

SMALL PA SYSTEMS

Any performer or band, which goes out gigging will quickly realise that a PA system is as necessary as their instruments or the transport in which they reach the venue. If you are content to play at open mike nights then the chances are that the organiser has a PA in place and all you have to do is plug in. Likewise, if you're in the exalted position of being a household name then you will either have a busload of sound equipment and roadies who take care of the problem for you or you will be performing at a

large venue with everything in place. If like me you are not

and are one of the thousands of unknown stars who have spent years doing gigs in pubs, clubs, church halls and farmers fields, then you will know that you have to take the PA with you and act as sound engineer whilst you perform. So, if you are thinking of going out gigging or buying a pa then I hope the following comments will be of use to you.

A PA (public address) system is merely a means to make yourself heard above the clink of the glasses and general chatter. If you are a solo performer, singing and strumming then a small two channel acoustic amp similar to the **AER 60** is the ideal piece of equipment. If, on the other hand you are a band of anything more than a duo then you will need something

a bit more ambitious. For many years I have been managing with a 6 channel Fender PA unit which consists of mixer amp, two speakers and 3 microphones that served quite well for 4 or 5 of us. Sure there was the odd time when an extra channel would have been useful but it was not until I recently plugged in a condenser mike that I realised I had something lacking - phantom power. So I set about researching the market for what was available. There's lots of information on the internet and asking the opinion of other users will help but beware of the expert who has never owned or operated a PA. The world is full of them.

Bands need more

As a band, you'll probably need quite a bit from a PA. It's not just a matter of making things louder. You'll need to be able to control the sound so that you can make a decent overall mix and tame any feedback from mics or acoustic instruments. You need to be careful not to try and overdo things. The rating of the amp doesn't just govern how loud things will be, it will also dictate how much you can expect to put through it. For a small PA don't try to put much more than just a vocal or two or maybe a vocal and acoustic guitar. Much more than that

and the amp will struggle and the sound quality will suffer. Don't take it as read that a PA with inputs for half a dozen instruments is actually powerful enough to handle them all. It can be difficult to concentrate on sound quality in the excitement of a gig so if you're trying with a view to buying, get a friend to listen for you. At

the end of the gig check how the PA is set. If one or more channels are cranked up full, then you're already running the thing flat out and have

nowhere to go if you need more volume for a bigger venue later on.

Choosing a system

Manufacturers tend to rate PA systems by the amount of power they'll deliver - measured in watts. There's a real problem with this. Basically you can't tell how loud a PA will be from its power rating, for two reasons: The manufacturers don't all measure the same things in the same way. Some will quote meaningless measurements, which make the figures look bigger. Others will give a measurement taken under a unique and specific set of circumstances that's nothing like the way you'd actually use an amplifier. A lot depends on your speakers. Amplifiers don't just pump out power regardless. They will behave differently according to the electrical characteristics of the speaker they're driving. Less important, but still potentially significant, is the fact that certain speakers are more sensitive than others. Connected to the same amp, some will simply deliver more noise.

So if you can't tell how useful a PA is going to be without actually setting up and using it, how do you tell whether it will do what you want?

Trying before you buy might be the way to go but don't take too long making up your mind. Hiring a PA half a dozen times may cost you more than buying it in the first place. Hire shops tend to stock gear from one manufacturer, so you'll probably need to visit a few to get a good picture of what's out there.

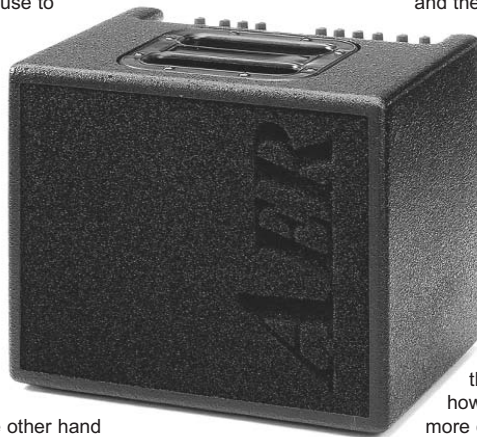
How robust is the gear? It worked for the gig you hired it for but will it let you down a year down the line when it's been around the country in the back of a van a few times? Will the screw threads on the speaker stands strip the third time you use them? Where is a good place to buy this equipment from? It always pays to shop around with sound equipment. Visiting a shop with lots of different gear like the London PA Centre will help, other than that talk to other bands if you can.

Mixer Amps or Separates

Talking with Andy Cooper, who runs the London PA Centre I asked what his most popular seller was. 'Mix and Match' was the quick answer. This made me realise that I already had the speakers and the rest of the gear and all I needed was to update the amp.

But which amp? Another mixer amp, or should I go for a powered mixer and separate power amp. Separate mixers and amps are probably the better solution for bigger bands or if there is a possibility that you may wish to upgrade either unit but my experience with a mixer amp had proved that it was the best solution from the point of operating whilst performing, so I looked around for another mixer amp.

There is a plethora of equipment on the market at amazingly low prices. For round about £150.00 you can get a decent 6 channel mixer amp. However, don't believe that just because it has 6 channels and is possibly rated at 300 watts it will give satisfactory performance at full chat on all channels. PA amps are like cars, the more power you have in reserve, the smoother



it will run, and my ideal is to get the best performance using only half the master volume. Also, just because there are four of you in the band playing instruments with two of you exercising your larynxes



don't assume that 6 channels will be enough, there will always be that occasion when you need an extra channel.

Mixer Amps

A mixer amp is the most basic type of multi-purpose PA. It

pretty much is what it says.

It is an amplifier with a mixer built in. The mixer usually has 2-8 inputs and will cope with mics as well as line-level things like keyboards or backing tapes. Mixing facilities are limited - you usually get a few basic controls to tweak the sound - typically bass, treble and a level knob. Some of them however have a few more facilities like effects processors built in but in general they are much simpler to use and for me represents the best solution for stage operation whilst playing.

Power Amps

Some power amps have volume controls on the front and some don't. These can be useful if you want to protect your speakers a little - you

can back off the volume on the amp so that, however loud the signal from the desk gets, the amp is never working flat out.

Some stereo power amps also come with a bridging option. This allows you to gang together the two channels into one, more powerful mono amp. So you can start out with just the one amp and add more power when you've got more money. Alternatively, you can use a single amp for smaller venues and unleash a more powerful system in bigger ones.

Powered Mixers

Where a mixer amp is an amp with a mixer built in, a powered mixer is more like a mixer with an amp built in. Typically they'll handle up to 12 or even 16 inputs and the control over the sound is much more detailed. The EQ controls will give a lot more flexibility for tweaking the sound, which as we said can help deal with feedback. Usually you'll get a basic reverb effect built in too. That'll make things sound sweeter and help bind the mix together. They are more suitable if you have a sound engineer in tow with the band. Powered mixers are more expensive than mixer amps but for the increase in sound quality they can be a worthwhile investment.

As a band, buying a mixer amp or powered mixer can be a cheaper option but it's also a slightly limited one. There's no easy upgrade path, so if you outgrow the system, you have to sell the lot and start again. The alternative is to buy a power amp, which is just a thing to make stuff loud and will only take a mono or stereo input. You then have the option of upgrading the mixer without changing the amp. But then, if the band is outgrowing the mixer amp you'll probably be earning enough from the gigs to buy a bigger one, which is where I started.

COVER YOUR AMPS AND GEAR

There's not much point investing money in expensive amplifiers then throwing them in the back of the van without any protection and getting them damaged. Flight cases themselves can be expensive and not always convenient for the boot of a car. We asked Roqsolid who make covers for anything from an amp to a Grand piano to make one for the Behringer PA amp. For added protection we cut a piece of hard board and glued it to the inside of the cover to give the knobs and controls a bit of extra protection, see our photo. We can confirm that it fits like a glove and works a treat.



Roqsolid have spent the last 6 years developing a variety of material-combinations to suit a wide range of purposes from home-use to gigging to storage and heavy-duty removals. All their goods have a 30-day, no-quibbles, no questions asked, money-back guarantee.

They say; 'In addition, our amp covers and cab covers have the only double - guarantee available anywhere which means you not only get our 30-day, no-quibbles, no questions asked money-back guarantee, you also get our industry-unique 6-month 'wreck it and we'll replace it for free guarantee' which covers you for damages due to normal wear and tear.

All our covers are custom-made and made on demand - we do not carry stock. Each amp cover, cab cover, piano cover and removals cover is made to order. This helps us bring you what our customers consider to be a range of outstanding products, at competitive prices, backed by our ROQSOLID guarantees of quality and craftsmanship. Have a look at our testimonials page to see what other customers have to say. If you don't have an eBay account and don't want to open one just to purchase one of our covers, call us now - we are happy to take telephonic orders as well Tel 07748 155 864 or 07929 253 434.



BEHRINGER'S EUROPOWER PMH 880S



My research for the ideal mixer amp for a 4-5 piece band with 2-3 of them needing voice mics as well as instrument inputs led me to the Behringer Mixer amp Europower PMH 880S.

It has a lot going for it. Firstly the price,

they are listed at just over £200.00 but shop around and you'll probably get one for just under. They are German designed which is usually a good indication that they will do the job and there are plenty of dealers selling them so you can be sure that the warranty will be reliable. There is a 6 channel model available but I opted for the 8 channel which has several advantages, which are not just in the number of channels.

Power ratings

The 880S is rated at 400 watts but as we said earlier manufacturers power ratings can be misleading, suffice to say that it delivers more power than the 300 watt 6 channel Fender using the same 15 inch speakers.

www.roqsolid.co.uk

We have an extensive range of all of the above covers in our eBay shop here: <http://stores.ebay.co.uk/ROQSOLID-POWER-COVERS>