PUBLIC ADDRESS SERIES

BASIC SERIES

Owner's Manual

PUBBLIC ADDRESS SERIES

BASIC SERIES
BA5 – BA120B – BA240B

PRODUCT DESCRIPTION

Monophonics amplifiers and mixer presents:

- 2 MIC-AUX inputs (labelled with nos. 1 and 4) electronically balanced and commutable with micro-switch.
- 2 MICRO inputs (labelled with nos. 2 and 3) electronically balanced
- 1 CD/TAPE input
- 2 treble and bass general controls
- 1 general master volume control
- 1 power indicator
- 1 PRE OUT output
- 1 TAPE OUT output

A 24 VCC potential is available on MICRO input, insertable through 2 micro-switch and channels on the phonic line, the same potential for the eventual direct phantom power supply of electret-type microphones.
Audio potential outputs for loudspeakers of amplified series (BA120B and BA240B) are expected for connection with constant impedance and voltage lines.
The whole electronic circulation has quality and safety working features.
Metal framing is suitable to be supported on surfaces (table, etc.) and is equipped with separated stirrups for assembly in 19" rack; in this case it occupies 1 rack unit = 44mm for BA5 and 2 Rack units = 88mm for BA120B and BA240B.

POSSIBLE USES

- conferences
- places of worship
- hotels
- schools
- airports
- offices
- supermarkets
- restaurants
- motorway restaurants
- auditoriums
- industries
- gyms

POWER SUPPLY

The unit is expected to work with 230 VCA – 50/60 distribution system and with 24 VCC battery.
In case of power dysfunction, check the outside and inside protection fuses (for 24 VCC) and eventually replace them with others of same calibration; if one of them burns out immediately, do not go on and have check the unit by qualified personnel.
Take away plug from 230 VCA electric power socket and 24 VCC battery always, before removing fuses and, in any case, open the unit framing.

SIGNAL INPUTS AND OUTPUTS CONNECTION

On MIC-LINEA commutable channel 1 (DIN 5 poles) socket pin 5 is connected on a “Priority” circuit; if a microphone (or a microphone base) with a priority consent is being connected, an automatic softening of the other amplifier inputs (2,3,4,5) is achieved by pressing the speaking key. On the above mentioned DIN (pin 4) socket a 24 VCC potential is available for eventual amplified microphonic places.
It is possible to assemble a DIN-DON card as optional, which is activated with the priority function (1 of Fig.4).
A 24 VCC potential for direct “phantom” power of electret-type microphones (on the same balanced phonic line) could be carried to 2 and 3 MICRO (XLR) channels, through the multi-micro-switch placed on the back; therefore, before connecting a microphone it should pay attention to the model (if dynamic or electret). Do not insert 24 VCC in case of dynamic microphone; insert them with electret microphone only.
4 JACK channel is MICRO/LINE commutable.
5 AUX channel (RCA-type pin) could be used for tape, CD, turner and radio microphone, videoprojector audio, outside audio lines (to be protected by inserting a separator transformer), message generators.

On same connector (ref. 9, fig.1), power unit input and pre output are available.
If no connectors are inserted to this socket, link between pre output and power unit input for connection automatically happens (see fig. 3).
MAIN-IN is the power unit imput for audio signal came to outside device (e.g. Feedback suppressor , ecc.); connector is 6,3 mm JACK-type stereo female (unbalanced audio).
PRE-OUT is the preamplifier output with an audio signal depending on Master volume regulator, available to pilot an outside device (e.g. Feedback suppressor etc.); connector is 6,3 mm JACK-type stereo female (unbalanced audio).

ACOUSTIC SPEAKER CONNECTIONS (BA120B and BA240B only)

Unit is supplied with a crossbar output terminal board for connection with constant impedance and voltage lines.

- CONSTANT IMPEDANCE LINES

4 and 8 Ohms terminals should be used.
In order to achieve the maximum efficiency of the system and to take precautions from amplifier bad working, it is necessary to check the effective loading impedance of the lines. The total speakers impedance should be equal or higher than pre-selected value for connection.
To get that, each loudspeaker should be without transformer and should be connected in series or in series-parallel groups; In any case loudspeakers should also have the same power handling (see fig. 2a).

- CONSTANT VOLTAGE LINES

100 V terminals should be used with each loudspeaker provided with line transformer and parallel connected.
In order to achieve the maximum efficiency of the system and to take precautions from amplifier bad working, it is necessary to check the effective total power handling of the loudspeakers that has to be equal or lower than the RMS power value of used amplifier. It’s a good rule arranging a 10-20% safety margin on the amplifier power capability (see fig. 2b).

SPECIFICATIONS: BA5 – BA120B – BA240B

TAPE inputs sensitivity	- 4 dBm 490 mV	
LINE inputs sensitivity	- 12 dBm 195 mV	
MICRO inputs sensitivity	- 60 dBm 0,8 mV	
Micro-balanced inputs impedance	600 Ohm	
Line-balanced inputs impedance	220 KOhm	
Bass control	± 12 dB at 50 Hz	
Treble control	± 10 dB at 10 KHz	
TAPE REC output level	+ 0 dBm 775 mV	
PRE OUT output level	+ 0 dBm 775 mV	
Frequency response (-3 dB)	50-15.000 Hz	
Rating power distortion @ 1 KHz	< 1%	
NOISE RATIO 20÷20KHz weighted master anticlockwise:	91dB	
NOISE RATIO 20÷20KHz weighted master clockwise:	82dB	
EIN Micro(noise equal to the input) 20÷20KHz weighted RS=150ohm:	126dBA	
Power supply:		
from CA mains	230 V CA 50÷60 Hz	
from battery	24 VCC	
BA5		
Consumption	15VA	
Dimensions (W x H x D)	482x44x100mm	
Weight (Kg)	1	
	BA 120B	**BA 240B**
RMS output power	120 W	240 W
I.H.F. power	180 W	360 W
Loudspeaker outputs:		
Constant impedance	4-8 Ohm	
Constant voltage	50 – 70 – 100 V	
Consumption	220 VA	440 VA
Dimensions (W x H x D)	482x88x256mm	482x88x340mm
Weight (Kg)	7 Kg	14 Kg

COMMANDS AND FUNCTIONS (see fig.1)

1. POWER ON/OFF : power switch.
2. LEVEL : volume for MICRO – LINE – TAPE inputs.
3. BASS: bass adjustment.
4. TREBLE: treble adjustment.
5. MASTER LEVEL: main volume.
6. ON: power signalling.
7. MAINS: 230 VCA supply mains socket.
8. FUSE: protection fuse of CA mains
9. MAIN IN/PRE OUT: unit power input and mixed output of amplifier “PRE” sector (for connection, see fig. 3).
10. TAPE REC/PLAY: stereo output/input for recorder (tape 5 input).
11. MIC/LINE 4: balanced input adaptable to variable sensitivity.
12. MICRO/LINE: microswitch for changing input sensitivity on channel 1 and 4.
13. MICRO 2 and 3: balanced microphonic input.
14. PHANTOM: switch for connecting 48 VCC phantom supply power to inputs 2 and 3.
15. MIC/LINE 1: balanced input adaptable to variable sensitivity for line or microphone equipped with “PRIORITY” command.
16. POWER OUT: output for loudspeaker lines.
17. BATT.: 24 VCC power supply input for outside battery.

FIG.1

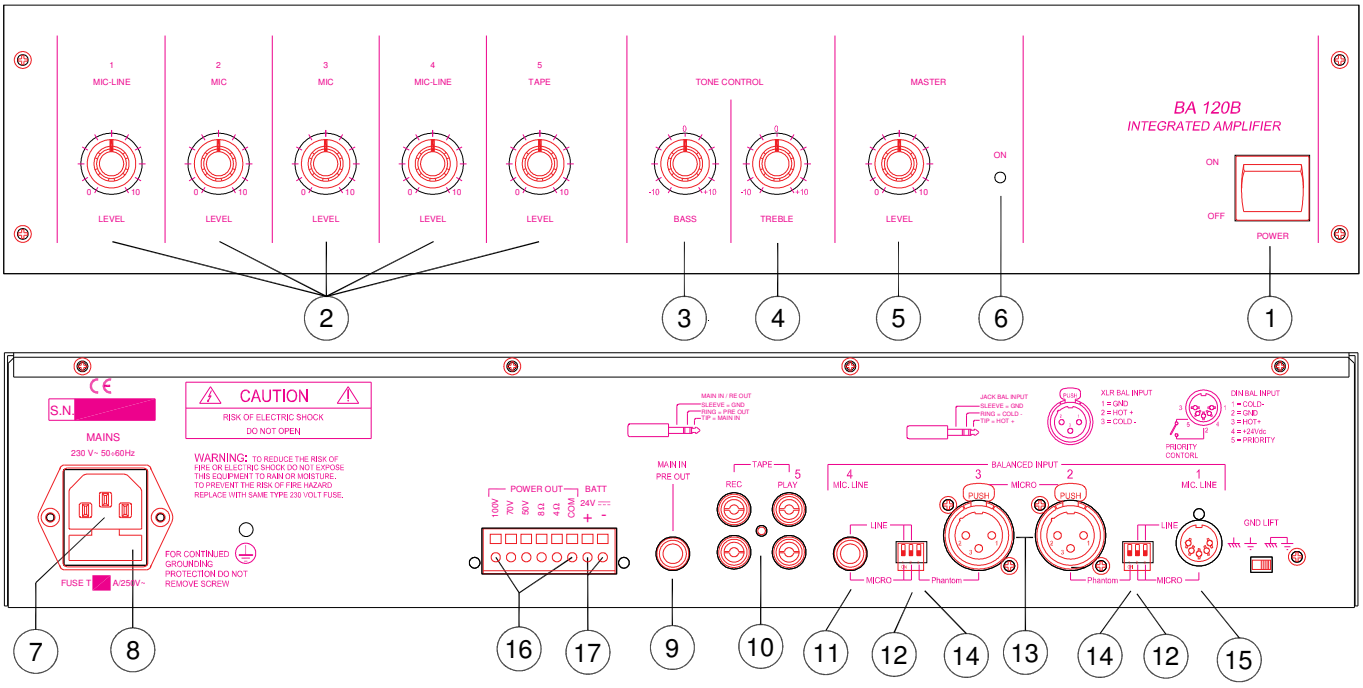


Fig.2 _ LOUDSPEAKER CONNECTIONS

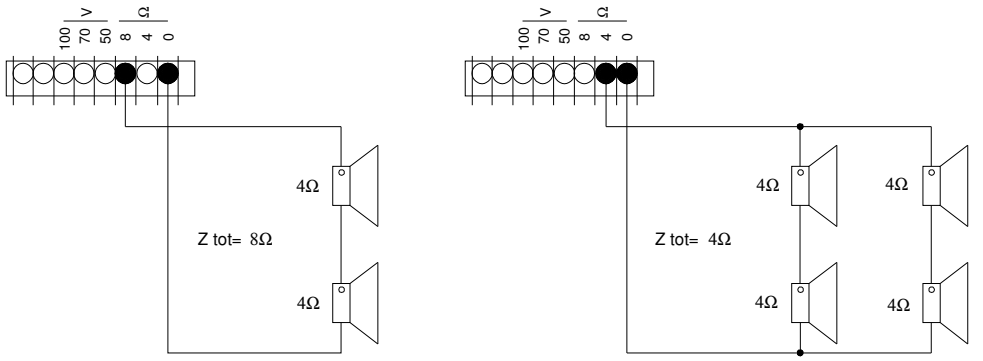


Fig.2a _ Constant impedance lines

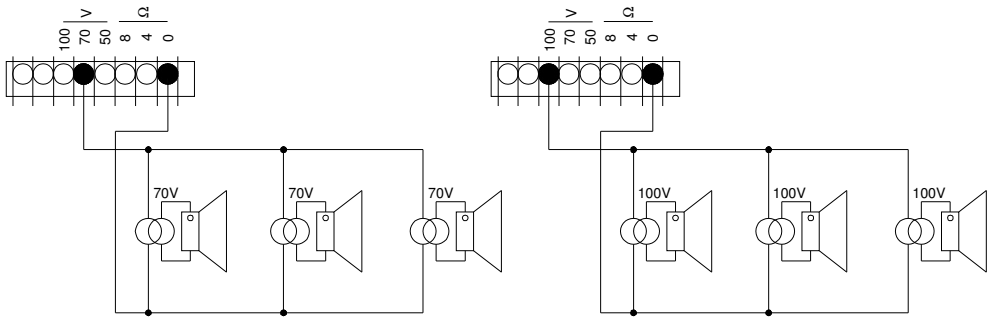
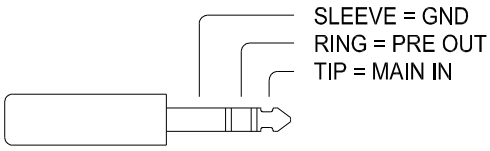


Fig.2b _ Constant voltage lines

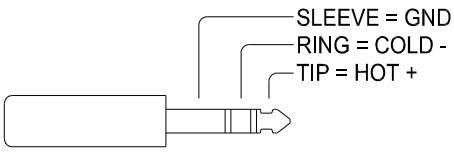
Fig.3

PLUGS AND BARRIER STRIP

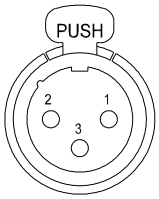
MAIN IN / PRE OUT



INPUT MIC/LINE 4

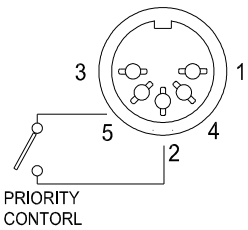


INPUT MIC/LINE



1 = GND
2 = HOT +
3 = COLD -

INPUT MIC/LINE



1 = COLD-
2 = GND
3 = HOT+
4 = +24Vdc
5 = PRIORITY

FIG. 4