



## Choosing Your Portable Public Address System (PA System)

There are a few fundamentals to consider when choosing a PA system (Portable Public Address System). A Portable PA system is a self contained unit for amplifying your voice and music. It usually includes some or all of the following:

- A Portable PA system that plugs into a wall outlet - **AC powered**
- A portable PA system that operates from a rechargeable battery pack - **DC powered**
- A portable PA system includes an **amplifier** with a **mixer** and speaker /speakers.
- A portable PA can usually house a CD /MP3/USB Player and may have the ability to handle up to four wireless microphones.

Consider the following factors when deciding on your PA system, as they will help you determine the best PA system for your requirements. Also addressed are some secondary factors, or tips that may also be important when choosing your PA system.

- The size of your audience
- What type of venue will you use your PA system?
- Additional Inputs /Outputs that may be needed
- What special accessories may be required?
- Other secondary factors / tips

### The size of your audience

The size of your audience and area you wish to cover is the single most important determinant of the power output needed to run your PA system. Power is rated in Watts.

### What is the largest amount of people that I want my PA system to reach?

If you are going to address **smaller crowds** (usually up to 50 people), then a smaller power rating (up to 25Watts) should be sufficient.

For **medium size crowds** of up to 150, usually a 50-75Watt PA system should be sufficient.

For **larger crowds**, over 150 people, a higher power output is required, usually over 75Watts.

Overcoming very loud conditions -- especially out doors – or very larger venues may sometimes require 250 Watts or more.

Of course, ideal or not so ideal conditions and different venues will also play a role when deciding what PA system will suit your requirements.

## **What type of venue will you use your PA system?**

The environment for a PA system will be for either indoor or outdoor use. If you're going to use your PA system outdoors, you'll need more power and more flexibility than for indoor use, as well as the ability to run on batteries. For outdoor use, you should go with higher Wattage and, ideally, the ability to hook up a companion speaker or speakers to increase your PA's range. If you'll be using it exclusively indoors, it's best to know before you buy the size room or rooms where you'll be using your PA system, and how many people those rooms can hold.

In general, odd indoor configurations and outdoor venues require more power and/or companion speakers.

## **Additional Inputs/Outputs that may be needed**

Each additional external source that you may require such as a microphone, cassette, video, CD or DVD will need its own input channel. Channel inputs generally require 6.35mm , XLR / Cannon, RCA, 3.5mm connectors . Make sure that the external microphones and other input sources you need can be properly connected to the PA system.

An output is useful for sending the vocals and/or music to a second powered or active speaker, external mixer or recording device. These come mainly in 6.35mm or RCA.

## **What special accessories may be required?**

### **CD/USB/MP3 Player**

Most PA systems have the ability to house an optional CD/MP3/USB Player and more often than not, will also include a wireless remote control.

### **Microphones**

There are two basic types of microphones: wired and wireless.

**Wired** microphones are usually included in your basic PA package. The wired microphone is a great solution if you do not require a lot of mobility. Simply plug it in to one of the available channels on your mixer and you have a cost efficient PA system. The only down side is the length of the cable. Unlike wireless, there are no cable restrictions.

**Wireless** microphones are ideal if you want flexibility, interaction and audience participation. Most PA systems will allow you the flexibility of using at least two wireless microphones. Some PA systems can accommodate up to four.

You can choose from; wireless handheld microphones, headset or lapel microphones. A Lapel and headset microphone requires an additional body pack transmitter. With each wireless microphone you will require a receiver module, to be added to your PA system. A wireless hand-held microphone has the transmitter built-in which broadcasts a signal to its receiver plugged into the PA system. Remember, when using more than one wireless microphone, each must operate on a separate channel to avoid interference. Most PA systems have 16 channels to chose from.

### **Protective cases**

Protective cases are definitely a very good accessory to house your expensive piece of equipment. It will protect the PA system from scratches and other undesirable elements that may damage the PA system, such as dust/ wind /sand. Some PA systems for smaller to medium size applications are designed with portability in mind. For this reason they usually have the shoulder carry bag as

an accessory option which allows for the PA system to be conveniently packed and transported in its very own carry case. The Mipro MA101 Portable PA system and the Chiayo Focus 505 Portable PA system both have the option of a carry bag for pack and carry convenience.

**Speaker stands** - highly recommended. The use of tripod stands will enhance the performance of your PA system. Sound usually travels better when the PA is off the ground and up around head level. If you want the best performance from your PA system, then consider the stand as a great addition.

### **Cables**

We can supply standard or special / custom cables with your PA system depending on your requirements. If your PA system does not have a CD/MP3/USB Player built in, and you require an external music source such as an I-pod to be plugged in, you will need an I-Pod lead configured to suit your PA system. Similarly, when connecting other external devices, you may also need specific cable to plug into the PA system.

Other PA accessories vary depending on the system you buy and your particular needs.

### **Other Secondary factors/ tips to consider when buying a PA System**

Another important factor when deciding which PA system is to ensure your equipment choices have the ability to adapt and grow along with your present and future needs. Some questions that you should ask yourself are;  
Will I be able to add a CD/MP3/USB Player to my PA later on if need be?  
Will I be able to add a wireless microphone?  
Will I be able to connect an external speaker if I need?

### **Portability**

A very important factor to consider when choosing your PA system is how portable, easily transportable and lightweight the PA system is. You may ask yourself some of the following questions to help you decide if the PA will suit your requirements.

Is it light enough to be carried by hand?

Does it have rolling casters and retractable handle?

How often and how far will you need to transport the PA system?

Answering some of these questions will help you decide how portable you're PA needs to be.

### **Components**

A PA system is only as good as its weakest component. Your amplifier and speakers may be great quality, but they're not going to sound good if you use a bargain-basement microphone. If you're planning to buy your PA system as an all-inclusive package it may pay you to take the time to look into each component to see how it rates.

Obviously, there is a lot to consider when buying a PA system. We have tried to address some of the main factors that will hopefully arm you with enough knowledge and confidence to help you get started.