



## Building an Oud

by Edward Powell

### What Is an Oud?

Most of us in the West first have seen oud-like instruments in European paintings from the Renaissance. All of us with an interest in guitars have been fascinated by images of pear-shaped instruments with unusually long peg boxes jutting off at sharp angles from short necks. As a child, the intrigue I experienced on first seeing these instruments equaled that of seeing a sitar for the first time. As a Canadian kid, my first impression of a sitar was, "This thing is incomprehensible!" By contrast, on first seeing a medieval lute I was immediately struck by the beauty and balance of the instrument.

In terms of construction, the lute and oud are essentially the same instrument with only minor differences, but major differences in playing technique and repertoire place them worlds apart.

Perhaps the first known ancient lute was the Persian *barbat* which was copied and adapted to Arabic music and culture by the first Muslim invaders; hence the birth of the Arabic oud and its widespread use throughout the Arabic world. Later the Ottomans followed the Arabs' example and the instrument proliferated throughout their empire, including Greece and the Balkans. Arab conquests of North Africa and Spain saw the introduction of ouds into those regions. At the time of the invention of the tempered scale, these ouds (*al ud* or *la ud*) became the fretted lutes that we recognize today. Furthermore, these fretted lutes inspired the creation of the first Baroque guitars which we know as the forerunners of the modern Spanish or classical nylon-string guitar.

The oud is the grandfather of all guitars today and it is still alive and well in Turkey and all Arabic countries. In addition, the oud is experiencing a dramatic re-birth in the West and around the world as its rich tone and melodic potential are being rediscovered by growing numbers of adventurous musicians in the world fusion genre.

### Differences Between Oud and Lute Construction

There are numerous differences between ouds and guitars. Most of these differences arose from the significantly different musical role each was assigned and more than that, the two instruments are designed to play music of entirely different types. Guitars are built with chordal music in mind. Being fretless, ouds are not designed to play chords; by contrast, oud music is modal and melodic in nature.



The most obvious difference between ouds and guitars are the oud's round back, pear-shaped soundboard with three sound holes, short neck with a long right-angle peg box, double-string courses, and fretless fingerboard.

Less obvious differences between ouds and guitars include the oud's thinner, unvarnished soundboard with distinctive bracing patterns, generally lighter construction, much lighter strings tuned to the same pitches as the guitar, lower string action, and lack of any metal parts.

As I mentioned, ouds and lutes are incredibly similar; in fact, I built my first oud using an instruction manual for how to build a lute! The instrument came out very well, however when I showed it to Ross Daly on the isle of Crete his first comment was, "This looks like a Baroque lute."

Lutes are even more lightly constructed than ouds. A modern Spanish guitar is a tank in comparison. Lutes have frets, not fixed metal frets like a guitar, but rather pieces of gut string tied around the neck to make "moveable frets". In the early experimental years of European Equal Temperament, the moveable fret was essential because most of the music was played in "partially tempered" scales which allowed for 'acceptable intonation' in a limited number of key centers. It wasn't until all European music became fully entrenched in Equal Temperament that fixed metal frets were implanted into the fingerboards of all guitars.

Back to ouds- To sum up, the differences between ouds and lutes are very few, and it is difficult to generalize because the lute in fact blossomed into an almost infinite myriad of forms and variations before falling out of fashion due to the rise of the guitar.

## Differences Between Arabic and Turkish Oud Construction

Ouds themselves these days fall into two distinct categories; Arabic and Turkish, although the Arabic oud, due to the geographic vastness of the Arab world, exists in various distinctive sub-forms; for example, the Iraqi oud, the Syrian oud, the Egyptian oud. However, there are significant main general features which tend to hold all of the Arabic oud sub-forms into one large general instrument class: the Arabic oud. Turkish ouds are something quite different, and in general what you would encounter in Greece would more than likely be a Turkish oud.

Personally, I had been listening to and playing oud for many years before I fully realized that the 'oud world' is essentially divided in two parts; the Arabic oud world and the Turkish oud world. Not only are the instruments different but the playing styles and even the *makam/maqam* system and microtonal placement within their respective musics are significantly different.

When I first went to Ross Daly's musical labyrinth on Crete I was amazed that every person I encountered, upon hearing that I played oud, asked exactly the same question, "Which do you play- Turkish or Arabic oud?" My answer at the time was, "I don't know. I built my own!"



Slowly, I began to hear, understand and finally "feel" the difference between Arabic and Turkish ouds and playing styles. It was also interesting that, in the beginning, I was attracted to Arabic oud music, but now find myself more drawn to the Turkish flavor although I still love the Arabic oud as much as I ever did.

In a nutshell, Turkish ouds are slightly smaller, have a slightly shorter scale length, slightly lower string action, and a slightly thinner soundboard. There is, however, one secret hidden inside the Turkish oud's body; it's on the underside of the soundboard, which is the main reason for the huge difference in tone between Arab and Turkish ouds. To describe this secret, it is first necessary to say something about the construction of an oud soundboard.

## How to Make an Oud

An oud is in fact, not a difficult or overly complicated instrument to construct. It is possible to build one with very simple hand tools and good prior knowledge of fine woodworking. Without question, the most difficult procedure is the construction of the back, and the one essential tool you must have in order to succeed is a very long jointer's plane. This must be turned upside-down and fixed in this position in order for the individual ribs to be planed absolutely flat after rough shaping.

Your first dilemma will be whether or not to use a back mould. I myself constructed all the ouds and oud-like instruments that I have built without any moulds. I'm not sure if I would recommend this to others because it took me 3 solid/months of work to succeed in making my first workable oud back. I have never used a mould but I have seen that it makes the job much easier and far more accurate, but you must first make the mould!

There are many very good books and even DVDs on the subject of lute building to help you build an oud. What is essential is to have a very well made oud to copy, and then adapt the lute instructions to it.

Be clear right from the beginning about what kind of oud you are building and what kind of music you intend to play on this instrument. If you are drawn to the Turkish sound and way of playing, then do not copy an oud you picked up in Cairo! Get a good Turkish oud to use as a model. Also, the Internet is full of information and photos of many types of ouds. You will find this an essential resource when designing your own parts according to what you feel you are able to accomplish and what materials you have available.

The main thing to remember is that, compared to building a guitar, all oud construction is very light, using a bare minimum of wood as a general rule. Take this principle even further when building a Turkish oud as opposed to an Arabic oud. Turkish ouds are even more lightly constructed than Arabic ouds.

Another essential tool to have is an electronic caliper for measuring 100ths of millimeters. This is especially important when dealing with the soundboard, which must be very thin-somewhere between 1.5 and 1.8mm thick.





The two most important features which determine an oud's character are: 1.) the thickness and bracing of the soundboard, and 2.) the string action and proximity of the double courses. The latter is something that can be adjusted after construction is complete; the oud's bracing, however, cannot easily be altered once the soundboard is glued on. Even if the sample oud you are copying is excellent, you will find it very difficult to successfully copy the bracing. You can get a good idea of the brace positions by examining your sample oud with a small desk lamp in a darkened room. With the room totally dark, shine the desk lamp into the sound hole. You should now be able to see the 'shadows' of the soundboard braces thereby giving you their positions.

This degree of visibility is great, but you still need even more important information regarding the heights of the individual braces. At this point you surely will have noticed that all of the oud's braces are simply straight bars going across the soundboard perpendicular to the string direction. Now that you have their positions and widths, all that remains to know is their heights and you should be able to make a great-sounding oud.

Truly knowing the correct heights of the oud's bracing is a very deep and complex art. The world's foremost oud maker (my teacher), [Faruk Turunz](#) has in fact discovered mathematical formulae which he uses to calculate and 'tune' his soundboards and braces. There are other oud makers who get great results, but the one thing they have in common is years of experimentation.



If you are building an oud for the first time here is some rudimentary advice that ought to produce satisfactory results. When building an Arabic oud, simply follow the advice for the brace heights which are given in your lute-making guide book; Just mount all 7 braces straight across the soundboard. Do not bother with the "bent bass bar" commonly used in lute construction.

One thing I do advise concerns brace numbers one and two (the two braces on either side of the bridge); these should not be exactly parallel but rather slightly further apart on the bass side of the soundboard, and slightly closer together on the treble side.

Now then, if you are making a Turkish oud- and this is the "trick" I mentioned earlier-construct the bracing with heights similar to how you would if making an Arabic oud, except shave the third brace right down to just 4 or 5mm high, even lower if you have the courage (Some Turkish makers shave the third brace down to just 2mm!). In addition, if you are making a Turkish oud, make sure that the string action is extremely low, about 2mm high at the neck/body joint, whereas 3mm is about right for an Arabic oud.

In conclusion, while it is impossible to describe all aspects of oud construction in a short article, it is my sincere hope that what I have written here will help and encourage those interested in making an oud. Good luck, measure twice and cut once and otherwise TAKE IT SLOW AND EASY!



### About the Author

**Edward Powell** is considered today one of the world's foremost fretless guitarists. He has designed and built the instrument he now plays, the "ragmakamtar" which is an approximate combination of an oud and a sarod in the body of an acoustic guitar. As a composer and recording and concert artist, Edward performs original compositions inspired by twenty years of travel and study in India and the Middle-East.

Edward's CDs are available on [CDBaby.com](http://CDBaby.com). To learn more about Edward Powell, his instruments and music, please visit his official website at [www.edwardpowell.com](http://www.edwardpowell.com).

