOW BLINK when SLEEP by BUTTON, FAST BLINK when SLEEP by AUTOSTBY, VERY FAST BLINK when HW Faultnit)

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

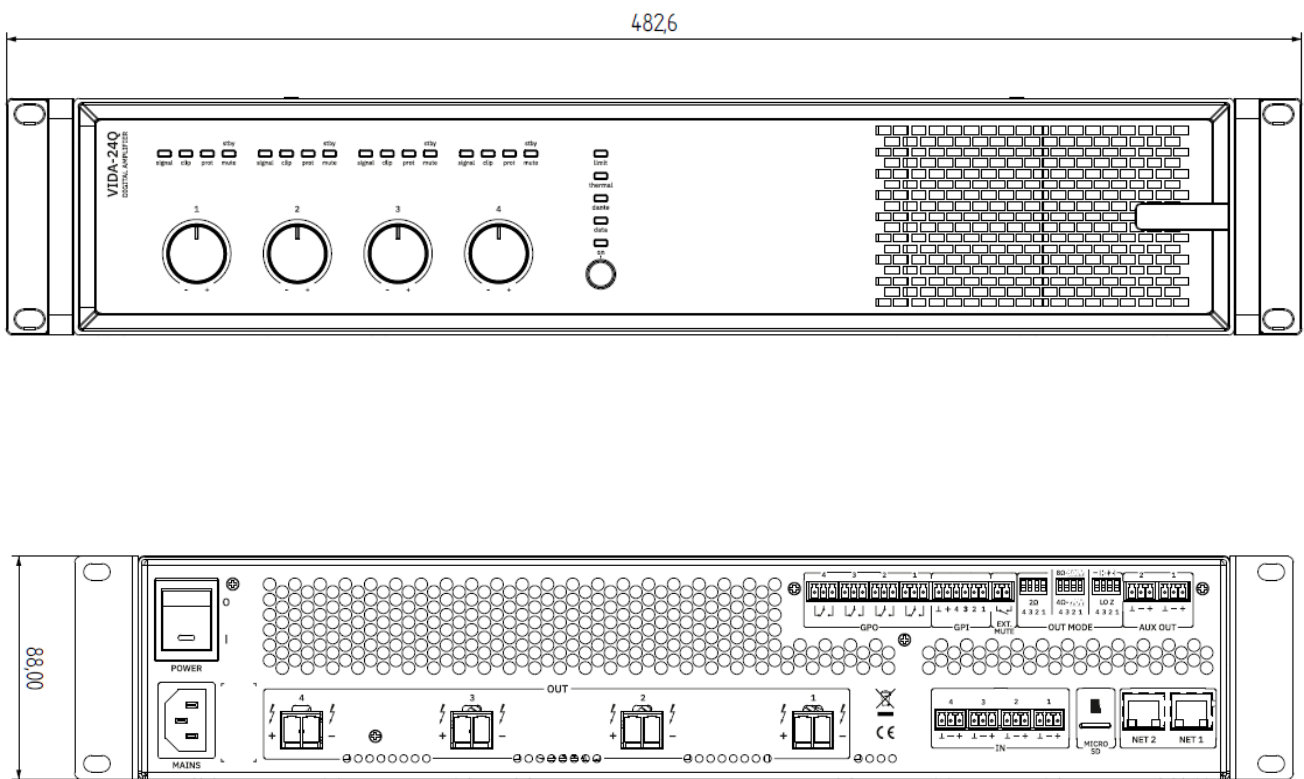
DIGITAL ENGINE	
Processor	Quad core 64bits 1,5GHz
AUDIO CONVERTERS	
Sampling rate	48 kHz
Resolution	24 bit
Dynamic range	114dB
PROCESSING	
Digital processing	32/64 bit
Latency	2,8 ms (Analog IN to analog OUT)
Inputs processing	Parametric EQ (Settings by embeded web application)
Outputs processing	Delay, Parametric EQ, Graphic EQ independent for every amp out and aux out. Limiters independent for every amp out Smart VersaPower management (Settings by embeded web application)
Others	Preset management, Internal matrix, priority & backup signals management, local & network groups, events management incl. calendar (Settings by embeded web application)
REAL-TIME CLOCK	
Retention time	> 5 years
Accuracy	±1 minute / month
Battery	VARTA CR2032 3V, 230mAh
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	-10° to 50° C 14° to 122° F (performance may be reduced above 40 °C)
Operating humidity	5 - 85% RH, non-condensing
Storage temperature	-10° to 50° C 14° to 122° F
Storage humidity	5 - 85% RH, non-condensing
Installation options	Rack 19" installation & desktop

T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA

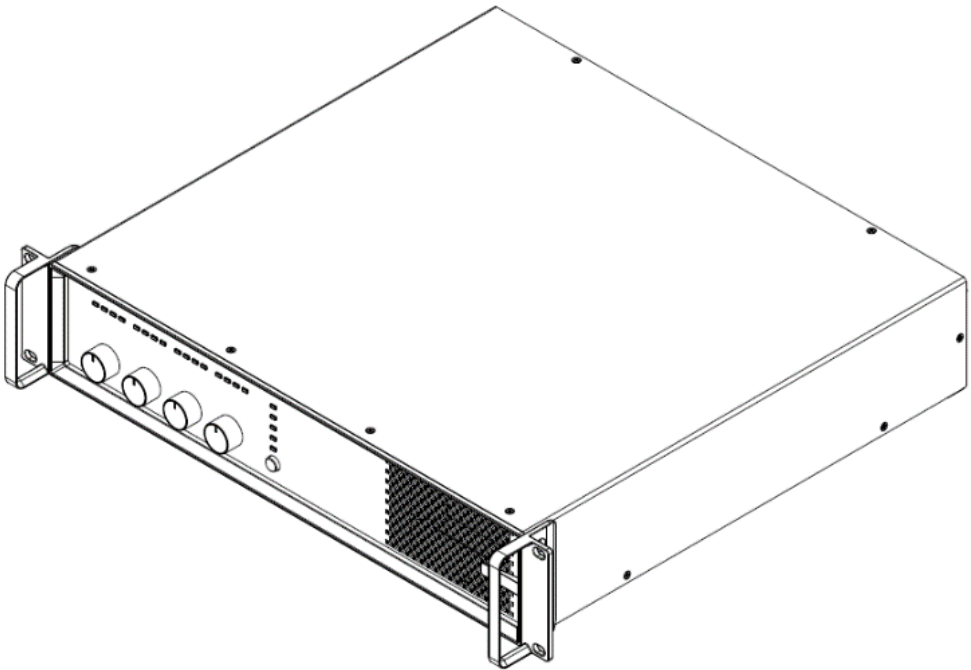
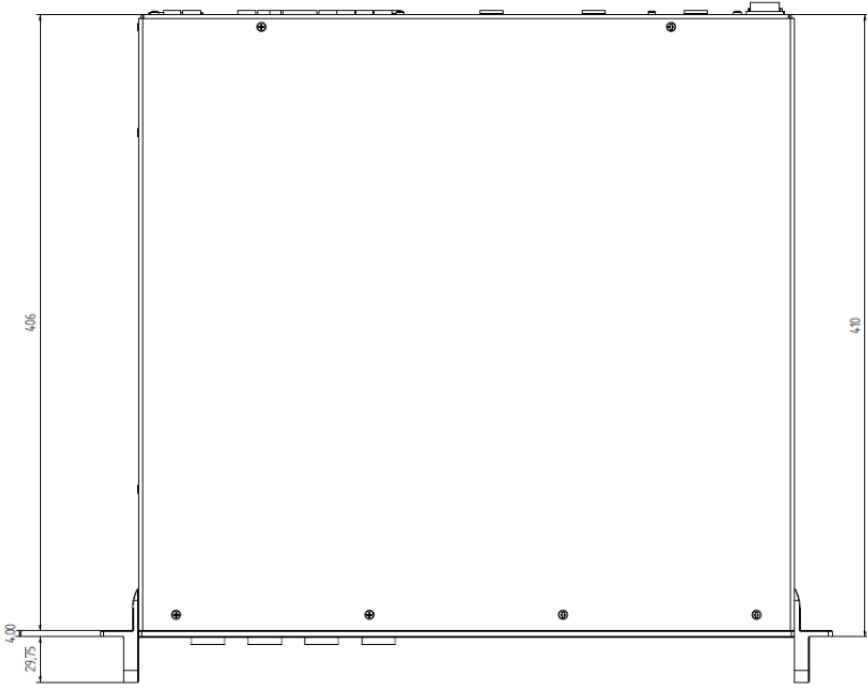
Included accessories	Universal Main cords, Euroblock Connectors (inputs /outputs), Desktop feet, rack 19" installation hardware
Optional accessories	-
Dimensions (WxHxD)	482.6 x 88 x 410 mm. / 19 x 3.46 x 16.14 inches
Weight	9.3 kg / 20.5 lb
Shipping dimensions (WxHxD)	650 x 125 x 600 mm. / 25.59 x 4.92 x 23.62 inches
Shipping weight	12.3 kg / 27.1 lb

7.2 MECHANICAL DIAGRAM

All measures in mm.



T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA



T.O.C.	PRECAUTIONS	PACKAGE CONTENTS	DESCRIPTION & FEATURES	INSTALL & CONNECT	START-UP & OPERATION	PANEL FUNCTIONS	TECHNICAL DATA
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T.O.C.
PRECAUTIONS
PACKAGE CONTENTS
DESCRIPTION & FEATURES
INSTALL & CONNECT
START-UP & OPERATION
PANEL FUNCTIONS
TECHNICAL DATA



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 queries contact your supplier, distributor or complete the contact form on our website, in [Support / Technical requests](#).

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