Buying Guide

Please **do not buy anything** before talking to one or two instructors.

This guide is aimed at the beginner and is oriented towards training to ‘A Certificate’ level. You will need to achieve an A-Certificate before you are allowed to fly unaccompanied at our site. You should therefore consider purchases that will allow you to achieve that.

Choosing a model

The first step, preferably before obtaining a model or other equipment, is to speak to one or more Instructors for advice on purchases. This is best done by coming to the field and meeting people or by coming to a monthly meeting.

It is essential to choose a suitable trainer as your first model. You may like the look of that quarter scale Sea Fury kit taking pride of place in the model shop window, but it is not a practical proposition for a first model, or even a second!

The typical power trainer will be a high wing arrangement, with sufficient stability to allow the model to fly 'hands-off' while the student thinks about what to do, and to be able to fly slowly enough to allow the student time to think. A larger model (about 5 foot wingspan) has the advantage of being easier to see, and can also have an advantage in being smoother in flight. Bigger models will require more resources when building, transporting and repairing. Most trainers are of simple lines and construction both for ease of initial construction and to make any repairs simpler, but there is no reason why it should not have a scale-like appearance, subject to the constraints already described.

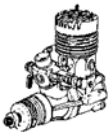
Some popular models are listed at the end of this article.

Most modern trainers will have four functions (or controls): Throttle, Elevator, Ailerons and Rudder. Some older designs will not have ailerons, and these can be used for training if you happen to have one. Our experience favours models with two main wheels and a tail wheel (known as a ‘Tail-dragger’). There are good models with a tricycle undercarriage but a beginner’s landings often damage the nosewheel and make the model unserviceable, so be warned.

For the ‘A-Certificate test, you must have a model that can take off from the ground (and therefore have an undercarriage) and it must weigh at least 1Kg. So- Powered Gliders and very small models cannot take you to A-certificate level.

Almost everyone starts model flying with an electric model rather than an Internal Combustion (IC) glow motor and most instructors are more comfortable with this. If you do want to start with an IC model talk to Instructors before you make any purchases as there are good and bad motors on the market and you can end up spending a lot of time tinkering with IC motors when you could be flying. For most people, it is best to move on to IC only at a later stage.

Power



For an electric model, the power is provided by an electric ('brushless') motor and a lithium battery. An Electronic Speed Controller (ESC) completes the power train. Some trainers come with the motor and ESC already installed but some come without and you need to buy them separately. The batteries are rarely included but the battery type and size is usually specified in the model instructions, or even on the box.

Of course, the batteries are re-chargeable and each battery will give one flight before re-charging, so you need, typically, three batteries for an afternoon's training. You also need a dedicated battery charger.

Finally, it is worth buying a battery condition monitor. They are quite cheap and you use them to check the batteries before and after each flight. They show the condition of each cell within the battery, so you can see if everything is OK.

Once again, if you need to buy any equipment, including batteries and charger, seek advice.

Should you decide on an IC model, you will need a completely different set of equipment, including fuel and fuel pump, starter and battery and a glow battery.

Having got all the items needed to make the model move, you also MUST HAVE a simple model restraint to stick in the ground to hold the model from moving forward unintentionally. You will see how easy this is at the field

Radio

There is a huge range of radio equipment available. As a beginner you should be looking for a 4 or 6 channel radio set. If the budget allows, buy the 6 channel set; you can always add more servos, but it is not usually as easy to add extra channels and once you gain your wings you will soon find yourself making use of the extra facilities. For the same reason, it is worth buying a set with some extra facilities, such as rate switches, mixers and model memories: You don't have to use them initially, but is far better to have them available when you are ready rather than having to replace your radio equipment.

Before committing to a particular Transmitter, hold it in your hands and see if it feels comfortable in use. Some are very small, others have strange layouts, so try before you buy.

If possible, choose a Transmitter with an integral rechargeable battery. These are much more reliable than using individual AA cells, which can provide intermittent contact leading to crashed models.

When planning your purchases, consider making allowance for a buddy box. This is strongly recommended for early training. A cheap second transmitter, often bought second-hand, is sufficient and it reduces the chance of a damaging crash. Again – talk to people about this.

The best way to choose which radio system will be right is by speaking to one or more Instructors for advice on purchases, either by coming to the field or by coming to a monthly Club meeting. At the field take note of what radios and brands are commonly in use by the other members, it will be easier to get advice on set-up if others are familiar with your radio.

Some popular brands are listed at the end of this article.

Example Models

The **Multiplex Mentor** is an excellent trainer. It is a tail-dragger of the right size, flies well and is robust. It is not made any more but they can sometimes be had second-hand.

The **Max-Thrust Riot** is a good model. Again, it is a tail-dragger. It is a good size and flies well. It is sold a as a multi-purpose model. It can be flown as a Trainer with a gentle control set-up and can become reasonably aerobatic by increasing the controls when the flyer is more proficient. It comes fully-equipped (ie with Motor, ESC and Servos.)

The **Rip-Max Wot-4 Foamie** is a tail dragger. It is really a sports-aerobatic model, but it is used for training. Being a bit smaller and quite agile, it needs quicker reactions than the larger models. Again, it comes fully equipped.

The **ST Discovery** is another good flier. It is a good size and is designed as a trainer. The only drawback is the tricycle undercarriage, which is vulnerable to poor landings. However, it is quite widely used. Again, it comes fully equipped.

Example Radio Brands

The two brands in most common use at our site are **Futaba** and **Spectrum**. Also becoming popular are the **FR Sky** brand and the **Radiomaster**.

Each of these brands covers a very wide (bewildering) range of products, both Transmitters and Receivers. A transmitter can cost anything from less than £100 to well over £1,000. So think carefully before purchase and take advice from people in the Club. Also, be aware that you may wish to eventually have more than one receiver, so look at the cost of those as well.