ATT. ZONE AMPLIFIER

# PAM-510/520




interM

# ATT. ZONE AMPLIFIER




## OVERVIEW

PAM-510/520 is a PA amplifier which is possible to control the output each speaker zone using an Attenuator.
It can broadcast in selected zones or all zones using 5 speaker selection switches and one ALL switch and is easy to check output signal since it has a built-in monitor speaker.
Emergency broadcasting is available in sync with a fire receiver and power On/Off is possible at a distance via dry contact method.
Also, it is convenient to use at a distance by connecting with remote amplifier(RM-05A) and optional tuner, CD, wireless MIC, etc. are available according to user environment.

## FEATURES

**ATT. Zone Amplifier**
It has a built-in attenuator, which controls output each speaker zone

**Various options**
Optional tuner, CD, wireless MIC are available according to user environment.

**Remote Control System**
It is possible to be connected to the remote amplifier and broadcast in selected zones via remote amplifier.

**Speaker Selection Switch**
It can broadcast in selected zones or all zones using 5 speaker selection switches and one ALL switch.

**MIC Priority Broadcasting**
It is designed to block broadcasting from other sound sources when broadcasting MIC1 because MIC1 has priority broadcasting.

**Monitor Speaker**
It is easy to check output signal using a built-in monitor speaker.


Building, station, etc.


Hall, Church


Kindergarten


Amusement Park

## SPECIAL FEATURES




| Output | MIN | 2 | 3 | 4 | 5 | MAX |
|---|---|---|---|---|---|---|
| Output Voltage | 6V | 8.9V | 12.5V | 25V | 50V | 100V |

**MONITOR SPEAKER Input and Option Module Installation**

It is easy to check output signal of PAM-510/520 as it is equipped with three step volume MONITOR SPEAKER module, PAM-MPM4(CD/MP3/TUNER) are available at the user's need. It can be used after MONITOR SPEAKER is removed.




**DC 24V Emergency Power and Remote Control Power**

PAM-510 is installed with Battery Connection Terminal for emergency cases. Also, Remote Power Switch Connection Terminal is provided for the use in OFF status.



**Emergency Broadcasting when Exterior Contact Signal Inserted**

When Exterior Contact Signal inserted in EM Terminal, "It is Emergency Situation" goes on air from equipped VOICE IC through 5CH Speaker Line simultaneously.

**MIC Priority Broadcasting**

With PROPRITY SWITCH, it can block broadcasting from other sound sources when broadcasting Channel 1 and 2.
* CHIME input can adjust the amount of mute with interior Muting LEVEL VOLUME.

**REMOTE MIC**

Can be connected to REMOTE MIC(RM-05A)and broadcast remotely.

## SUMMARY

**SOURCES(OPTION)**

MPM4(CD/USB/DRP/TUNER), REMOTE MIC

**BUILT-IN FUNCTIONS**

120 W/AC,DC/OUTPUT ATTENUATOR/MONITOR SPEAKER/CHIME/SIREN/SPEAKER SELECTION SWITCH/EQ VOLUME/MIC PRRIORITY BROADCASTING

**CONNECTIVITY FEATURES**

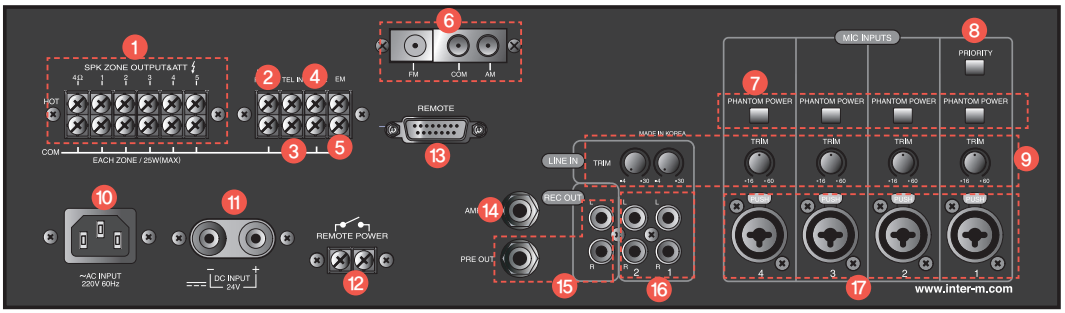
MIC/LINE INPUT 4CH/SPEAKER OUTPUT 5CH/REMOTE MIC/REMOTE CONTROL/TELL-IN/NIGHT RINGER

# FRONT AND REAR PANEL FUNCTION

1. Monitor speaker
2. Speaker selection and output controller
3. Channel 1~6 tone controller and PEAK LED
4. Channel volume controller
5. CHIME S/W and VOLUME
6. SIREN S/W and VOLUME
7. TEL IN VOLUME
8. RINGER S/W and VOLUME
9. Main volume controller
10. Power switch
11. LED Protection circuit
12. LED Output level




1. Speaker contact terminal
2. NIGHT RINGER terminal
3. TEL IN terminal
4. CHIME(External chime switch) terminal
5. EM(EMERGENCY) terminal
6. Antenna terminal(TUNER option)
7. PHANTOM POWER (Condenser mic power switch)
8. MIC 1 PRIORITY(Priority Mute) switch
9. Input size controller(TRIM VR)
10. AC INLET(AC Power input)
11. DC TERMINAL(DC power input)
12. Remote power terminal
13. Remote control input terminal(option)
14. Main amplifier input jack
15. External output jack
16. Line input 1~2
17. Mic input 1~4




# APPLICATIONS

## Remote Mic

* Broadcasting alarm sound and MIC TALK function
* Broadcasting zone selection function
* Output level meta
* MIC broadcasting
* CHIME output removal function


RM-05A

## Related module


WH-A91L(Hand-Held)


WB-A91L(Belt-Pack)

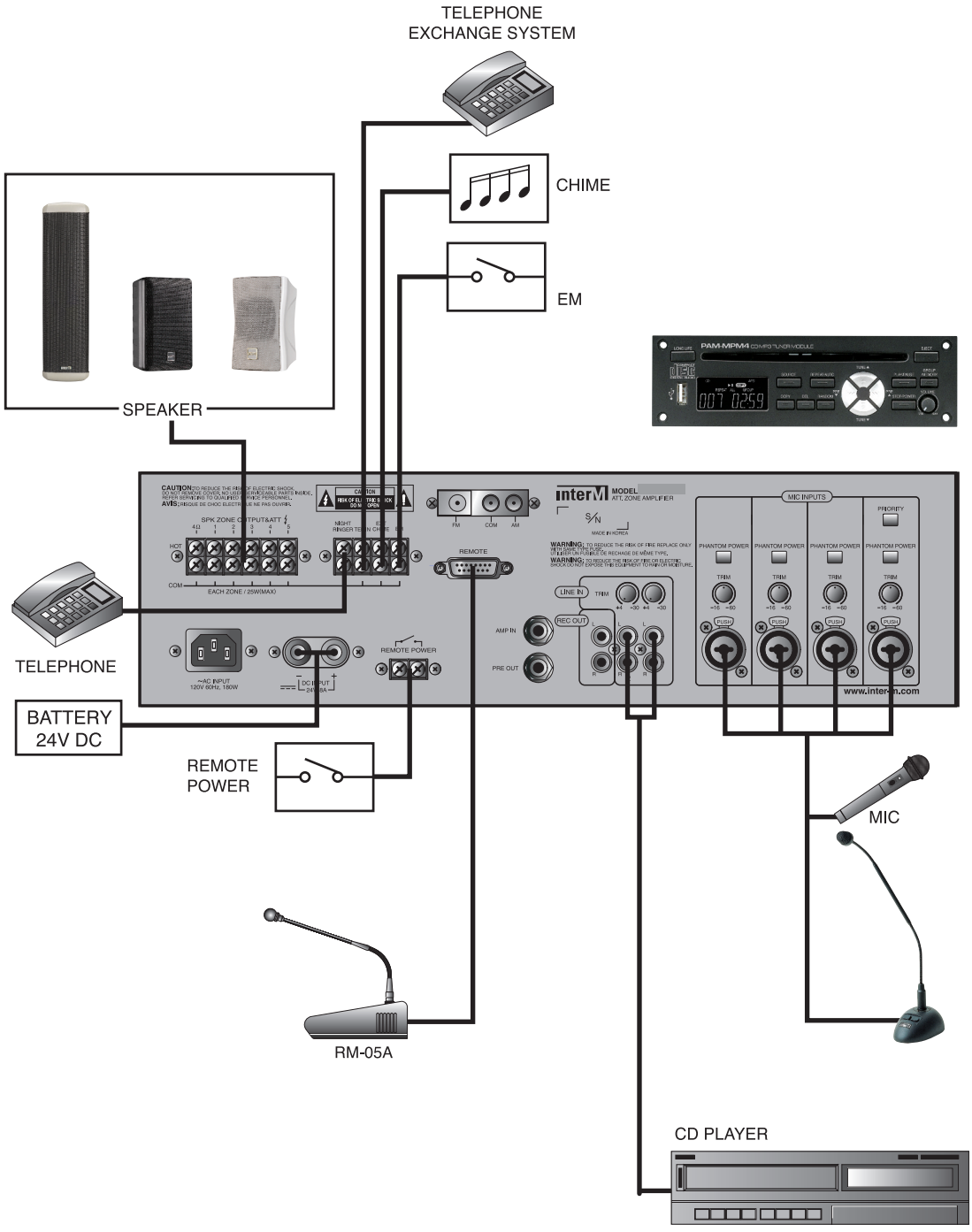

PAM-MPM4

# SPECIFICATIONS

| | PAM–510 | PAM–520 |
|---|---|---|
| Amplifier Section(Amp In@1 kHz, 4 Ω Load Output) | | |
| Rated Output Power(THD 1 %) | 120 W(RMS) | 240 W(RMS) |
| Speaker Zone 1~5 Output | 25 W MAX | 50 W MAX |
| Input Sensitivity/Impedance | 1 V/20 kΩ | |
| S/N | Better than 85 dB | |
| Frequency Response(at 1 kHz Half Power Output, ±3 dB) | 80 Hz~18 kHz | |
| Mic Input Section(Mic 1~4 In@1 kHz, Preamp Out) | | |
| Input Sensitivity/Impedance | –60 dBV/600 Ω | |
| S/N | Better than 55 dB | |
| Frequency Response(±3 dB) | 120 Hz~10 kHz | |
| Tone Control(Bass:100 Hz,Treble:10 kHz) | ±12 dB | |
| Phantom Power | +24V DC | |
| Line Input Section(Line 1~2 In@1 kHz, Preamp Out) | | |
| Input Sensitivity/Impedance | –30 dBV/10 kΩ | |
| S/N | Better than 65 dB | |
| Frequency Response (±3 dB) | 80 Hz~15 kHz | |
| Tone Control (Bass:100 Hz,Treble:10 kHz) | ±12 dB | |
| Remote Amp Section (Remote In@1kHz, Preamp Out) | | |
| Mic Input Sensitivity/Impedance | –60 dBV/600 Ω | |
| S/N | Better than 55 dB | |
| Frequency Response (±3 dB) | 120 Hz~10 kHz | |
| Tel In Section (Tel In@1kHz, Preamp Out) | | |
| Input Sensitivity/Impedance | 0.3 V/600 Ω(USA/Canada) / 0.775 V/600 Ω(EC & Associated) | |
| S/N | Better than 65 dB | |
| Frequency Response (±3dB) | 330 Hz~3 kHz | |
| Pre Amp Out(Mic 1~4, Line 1~2, Tel In, Remote In) | 0 dBV/600 Ω | |
| THD | Less than 0.5 % | |
| Record Out | -10 dBV/3 kΩ | |
| Operation Temperature | –10 °C ~ 40 °C | |
| Power Source | 100–120 VAC or 220–240 VAC; 50/60 Hz, 24 VDC | |
| Power Consumption | 180 W | 320 W |
| Weight | 17 kg/37.6 lbs | 19 kg/42 lbs |
| Dimensions(W×H×D) | 482×132×398 mm/19×5.2×15.7 in | |

# APPLICATIONS

## Connecting Equipment



# PAM-MPM4

## PAM Option CD MP3 Tuner Module




〈PAM-MPM4〉



〈PAM-MPM4 INSTALLED in PAM-510〉

**Adapted System: PAM-340A/480A, PAM-510**
**Source : CD/USB/DRP(Digital Recording Player : SD Memory)/TUNER**

- **CD Long-Life Function**
  When LONG LIFE Function is implemented and CD 1 is stopped, contents in the CD are automatically saved in Interior Memory(DRP). These contents are actually the ones that are played, so CD MECHA-NISM's Pick-up Life Span extends.

- **USB Hosting Function**
  With USB, direct play of the music, DRP and two-way COPY are available.

- **Frequency Memory of 40 TURNERS**
  It can memorize 40 frequency of the broadcasting station.

| SPECIFICATION | |
|---|---|
| Frequency Response | 20 Hz~20 kHz ±1.5 dB |
| THD + N(WITH A FILTER) | 0.08 %(LESS THAN 0.1 %) |
| S/N Ratio(WITH A FILTER) | 80 dB(MORE THAN 75 dB) |
| Output Signal Level | 1.2 V ±0.2 V |
| Capacity of inner memory | 2 GByte |
| Range of receipt frequency | FM: 87.5-108MHz |
| Operating temperature | -10 ℃~40 ℃ |
| Power Source | DC 17 V,22 V |
| Weight(SET) | 950 g/2.1 lbs |
| Dimensions(SET) | 184(W)×55(H)×180(D) mm/7.2(W)×2.2(H)×7.1(D) in |

# RM-05A

## REMOTE MIC



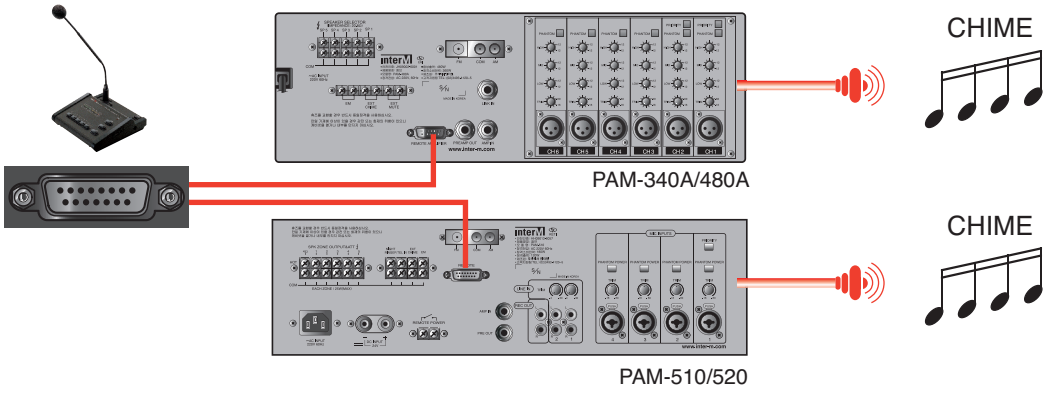
〈RM-05A〉

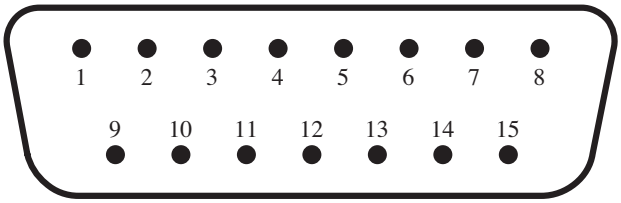
Adaptation System : PAM-340A/480A, PAM-510/520

- RM-05A is a Remote Control Amplifier exclusively for PAM-510/520.
- Broadcasting within selected region is available with 5 Speaker Selection Key and it outputs Microphone Broadcasting Chime
- Chime sending is optional and high-quality broadcasting is available with high-speed Condenser Microphone.
- Control Circuit : 5CH
- Communication Connectors : 15pin D-SUB CONNECTOR(including power)
- Major Features : 1) Contact and Microphone Broadcasting 2) Built in CHIME 3) Output Level Meter
  4) Extension of circuit impossible 5) Can be used within 300m

| SPECIFICATION | |
|---|---|
| Output Level/Impedance | 1 V±200 mV(max gain)/600 Ω, BAL |
| MIC Input Sensitivity/Impedance | 0.8 mV/±0.3 mV/600 Ω, BAL |
| Frequency Response | 120 Hz~18 kHz, ±3 dB |
| T.H.D | Less than 0.7 % |
| S/N | Better than 55 dB |
| Speaker Control Terminal & Switch | 5CH |
| Power Source | DC 24 V(used by D-Sub connector) |
| Weight(SET) | 800 g/1.8 lbs |
| Dimensions(SET) | 194(W)×60(H)×205(D) mm/7.6(W)×2.4(H)×8.1(D) in |

# CONNECTIVITY

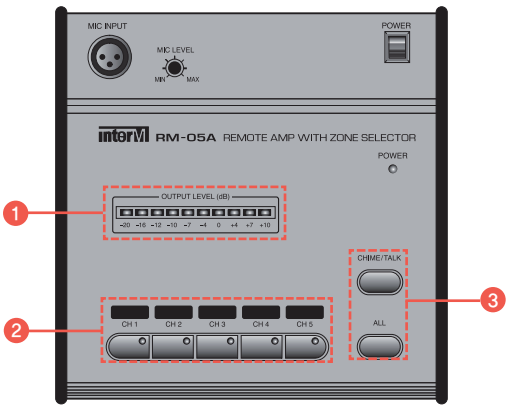



| 15P D-SUB JACK | |
|---|---|
| Pin 1 : Remote Amplifier Input HOT(+) | Pin 8 : Remote Control 5(SP 5) |
| Pin 2 : Remote Amplifier Input COLD | Pin 9 : Remote Control GND |
| Pin 3 : SIGNAL GND Pin 10 :+24V | Pin 10 : +24 V |
| Pin 4 : Remote Control 1(SP 1) | Pin 11 : CHIME Input |
| Pin 5 : Remote Control 2(SP 2) | Pin 12 : NC |
| Pin 6 : Remote Control 3(SP 3) | Pin 13 : NC |
| Pin 7 : Remote Control 4(SP 4) | Pin 14, 15 : NC |

## SPECIFICATION

1. Level Meter
2. Circuit Selection Button 5ea
3. Chime/Talk, All Selection Button



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※ Design and specification are subject to be changed for the improvement of product quality without pre notice.

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