

Integrated mixer amplifier

# PA-120



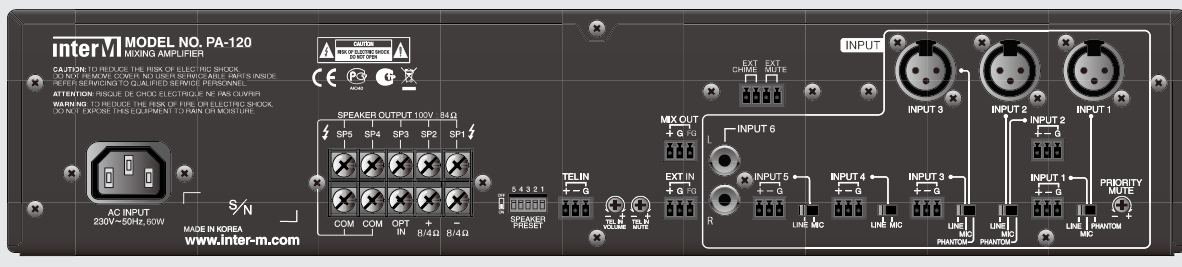


## ∴ SUMMARY

The Inter-M PA-120 are integrated mixer amplifiers. They are complete and economical multi-purpose desktop mixer-amplifiers providing a cost-effective solution to public address and similar applications. Three versions are available with outputs of 120 watts respectively into direct (4 ohms) or distributed (70V/100V line) speaker systems.

## ∴ OVERVIEW

The Inter-M PA-120 are integrated mixer amplifiers. They are complete and economical multi-purpose desktop mixer-amplifiers providing a cost-effective solution to public address and similar applications. Three versions are available with outputs of 120 watts respectively into direct (4 ohms) or distributed (70V/100V line) speaker systems. Each have six inputs; five microphones or line level selectable balanced on XLR-F and/or euro block connector inputs with rear mounted level selector switch setting the input sensitivity from mic to line level. The sixth input is high impedance unbalanced on summing RCA connectors. A telephone input terminal is provided for telephone paging. Base and treble tone control provide sound equalization. VOX priority override is available on mic 1-2 and telephone inputs. Additionally there is a preamp mix out (500mV, 600 ohm); main amp in (1V, 47k ohm); which allows linking of multiple amplifiers together. A master volume control, loudspeaker zone selection (5 zone and "all-call") on 70/100 volt outputs and built-in chime and siren tones (manual operation) is also featured. The PA-Series amplifier is designed for reliable service in permanent installations, and comes complete with short-circuit and thermal protection and is ideal for voice reproduction and BGM applications. The PA-Series is an ideal solution for medical offices, restaurants, schools, etc.



## ∴ THE NEW PA-120 ADVANTAGE

### Frequency Response (CH1~6)

The new PA-120 offers enhanced frequency response compared to the former PA-4000. With an improved widened frequency response of 50Hz to 16Kz the new PA series offers better speech intelligibly and higher quality sound for Music reproduction.

### S/N Ratio

The new PA series has a higher signal to noise ration than its predecessor does. With a 78db S/N the new PA series delivers better desirable power ratio than noise giving it great tone and high-resolution sound.

### Power Consumption (1/8W Output)

Among their advantages is their power efficiency, reduced power consumption and lower heat dissipation over traditional amplifiers.

### Weight / Size

The new PA Series offers reduced size and weight for easier portability and economy in transportation costs.

### Phantom Power

Phantom power is now available on inputs 1 to 3 allowing the use of high sensitivity condenser microphones.

## ∴ TECHNICAL NOTES



### EXT IN

This input can be used to expand the mixer inputs. It is the input to the power amp stage of the mixer amp. An external mixer can be connected to this input and expand the input capacity of the Mixer amplifier.



### MIX OUT

The MIX-out is a line level signal output of the mix bus. It can be used for recording, linking to another amplifier for additional power, or linked to a processor and subwoofer amplifier.



### Input Selection Switch (INPUT 1~3, INPUT 4~5)

- INPUT 1 ~ 3  
Select LINE, MIC or PHANTOM depending on the input signal. Select PHANTOM to supply DC voltage required by condenser microphone.
- INPUT 4 ~ 5  
Select LINE or MIC in accordance with the input signal



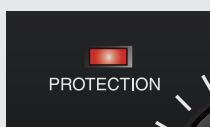
### Priority Volume Control

Sets the ducking level giving priority to telephone, mic 1, mic 2, EXT in, chime and Siren, over all other BGM inputs.



### Speaker Zone Pre-set

The SPEAKER ZONE ON PRESET can be set via these DIP switches. This function allows the amplifier zone output selector to revert to a pre-set selection when the power switch is turned ON. For example, by setting DIP switch1 and 3 on, this will set the speaker zones 1 and 3 on when the power switch is turned on.



### PROTECTION

The PA-120 employs a protection circuit to protect the amplifier from momentary or long-term overload and overheating. The PROTECTION LED on the front panel when lit indicates that the protection circuit is activated. No audio will be heard when the amp is in protection mode.



### External CHIME connector

The CHIME can be remotely activated by connecting a push button switch to this terminal.

### EX MUTE connector

The output level of INPUT 3~6 are controlled by the priority control volume when the external mute switch terminal is closed.

## ∴ FEATURE

- **High-efficiency Class-D Amplifier**

Offer greater power efficiency over traditional amplifiers, reduced physical size and lower heat dissipation.

- **Multiple input**

6-Inputs (3 x 3 pin balanced XLR/ euroblock, 2 x balanced euroblock, 1 x stereo phono)  
Telephone input (Euroblock connectors)

- **Priority broadcasting**

Priority—telephone, mic 1, mic 2, chime and Siren, in order from ch1 to ch6.

- **Phantom Power Supply**

PHANTOM POWER is available (INPUT 1 ~ 3) for use with condenser microphones.

- **Input/Output Monitoring**

Channel-specific input signal LED  
Output level 7 segment Bar graph LED VU meter.

- **Base and Treble tone controls**

Provide user adjustable sound equalization.

- **5 Zone speaker selection**

Allows the selection and audio broadcast to a specific speaker zone, all zones or any combination of all 5 zones.

- **Announce tones**

Chime & Siren

- **Expandability**

Line in / Line out

- **Optional 19" rack kits (BKT-PA2000A)**

- **EX CHIME, EX MUTE**

It can be used when the external chime and mute switch terminal is closed.

## ∴ SPECIFICATION

		PA-120	
Rated Output		120W	
Frequency Response (@ Speaker Output, 1W)		80Hz - 15kHz	
THD (@ Rated Power, 1kHz)		less than 1%	
S/N (@ Rated Output, Line Input)		more than 78dB	
TONE CONTROL (100Hz, 10kHz, ±3dB)		±10dB	
Input Sensitivity / Impedance (@ High-Z Output)			
INPUT 1~5	MIC	-50dBu / 2k $\Omega$	
	LINE	-10dBu / 2k $\Omega$	
INPUT 6		-10dBu / 10k $\Omega$	
TEL IN		0dBu / 10k $\Omega$	
EXT IN		0dBu / 20k $\Omega$	
MIX OUT / Impedance		0dBu / 10k $\Omega$	
Speaker Output Level/ Impedance	Low-Z	Output Level	120W / 8 $\Omega$
		Impedance	8 $\Omega$ , 4 $\Omega$
	High-Z	Output Level	100V
		Impedance	84 $\Omega$
		Output Level	70V
Impedance	41 $\Omega$		
Operating Temperature		-10°C ~ +40°C	
Power Source		AC 120V/60Hz or AC 230V/50Hz or AC 240V/50Hz (Supplied AC mains transformer depends on contrary requirements)	
Power Consumption		60W	
Weight		7.4kg/ 16.3lb	
Dimensions (W x H x D)		420 x 88 x 319mm/16.5 x 3.5 x 12.6in	

## ∴ APPLICATION

Applications include BGM, background music or paging. Ideal for use in places such as the classroom, training center, restaurant, and cafe.

- Restaurants and Lounge
- Higher education

- Seminar rooms and lecture halls
- Conference Room

- K through 12
- Retail Shops



Our technology can be found in schools, hospitals, malls, campus, transportation, correctional facilities and a variety of commercial and industrial applications.

- Education facilities  
(Elementary / high school / College /University / Training Institute, etc)
- Commercial establishments  
(Department stores, Shopping centers, multiplex cinemas, hospitals, etc.)
- Public facilities  
(Government offices, transportation, stations, terminal, exhibition hall, factory, resorts, etc.)



## ∴ ACCESSORIES

BKT-A120