# PA-200 PA-A200 (Control Power Amplifier) SS-P200 (Speaker System)

## **Compact Public Address System**







The PA-200 is a Compact Public Address System with superior sound quality, adequate volume and good handling feats. This system, which is constructed from the CONTROL POWER AMPLIFIER PA-A200 and SPEAKER SYSTEM SS-P200, is provided with every function in consideration of multipurpose use.

As a result it is the optimum PA for conference halls, entertainment locations and as a part of video projection systems. Since this system is produced in response to these objectives, it can be used to its foremost effectiveness.

#### PA-A200 Features

#### Multiple inputs

Equipped with four MIC inputs (MIC-1 to MIC-4, monaural) and two LINE inputs (LINE-1 and LINE-2, stereo). The LINE-2 inputs (PHONE, TAPE and AUX) allow you to connect to a record player, tape recorder and an auxiliary source such as a tuner, compact disc player, etc.

Mixing function is provided for mixing all of the input signals.

#### Two kinds of howling suppression circuits

One is to detect the distance between the speaker and the microphone and to reduce the volume of the speaker near the microphone, and the other is to reduce the output level of the amplifier when there is no input to the microphone.

#### Automatic muting function of the background music

This function is useful when background music is being provided from the LINE-1 or LINE-2 connectors. The volume of the background music is reduced automatically when a signal from the microphone is obtained. This allows the listeners to hear the speaker's voice clearly.

When the voice stops, the background music returnes to the previous level setting.

#### Pre-fader listening

The sound source from the LINE inputs can be monitored with headphones while distributing the microphone sound through the speaker system. This allows you, for example, to prepare the next sound source for BGM while a person is speaking to the microphone.

#### Two independent equalizer circuits

One for MIC inputs and the other for LINE inputs.
You can adjust the tone separately according to the acoustic characteristics of the room and the program sources. LINE EQUALIZER controls the frequency response of line inputs and MIC EQUALIZER for that of microphone inputs.

#### Capable of connection of a reverberator

This amplifier is equipped with connectors for a reverberator: ECHO SEND and ECHO RETURN, so that you can add a reverberation effect to the microphone sound.

#### Parallel drive of two power amplifiers

By connecting two PA-A200s to each other, you can control the power amplifier section of two units in parallel. With this system, you can drive up to 8 pairs of speakers at a time. You can also use the two PA-A200s independently without disconnecting them.

#### SS-P200 Features

#### Compact size and high performance

Despite compact size, the speaker provides you with high output sound pressure level of 93dB (1W, 1m) and high power handling capacity (Max. 40W). A maximum output sound pressure level of 109dB/m is obtained at 40W.

#### Anti-howling system

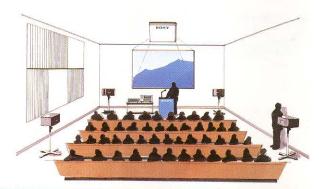
Used with the control power amplifier PA-A200, this speaker system constructs the anti-howling system. When a microphone is placed near the speaker system, the output power of the PA-A200 is attenuated automatically.

#### Capable of cascade connection

The connectors in this speaker system allow you to use additional speakers in a cascade connection according to the room area or other factors to be considered.

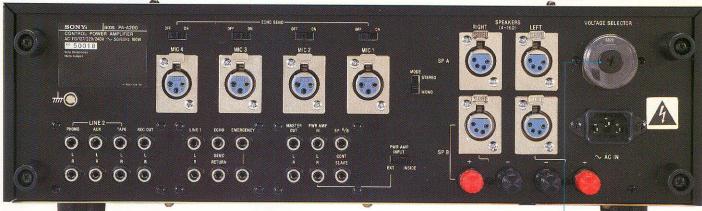
#### A.I. coupler

The full-range speaker unit, which has an Acoustic Impedance Coupler, produces clear and natural sound.









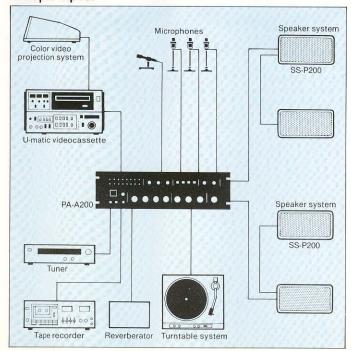
SS-P200 (One pair)

Speaker System

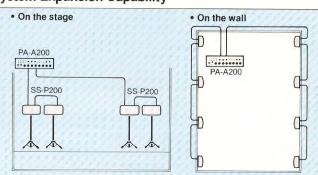


Connectors (Cannon XLR-4-31 type) (Cannon XLR-4-32 type)

#### Multiple Inputs

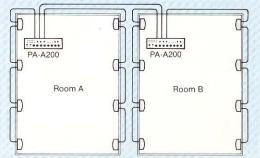


#### System Expansion Capability



Voltage selector (Europe/UK model only)

#### Two PA-A200s parallel operation



#### SPEAKER PLACEMENT

The speaker characteristics are greatly affected by the room's acoustics and the position of the speakers. Here are a few suggestions concerning basic speaker placement.

- TO MOUNT ON THE WALL

  TO SET UP ON THE SPEAKER STAND

  TO STACK HOLIZONTALLY OR VERTICALLY

  TO MOVE THE TERMINALS

The control power amplifier PA-A200 has speaker terminals which can drive up to 4 pairs of speakers systems.

By using a cascade connection, you can obtain the sufficient sound level.

Use appropriate number of pairs of speaker systems according to the room area or other

### **Specifications**

Mixer Section	
Microphone Input:	-60dBs, 4k ohms, balanced, Cannon XLR-3-31 type ×4
Line Input (stereo):	-10dBs, 50k ohms, unbalanced, Phono
Phono Input (stereo):	2.5mV, 50k ohms, unbalanced, Phono
AUX Input (stereo):	-10dBs, 50k ohms, unbalanced, Phono
Tape Input (stereo):	-10dBs, 50k ohms, unbalanced, Phono
Echo Return Input (mono):	-10dBs, 30k ohms, unbalanced, Phono
Master Output (stereo):	-15dBs, 150 ohms, unbalanced, Phono
REC Output (stereo):	-5dBs, 10k ohms, unbalanced, Phono
Echo Sound Output (stereo):	-5dBs, 150 ohms, unbalanced, Phono
Power Amplifier Section	
Number of Channels:	2
Reference Input Level:	-15dBs at 1kHz (0dBs = 0.775V)
Maximum Input Level:	0dBs at 1kHz
Input Impedance:	30k ohms (20Hz to 20kHz)
Maximum Power Output:	60W + 60W (8 ohms), 80W + 80W (4 ohms) for USA/Canada 55W + 55W (8 ohms), 70W + 70W (4 ohms) for Europe/United Kingdom
Power Output at Reference Input Level:	1.2W + 1.2W (8 ohms), 2.4W + 2.4W (4 ohms)
Harmonic Distortion at Maximum Power Output:	Less than 1 % (8 ohms)
Residual Noise (A weighted):	Less than 23µV (8 ohms)
S/N Ratio (A weighted):	Better than 102dB (8 ohms)
Gain:	27dB
General	BB400000000000000000000000000000000000
Power Requirements:	AC 120V, 50/60Hz for USA/Canada AC 110/127/220/240V selectable, 50/60Hz for Europe/United Kingdom
Power Consumption:	150W for USA/Canada 180W for Europe/United Kingdom
Dimensions:	Approx. 483(W) × 141(H) × 404(D)mm (19 × 5 <sup>5</sup> / <sub>8</sub> × 16'')
	Approx. 13.1 kg (28 lb 14 oz)

#### Supplied Accessories

ECP-5-3PHS microphone cable with howling suppression unit (5m)  $\times 2$  RK-10-4P speaker cable (10m)  $\times 1$  AC power cord  $\times 1$ 

#### SS-P200 (one pair)

55-P200 (one pair)	
General	14223-1-12223-1-1223-1-123
Speaker System:	1-way speaker system
Speaker Units:	Full-range, 16cm (6½''), cone type ×2
Enclosure:	Acoustic suspension
Volume:	12 liters
Nominal Impedance:	16 ohms
Handling Power Capacity:	20W (nominal), 40W (maximum, DIN-45500)
Output Sound Pressure Level:	93dB (1W, 1m)
Frequency Range:	100Hz to 12kHz
Connectors:	Cannon XLR-4-31 type Cannon XLR-4-32 type for cascade connection
Dimensions:	Approx. $430(W) \times 220(H) \times 188(D)mm$ $(17 \times 8^{3}/_{4} \times 7^{1}/_{2})$
Weight:	Approx. 4.8 kg (10 lb 9 oz)
Supplied Accessories	
BK-10-4P speaker cabl	e (10m) x2. Direct wall mount bracket x4

RK-10-4P speaker cable (10m) ×2, Direct wall mount bracket ×4

Design and specifications subject to change without notice.

### **Optional Accessories**



WS-P200A Speaker Stand



ECM-55S/B Electret Condenser Microphones



WS-P250 Wall Mount Bracket



F-720
Dynamic Microphone for Multi Purpose Use



EC-10XLR (10m) Microphone Cable with Cannon Type Connectors (XLR-3-11C—XLR-3-12C)



F-730
Dynamic Microphone for Vocal Use



ECP-5-3PHS (5m) Microphone Cable with Howling Suppression Unit (Cannon Type Connectors XLR-3-11C—XLR-3-12C)



RK-10-4P (10m) Speaker Cable with Cannon Type Connectors (XLR-4-11C—XLR-4-12C)