

WHAT IS IT?

This chapter gives you advice on how to choose, maintain and repair your equipment for a price you can afford - musical instruments, live sound equipment and music technology equipment.

How to find up to date equipment and make sure you get good value for money.

How to keep your equipment in good working order – and do this safely.

➤ WORKBOOK 5 – RECORDING AND PRODUCTION
for more advice about pro-audio equipment.

WHY DO I
NEED TO
KNOW
ABOUT THIS?

Having access to good quality equipment is a must for any musician, DJ or technologist and can make the difference between getting work or not.

You can keep your costs down by getting good value for money and keeping things in good repair yourself.

This knowledge is useful to find a job which involves selling, maintaining and repairing equipment – such as in a music shop, or being a guitar tech for a touring band.

NOTE: Turn to the project in Chapter 4 – Health and Safety and Equipment projects are combined on P73.

HOW TO CHOOSE THE RIGHT
EQUIPMENT / INSTRUMENT

Assuming you know roughly what you want – e.g. a mixer with 8 channels so you can plug 8 microphones in – decide your budget first. Once you have a price in mind you can then start to browse the many catalogues and shops that sell music tech equipment.

If you are online, then the first port of call should be a large online retailer – see the ‘more information’ section. These websites have online catalogues of all the equipment the shops sell which will enable you to browse to find a few options for what you want. DON’T BUY ANYTHING YET!

Once you have a couple of options its time to look for reviews, on-line, in magazines and from other musicians, DJs and technologists.

Using the reviews you have found can help you to decide between pieces of equipment. Often price is a big factor as well, and it’s often a case of compromise.



If you are buying instruments, speakers or headphones you really need to hear them before you part with any money. This is generally a case of phoning around local shops and finding out what they have in stock. If you’re testing PA equipment, speakers or headphones, take some CD’s of material you know well and make sure you listen to a few different sets. If you’re buying an instrument which you will amplify, set it up so you can play it acoustically and amplified in the shop.

There are some manufacturers that are renowned for being cheap. Behringer, for example, make a wide range of music and pro audio equipment that is among the cheapest out there, yet performs fairly well. You wont often see Behringer equipment in large studios like Abbey Road, but it can easily do the job.

The Sound on Sound website has a search function into which you can type the model number of the device and see if they have reviewed it. Or just type the equipment manufacturer, model number and the word **review** into a Google search. This usually returns some useful results.



“Only buy an instrument that feels comfortable to play, no matter whether it’s cheap or expensive”
Mark Singleton

HOW GOOD AN INSTRUMENT DO YOU REALLY NEED? HOW MUCH WILL IT COST?

Ask yourself what you'll be using it for – does it need to be sturdy, reliable, will standard equipment do or do you need something better and different? If you're investing in equipment, think about how important that item is to your set up.

Although a good quality instrument will always sound better, you don't necessarily need this to get on in the business.

Instruments fall broadly into three categories : beginners, semi - professional, and professional. Even a beginner's instrument will be good enough to get you started, provided it is well set up and kept in good working order, but always aim to buy the best instrument you can possibly afford.

Improve your instrument's sound with proper 'setting up'. Check the action of a guitar, the state of the skins on your drums and the positioning of the bridge on your violin, for example.

Moderate quality equipment can be improved with small changes – new strings, better quality needles on your turntables, or good quality, shielded cable for leads.

A poor internal or contact pick up on your instrument can make your instrument sound terrible. It's often worth investing in a better pick up or alternatives.

How much you should spend on your instrument depends on the type and quality of the instrument you buy.

Remember to budget for other costs e.g. insurance, cases, accessories, amplification, maintenance costs, strings, reeds, plectrums, resin etc.

Before you spend any money, get advice!



BUYING A PA Mark Singleton

There are literally hundreds of PA system combinations on offer ranging from 100 watts a side to 10,000 watts and a lot of thought and careful consideration should be taken when you are deciding on one.

- What kind of venues will you be playing as regards power / volume?
- What are you putting through the PA?
- Do you need it to be powerful yet small enough to fit in the back of a small car ?
- Do you want built in horns to enhance the top end frequency?
- Do you want a full range system in one cabinet, or prefer tops and bass bins ?
- Do you need something you can carry yourself or have you a roadie?



GETTING ADVICE AND SUPPORT

Buying and looking after musical instruments can be a daunting task, so it’s important to get good, impartial advice.



Ask people who are involved in music for advice, for example, the Musicians' Union, instrument repairers and other musicians. Don't forget to ask for the full specification of equipment, as well as about reliability and popularity.

A lot of the online retailers have a B-STOCK section on their site where they sell items that have been returned and mended, display or end of line stock at cut down prices.

If you are planning a couple of purchases then try to buy them together as this will be a good bargaining point for price reductions.

If you wish to buy from somewhere closer to home then do your research, find the best price and then phone the dealer (or go in) and ask them to match it. Most retailers will do this to get your business, although they may ask for proof. It pays to take a print out from the Internet or a cut out from a magazine showing the price with you.

MAGAZINES

Almost every category of instrument has at least one magazine dedicated to telling you more about your instrument, how to maintain it and featuring reviews on new and old equipment. They also contain lots of manufacturers’ adverts and personal ads, so you can get an idea of what’s around and for how much. See 'more information'.

MUSIC SHOPS

People who work in music shops tend to be well clued - up about the instruments and equipment they sell. Although you may not get completely impartial advice (they want to sell you something, after all), they are often highly skilled musicians themselves and can give you some inside tips and advice that you’d find it difficult to get elsewhere. Remember that many dealers also do instrument and equipment repairs.

MUSIC TEACHERS / COLLEGES

Teachers tend to have a very wide and detailed knowledge of their instrument, and as such can usually tell you the pros and cons of specific makes and models. Also, they often get to hear of good second - hand instruments coming up for sale as their students upgrade.

INSTRUMENT / EQUIPMENT MANUFACTURERS

Manufacturers are always happy to send out details of their products to prospective buyers and most major firms have a technical sales department to deal with customer enquiries.

DO YOU BUY NEW OR SECOND - HAND?

This depends on the type of instrument / equipment you’re buying. Some instruments improve with age whilst others deteriorate.



“It depends on your budget and if you are prepared to do the odd soldering job, and obviously the type of equipment needed. Take more care if it’s electrical equipment you’re buying, than for, say, speakers though its extremely important to feel confident about your gear no matter what job it does.” Mark Singleton

BUYING NEW

You get instructions and maintenance advice, reliability, a guarantee and free repairs for a fixed term. You can often end up paying more, but this can be offset by part exchanging your old instrument and haggling for money off, or free accessories. New instruments can also take quite a while to break in. New technology is usually best, but only when it’s become quite widely used.

BUYING SECOND - HAND

Is cheaper, more room to negotiate to get money off or for other things to be included in the price. Private sales are always on a ‘sold as seen’ basis, and if your gear breaks when you get it home, there’s not much you can do about it. Even if you buy from a dealer, second-hand items usually come with a much reduced guarantee.

- Questions to ask about second hand items:
- How long have you had it?
 - (Did they buy it new, are they getting rid of it very quickly?)
 - Have you had it repaired / maintained?
 - Why are you selling it?
 - What did you use it for (e.g. regular gigs produce wear and tear quickly)
 - Do you know of anything that's wrong with it?

Flight cases / hard instrument cases are good value second hand, if you can find them as they are built to last.

Buying from a friend is best – people in the music industry are often changing equipment and so therefore people often have gear to sell. If its from someone you know then you’ll be able to give it a good test and ask loads of questions before deciding.

It is not advisable to send money in the post or do a bank transfer to someone you’ve never met for some equipment they say they’ll send you.

Ebay, the online auction site, is a popular choice now for buying anything second hand. As with all second hand trading, be very careful about the descriptions people give – they can be misleading – and take an experienced musician with you to look at any equipment / instrument before you buy.

When buying microphones, speakers, mixers or something else with lots of moving parts then view them and listen to them before buying.

Generally electronic equipment with few moving parts is built to last and you can be fairly confident that it will work a few years down the line.

Watch out for shipping costs when buying on-line or on Ebay.

KEEPING YOUR INSTRUMENT IN GOOD WORKING ORDER

You will need to invest time and a bit of money to keep your instrument in good condition - this may involve buying a flight case, new strings, or just keeping it clean. Below is a list of routine maintenance tasks. For anything other than this you should seek specialist advice.

HOW OFTEN?

Every time you use your instrument you will need to think about some or all of the routine maintenance tasks listed below. If your instrument has not been used for a while, regular check-ups will ensure no decay or damage occurs.

CLEANING

All instruments will suffer in varying degrees from dirt, such as dust, grime and grease. Try to keep your instrument as dirt free as possible at all times. How you clean your instrument will depend on what it is made of and you should seek specialist advice before you do anything. As a general guide, electrical equipment and string instruments should be kept dry and dust free. Brass and wind instruments will need more thorough cleaning after each session. Clean your strings with a tissue after every gig, it removes the sweat and grease from the string and it keeps the strings sounding livelier and brighter for longer.

TUNING

Learning how to keep your instrument in tune will not only help keep it in working order, but also stop you from getting thrown out of the band. Electronic tuners vary in price, (and accuracy), from about £20 - £100 and are very useful if you're having to tune up in a noisy venue. String players usually use a tuning fork. Many instruments, including stringed, wind and brass instruments will not work well if they are not tuned to the correct pitch. Guitars and stringed instruments should be stored with strings in tune. Percussion instruments such as bongos and congas need to have their skins loosened when not being used. Pianos need to be tuned by a specialist on a regular basis.

ENVIRONMENT

Environmental influences such as climate, humidity, weather and central heating can all have an effect on the working condition of your instrument. Some people say that wood is a living, breathing material and therefore should be treated with a bit of T.L.C. A change in humidity can affect the tone of wooden instruments and the dry air caused by central heating can cause untold havoc, such as warped necks and broken bridges - you can prevent this by using a specially designed humidifier, available at most specialist shops. Temperature changes will affect the tuning of all wind, brass or stringed instruments so it's worthwhile making sure your instrument is acclimatised before you go on stage to perform. For example, the increase in heat caused by stage lighting will make these instruments go sharp.



TRANSPORT AND STORAGE

Making sure you store and transport your instrument safely can involve added expense. Good quality, hard instrument cases and flight cases for electrical gear are not cheap to come by, but help maintain the condition and value of your equipment - making them worth every penny spent. Make sure your instrument insurance covers usage outside the home and theft from a locked vehicle. Wood worm can cause irreparable damage to wooden instruments and quite willingly have your acoustic guitar for dinner. Tell-tail signs include small amounts of sawdust and minute holes in furniture and instruments, so it is worth keeping your eyes open. Don't leave your equipment in the sun, heat, or extreme cold.

ELECTRICAL SAFETY AND EFFICIENCY

Always have your electrical equipment serviced by a qualified person - don't attempt it yourself.

➤ WORKBOOK 4 – PERFORMING – CHAPTER 4

SERVICING

From time to time, wind, brass and stringed instruments will need a check-up from a specialist instrument repairer – a kind of M.O.T. which will help prolong their working lives – a good time is when you're planning to go on tour or have important performances or auditions looming. At some stage, getting your instrument re-valued for insurance purposes will probably be worth your while, and this can be a good time to send it in to a reputable repairer.

ACCESSORIES

Instrument accessories such as strings, reeds, batteries, leads, mutes etc. also need to be kept in good working order.

PRO AUDIO EQUIPMENT

Keep its exterior clean and free from dust by wiping with a damp cloth. Ensure that rack equipment has enough space around it for air to flow to keep it cool. If it does go wrong and it's out of guarantee then you will need to refer to a specialist. These sorts of people advertise in the back of magazines and often music retailers will be able to point you in the right direction. Get a quote first, as it may work out cheaper to buy a new one.

TIP

Matt's Tips
- Keyboard technician for the Chemical Brothers

- Keep a check on your stuff constantly, it rattles around in the back of a truck so check tightness of rack bolts / screws. Don't be afraid to open up a keyboard every now and again to make sure there's not a circuit board about to come loose - preventative medicine!!
- If you own older vintage gear, there's probably a book about it somewhere. Buy that book and learn about the little nuances of that particular keyboard / software.
- Always have a contingency plan for if your stuff does breakdown - should you really take your vintage keyboard on the road, or use a modern one with similar patches?
- Get a proper service engineer to overhaul or service expensive items. You spent a lot of money buying it, another couple of hundred quid on correct maintenance makes sense. Do repairs to get you through a gig by all means, but if not sure, do nothing! You can cause more damage than good.

INSURANCE

Think about insuring against theft / burglary at home, whilst in transit and at gigs – in the UK or overseas if you tour there. Also consider insurance for accidental damage to equipment (a pint over amp does it no good at all...) and public liability insurance – ask an insurance adviser for details.

There is always the possibility that someone might break into your house and steal your gear, and it won’t always be covered by house contents insurance. If your equipment never leaves your house then contact your house insurance company first and tell them you have £X000 worth of music equipment. They will ask for the highest individually priced item (say you have a guitar that cost £1000) and amend your insurance accordingly.

If you are planning to take your equipment out the house then you need specialist insurance. Look at the ‘want to know more’ section.

Most insurance policies will cover your equipment at home and at a gig. You will need to specify if it’s kept elsewhere (at a rehearsal room, studio etc), and also if you plan to take it abroad.

Check whether theft from cars is included. There are often little clauses that mean the only way it is covered is if you are in the car as well, or if the car has been forced open, or if you have an alarm / immobiliser fitted. Some music equipment policies also include Public Liability Insurance, which protects you if your equipment hurts or kills someone else.



The Musicians Union can help you with insurance that fits your needs. You get reduced rate membership to the MU if you are on New Deal for Musicians.

