

Met dank aan A.R.A. van Rossum

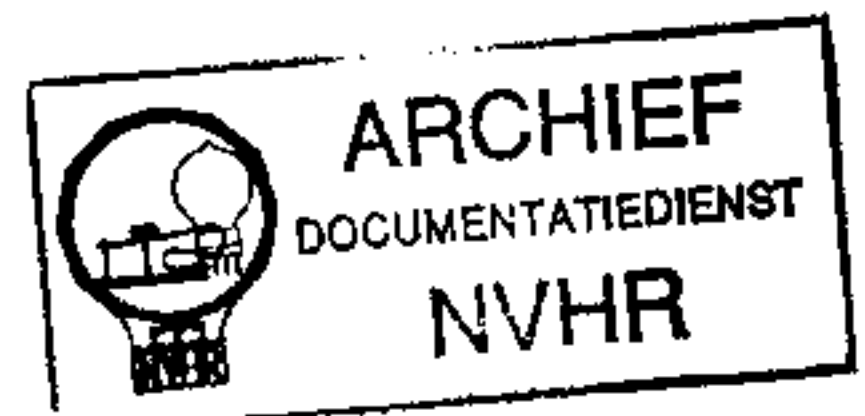
OPERATING INSTRUCTIONS

PUBLIC ADDRESS AMPLIFIER
MODEL PA2500R,
PA2500,
PA1500R,
PA1500

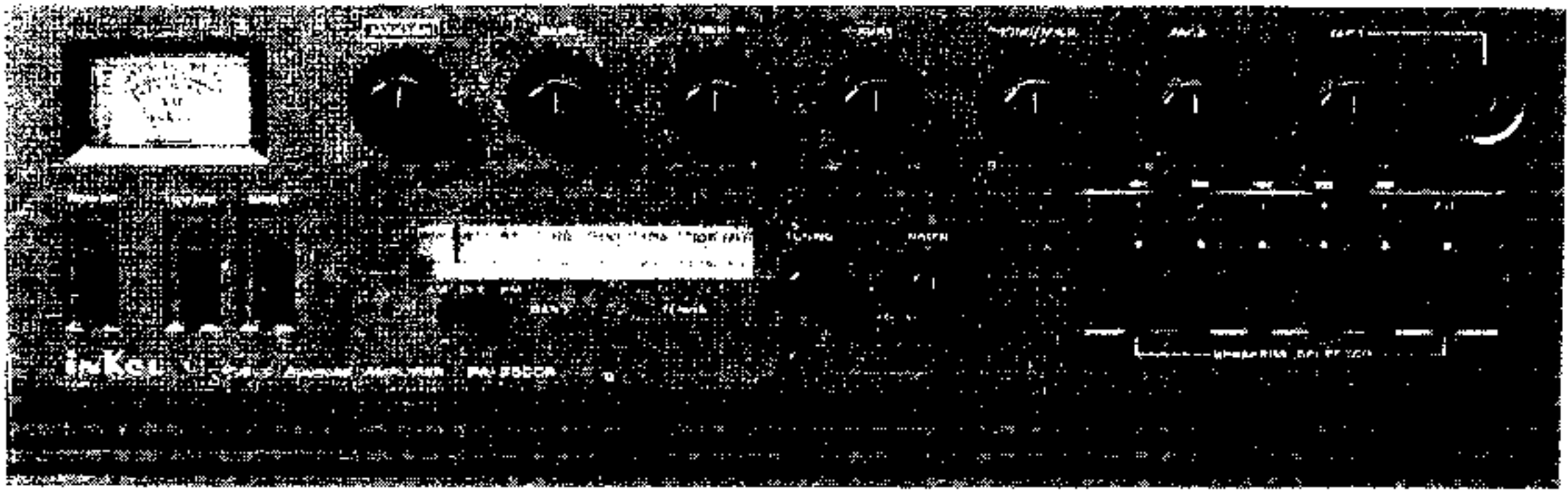


Ned. Ver. v. Historie v/d Rad

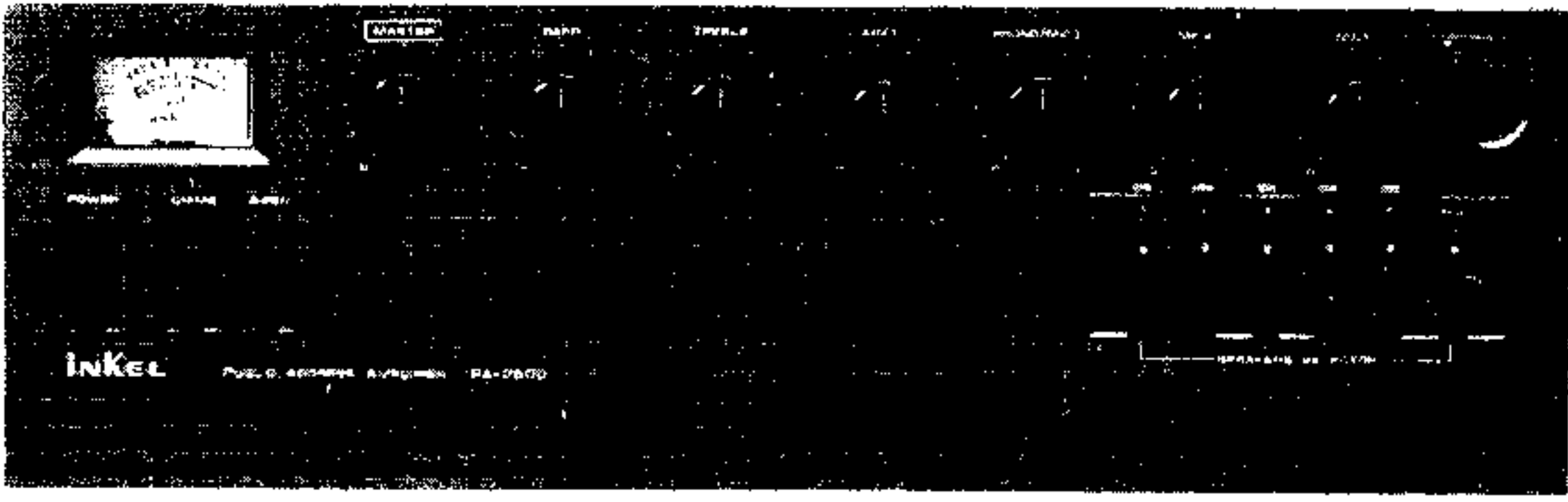
[®]
INKEL



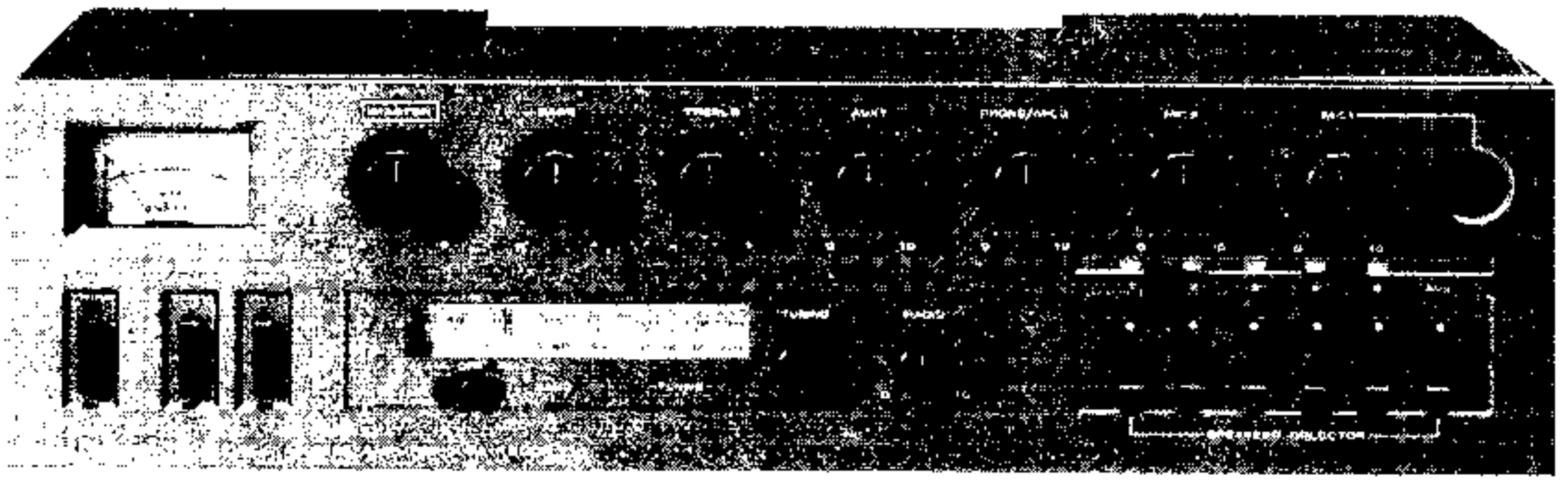
PA2500R



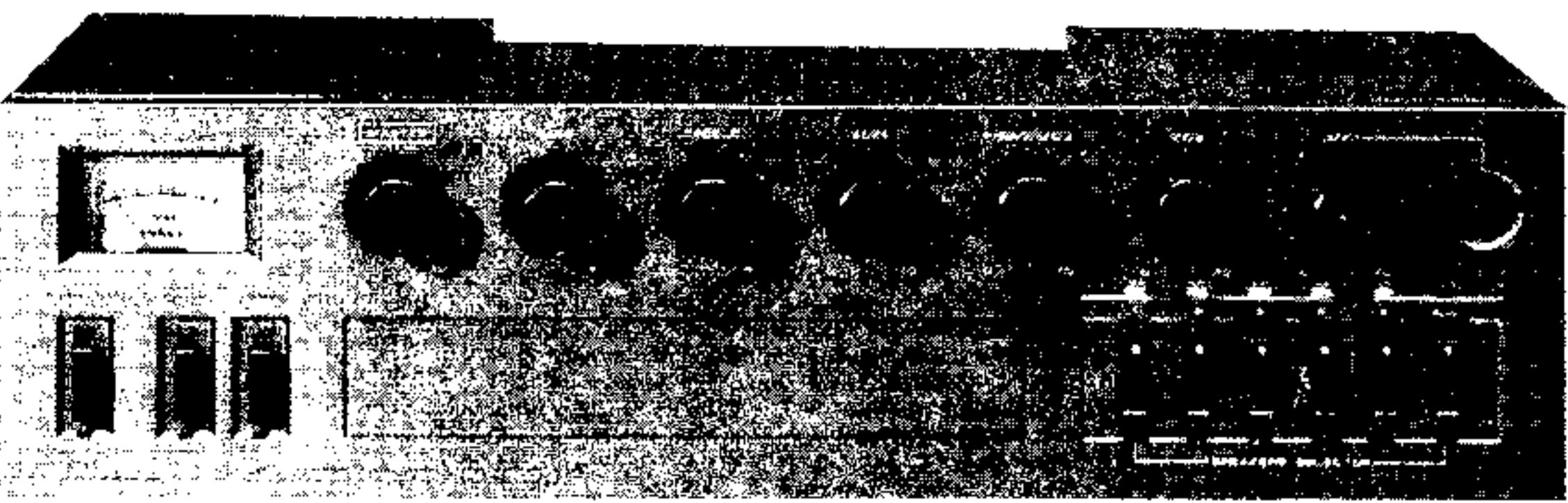
PA2500



PA1500R



PA1500



Unpacking and Installation

Although it is neither complicated to install nor difficult to operate your PA amplifier (receiver), a few minutes of your time is required to read this manual for a properly wired installation and becoming familiar with its many features and how to use them.

Please take a great care in unpacking your amplifier (receiver) and do not discard the carton and other packing materials. They may be needed when moving your set and are required if it ever becomes necessary to return your set for service.

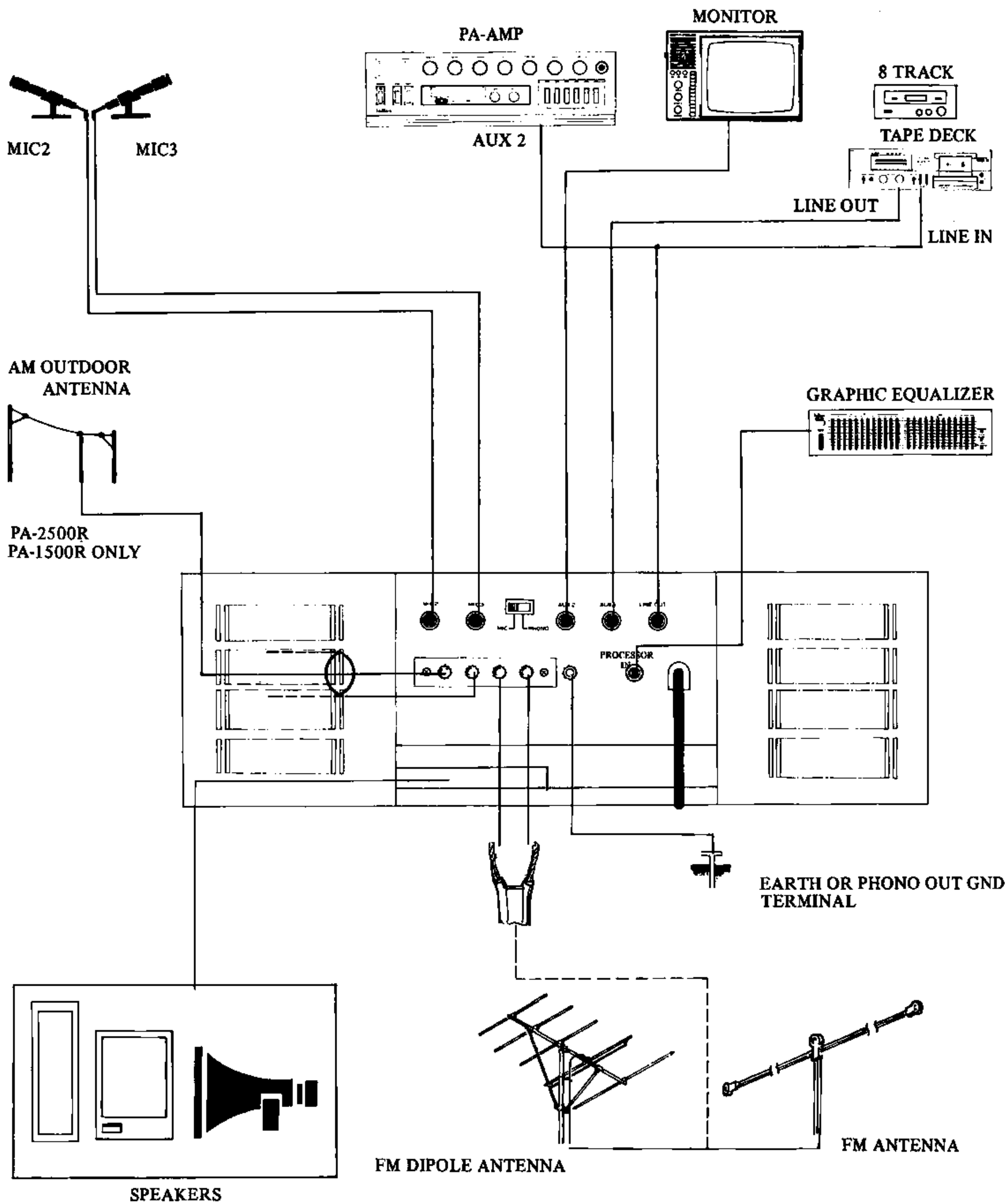
Never place the unit near radiators, in front of heating vents, in excessively humid or dusty location to avoid early damage and for your years of quality use.

Connect your complementary components as illustrated in the following page.

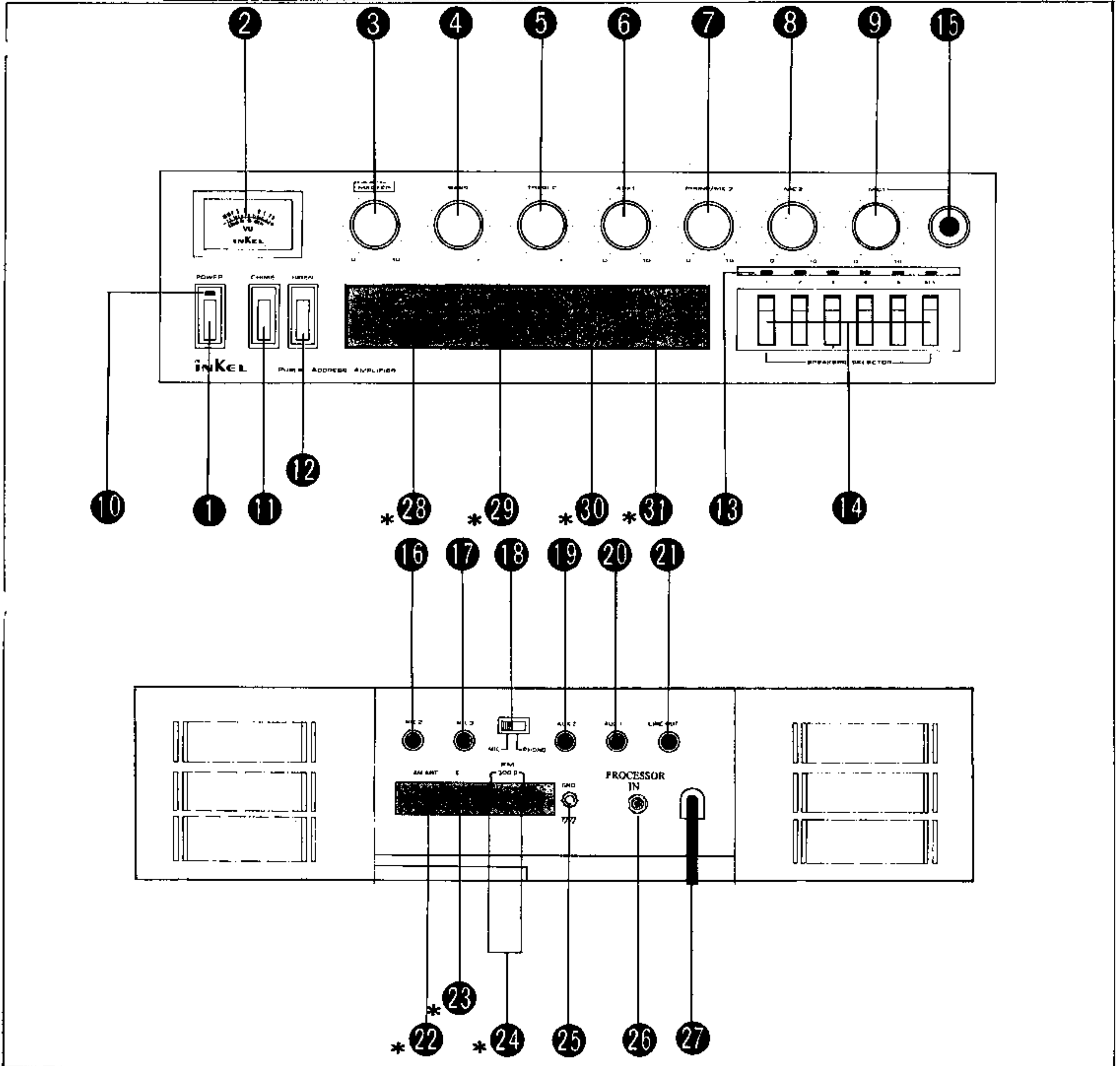
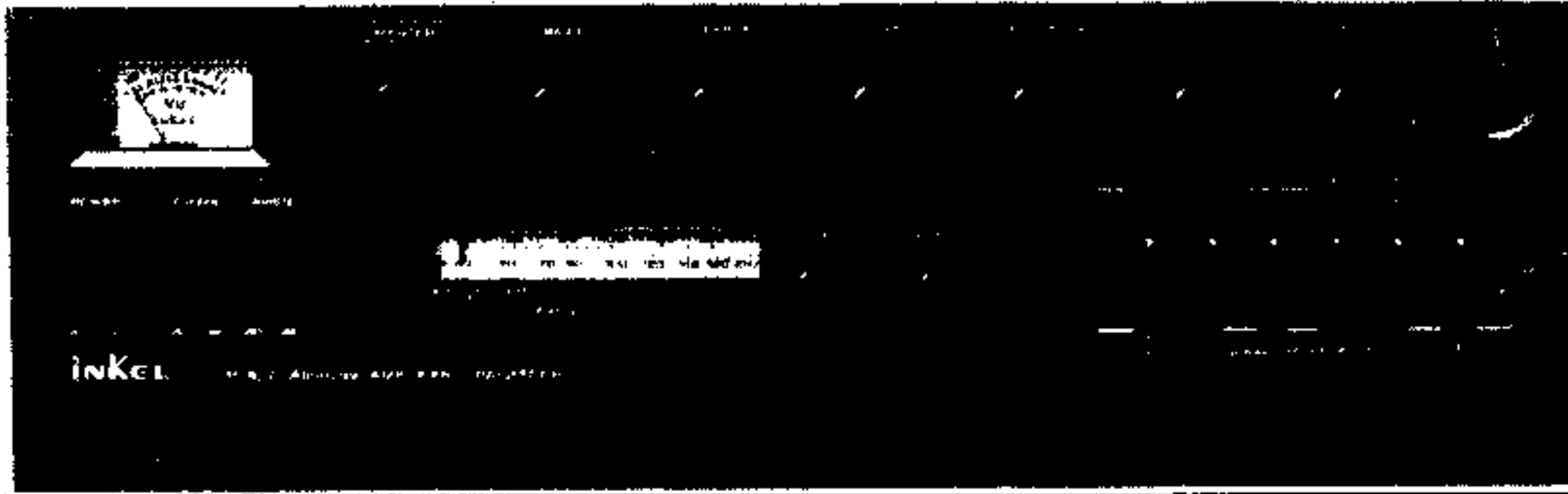
Features of PA-AMPLIFIER/RECEIVER

- 5 channels of input signals from MIC 1, MIC 2, MIC 3/PHONO, AUX 1 and AUX 2, are provided and mixed, and call signs of chime and siren are incorporated for versatile and convenient use.
- Call sign and signal from MIC 1 automatically activate the muting circuit which temporarily mutes the signals from MIC 3/PHONO, AUX 1 and AUX 2. You don't have to reduce the volume of other input signals when you make an emergency call or announcement by MIC 1 input.
- 6 speaker selector switches are provided to enable you to select 5 speakers individually or totally.
- Receiver version is furnished with FM/AM tuner section with FM mute which eliminates interstation noise.

Rear Panel Connections



Front Panel and Rear Panel Controls



* indicates functions for R version which includes tuner section.

1. POWER SWITCH

Pressing this switch to ON will make the power indicating LED ON and supply the power to this unit.

2. LEVEL METER

This meter indicates output level. Be sure not to operate the unit with signal level indication over 0 dB position. Otherwise distortion will occur.

3. MASTER VOLUME CONTROL

This control is used for adjusting the volume of finally mixed sound.

4. BASS CONTROL

This control is used for modifying the low frequency sound.

5. TREBLE CONTROL

This control is used for modifying the high frequency sound.

6. AUX 1 VOLUME CONTROL

This control is used for adjusting the volume of AUX 1 input signal.

7. PHONO/MIC 3 VOLUME CONTROL

This control is used for adjusting the volume of PHONO/MIC 3 input signal.

8. MIC 2 VOLUME CONTROL

This control is used for adjusting the volume of MIC 2 input signal.

9. MIC 1 VOLUME CONTROL

This control is used for adjusting the volume of MIC 1 input signal.

10. POWER INDICATING LED

This LED indicates power is turned ON.

11. CHIME BUTTON

Pressing this button will activate chime circuitry. You can refer readjustment of chime tone to qualified service personnel.

12. SIREN BUTTON

Pressing this button will activated siren circuitry. You can refer readjustment of siren tone to qualified service personnel.

13. LED INDICATOR FOR SPEAKER SELECTION

This LED indicators show what speakers are connected to and being operated with this amplifier.

14. SPEAKER SLECTOR SWITCHES

These switches are used to connect the selected speakers to the amplifier's output.

15. MIC 1 INPUT JACK

This jack is for the input signal of MIC 1. Use microphone with -72 dB sensitivity and 200 to 20,000 ohm impedance.

16. MIC 2 INPUT JACK

This jack is for the input signal of MIC 2. Use same microphone as MIC 1.

17. MIC 3/ PHONO INPUT JACK

This jack is for the input signal of MIC 3 or PHONO according to the position of (18) MIC/PHONO SELECTOR. Use same microphone as MIC 1 and use magnetic cartridge type turntable for PHONO. For ceramic cartridge type turntable, use AUX 1 or AUX 2 input jack.

18. MIC 3/PHONO SELECTOR

You can select MIC 3 or PHONO by using this selector.

19. AUX 2 INPUT JACK

This input jack is for the output signal from line level sources with level of around hundred mV like a ceramic cartridge type turntable, line output of another amplifier which is connected in parallel with this amplifier, audio output of television set and etc. The input sensitivity has been factory adjusted 0 dB (1 V), but this can be readjusted as required by qualified service personnel.

20. AUX 1 INPUT JACK

This input jack is same as AUX 2 input jack except its input sensitivity has been fixed as -38 dB (80 mV).

21. LINE OUTPUT JACK

This output jack is used when recording signal from the amplifier is needed or parallel connection of amplifiers is needed.

22. AM ANTENNA TERMINAL – PA1500R/PA2500R ONLY

This terminal is used for AM antenna wire connection to receive AM station. For strong signal area, a short wire as an antenna is enough, but for weak signal area, outdoor antenna may be needed.

23. EARTH TERMINAL – PA1500R/ PA2500R ONLY

This ground terminal is used for AM reception to get more safety and better noise elimination.

24. FM ANT 300 OHMS – PA1500/PA2500R ONLY

Connect FM antenna 300 ohm feeder with these terminals and position the dipole antenna's arm perpendicular to the direction of transmission.

25. GROUND

This is system ground terminal to be connected with the ground lead of the turntable to reduce hum to a minimum. To further minimize hum, it may be necessary to connect this terminal with a wire to the nearest water pipe which goes directly to true ground.

26. PROCESSOR IN

You can connect a signal processor like an equalizer or a filter by plugging a 2 hot type phone plug into this jack.

27. AC CORD

Plug this AC input cord into AC output.

28. BAND SELECTOR SWITCH – PA1500R/PA2500R ONLY

This switch is used to select AM or FM. When the tuner section is not in use, set this switch to OFF.

29. TUNING LED – PA1500R/PA2500R ONLY

This LED indicates tuning for absolute center of AM and FM signals ensuring minimum distortion and maximum output.

30. TUNING KNOB – PA1500R/PA2500R ONLY

By turning this tuning knob, you can select AM or FM stations.

31. RADIO VOLUME CONTROL – PA1500R/PA2500R ONLY

You can adjust volume level from AM or FM stations by this control .

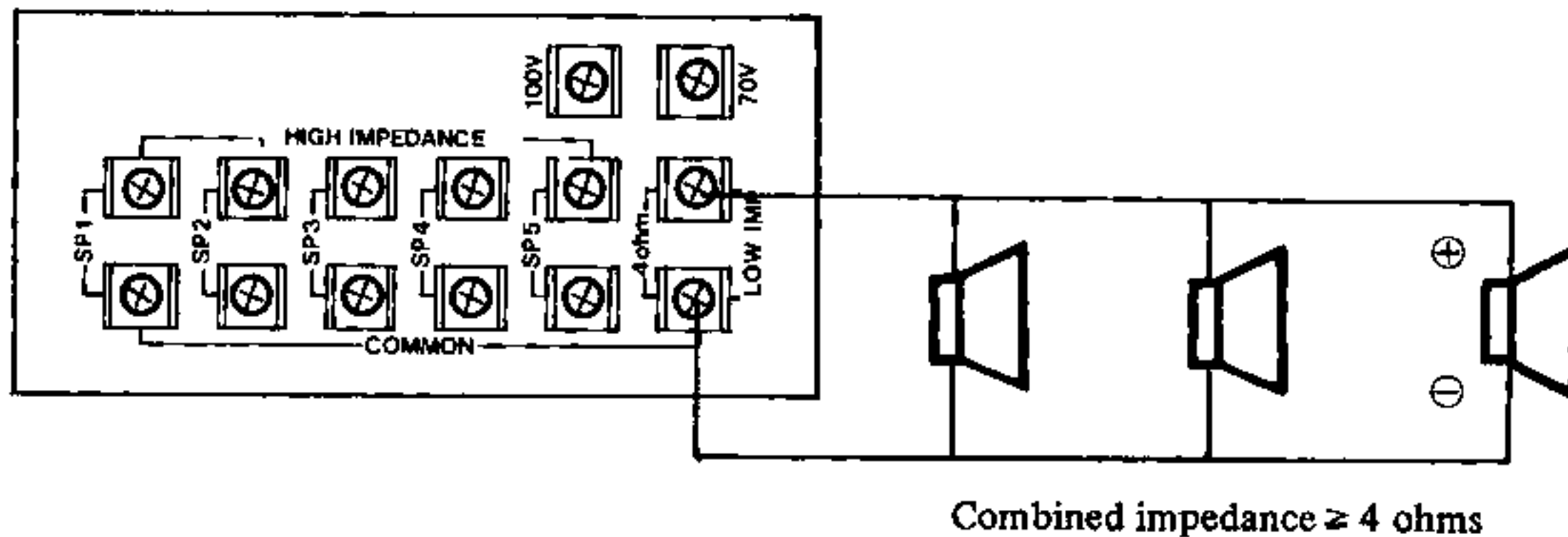
How to Connect Speakers

The output terminal is provided with flowing rated low and high impedances.

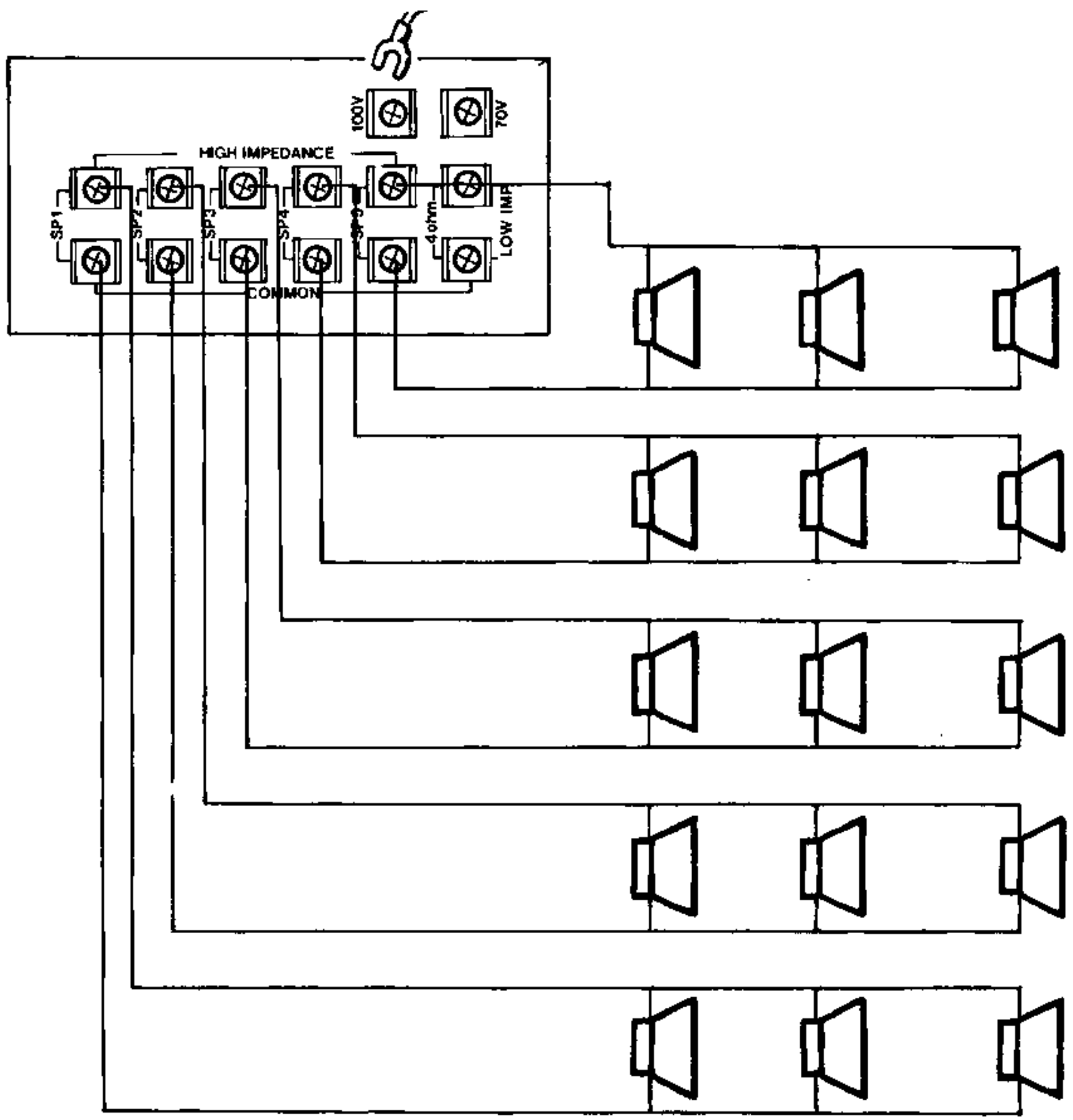
Impedance \ Model		PA1500, PA1500R	PA2500, PA2500R
Low		4 ohms	4 ohms
High	70 V	83 ohms	42 ohms
	100 V	165 ohms	83 ohms

In any case, use the speakers whose combined impedance is equal to or higher than the rated output impedance of amplifier. While the high impedance terminals are controlled by the SPEAKER SELECTOR switch on the front panel, the low impedance terminal has been directly connected to the output of amplifier. Never use both low and high impedance terminals simultaneously.

EX 1) Connection with low impedance terminal



EX 2) Connection with high impedance terminals



Combined impedance \geq Rated impedance

Specifications

Amplifier Section

Rated Output	PA-1500 (R): 60W (RMS) PA-2500 (R): 120W (RMS)
Frequency Response	80Hz to 20KHz
THD at 1KHz, Rated Output	Less than 1%
Tone Control	Bass +7/-12dB at 100Hz Treble +7/-12dB at 10KHz
Signal to Noise Ratio	More than 80dB
Input Sensitivity/Impedance	
MIC1, 2, 3	0.25mV/200-20K Ω
PHONO	2.5mV/47K Ω
AUX 1	80mV/47K Ω
AUX 2	1V/47K Ω , Variable 80mV to ∞ .
Output Level/Impedance	
Speaker Output	PA-1500 (R): 100V/165 Ω , 70V/83 Ω PA-2500 (R): 100V/83 Ω , 70V/42 Ω
Line Output	1V/10K Ω
Muting Effect	40dB

Tuner Section (for Receiver)

Tuning Range	FM: 88-108MHz AM: 525-1620KHz
Antenna Input	FM: 300 Ω AM: Low Impedance
Usable Sensitivity	FM: 8 μ V AM: 50 μ V
Signal to Noise Ratio	FM: 60dB AM: 45dB
Unit Dimensions	PA-2500 (R) 420(W) x 134(H) x 296(D) mm PA-1500 (R) 420(W) x 107(H) x 296(D) mm
Unit Weight	PA-1500 (R): 11.2Kg PA-2500 (R): 12.5Kg

NOTE: Specifications and the design subject to change without notice for improvements.

