Amateur Radio Getting Started: Which radio should I buy?



requirements, preferences and budget, it's hard to offer any advice. So, here are some things to consider:	
	Bands: VHF/UHF (Local), HF (Distant) or both?
	Type: Handheld, home base, in-car or portable?
	Budget: Cheap low-quality import, or big name such as iCom or Yaesu
	Antenna: What type of antenna are you going to be using?
	Features: Extra bands (6m and 4m), Digital (D-Star, DMR, Fusion), Software-defined or standard? Does it support
	connecting to a computer for data modes? Does it support CW?
	Accessories: For your budget, think about an ATU (for HF), 12V Power supply, SWR meter, co-ax, antenna, etc.
The first question to ask is, do you want to contact "locals" (within, say, a 50-mile radius), or outside the UK?	

This is always a tricky question to answer... a bit like "what sort of car should I buy?" Without knowing your

A radio for local contacts?

You'll be looking for a radio with 2m and 70cm capability. This could be a handheld (£30 upwards), a "mobile" radio (which you can use in a car, in a field or at home – a basic imported model costs from £60 upwards), or a dedicated base station (starting from £700). There are also "shack in a box" radios with VHF/UHF and HF in one.

- For 2m & 70cm, the antenna is key. For home use, many amateurs start with a vertical antenna, positioned as high up as possible (to push your signal out to the horizons). A roof-mounted "2m/70cm colinear" is a good starting point (these are typically white fibreglass "stick" antennas, just over a metre long). Priced around £50. Don't forget the co-ax, and don't buy cheap thin co-ax, as this will be "lossy", especially over a long cable run.
- Mobile rigs require 12 volts, so if you're going to use one at home, don't forget to budget for a 12 Volt PSU (Power Supply Unit). Prices start from £50
- Other considerations take a look at what repeaters are near you, to see if they're likely to be in range. Some
 repeaters are "digital" which allow you to make contact with other repeaters (connected over the Internet), so
 you may want to consider a radio capable of both analogue and digital.

A radio for further than 50 miles, including outside the UK / around the world?

You'll be wanting an HF radio, capable of accessing 80m-10m. These start from around £400 for a basic model

- Again, the type of antenna is key. A basic antenna would be a long bit of wire as high as you can get it (with something called an UnUn between the wire and the co-ax). The dipole is a common HF antenna, or you can get a vertical the aim is to throw as much radio energy at the lonosphere, and there are hundreds of antenna types to choose from, or to make yourself. HF antennas can get quite long (as the wavelength is longer for HF)
- You have the option of a "mobile" (in-car, field or at home), or a home base station
- If you want to operate on multiple HF bands (e.g 40m, 20m, 14m and 10m), you will probably need an ATU (Antenna Tuning Unit called an AMU in the exam). Automatic ATUs are easier than the manual ones, but more expensive, starting at approx. £150. Some rigs have a built-in ATU, so that may be a consideration
- Power Supply Same as under "local"
- For HF, an SWR meter is a good idea some ATUs and radios have these built-in

For both types of radio: Although you have a limit of 10 watts at Foundation, if you're planning to progress to Intermediate or Full, consider buying a radio that supports higher-power, for when you move to a higher licence

Still need advice, ask in our forum, Facebook discussion group, or Groups.io chat, giving as much info as possible – see www.essexham.co.uk/help for all the ways that Essex Ham's members can give you advice.

More help, plus videos, guides and more information here: www.essexham.co.uk/getstarted