

## The Flute - a beginner's guide to student instruments

Although a Flute is classed as a woodwind instrument, nearly every modern Flute is made of metal. Very old Flutes, folk Flutes, and some professional Flutes are made of wood.

Flutes come in four different sizes which make up the Flute family. Beginners start on the most common member of the family – the 'C soprano concert Flute', it is so common that people usually just call it *the* Flute.

### The parts of a Flute

There are three parts to a Flute: -

- The **head-joint** - this has the **embouchure hole** into which the player blows.
- The long tube called the **body** on which are found most of the **keys** - these are operated by the player's fingers so that various **pads** either cover or uncover the **tone-holes** to make different musical notes.
- The short tube called the **foot-joint** which has three keys on it. The foot-joint fits onto the **tenon** at the bottom end of the Flute body, and the head-joint fits into the **socket** at the top end of the body.

The metal keys on the Flute make up the mechanism of the instrument. The keys are supported between metal pillars on screws or rods. Each key has a wire spring that keeps it held open or held shut. Most the keys have a key cup in which there is fitted a pad to cover the tone-hole. The keys also have cork or felt glued on to function as a stop so that each key opens the correct amount.

The pads, corks, and felts on the instrument (and also the adhesives which keep these items in place) deteriorate over time. On older or poorer quality instruments the mechanism itself starts to wear and the keys can become loose or jammed.

Although not a part of the instrument there is one vital accessory – the case. A case that holds the instrument snugly will protect the instrument during transport - a poor fitting case will damage the instrument!

### Special Flutes for children

To assist children some manufacturers make a curved head-joint so that the child has less difficulty stretching to reach the keys on the body of the Flute.

One manufacturer (Jupiter) makes a Flute especially for children; it is called the 'Prodigy', it does not have a foot-joint and it has modifications for smaller hands. Because a child would need to upgrade to a full size Flute fairly soon after starting to learn there seems little advantage in buying one (however the Prodigy Flute might be useful for schools where the instrument could be continually passed on to new beginners).

Children usually start Recorder at the age of 7 or 8 before progressing onto the Flute; this is partly because it is best for children to wait until they have their front adult teeth before learning the Flute. Children who are ultimately interested in playing Saxophone have usually started on the Clarinet (or Flute) until their fingers are big enough to reach all the keys of the Saxophone (although the new Trevor James Alpha Sax means they can now start on Saxophone straight away).

## Variations in design

Modern Flutes vary little in the design of the mechanism and therefore they all feel more or less the same to the player. They can vary in tuning to some degree – with poorer quality instruments being difficult to play in tune.

The standard student Flute is usually made of silver-plated metal, has covered holes, an off-line G assembly, a straight head-joint, and it may or may not have a split E mechanism; but what does this all mean?

**Silver-plated metal:** student Flutes are made of a base metal which is then silver-plated. Some student Flutes have a solid silver lip plate to avoid corrosion of the silver-plating caused by the moisture from the player's lips. Some student Flutes have a silver lip-plate *and* a silver 'chimney' (sometimes called the 'riser'); the chimney is the very short tube that joins the lip-plate to the head-joint. Corrosion of the chimney can also be avoided if it is made of solid silver; additionally it may be hand finished which can enhance the sound of the Flute. Top of the range student Flutes have a solid silver head-joint which avoids plating wear, allows for hand finishing of the embouchure hole, and also means the head-joint can be worked to the shape of design mandrel more accurately (the denser material itself is also said to enrich the tone).

**Covered holes:** nearly all student Flutes have covered holes – this means every hole on the Flute has a metal key to cover it and there is no hole in the metal key. A few student Flutes are open-holed which means some of the metal keys have holes in the top which need to be covered by the player's fingers, this makes it more difficult to play to start with but encourages good finger positioning when playing.

**Off-line G mechanism:** this means that the keys used to play the note G are slightly offset from the other keys, this mechanism is found on all student Flutes with covered holes. Student Flutes with open holes also usually have an off-line G mechanism but a few have an in-line G mechanism which some players find more comfortable.

**Straight head-joint:** head-joints can be straight or curved. Only small children need to use a curved head-joint. Most manufacturers make both types.

**Split E mechanism:** this is an optional feature on all Flutes from the student model to the top professional model. The fact that top professional models are available without it is an indicator that it is not essential. It makes it easier to play some high notes, but at the cost of making other (less used) notes more difficult to play.

## Categories of student instruments

Student instruments can be divided into five categories:

**Budget student instruments:** these are models that are often sold on-line or by local retailers who do not specialize in music. They are much cheaper than the recognized brands and often cheaper even than second-hand standard student instruments. This is because these new instruments are of poor quality and will have a very limited lifetime, either because they will soon need repair (but many repairers will not work on these cheaper instruments) or they simply do not meet the needs of any but the complete beginner. Some budget instruments are of reasonable quality for the price, but there is no "brand consistency" so it is impossible to recommend any particular make or model.

**Older student instruments:** these are models that have not been manufactured for several years but were well made. They are suitable for up to and including grade 5 if in good condition.

**Standard student instruments:** these are models manufactured within the last 15 years. They are well-made, robust instruments suitable up to and including grade 5 if in good condition (and probably beyond grade 5 if they are regularly serviced); makes include Jupiter and Trevor James.

**Premium student instruments:** these are models manufactured within the last 15 years. They are very well made and are suitable up to grade 8 (when Custom serviced). The best examples are Yamaha YFL200 series and Pearl 500 series; both Yamaha and Pearl manufacture a range of Flutes from student up to professional level.

**Advanced student instruments:** these are versions of the premium student models but are fitted with a solid silver head-joint; the solid silver head-joint enhances the tone of the instrument and means the embouchure plate and chimney will not become corroded by moisture from the player's breath. The best of the advanced student instruments are the Yamaha 300 series and the Pearl 600 series.

## **Manufacturers and models**

There have been dozens of different manufacturers and hundreds of different models over the years; here is a brief description of the most popular current brands.

**Yamaha:** Yamaha (along with Pearl) make the best student Flutes. Models come with or without split E, and are available as open hole or covered hole. Yamaha student Flutes come with a silver-plated straight head-joint but a curved head-joint can be purchased separately. Yamaha also make an advanced student Flute with a solid silver head-joint. Yamaha has used different model numbers over the years to indicate slight changes in design, student Flutes model numbers start with a 2 (211,221 etc), advanced student models start with a 3.

**Pearl:** Pearl (along with Yamaha) make the best student Flutes. Models come with or without split E, and are available as open hole or covered hole. Pearl student Flutes come with a silver-plated straight head-joint or a silver-plated head-joint with a silver lip-plate and chimney; Pearl do not manufacture a curved head-joint. Pearl also make an advanced student Flute with a solid silver head-joint. Pearl has used different model numbers over the years to indicate slight changes in design, student Flutes model numbers start with a 5 (501,521 etc), advanced student silver head models start with a 6.

**Jupiter:** Jupiter Flutes are well made and are growing in popularity with teachers. All standard size models have a silver chimney (riser) and are available with or without split E, and with open holes or covered holes. Jupiter student Flutes come with either a silver-plated straight head-joint or one straight and one curved head-joint; either way the case supplied with the instrument is designed to contain the instrument and the head-joint(s). Jupiter also makes an advanced student model with a solid silver head-joint. Jupiter also manufactures the 'Prodigy' as described earlier.

**Trevor James:** Trevor James Flutes are popular with teachers because of the ease with which beginners can get them to sound. Trevor James student Flutes are available with covered or open holes and with or without split-E. The instrument can be supplied with a straight head-joint or a curved head-joint or both. The straight head-joint can also be supplied with a silver lip-plate. Trevor James also manufactures an advanced student Flute with a silver head-joint.

## **Play-testing a Flute before purchase**

For a complete beginner this is impossible because the player won't be able to produce a sound. If the player has been playing for 2 or 3 months and can produce a reliable sound then it is worth getting the player to try the instrument before purchasing because the player might find one instrument easier than another; this is largely down to the shape of the embouchure hole, the design of the head-joint, and how well the instrument is working (bear in mind that even brand new instruments might not be working well).