

**A PUBLIC ANNOUNCER SYSTEM / PA SYSTEM** is an electronic amplification system with a mixer, amplifier and loudspeakers, used to reinforce a given sound (E.g. A person making a speech, prerecorded music, or message) and distributing the 'sound' to the general public around a building. Simple PA systems are often used in small venues such as school auditoriums, churches, and small bars. PA systems with a larger number of speakers are widely used in institutional and commercial buildings, to read announcements or declare states of emergency. Intercom systems, which are often used in schools, also have microphones in each room so that the occupants can reply to the central office.

**SMALL PUBLIC ANNOUNCER SYSTEM / PA SYSTEM** The simplest PA systems consist of a microphone, a modestly-powered mixer-amplifier (which incorporates a mixer and an amplifier in a single cabinet) and one or more loudspeakers. Simple PA systems of this type, often providing 50 to 200 watts of power, are often used in small venues such as school auditoriums, churches, and small bars.

**Public Announcer Systems** typically consist of input sources, pre-amplifiers and/or signal routers, amplifiers, control and monitoring equipment, and loudspeakers. Input sources refer to the microphones and CD Players that provide a sound input for the system. These input sources are fed into the pre-amplifiers and signal routers that determine the zones that the 'audio signal' is fed to. The preamplifier signals are then passed into the amplifiers. Depending on a countries' regulation these amplifiers will amplify the audio signals to 50V, 70V or 100V speaker line level. Control equipment monitors the amplifiers and speaker lines for faults before it reaches the loudspeakers.

**AMPLIFIERS** A number of Public Announcer companies are now making lightweight, portable speaker systems for small venues that route the low-frequency parts of the music (electric bass, bass drum, etc.) to a separately-powered subwoofer. Routing the low-frequency parts of the signal to a separate amplifier and low-frequency subwoofer can substantially improve the bass-response of the system. As well, the clarity of the overall sound reproduction can be enhanced, because low-frequency sounds take a great deal of power to amplify; with only a single amplifier for the entire sound spectrum, the power-hungry low-frequency sounds can take a disproportionate amount of the sound system's power. Power amplifiers have also become lighter, smaller, more powerful and more efficient due to increasing use of Class D amplifiers, which offer significant weight and space savings as well as increased efficiency.



**Lecture Theatre**



**Conference Hall**



**Box Speakers**



**Amplifiers**



**Chairman Unit**



**Mixers**



**Microphones**

**MAKE**

- \* JBL
- \* BOSCH
- \* AHUJA
- \* PHILIPS