

Guide to Marquee PA Systems

by Lee Wright



If you're hiring a marquee the chances are it's for an important special event. This guide has been put together to help you get a hassle free audio experience at your special event whether it be a wedding, party, corporate or other event.

Do Marquees Have Special PA Requirements?

They actually do. These are covered later but special considerations include:

- Powering the system
- Acoustics and
- Cabling

What Type of PA System Do You Need?

This really depends on the requirements of your particular event. There are 4 main PA types you could use:



The Roland BA-55 Portable PA System

1. Portable PA System

A battery powered portable PA is the simplest system. They often consist of a single speaker mounted on a stand with a wireless mic and an iPod/laptop socket. These are primarily for speech but can do light background music. Battery life is between 4-6 hours. They can also be plugged into mains power if available. A single speaker in a marquee will cater for around 60-80 people. If you're planning a wedding with an outdoor ceremony these systems are very popular. They can be easily moved into the marquee for speeches during the reception.

2. Standard Vocal PA System

This usually consists of a pair of powered speakers and a separate mixer. They generally come with a wired microphone but a separate wireless microphone can be added. They have considerably more power than a portable and a pair will cater for up to 200 people.



Vocal PA System



Dance Music PA - Bose 802 speakers with MB4 subs for 200 person wedding

3. Dance Music PA System

This can handle speech well but has the capacity to handle louder dance music. It includes sub speakers for extended bass.



Band PA System

3. Live Music Music PA System

This is simply a vocal PA that has extra facility for musicians and singers. The main difference is that it has a “monitor” or “foldback” speaker. Monitors are designed particularly to allow singers to hear themselves so they can pitch correctly. Even a skilled performer can struggle when they can't hear themselves.

What Size PA Do You Need?

A good rule of thumb in a marquee environment is to use watts-per-person. For a speech only PA you want about 1 watt per person. For example if you have 100 guests then you'd want a 100 watt speaker system. For dance music you need around 3 watts per person and for live music with drums and bass and drums around 5 watts per person. Most powered speakers these days are at least 250 watts each.

Acoustics

Visually marquees are enclosed space but acoustically they behave much more like an open air space. The walls and ceiling don't absorb a lot of sound particularly when it comes to bass. Practically this means you need a bit more power than for a typical indoor system. The great benefit though is that you don't have the echo and phase cancellation problems that a lot of indoor rooms have so speech tends to be much clearer and consistent.

DIY or Hire a Professional?

You can certainly do it yourself. If so, it's best to hand this over to a capable friend to look after. Whatever you do, don't dump it on them at the last minute. They'll need to rehearse playing any music in advance. You'll normally want 2 day hire of any equipment to allow enough time. What's the difference with hiring a professional? Well a professional knows how to set up the PA in the best possible way. They can adjust the speech levels and adjust the EQ for improved clarity during the ceremony. They are comfortable with the responsibility of making sure everything goes to plan. (which might be a big ask for a friend or relative). They can handle the delivery, set-up and return of the equipment without the bride and groom having to worry.

Powering Your Marquee PA System



Power Distribution Box

This is actually quite critical to your PA. There's a few options:

Battery Powered PA

This is a nice simple option if your requirements are modest.

Battery and Inverter

This can run a PA longer than a portable but is still mainly for speech and background music systems rather than live or dance music. The benefits are that it's completely silent and can run other audio equipment such as CD players or mixers.



Battery and Inverter

Mains Power

You can run an extension lead from a nearby building or socket. There's a few things to be careful of here. Powered speakers are fairly voltage sensitive. Street voltage can vary by about 10% and there's further loss in long extension leads. I've witnessed this problem before. As a rough guide, extension leads should be less than about 50 metres. The best test is to run the equipment at full power before your event. If you do have low voltage then passive speakers may be an option rather than powered speakers. They can generally run on lower voltages without completely cutting out.



The Yamaha EF2000iS Silenced Generator

Consider what other electrical loads might exist during the event. For example at one recent marquee event a good sized generator was used. During testing it was fine but when the caterers started using they're cooking equipment it started having problems. Remember a standard extension lead can only handle 10 amps. A good sized PA will draw about 4 amps. An electric frypan will draw 10!

Generator

With generators you need to be conscious of 2 things. Power rating and noise. Carefully work out how much power you'll need and make sure the generator has enough capacity. Standard generators can be very noisy and ruin the atmosphere of the event. Make sure you get a silenced one. Yamaha and Honda make some good models.

Safety Tips

- Avoid running cables across walkways, they can be a tripping hazard. Use cable covers if needed.
- Make sure all electrical equipment and cabling is kept dry.
- Make sure any speaker stands are stable with the legs fully extended. We often tie the stands to the frame of the marquee.

General PA Tips

-Use a foam windshield on the microphones to prevent wind noise.

-Think about carefully about speaker placement. Make sure not to place speakers right behind microphones to avoid feedback (high pitched squealing noise).

-If using a separate mixer, it's best to locate it a good distance back from the speakers. Make sure you have enough microphone cable and speaker cable.

-For music playback the most popular method now days is to create play lists on an iPod, iPad or laptop. Make sure you have your play lists well labelled and burn a backup copy to CD.



I hope you've found this guide useful. If you need someone to take care of your audio needs then just give us a call. There's also a special offer attached below.

Lee Wright, Sydney PA Hire, Ph 0418 407 733, www.sydneyhire.com

See special offer below



**Special Offer for White Umbrella Customers on
Top Quality Audio Equipment for your Marquee Event**

Mention this offer to get your special price.

Valid till 31/12/14

Daily Hire Packages

**Roland BA-55 portable battery
PA \$179 ~~\$179~~ \$169 delivered and
setup***



Roland

Suits up to 60 people for speech and live music.

- > 60 watts
- > Up to 4 hours running time on 8 x AA batteries (included)
- > 2 x wireless hand held mics
- > 2 x channels (suit instruments, guitars, wired mics etc)
- > Includes speaker stand and mic stand and iPod cable.

**Chiayo Stage Pro portable
battery PA \$199 ~~\$199~~ \$189 delivered
and setup***



CHIAYO

Suits up to 100 people for speech and live music.

- > 150 watts
- > Up to 6 hours running time
- > Rechargeable
- > 2 x wireless mics (hand held, headset or lapel)
- > 4 x channels (suit instruments, guitars, wired mics etc)
- > 2 x available (can be linked + \$50)
- > Includes speaker stand, mic stand and iPod cable.

**PA System 1 \$295 ~~\$295~~ \$275
Delivered and setup***



Suits up to 75 people for speech and moderate dance music. Superb Bose sound. Just plug in your iPod/iPad or bring your CDs.

- > 2 x Bose 302A speakers
- > 1 x Bose MB4 sub speaker
- > 1 x Bose 1600VI amplifier
- > 1 x Mixer
- > 1 x Shure SM58 corded microphone
- > CD player (if requested)

With Experienced Operator add **\$75**

*Delivery over 15km from Ryde may be extra.



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West Ryde

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See website for conditions of hire.