

ES 3323-II

3 ZONE CD-USB-Bluetooth/MP3 DIGITAL RECEIVER AMPLIFIER



DESCRIPTION

ES 3323-II is a mixer-amplifier with 4 mic-line audio inputs, CD/USB – MP3 player and tuner and an aux input for an additional external music source. The amplifier nominal power is 320 W can be share between the 3 zones speakers, the ES 3323-II is able to control the independent activation of announcements and musical program and control separately the sound level of the 3 zone. The 3 zone output and the direct output are available at 100 V – 70 V for constant voltage line. All four inputs can access the priority through an external command, have a common 'presence' control and separate highpass filters that are useful for improving speech intelligibility. Inputs 2 and 3 also have an RJ 45 socket for quick connection of an BM 3001 and BM 3003 paging microphone. The BM 3001 send the announcement in all the zone, the BM 3003 allow to select the zone to send the announcement. The BM 3003 could be connect in a single unit or a line (daisy-chain) of BM 3003 (max. 12, by using an additional power supply unit). The paging buttons on the front panel can be used to select zones to be paged by either the channel 1 or 4. The music buttons turn the music on in the respective zones. Aux outputs are available to send the internal / external music source signals to additional amplifiers, mixers, phone systems, etc. As system expansion, it is possible to link a second generic external amplifier to keep the background music in the zones that are not paged. Through a screw terminal connector is possible control the master volume and the music volume from a remote area, also the selection of the music source is a remote control available.

CERTIFICATIONS AND APPROVALS

- CE: it complies with European Community 2006/95/CE LVD and 2004/108/E 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

INSTALLATION NOTES

The ES 3323-II is supply with 4 footpad that allow to place the unit on a table. In case the ES 3323-II will be assemble in a cabinet use the rack support AR 3000 and to ensure proper heat dissipation, install the unit while leaving clearances between the units and wall or other components, in case of rack mounting use two rack units, one above and one below the amplifier, for the installation of two panels P AER1, in order to ensure proper air circulation.

MAIN FEATURES

- CD-USB/MP3 Player / FM tuner / Mixer Amplifier
- Bluetooth connection with external devices
- IR Remote control for CD - USB/MP3 player & tuner functions
- Full digital technology amplifier 320 W RMS, 100V-70V
- Low impedance (min. 4 O) 2 W output for a monitor loudspeaker is available
- 4 universal inputs with phantom facility, Presence Control and per-channel High-Pass filters
- RJ45 connectors on input 2 and 3 for connection to BM3001 and BM 3003 microphone
- Screw terminal connections, additional XLR and RJ45 input connections available
- Configurable Priority settings, VOX facility on input 1
- Selectable aux input for music source with volume and tone controls
- USB port on front panel allows reproduction of MP3 files from a memory stick
- Music On Hold and PRE outputs
- The 3 PAGING buttons to select zones to be paged by either the channel 1 or 4
- GENERAL call button is available
- The 3 MUSIC buttons turn the music on in the respective zones
- Digital Chime and Siren built-in generator, activation through dry contact
- Status / Priority / Audio Level LED indications
- Link to a external amplifier (i.e. RCF UP 2321) to keep the music in the zones that are not paged

ACCESSORIES (included)

- 4 Male Audio Input connector 4 pole
- 1 Male Command Input connector 2 pole
- 1 Male Relay Input connector 3 pole
- 1 Male Remote Control Input connector 4 pole
- 1 Male output connector 4 pole
- 1 FM indoor antenna
- Safety protection cover for 100 V output connector
- Remote control unit
- CR 2025 (3 V) lithium battery
- AC Power cord
- User's Guide
- Quick Start Instruction
- Warranty Card

ACCESSORIES (not included)

- AR 3000 rack mounting support 3 units (code 133 60 101 Optional)
- BM 3001 microphone paging with CAT5 cable and RJ 45 connector (code 143 22 008 Optional)
- BM 3003 microphone paging with CAT5 cable and RJ 45 connector (code 143 22 012 Optional)

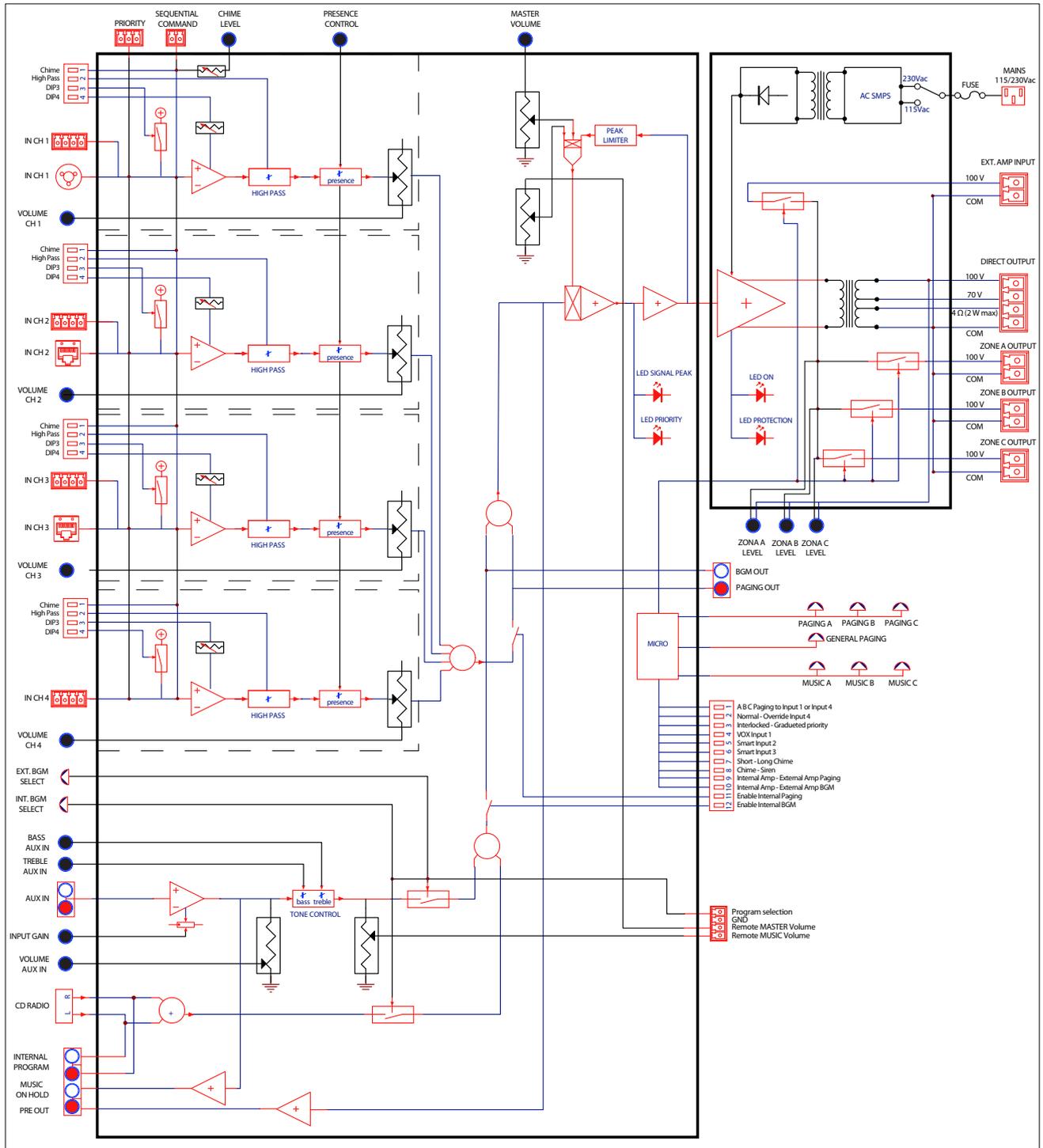
MAIN APPLICATIONS

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



ES 3323-II

SCHEMATICS

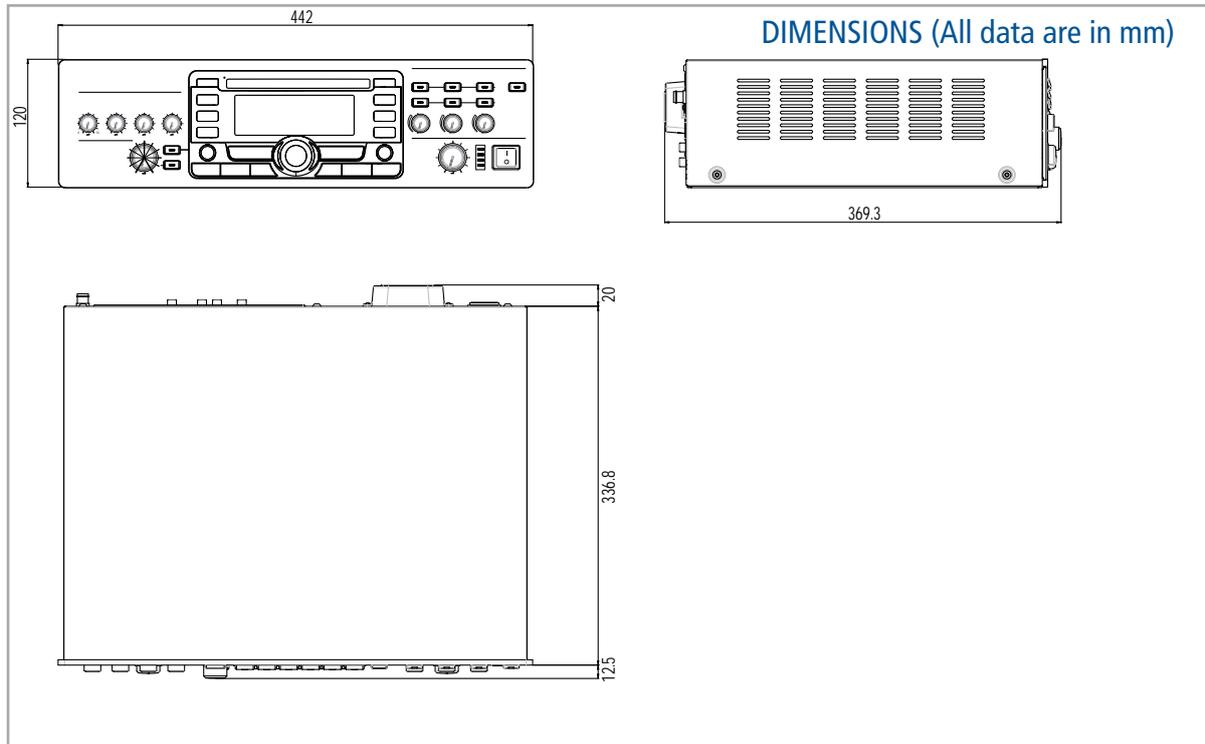


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PART NUMBERS

12135105

1.0-J-F



AMPLIFIER	
OUTPUT POWER	320 W (RMS)
DISTORTION (@ 1 KHZ, NOMINAL POWER)	< 0.3 %
PRESENCE CONTROL (INPUTS 1 ÷ 4)	+ 9.5 dB @ 2.2 kHz
HIGH-PASS FILTER (INPUTS 1 ÷ 4)	150 Hz
INPUTS 1 ÷ 4, LINE	
Input nominal sensitivity	- 7 dBu
Max. input	+ 21 dBu
Signal / noise ratio	80 dB
Frequency response (- 3 dB)	70 Hz ÷ 11.5 kHz
Impedance @ 1 kHz	20 kΩ (balanced) / 10 kΩ (unbalanced)
INPUTS 1 ÷ 4, LINE WITH PHANTOM	
Input nominal sensitivity	- 26 dBu
Max. input	0 dBu
Signal / noise ratio	80 dB
Frequency response (- 3 dB)	70 Hz ÷ 11.5 kHz
Impedance @ 1 kHz	6.5 kΩ (balanced)
INPUTS 1 ÷ 4, MIC. / MIC. WITH PHANTOM	
Input nominal sensitivity	- 56 dBu
Max. input	- 28 dBu
Signal / noise ratio	65 dB
Frequency response (- 3 dB)	70 Hz ÷ 11.5 kHz
Impedance @ 1 kHz	20 kΩ (balanced) / 10 kΩ (unbalanced)
AUX INPUT	
Input nominal sensitivity	0 dBu (adjustable)
Input sensitivity range	- 11 ÷ + 10 dBu
Max. input	+ 14 ÷ 24 dBu
Signal / noise ratio	79 dB
Frequency response (- 3 dB)	40 Hz ÷ 14.5 kHz
AUX INPUT TONE CONTROLS	
- Bass	± 8 dB @ 80 Hz
- Treble	± 8 dB @ 13 kHz
PHANTOM POWER VOLTAGE / CURRENT	32 V / 18 mA
PRE OUT NOMINAL OUTPUT LEVEL	0 dBm (affected by channel volume controls, presence control, music selectors and controls, not by the front panel / remote MASTER volume control)
PAGING OUT NOMINAL OUTPUT LEVEL	0 dBm (affected by channel volume controls, presence control, not by the front panel / remote MASTER volume control)
MUSIC OUT NOMINAL OUTPUT LEVEL	0 dBm (affected by music selectors and controls, not by the front panel / remote MASTER volume control)
MUSIC ON HOLD NOMINAL OUTPUT LEVEL	0 dBm (affected by the AUX INPUT gain only)
LOUDSPEAKER OUTPUTS	
Low impedance	4 Ω - power: 2 W
Constant voltage	70 V (16 Ω) / 100 V (31 Ω) - power: 320 W

RADIO	
FM range	87.5 ÷ 108 MHz
FM frequency response	30 Hz ÷ 15 kHz
FM channel separation (1 kHz)	≥ 30 dB
FM intermediate rejection	≥ 70 dB
FM image rejection	≥ 50 dB
FM signal / noise ratio	≥ 55 dB
AM (mw) range	522 ÷ 1620 kHz
Antenna input	75 Ω - Coaxial
AUDIO CD	
Frequency response	20 Hz ÷ 20 kHz
Signal / noise ratio	≥ 80 dB
Total harmonic distortion (1 kHz)	< 0.2 %
Channel separation	≥ 55 dB
PROTECTIONS	
Amplifier	Short circuit, thermal
Load	DC Offset Delay, fuse
Power supply	fuses
GENERIC	
Operating voltage	115-230V / 50-60 Hz
Power (consumption)	350 W
Dimensions (w, h, d)	444 mm, 127 mm, 345 mm
Net weight	10.1 kg



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