# ATT. ZONE AMPLIFIER

# PAM-510/520





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#### **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 24 V 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**

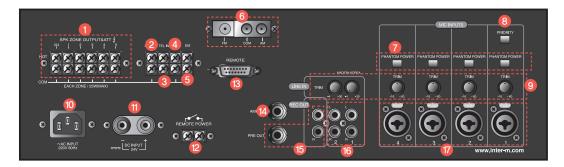
MIC/LINE INPUT 4CH/SPEAKER OUTPUT 5CH/REMOTE MIC/REMOTE CONTROL/TELL-IN/NIGHT RINGER

#### FRONT AND REAR PANEL FUNCTION

- Monitor speaker
- 2 Speaker selection and output controller
- 3 Channel 1~6 tone controller and PEAK LED
- Channel volume controller
- 6 CHIME S/W and VOLUME
- SIREN S/W and VOLUME
- **7** TEL IN VOLUME
- 8 RINGER S/W and VOLUME
- Main volume controller
- Power switch
- LED Protection circuit
- LED Output level



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





#### Remote Mic

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



#### Related module

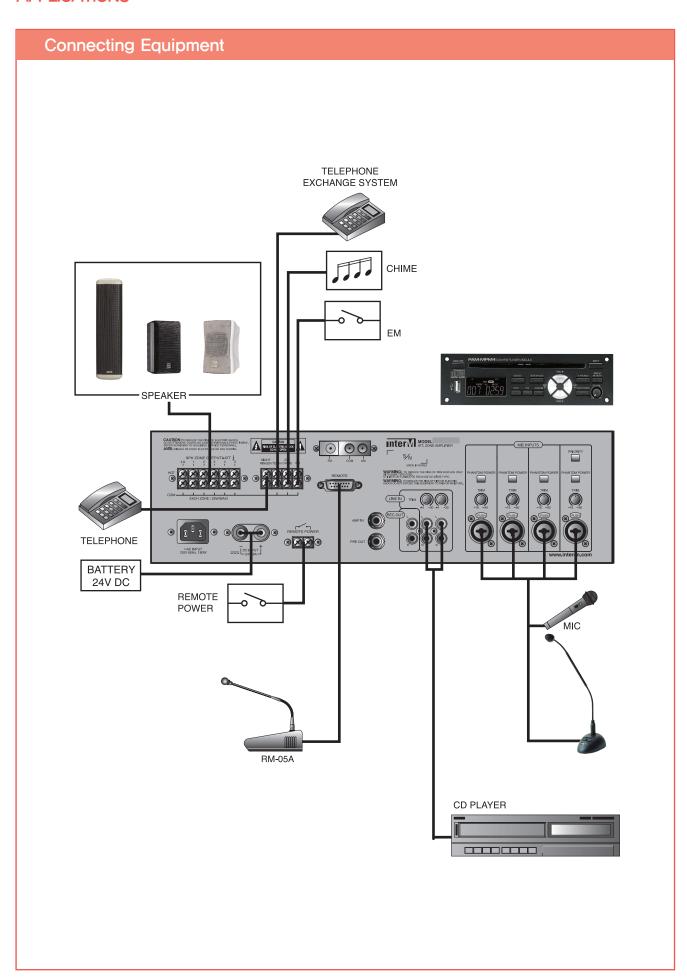






# **SPECIFICATIONS**

	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 $arOmega$			
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	+24 V DC			
Line Input Section (Line 1~2 In@1 kHz, Preamp Out)				
Input Sensitivity/Impedance	–30 dBV/10 k $arOmega$			
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@1 kHz, Preamp Out)				
Mic Input Sensitivity/Impedance	–60 dBV/600 $arOmega$			
S/N	Better than 55 dB			
Frequency Response (±3 dB)	120 Hz~10 kHz			
Tel In Section (Tel In@1 kHz, Preamp Out)				
Input Sensitivity/Impedance	0.3 V/600 $\varOmega$ (USA/Canada)/ 0.775 V/600 $\varOmega$ (EC & Associated)			
S/N	Better than 65 dB			
Frequency Response (±3 dB)	330 Hz~3 kHz			
Pre Amp Out(Mic 1~4, Line 1~2, Tel In, Remote In)	0 dBV/600 $arOmega$			
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	482(W)×132(H)×398(D)mm/19(W)×5.2(H)×15.7(D) in			



# 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: 87.5-108 MHz	
Operating temperature	-10 °C~40 °C	
Power Source	DC 17 V,22 V	
Weight(SET)	950 g/2.1 lbs	
Dimensions(SET)	$184(W) \times 55(H) \times 180(D) \text{ mm/7.2(W)} \times 2.2(H) \times 7.1(D) \text{ in}$	

### **REMOTE MIC**

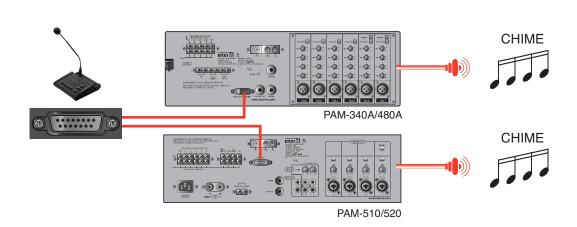


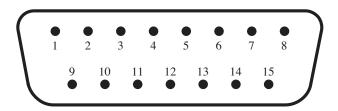
Adaptation System: PAM-340A/480A, PAM-510/520

- 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
   4) Extension of circuit impossible
   2) Built in CHIME
   3) Output Level Meter
   5) Can be used within 300m

SPECIFICATION		
Output Level/Impedance	1 V $\pm$ 200 mV(max gain)/600 $\Omega$ , BAL	
MIC Input Sensitivity/Impedance	$0.8~\text{mV}/\pm0.3~\text{mV}/600~\Omega$ , 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: +24V			
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
- Circuit Selection Button 5ea
- 3 Chime/Talk, All Selection Button



