INTEGRAL series

INTEGRAL-MA1604

KEY FEATURES

• 4 CH Matrix amplifier with high-performance integrated DSP
• 400 W per channel @ 4 ohms
• High Efficiency Class D topology
• Low Z and High Z (Bridged 70 V/100 V) operation
• 4 independent analog inputs
• 2 inputs with selectable MIC/Line option and phantom
• 4 x 4 CH DANTE Digital Audio
• ALMA management control and monitoring

DESCRIPTION

INTEGRAL-MA1604 is a 4CH (4x400W at 4ohm), 2U rack matrix-amplifier intended for permanent installation with integrated processing DSP (4 analog inputs, 8 analog outputs) and DANTE (4x4) digital Audio. Control, configuration and management of the amplifier shall be done via ALMA software over IP or using Open Sound Control (OSC) protocol. DANTE audio channels can be processed and injected back into the network if needed. The amplifier can be used with Lo Impedance lines or Hi Impedance 100V/70V lines.

Priority capabilities, full matrix and routing options make this unit essential as the "brain" of any type of installation. The internal memory resources allow to store more than 100 "global presets" and more than 200 "output channel presets" (speaker presets). A bank of output channel presets with specific processing parameters for all DAS Audio speakers is included allowing the users to configure each channel independently. For instance, it would be possible to recall for amp 1 the preset of Q-23T, for amp 2 the preset of Arco-4T, for amp 3 the preset of Q-10 etc.

The unit includes an OLED display (1.54") with control knobs for intuitive and easy navigation as well meters to monitor signal levels. Basic parameters can be accessible via front panel control knobs; input and output levels, global preset recall, output channel preset recall, mute, source selection, link manager functions, priority enabling etc.

Two of the analogue inputs can be switched to microphone with 12V Phantom power if needed.
The unit also Integrates an Ethernet Switch for daisy-chain connections. No external switch is needed.
WiFi and Bluetooth are available for direct wireless operation.

APPLICATIONS

• Retail Stores
• Bars, clubs and restaurants
• Fitness Centers, hotels, schools

SPECIFICATIONS

Output Power Ratings

Amplifier Channels	4
Power 8 Ohms, Both Channels Driven	4 x 200 W
Power 8 Ohms Bridged	2 x 800 W
Power 4 Ohms, Both Channels Driven	4 x 400 W
Power 100 V	2 x 800 W
Power 70 V	2 x 800 W

Electronics and Audio

Amplifier Output Circuitry	Class D
Frequency Response	20 Hz-30 kHz (+0 - 0.5 dB)
Input Sensitivity	+4 dBu
Max Input Level	+18 dBu
Voltage gain	32.5 dB
Controls	Power On/Off, Navigation knobs
Display	OLED 1.54"
Cooling	Side-Right-to-Left
Amplifier Protections	Short Circuit, DC Ouput, Temperature, Over/Under Voltage
LED Indicators	On, Comms, Signal, Protect

Connectors

Analog Audio Input Connectors	Euroblock 5 mm
Analog Audio Output Connectors	Euroblock 5 mm

DANTE Digital In/Out Connectors	2 x RJ45 Fast Ethernet

Power

AC Input Connector	IEC
Power Supply	Universal Mains Switch Mode
Operating Range	90-250 VAC

DSP

Analog Input Channels	4
Analog Output Channels	8
DANTE Input Channels	4
DANTE Output Channels	4
AD Converters	24 Bit @ 48 kHz 125dBA Dynamic Range
DA Converters	24 Bit @ 48 kHz 125dBA Dynamic Range
Internal Precision	32 Bit Floating Point
Latency	1ms
Delay	120ms per output
Equalizer	LCD
Crossover	Linkwitz-Relay, Butterworth
High and Low Pass Filters	up to 48dB/oct
Limiters	RMS, Peak
Load Monitoring	Yes

Dimensions-Weight

Dimensions (H x W x D)	88 x 483 x 208 mm 3,5 x 19,0 x 8,2 in
Net Weight	3,8 kg (8,2 lb)

Shipping

Carton Dimensions (H x W x D)	170 x 525 x 315 mm 6,7 x 20,7 x 12,4 in
Shipping Weight	4,5 kg (9,9 lb)

ORDERING INFORMATION

Model	Description	P/N
System		
INTEGRAL-MA1604		10721160
Replacement Parts		
L-A2	Power Module	20406645
L-PRO2	Power Module	20406644

DIMENSIONS