

# AM 2160 - AM 2320

## INTEGRATED AMPLIFIER



### CERTIFICATIONS AND APPROVALS

- CE: it complies with European Community 2006/95/CE LVD and 2004/108/CE EMC
- Electromagnetic immunity according to IEC EN 55013+A1+A2, IEC EN 55020+A2+EC, EN 61000-3-2, EN 61000-3-3+A1
- Electronic apparatus safety requirements according to IEC EN 60065:2002

### MAIN FEATURES

- Full digital technology amplifier, 160 W RMS (AM 2160) – 320 W RMS (AM 2320)
- 70 – 100 V / 4  $\Omega$  outputs
- 4 universal inputs for removable screw-terminals and with phantom power supply, high-pass filters facility and a common presence control
- RJ45 ports on inputs 2 and 3 for connections of BM3001 paging microphones
- Configurable priority settings, VOX facility on input 1
- 2 selectable aux inputs with volume and tone controls for 2 music sources
- Chime and siren internal generator, activation through dry contacts
- Status / Priority / Audio Level LED indications

### MAIN APPLICATIONS

- Restaurants
- Boutique
- Pub
- Beauty Centre
- Market
- Hotels
- Office building
- Medical centres

### DESCRIPTION

AM 2160 and AM 2320 are mixer-amplifiers with 4 mic-line audio inputs on removable connectors (the first input also has an XLR socket) and 2 aux inputs for music sources (e.g. CD players, tuners, etc.). Both models have identical features, but the nominal power: AM 2160 is a 160 W amplifier, AM 2320 is a 320 W amplifier. The amplifier output is available either for low impedance loudspeakers (min. 4  $\Omega$ ) or 100 – 70 V constant voltage line (for loudspeakers having 100 – 70 V transformers). Input 1 has a signal detection circuit ('VOX') providing automatic priority operation. All inputs 1, 2, 3 and 4 can access the priority through an external command (connected to the removable connector). Inputs 2 and 3 also have an RJ 45 socket for quick connection of an RCF BM 3001 paging microphone (through CAT5 cable). The MUSIC ON HOLD aux output allows to send the music (the output signal of the device connected to the AUX INPUT A) to additional amplifiers, mixers, phone systems ('music on hold' function), etc.. The 4 mic.-line inputs have a common 'presence' control and separate high-pass filters that are useful for improving speech intelligibility. The 2 aux inputs have independent tone controls (common for both aux inputs). Front panel LEDs indicate the device state (ON, PROT), the priority activation (PRIOR) and the signal level (SIG/PK).

### INSTALLATION NOTES

AM 2160 and AM 2320 have 4 footpads for desk-top positioning. To ensure proper heat dissipation, leave 0.1 m (4") clearances between the amplifier and walls or other components. These amplifiers can be mounted into a 19" rack cabinet (2 units each) through the included rack ears. In this case, it is necessary to add 2 P/AER-1V (1 unit) panels (one above and one below the amplifier) to ensure proper air circulation and heat dissipation.

### ACCESSORIES (included)

- 4 audio input 4-pole removable connectors
- 1 sequential command input 2-pole removable connector
- 1 paging relay 3-pole removable connector
- 1 amplifier output 4-pole removable connector
- Safety protection cover for amplifier outputs
- Rack ears with screws
- AC power cord
- User's guide
- Quick start instructions
- Warranty card

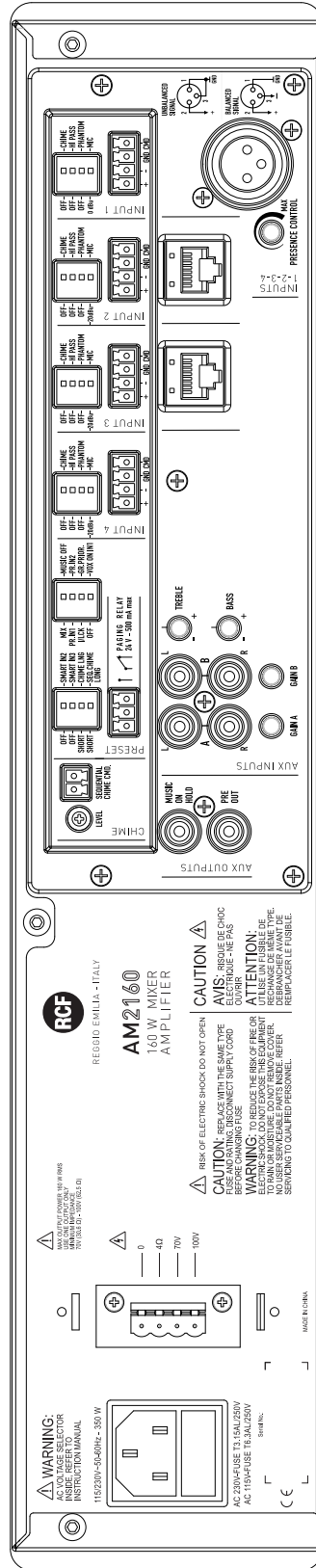
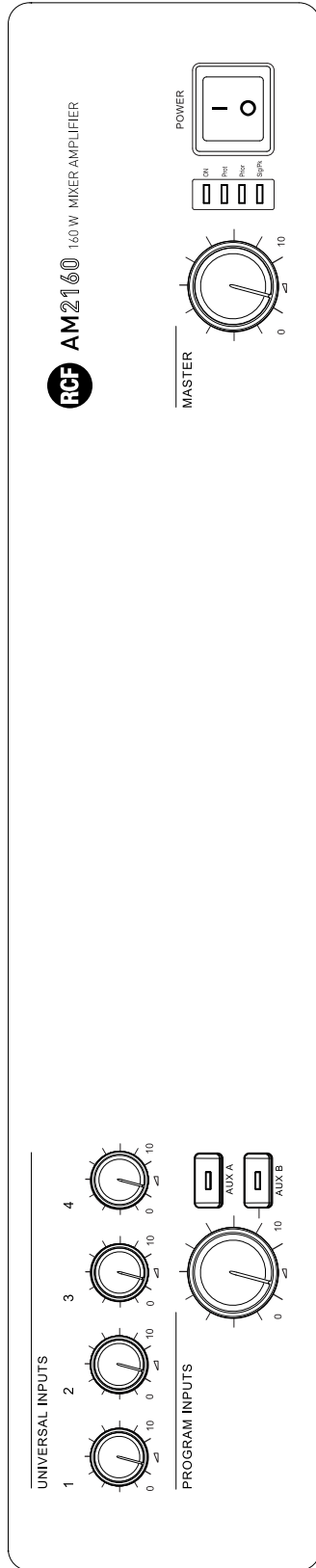
### ACCESSORIES (not included)

- BM 3001 paging microphones with CAT5 cable and RJ 45 connector (code 143 22 008)



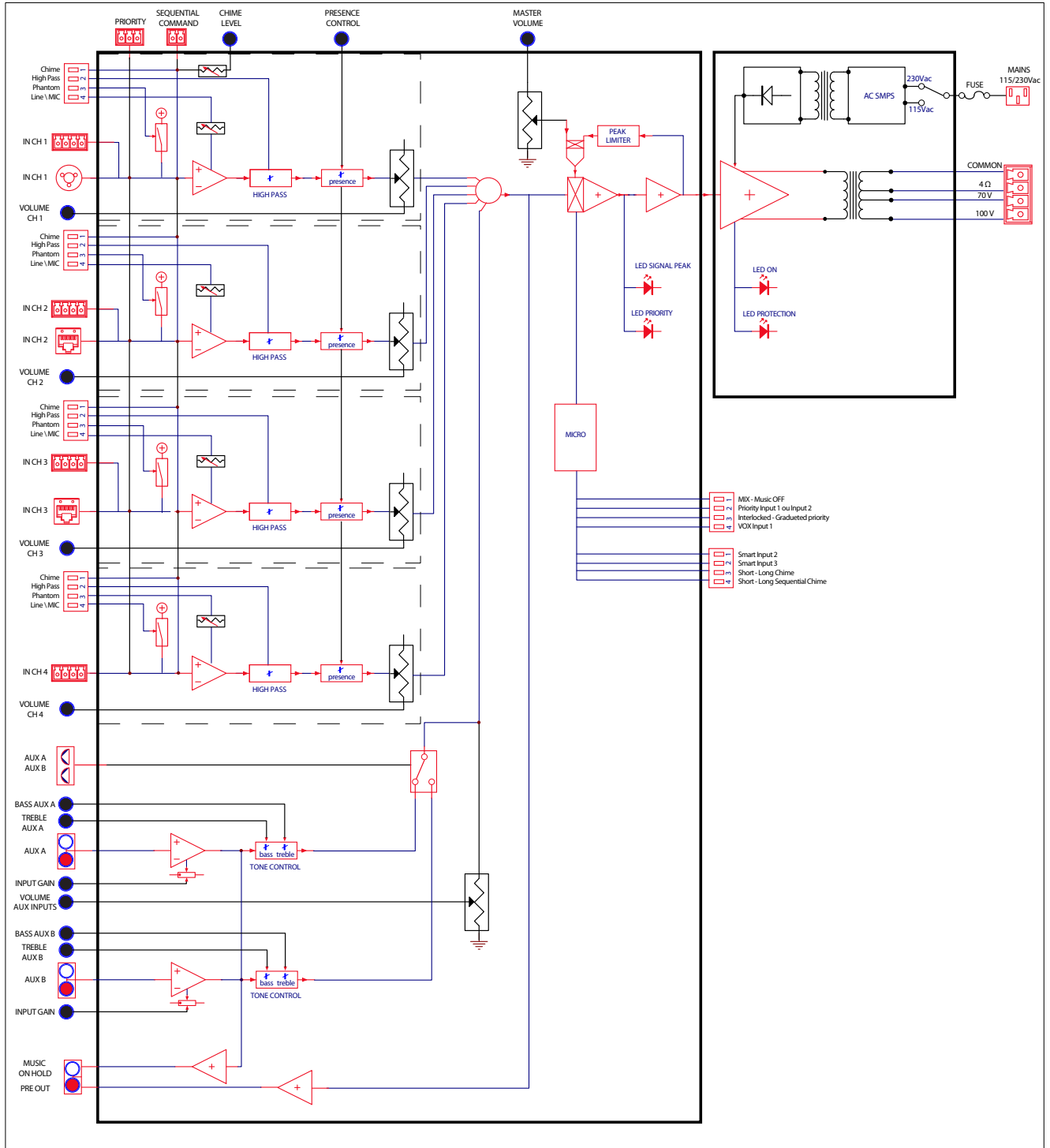
# AM 2160 - AM 2320

## FRONT PANEL & REAR PANEL



# AM 2160 - AM 2320

## SCHEMATICS

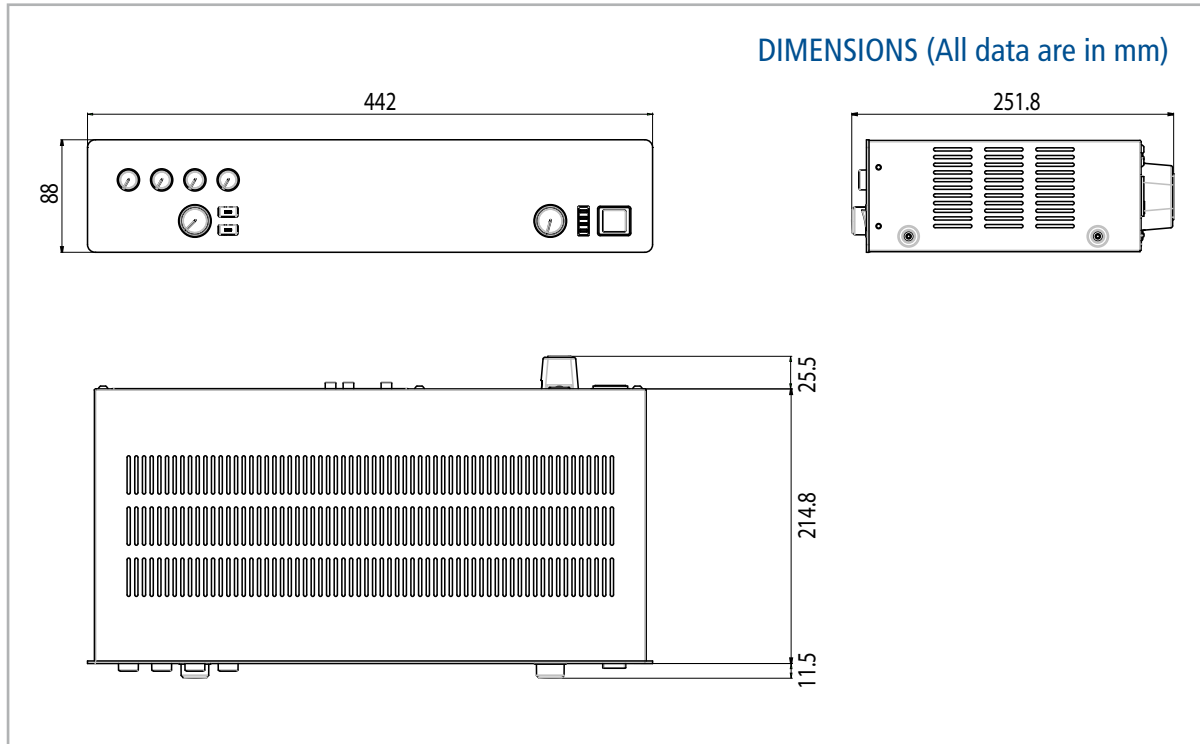


# AM 2160 - AM 2320

## PART NUMBERS

AM 2160 - 12135058  
AM 2320 - 12135059

1.0-J-G



## SPECIFICATIONS

### AMPLIFIER

Output power	160 W RMS (AM 2160); 320 W RMS (AM 2320)	Loudspeaker Outputs min.	4 $\Omega$ (Low impedance) 70 V (31 $\Omega$ )/100 V (62 $\Omega$ ) (Constant voltage AM 2160) 70 V (16 $\Omega$ )/100 V (31 $\Omega$ ) (Constant voltage AM 2320)
Frequency response ( $\pm 3$ dB)	70 Hz $\div$ 13.5 kHz	Protections Amplifier	Overload, Short circuit, Thermal
Frequency response ( $\pm 6$ dB)	30 Hz $\div$ 20 kHz	Protections Power supply	Fuses AM 2160 (T3.15AL - 250 V ;T6.3AL - 250 V) Fuses AM 2320 (T5AL - 250 V ;T10AL - 250 V)
Signal / noise ratio Mic (1 $\div$ 4)	60 dB	Operating voltage	220 $\div$ 240 / 110 $\div$ 120 V ~ 50 / 60 Hz
Signal / noise ratio Aux	80 dB	Power (consumption)	350 W (AM 2160); 600 W (AM 2320)
Distortion	< 0,3 % (at 1 kHz, nominal power)	Dimensions (WxHxD)	444 x 127 x 345 mm
AUX Input tone controls	$\pm 8$ dB @ 80 Hz (bass); $\pm 8$ dB @ 13 kHz	Net weight	4.8 kg (AM 2160); 6.2 kg (AM 2320)
Main Input presence control	+ 10 dB @ 2,15 kHz	Operating temperature	0° to +55°
Main input High-pass filter	150 Hz	Relative humidity	90% non condensing
Input Sensitivity (balanced)	- 56 dBu (max - 25 dBu) Low level Micro - 28 dBu (max 0 dBu) Low level Line - 7 dBu (max + 19 dBu) High level		
AUX Input Sensitivity	Adjustable - 4 $\div$ + 15 dBu (max +22 dBu)		
Input 1 $\div$ 4 impedance	5 - 10 k $\Omega$ (balanced)		
AUX input impedance	20 k $\Omega$		
Phantom power	32 V / 18 mA		
AUX Output level	- 1 dBu / 600 $\Omega$		



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