OPERATING MANUAL

PUBLIC ADDRESS

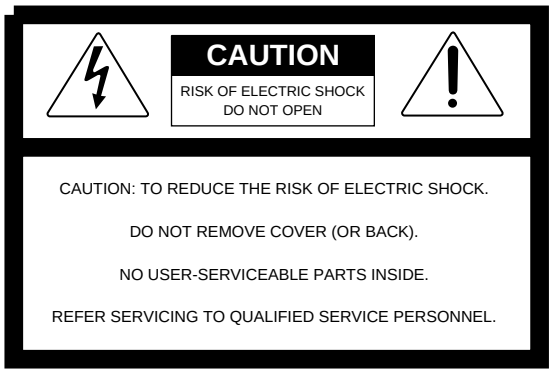
AMPLIFIER

PAM-60/120

interM

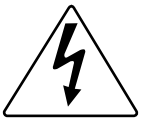
UNPACKING AND INSTALLATION

Although it is neither complicated to install nor difficult to operate your double cassette deck, 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 vour set for service. Never place the unit near radiator, in front of heating vents, to direct sun light, in excessive 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.



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 on une autre sortie de courant, sauf si les lames peuvent étre insérées à fond sans en laisser aucune partie à découvert.

FEATURES

- **MODULAR AMPLIFIER**
  This AMP is perfect for applications requiring High Reliability, Excellent Audio Quality. Units assemble in any configuration, AMP +Tuner, AMP+ CD(Deck), AMP+Tuner+CD(Deck), utilizing modules.

- **INPUT GAIN CONTROLS**
  This system controls input gain in rear panel input gain volume per CH, you can use conveniently.

- **SPEAKER SELECT**
  6 speaker selector switches are provided to enable you to select 5 speakers individually or totally.

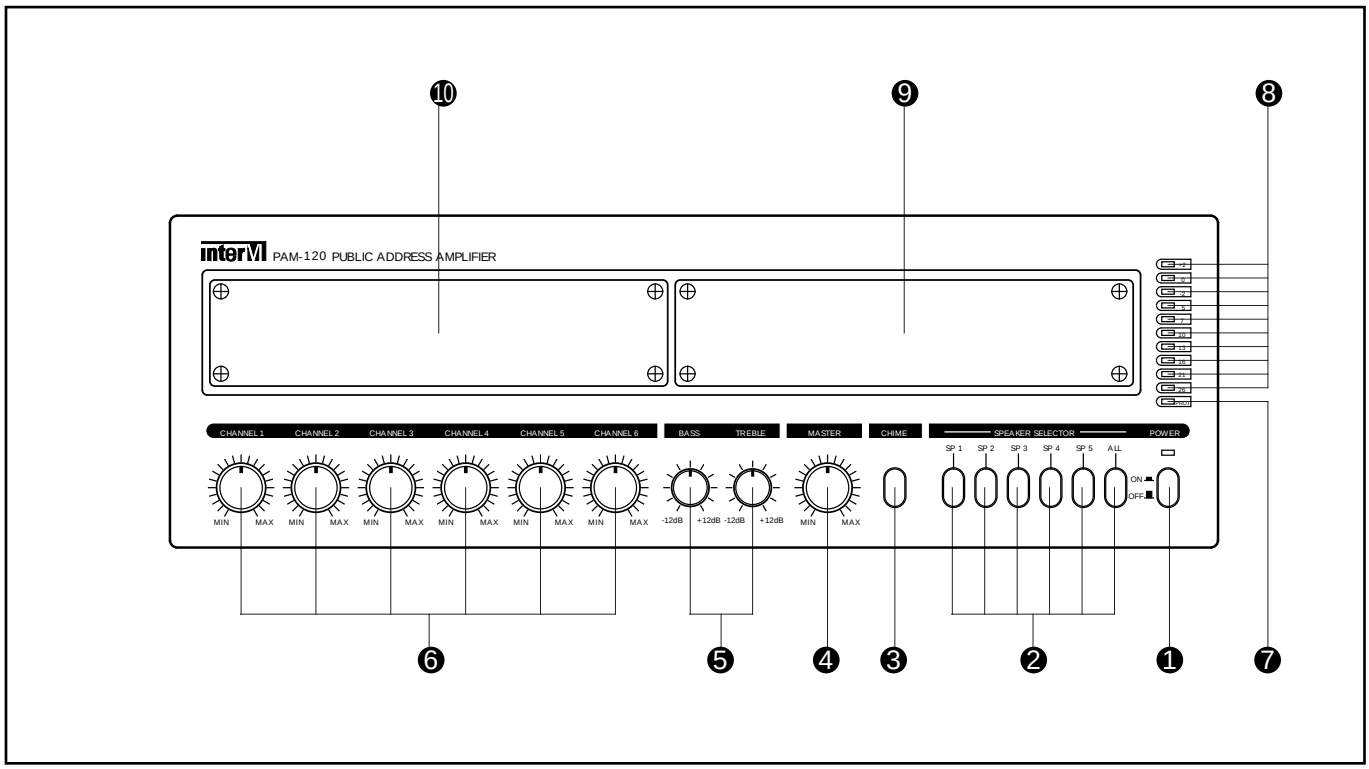
- **CHIME WITH FOUR TONES**
  You can conveniently use four tone chime before the announcement.

- **MUTING FOR PRIORITY**
  CH1,2, CHIME and TELEPHONE have priority to the others signal.

- **TELEPHONE INPUT/MUSIC-ON HOLD**
  To connect with the telephone system, the function of Telephone input and Music-on Hold are provided (Music-on Hold is only for PAM-Tuner)

- **INPUT TERMINALS**
  Input terminals is designed the type of terminals, XLR jack, phone jack, screw terminals and RCA jack.

FRONT PANEL CONTROLS



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

2. SPEAKER SELECTOR
These switches are used for connecting the output of amplifier to the speakers individually or totally.

3. CHIME BUTTON
Pressing this button will activate 4 tone chime circuitry.

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

5. TONE CONTROL
Each frequency level is adjusted to ±12dB by the 2 controls from 100Hz to10KHz.

6. CH1~CH6 VOLUME
These volume adjust the level of CH1~CH6.

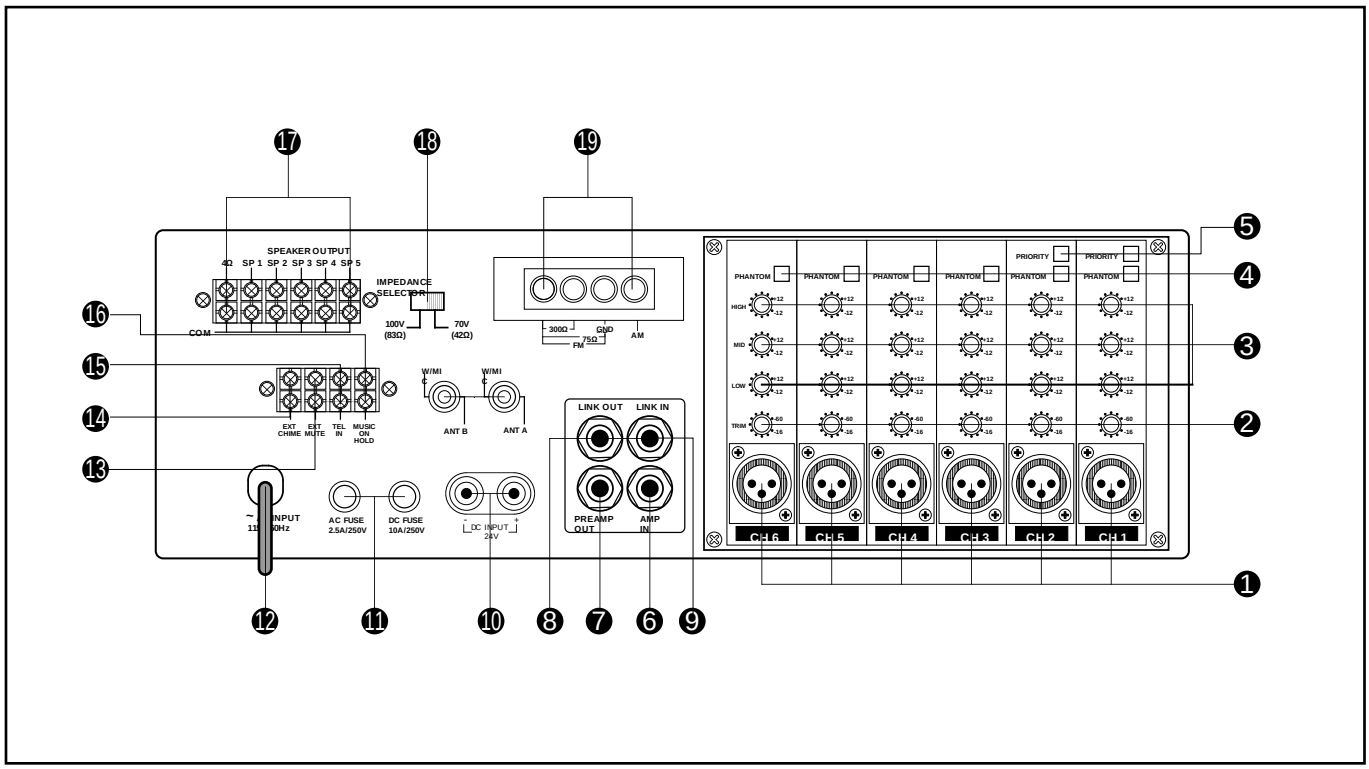
7. PROTECTION INDICATOR
This LED indicates the condition of the protection circuit. When the protection LED is “ON” the amplifier is not operating normally (overheating and limiting), please check the INPUT/OUTPUT condition of the amplifier.

8. OUTPUT LEVEL DISPLAY
This display indicates the output level (RMS) per 0dB.

9. DECK AND CD PLAYER OPTION
This Panel is used to connecting the DECK and CD player.

10. TUNER OPTION
This Panel is used to connecting the TUNER.
* Connection of option is provided the connector of internal unit.

REAR PANEL CONTROLS



1. CH1~CH6 INPUT JACK (OPTION)

These are input terminals which is designed electrical balanced circuitry. Optionally, the type of terminals, XLR female jack, phone jack, screw terminals and RCA jack are provided. And transformer balanced circuitary is optional per buyer's order.

2. INPUT GAIN CONTROL

According to the input signal source, adjust adequately these gain controls not to exceed input sensitivity. When the input level exceed the rated sensitivity, output signal of amplifier could be distorted and overloaded. Gain adjusting range of these volumes are 44dB, and general position of the volume is as following.

MIC (Microphone) . . . . . .-50~-60dB
MIC ATT (Electric Guitar) . . . . . .-30~-50dB
AUX (Deck, Tuner, etc.) . . . . . -20~-30dB

3. EQ CONTROL

The equalizer section provides ±12dB of control over high, mid and low ranges at the following frequencies.
HIGH : 10K, ±12dB
MID : 1K, ±12dB
LOW : 100Hz, ±12dB

4. PHANTOM POWER SWITCH

This switch turns on/off the phantom power supply for all channels. Use this switch when you are using condenser microphones. When this switch is turned on, DC +24V will be supplied to pins 2 and 3 of each INPUT jack.
If you do not need phantom power, be sure to leave this turned off.
* It is safe to connect balanced dynamic microphones or line level devices even if this switch is left on, but connecting unbalanced devices or devices whose transformers are center-grounded will cause hum or malfunctions.

5. PRIORITY SWITCH

This switch have priority to the others channels.

6. AMP IN JACK
This jack is for connecting the external signal input. If plug is inserted on this jack, mixed signal of all input is not connected to main amplifier, and only amp in signal is connected.

7. PRE AMP OUT JACK
This jack is for connecting the preamp out signal to external effect deive or external musical instrument. If the plug is inserted on this jack mixed signal of all input is not connect to main amplifier and only amp in signal is connected.

8. LINK OUT JACK
This jack is used to connecting the same kinds amp of this unit and record in of deck.

9. LINK IN JACK
To the expansion of input channels this jack is provided to connect with the output terminalof external mixer.

10. DC INPUT TERMINALS
These terminals are for connecting DC power supply of battery. Connect red colored terminal to positive lead of battery and black colored one to negative lead of bettery.

11. FUSE HOLDERS, AC AND DC
This fuse holders contain AC and DC fuses. When fuses are blown out, it should be replaced with the same type just like following page. If it continues to blow, stop replacing fuse and refer servicing to qualified personnel.

Model / Voltage	AC 100V/120V	AC 220V/230V/240V	DC 24V
PAM - 60	3A/25OV	1.5A/25OV	5A/250V
PAM - 120	5A/25OV	2.5A/25OV	10A/25OV

12. AC INLET
This terminal is conncctcd AC input cord.

13. EXT MUTE
When these two terminals are shorted, the signals from CH3 to CH6, tuner and turntable are muted, and the signals from CH1, CH2, LINK IN and CHIME are not muted. You can use these terminal for remote control.

14. EXT CHIME
When these terminals are shorted, the circuitary of 4 tone chime is activated. Also, you can use these terminal for rcmotc control.

15. TELEPHONE IN TERMINAL
These terminals are to be connected to telephone ewchange system for paging.
NOTE : When there are paging signal through this terminal, all other input signals except AMP IN are muted. Also, you can adjust to input level by the volume of internal unit from 200mV to 1V.

16. MUSIC-ON HOLD (PAM-TUNER ONLY)
These terminals are for connecting to the telephone system.
NOTE: When the tuner is turned on, the tuner output signal is always supplied these terminals and is not concerned with master volume and tuner volume. Also, you can adjust to output level by the volume of internal unit.

17. SPEAKER OUTPUT TERMINALS
These terminals are for connection of speaker lines to deliver power output to speaker. Impedance(voltages) of 4Ω, 25V, 70V and 100V are provided for convenience. In any case, use the speakers whose combined impedance is equal to or higher than the rated output impedance of amplifier.

Model	4Ω	25V	70V	100V
PAM - 60	15.5V	10.5Ω	83Ω	165Ω
PAM - 120	22V	5.2Ω	42Ω	83Ω

* 100V or 250V can be selected optionally.
* Pay attention than only high impedance terminal can be controlled by the speaker selector of front panel.

18. IMPEDANCE SELECTOR SWITCH

This switch is for selecting the high impedance.
PAM-60 : 165Ω(100V) or 83Ω(70V)
PAM-120 : 83Ω(100V) or 42Ω(70V)

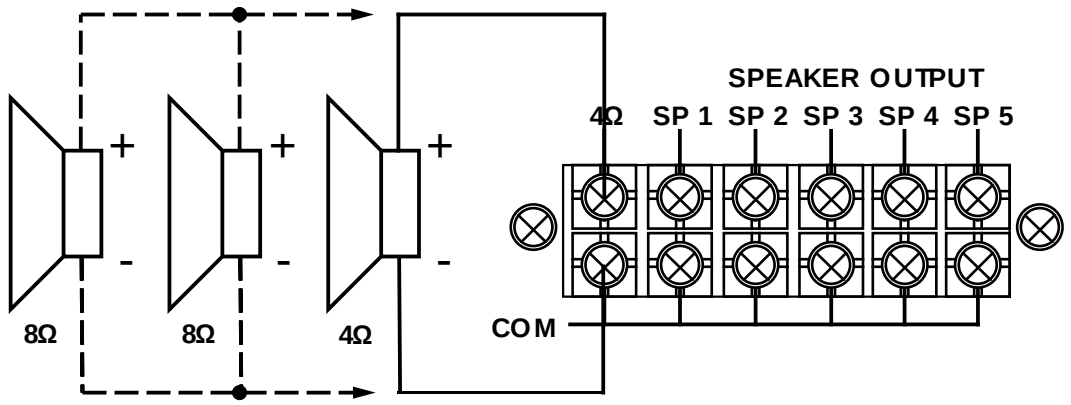
19. (OPTION)

This terminal is for connecting the antenna terminal, when you can use the tuner.
(Our Model PAM-UNER)

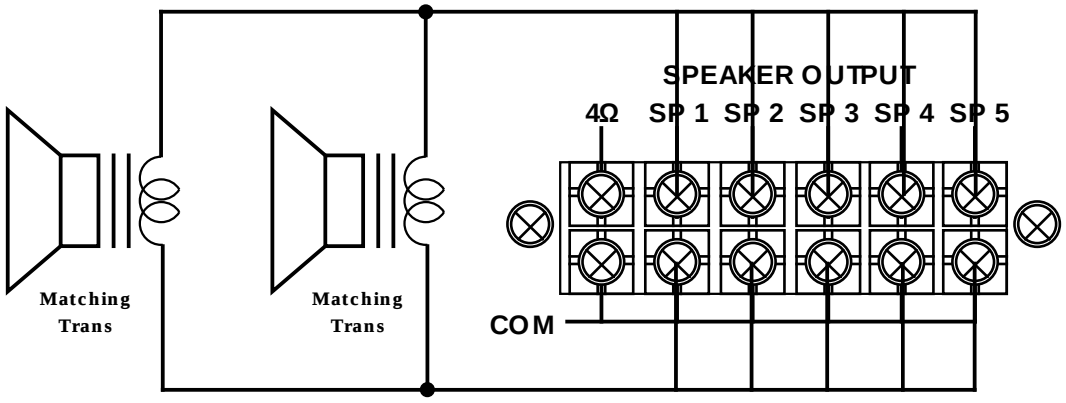
INSTALLATION OF THE SPEAKERS

When you connect the speaker, remove the power cord from Acount let. And use the suitable terminals connecting way as belows.
Be sure that total impedance is not less than rated impedance.

FOR 4Ω TERMINAL



FOR HIGH IMPEDANCE TERMINAL



interM

MADE IN KOREA

SPECIFICATIONS

■ ELECTRICAL

- Rated Output ..... PAM-60:60W(RMS)
  PAM-120:120W(RMS)
- Input Sensitivity/Impedance
  CH1~6 ..... 1mV-160mV/600Ω
  Link In 100mV/15KΩ
  Telephone In 0.775V/600Ω
  Amp In 1V/47KΩ
- Frequency Response ..... 80Hz~20KHz
- T.H.D (at 1KHz Rated Output) ..... Less than 1%
- S/N ..... Better than 100dB
- Tone Control(100Hz, 10KHz) ..... ±12dB
- EQ Control (100Hz, 1KHz, 10KHz) ..... ±12dB
- Speaker Output/Impedance ..... 60W(4Ω), 83Ω(70V), 165Ω(100V)
  120W(4Ω), 42Ω(70V), 83Ω(100V)
- Pre Amp Out/Impedance 1V/600Ω
- Music on Hold/Impedance 0.775V/600Ω
- Link Out/Impedance 500mV/600Ω

■ GENERAL

- Power Source ..... AC 110V~240V, 50/60Hz, DC 24V
- Power Consumption PAM-60:150W
  PAM-120:300W
- Weight PAM-60:11.4Kg
  PAM-120:13.5Kg
- Dimensions ..... 420(W) ×132(H) ×360(D)mm

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