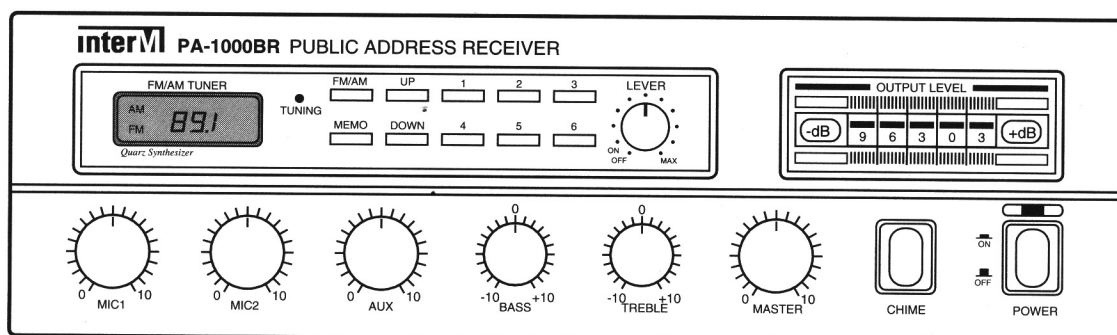


Operating Manual



PA-1000B/1000BR Public Address Receiver



interM

Contents

1. Unpacking and Installation.....	1
2. Features	2
3. Front Panel Controls.....	3
4. Rear Panel Controls	6
5. Installation of the Speaker.....	8
6. Application of the Antenna and the Earthing Cable	9
7. Applications	11
8. Block Diagram.....	12
9. Specifications.....	13

OFFICE :

226-9 DUGJUNG - LI, HOE CHUN - EUB,
YANGJU - KUN, KYUNGKI - DO, KOREA
TEL : 82-351-860-7041~5, FAX : 82-351-858-1907



Home Page : <http://www.inter-m.co.kr>

E-mail : export@inter-m.co.kr

Unpacking and Installation

Although it is neither complicated to install nor difficult to operate your Amplifier or 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 set 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.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Attentions: Pour prévenir les chocs électriques ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans en laisser aucune partie à découvert.

Features

- **VERSATILE AND CONVENIENT**

3 channels of input signals from Mic 1, Mic 2, Aux provided and mixed, and Call signs of four tone chime are incorporated for versatile and convenient use. Mic input has both XLR and PL55 jack.

- **REMOTE CHIME**

You can remote control chime circuitry through the external chime terminal.

- **MUTING FOR PRIORITY**

Call sign and signal from Mic 1 can activate the circuit which temporary mutes signals from other input. The muting level can be adjustable with the control.

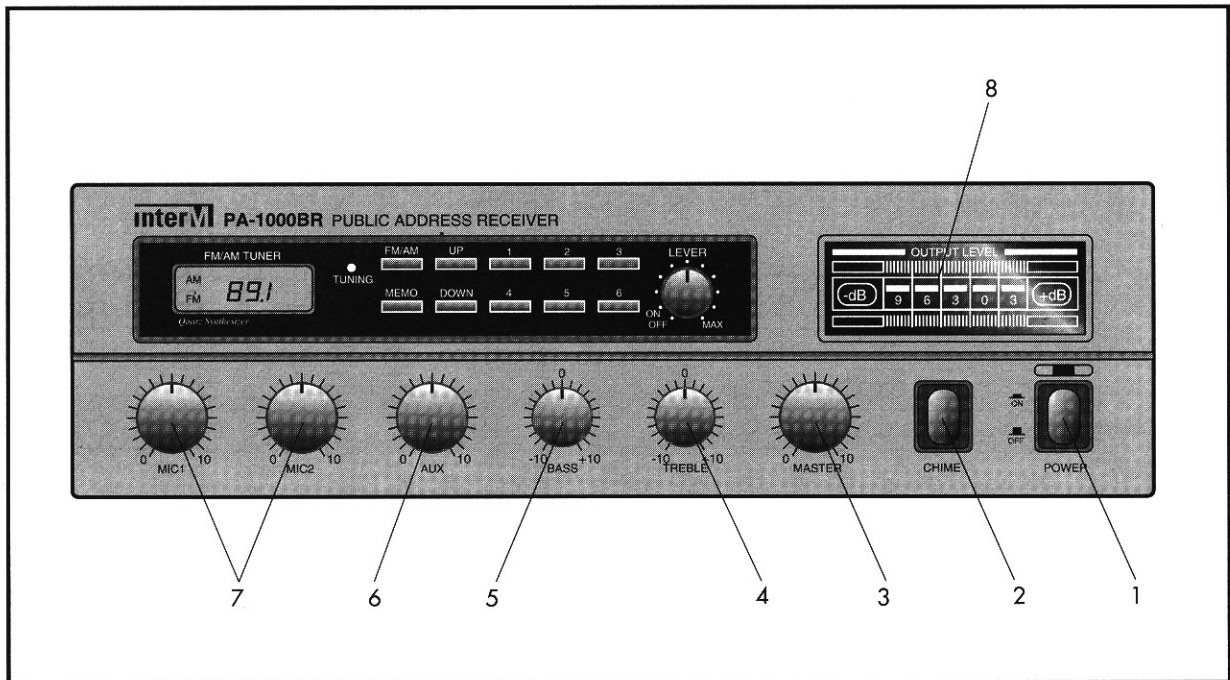
- **TELEPHONE INPUT & MUSIC-ON HOLD (PA-1000BR ONLY)**

This model has the function of telephone input and music-on hold to connect with telephone system.

- **TUNER MEMORY (PA-1000BR ONLY)**

The 6 memory address in system can memorize the frequency of broadcasting. You can get desirable frequency conveniently.

Front Panel Controls



1. POWER SWITCH

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

2. CHIME BUTTON

Pressing this button will activate four tone chime circuitry.

3. MASTER VOLUME

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

4. TREBLE

This control is used for modifying the high frequency sound.

5. BASS

This control is used for modifying the low frequency sound.

6. AUX VOLUME

You can adjust the volume level of Aux.

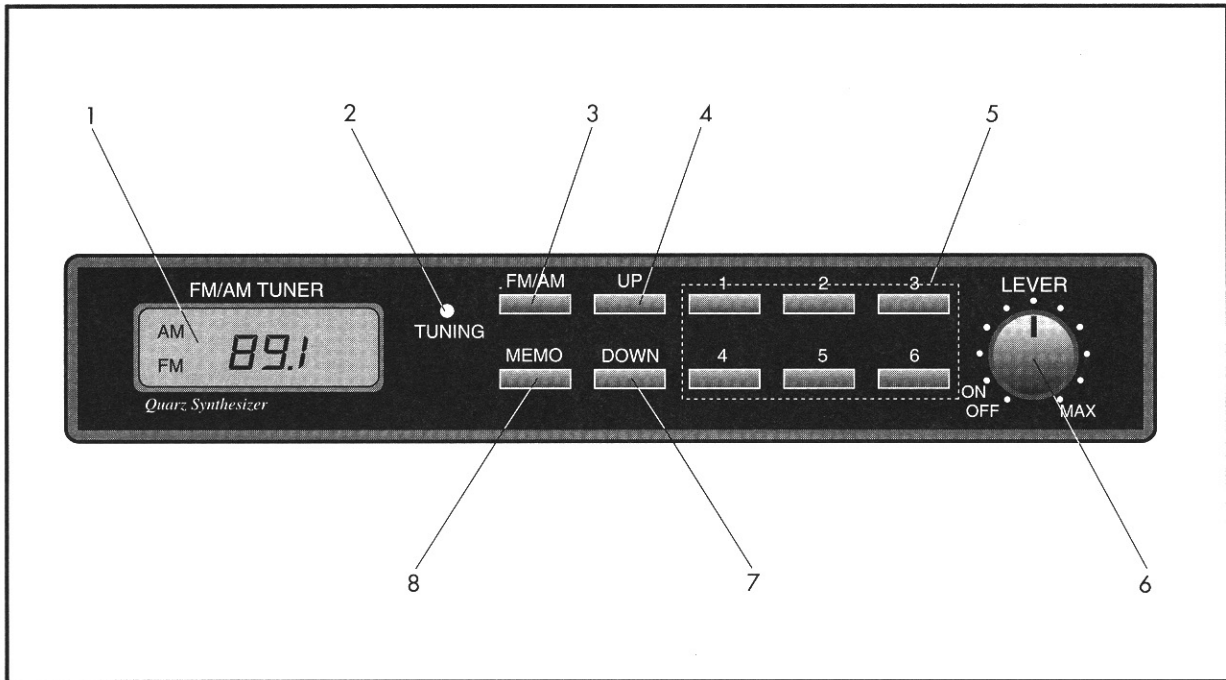
7. MIC VOLUME

You can adjust the volume level of Mic 1 and Mic 2.

8. OUTPUT LEVEL DISPLAY

This display indicates the output level per 3dB.

1. TUNER SECTION



1. TUNER DISPLAY (PA-1000BR ONLY)

You can confirm the status of tuning through this display.

2. TUNING LED (PA-1000BR ONLY)

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

3. BAND SELECTOR FM, AM (PA-1000BR ONLY)

These switches are used for selecting FM or AM.

4. UP SWITCH (PA-1000BR ONLY)

When the switch is pressed one time, FM/AM frequency is up-counted like Table 1. And in case of pressing continually, the frequency is fast up-counted.

	FM	AM
U.S.A (120V)	0.1MHz	10kHz
EUROPE (230V-240V)	0.05MHz	9kHz

5. ADDRESS SELECT SWITCH (PA-1000BR ONLY)

This switch has 6 kinds address from 1 to 6.

6. TUNER ON SWITCH & VOLUME (PA-1000BR ONLY)

This switch is used for supplying the power to tuner and display. You can adjust the volume level of FM or AM tuner sound.

7. DOWN SWITCH (PA-1000BR ONLY)

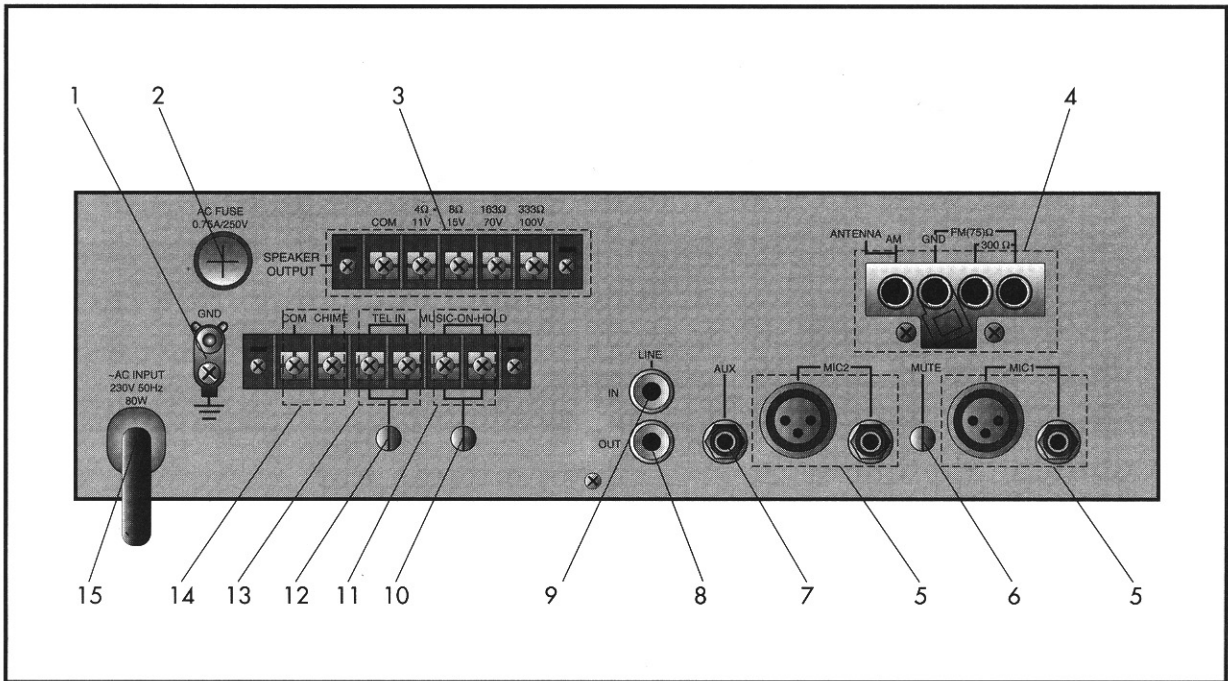
This switch has a function of down count reversely.

8. MEMORY SWITCH (PA-1000BR ONLY)

This switch is for memorizing the broadcasting frequency.

- a) Select the frequency which you want to memorize by the (4) UP, (7) DOWN switch.
- b) Press (8) MEMORY switch then select the desirable address with (5).
- c) Present status of tuner will be memorized in selected address.

Rear Panel Controls



1. GND TERMINAL

This is ground terminal to be connected with chassis of the turntable etc, to reduce hum to 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 real ground.

2. FUSE HOLDER (AC)

This fuse holder contain AC fuse, replace only with same type fuse when it is blown out. If it continuously blow, stop replacing fuse and refer servicing to qualified personnel.

VOLTAGE	AC 100V/120V	AC 220V/240V
FUSE RATING	1A/250V	0.75A/250V

3. SPEAKER OUTPUT TERMINAL

This terminal is for speaker wire connection. You can select one of 4Ω, 8Ω, 163Ω and 333Ω. Be sure not to make the total impedance less than rated impedance.

4. ANTENNA TERMINAL (PA-1000BR ONLY)

- FM Terminal: You can connect 75Ω coaxial cable or 300Ω feeder cable according to the antennas.
- AM Terminal: Connect it to the AM terminal in case of using of outdoor antenna.
- GND Terminal: An earthing terminal for AM receipt. It is possible to protect the unit in a thunder storm and to clear the noise.

5. MIC 1, 2 INPUT JACK

These jacks are for the Mic 1 and Mic 2 input.
Input sensitivity and impedance is phone jack; 1mV/10kΩ, and XLR jack; 0.3mV/10kΩ.

6. MUTE CONTROL

When the other signal is muted by Mic 1 and Chime, this control is used for adjusting the muting level.

7. AUX INPUT JACK

You can connect the sound source of tuner, deck, CD, video, etc to this input.

8. LINE OUT JACK

Permits auxiliary equipment to be patched from the output of pre-amplifier. Normally strapped to amp in.

9. LINE IN JACK

Provides a direct input to the amplifier. When this amplifier (receiver) is delivered, LINE IN and LINE OUT are linked by U-shape plug.

10. MUSIC-ON HOLD CONTROL (PA-1000BR ONLY)

This control is used for adjusting the volume of music-on hold output signal.

11. MUSIC-ON HOLD TERMINAL (PA-1000BR ONLY)

These terminals are for connecting to the telephone system.

NOTE: When the tuner is turned on, the tuner output signal is always supplied to these terminals and is not concerned with master volume and tuner volume.

12. TELEPHONE IN CONTROL

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

13. TELEPHONE IN TERMINAL

These terminals are to be connected to telephone exchange system for paging.

NOTE: When there are paging signal through this terminal, all other input signals except AMP IN are muted.

14. EXT CHIME TERMINAL

When these terminals are shorted, the circuitry of four tone chime is activated. Also, you can just these terminal for remote control.

15. AC INPUT CORD

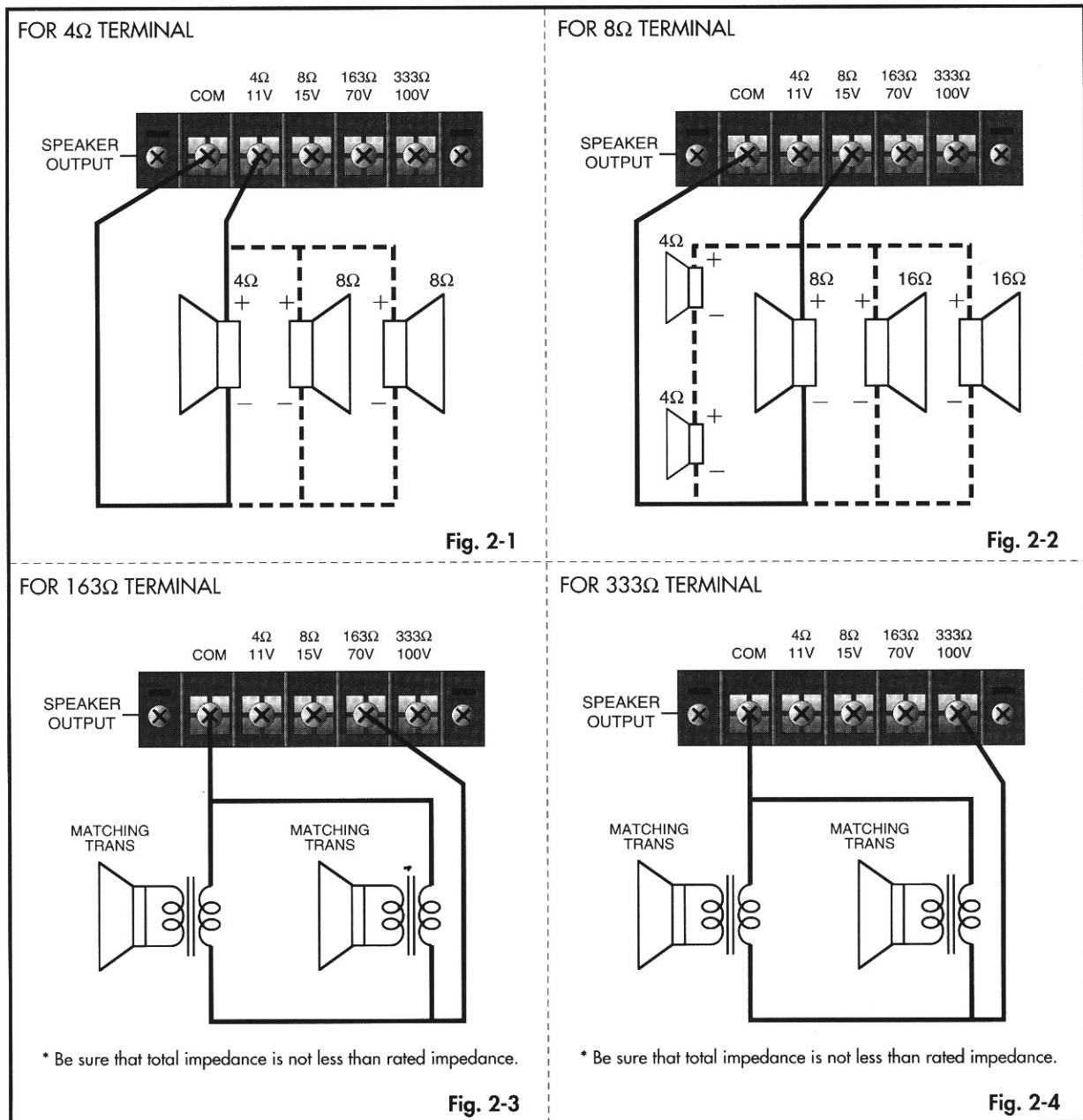
Plug this AC input cord into AC outlet.

Installation of the Speakers

When you connect the speaker, remove the power cord from AC outlet. And use the suitable terminals connecting way as follows.

Be sure that total impedance is not less than rated impedance.

VOLTAGE	11V	15V	70V	100V
IMPEDANCE	4Ω	8Ω	163Ω	333Ω



* Warning: Extreme care must be exercised when connecting to these terminals as potentially hazardous voltages may be present.

Application of the Antenna and the Earthing Cable

- FM RECEIVING ANTENNA

The electric wave of FM broadcasting is weakening in hills and valleys, around buildings and in iron-reinforced buildings because of its own nature.

- INSTALLATION OF AN ANTENNA EXCLUSIVELY FOR FM

Connect the feeder of the antenna to the terminal of 300Ω (Fig. 1-1). Listening to the broadcasting, fix it after deciding the location and the direction so that the receipt condition may be optimum.

- INSTALLATION OF AN ANTENNA USING THE COAXIAL CABLE

You may feel the noise at the crowded downtown, city streets and factory sites as well as around power cables, even in the case of using an antenna exclusively for FM. In these regions, install it through connection with a coaxial cable of 75Ω .

- INDOOR ANTENNA

In the regions where FM broadcasting is heard comparatively well due to the near distance to the station or wooden structure, you can receive broadcasting of good quality by using T-type antenna. Fix the antenna at the best place for receipt after connecting it with a terminal of 300Ω . (Fig. 1-1)

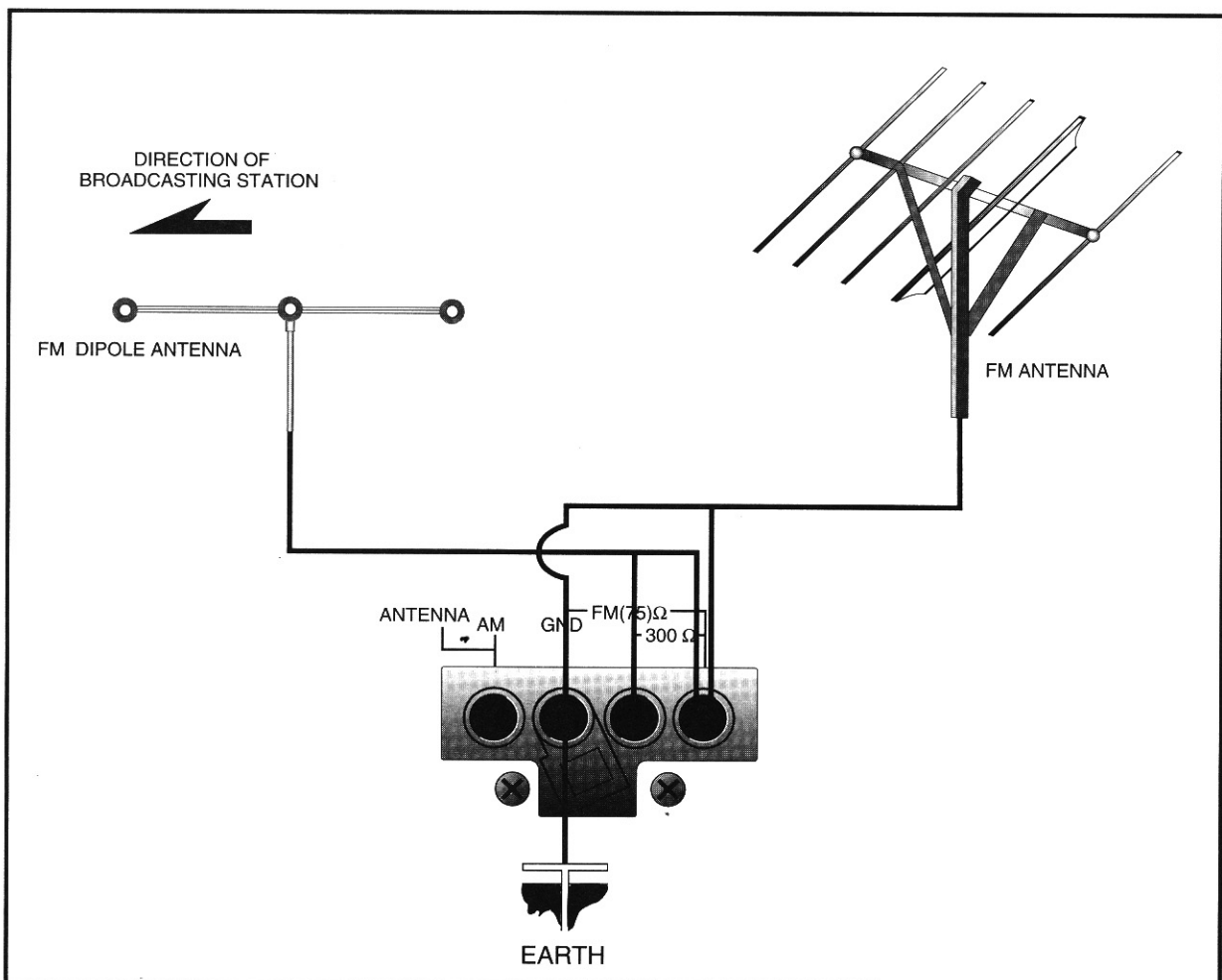


Fig. 1-1

- AM LOOP ANTENNA

Connect loop antenna terminal to GND and AM antenna terminal on the rear panel. For best result under strong-signal condition, set up Loop Antenna. (Fig. 1-2)

- AM OUTDOOR ANTENNA

Install the vinyl-coated cable at the outdoor place in case you cannot hear quite well through you have installed the lead antenna. (Fig. 1-2)

- ON EARTHING (EARTH GND)

Broadcasting may be heard well without earth connection. But connect the earth to the earth terminal (GND for safety and prevention of noise). (Fig. 1-2)

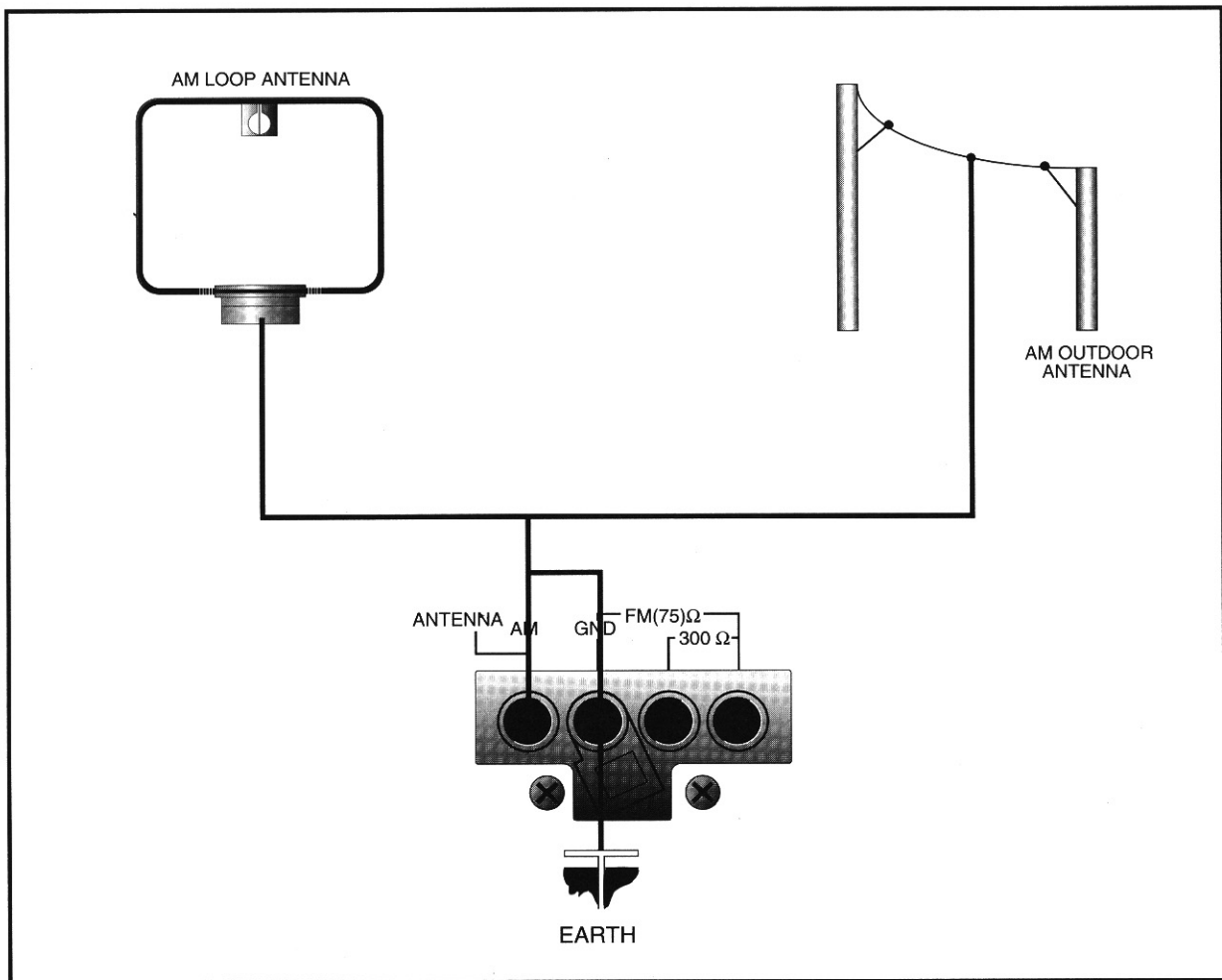
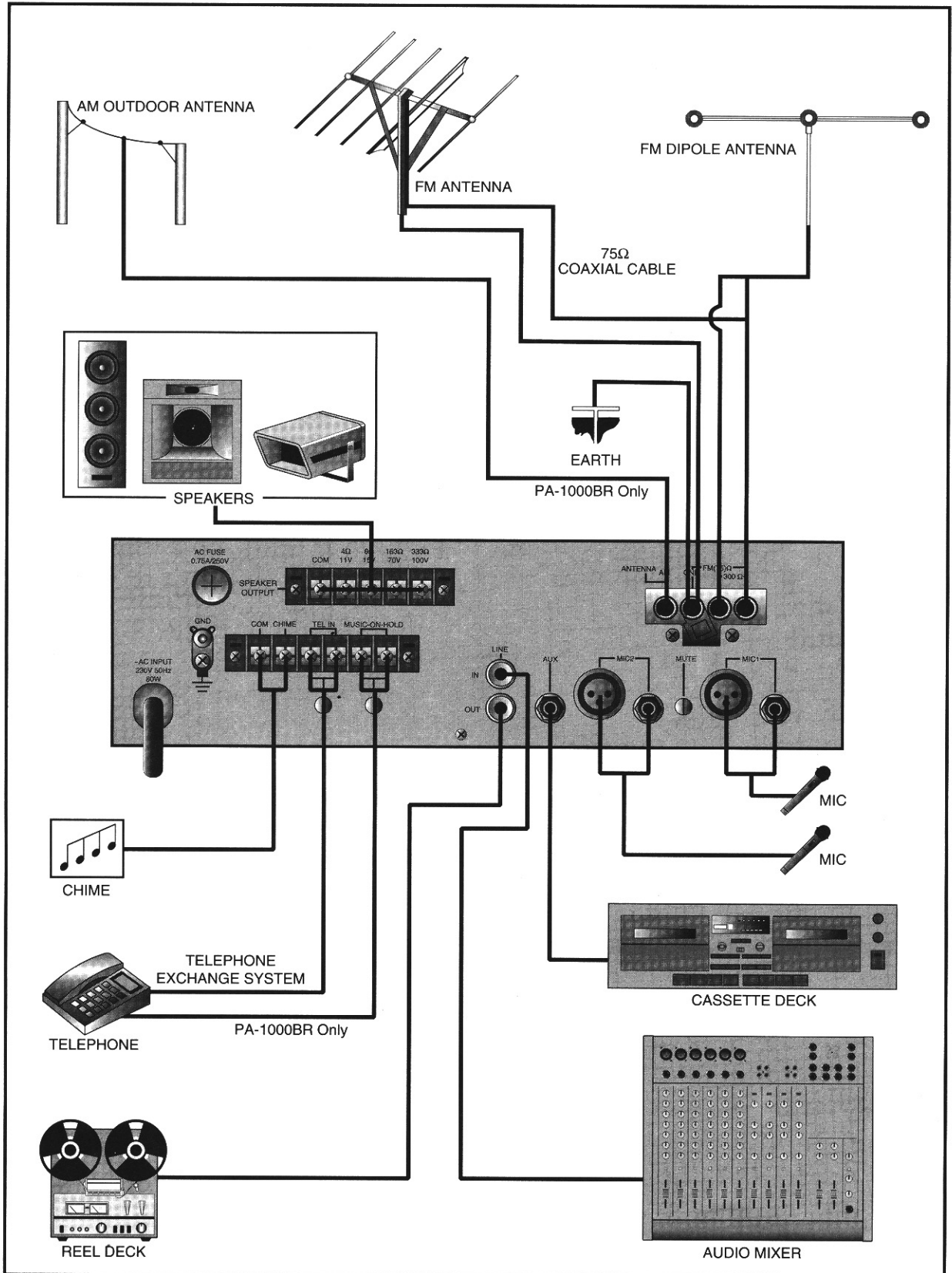
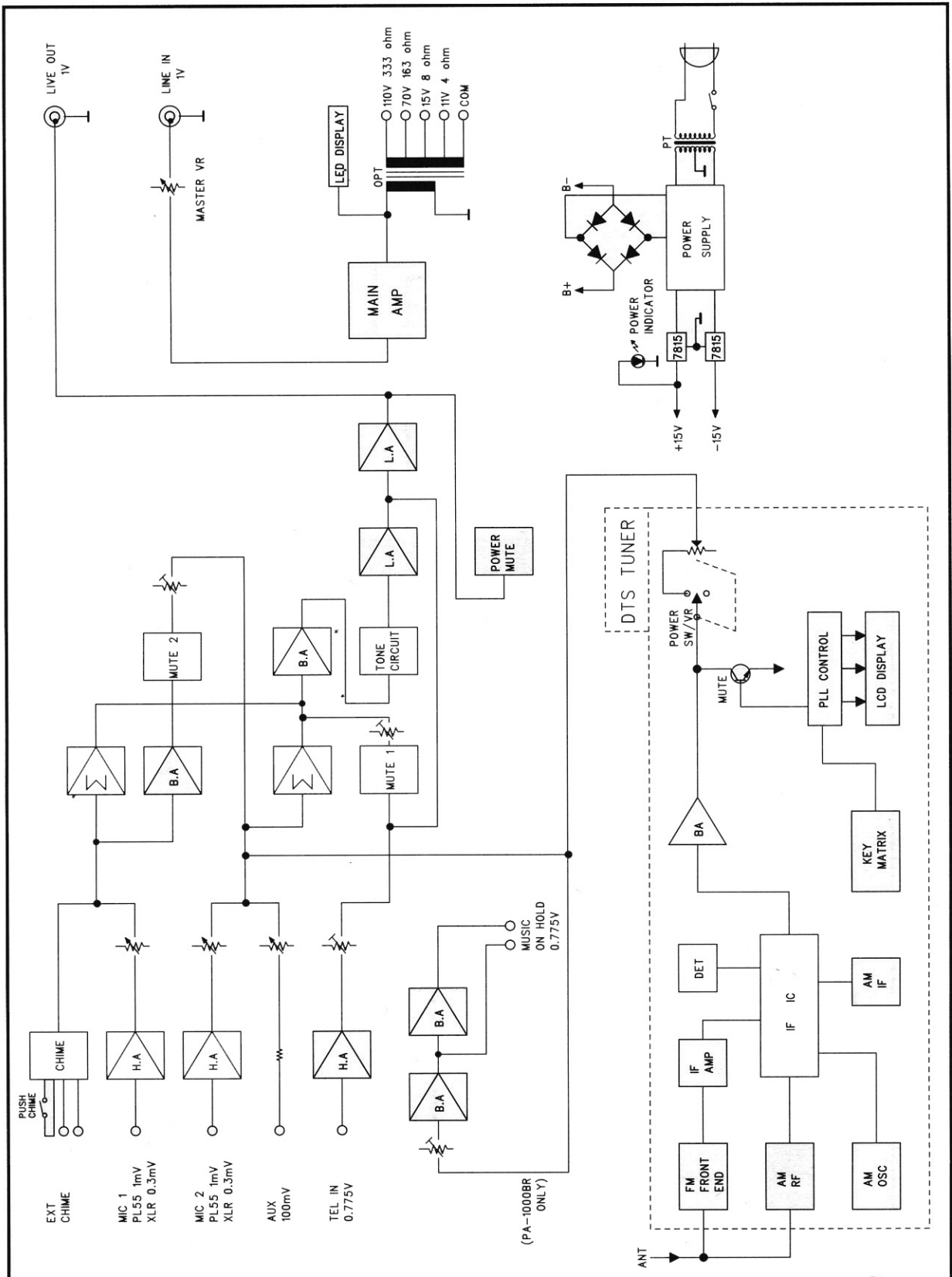


Fig. 1-2

Applications



Block Diagram



Specifications

0dB=0.775Vrms

- AMPLIFIER SECTION

Rated Output Power (RMS).....	30W
Frequency Response	60Hz–20kHz
T.H.D (at 1kHz Rated Output).....	Less than 0.5%
Input Sensitivity/Impedance	
Mic 1, 2	PL55: 1mV/10k Ω , BAL XLR: 0.3mV/600 Ω
Aux	100mV/10k Ω 2V _{pp} /10k Ω (AC 120V Only)
Telephone In	0.775V/600 Ω 0.3V/600 Ω (AC 120V Only)
Amp In	1V/10k Ω
Speaker Output/Impedance	11V/4 Ω , 15V/8 Ω , 70V/163 Ω , 100V/333 Ω
Music On Hold/Impedance	0.775V/600 Ω
Link Out/Impedance	1V/600 Ω
Tone Controls	
Bass (100Hz).....	\pm 10dB
Treble (10kHz).....	\pm 10dB

- TUNER SECTION

Tuning Range	U.S.A: FM 87.5MHz–108MHz AM 530kHz–1620kHz EUROPE: FM 87.5MHz–108MHz AM 522kHz–1620kHz
Antenna Input	FM: 300 Ω /BAL or 75 Ω /UNBAL AM: Low Impedance Loop Antenna
Usable Sensitivity	FM: 2 μ V, AM: 3 μ V
S/N	FM: 60dB, AM: 50dB

- GENERAL

Power Source	AC 110V–240V, 50/60Hz
Power Consumption	80W
Weight.....	PA-1000B: 4.6kg PA-1000BR: 4.8kg
Dimensions	300(W) \times 88(H) \times 260(D)mm

* Specifications and design subject to change without notice for improvements.