

# **Commonly Asked Questions**

## **Q: How long will it take to get my custom instrument after ordering?**

A: Our construction time can vary depending on the complexity of the project or if we have to order custom pickups or hardware. Our current build time is 9 to 12 months. For more complex custom instruments and parts the time frame could be from 12 to 18 months.

## **Q: How is the 7 string bass tuned? While you're on the subject; How about the 8 and 9 string bass?**

A: Our standard tuning for the 7 string bass is Low B, E, A, D, G, C and High F (all in fourths). It can also be tuned from Low F# (a fourth below B) to High C. Another tuning is from E to High A#. Finally, some players with treble clef in their blood tune their 7's Low B, E, A, D, G, B, E. With that in mind, the 8 string bass is usually tuned Low F#, B, E, A, D, G, C and High F or Low B, E, A, D, G, C, F and High A#. Finally, the monster 9 is tuned Low F#, B, E, A, D, G, C, F and High A#.

## **Q: Where can I find strings for all of these one-of-a-kind instruments?**

A: We stock most of the strings you will need for any of our unusual instruments including 8 string guitars and 7, 8, and 9 string basses. We also have the special silked upright bass strings for our M.E.U. bass. See "Accessories"

## **Q: Concerning the scale of the bass, what is "Multi-scale"?**

A: This is the same thing as fanned frets...basically you have a shorter scale on the treble side fanning out to a longer scale on the bass side which means that there is less tension on the treble side allowing you to tune standard gauge strings to higher pitches. The longer scale length on the bass side allows standard gauge strings to be tuned to lower than normal pitches while retaining the desired tension.

**Q: What are the effects of different woods on necks and bodies?**

A: As a general rule, the harder, heavier woods are invariably brighter, while the softer, lighter woods are usually warmer.

**Q: Which types of woods are best for various guitar-making applications?**

A: Hard, stable woods are best for necks and fingerboards. Light, resonant woods are generally best for bodies. This does not take into account that many of the most sought after exotics used for guitar tops or our exclusive "Melted Tops" are often times very dense, hard and relatively heavy. This is why we usually recommend a lightweight core wood for the back of the guitar or bass topped with a heavier exotic. The end result is an instrument with a wide and versatile tonal range.

**Q: Which wood is most durable?**

A: Purpleheart.

**Q: Which wood is the lightest?**

A: Dragonwood.

**Q: Which is better, a single piece neck or a multi-laminate such as a 3-piece, 5-piece, or 7-piece?**

A: The multi-laminate construction creates a superior neck because, just like plywood, multi-laminations make things physically stronger, stiffer and more stable.

**Q: What happens when you add a different wood for the top? Does it affect the sound? What's the best type of wood for different styles (ex. funk, rock, jazz)?**

A: Various tops can add different textures to the tone. As we stated before, the harder and denser tops will most likely be brighter while the lighter, porous woods will add a warmer and more resonant overtone.

### **Q: What are Piezos?**

A: Piezo elements have been used for years under the saddles of acoustic guitars, but when manufacturers started making them available as individual pickups for each saddle of electric instruments, things started to get interesting...

By installing piezo pickups under each saddle you give each string its own separate signal. These individual signals can be used for splitting the treble and bass strings into separate outputs for two-hand tapping techniques without cross-talk.

Piezo crystals operate on string pressure instead of vibration meaning the response is virtually instantaneous which makes them the perfect candidate for yet another challenging task; triggering MIDI systems...

### **Q: What is MIDI?**

A: MIDI allows your guitar or bass to digitally interface, or communicate with other MIDI equipped devices such as computers, controllers and converters so that you can write, record and edit your music via your computer or create the sounds of virtually any other instrument or synthesized effect live or in the studio right from your instrument.

Our MIDI electronics are made by RMC and are installed within the control cavity of the instrument and triggered by a piezo imbedded under each saddle in your guitar or bass bridge. By using piezos as opposed to the old hex pickup mounted on the face of the instrument, the system tracks virtually instantaneously and is much more accurate. Piezos also allow us to incorporate MIDI on our multi-string instruments such as 7 and 8 string guitars and basses. There are only 6 channels for MIDI available on any converter available on the market to date. This means that while we can install MIDI on any of our instruments you will only have up to 6 strings that can trigger MIDI independently. You can however have piezos on all the strings.

This system is compatible with any 13-pin COSM-Modeling or Pitch-to-MIDI digital converters such as any of the Axon, Roland, Yamaha and others. The MIDI, Piezo and Magnetic signals can be used in many different ways together depending on how you have us wire everything up, which there are several optional schemes we can do.

You can order MIDI electronics on any of our Custom Shop instruments. When ordering MIDI you have to order both the individual piezo saddles and the MIDI internal system. They are separate options.

**Q: Which types of pickups are best for which styles of playing?**

A: We recommend visiting the individual pickup manufacturer's websites as there are simply too many variables for us to generalize here. Our main suppliers are Lundgren for guitar and Delano for bass. Both of these companies work very well with us on our custom needs. Seymour Duncan is another company that works well with us in the custom realm. We also use Dimarzio, EMG and just about any other brand that is readily available on the market for standard model pickups.

**Q: What does a "Coil Tap Switch" do on a humbucker pickup?**

A: It grounds one of the coils in a humbucker pickup leaving only one coil giving signal, which basically makes your humbucker into a single coil pickup. The Pros to this is you get that clearer, crisper single coil tone. The Cons to this is your pickup will no longer be hum-cancelling so you will get noise and hum especially with overdrive and distortion and also about  $\frac{3}{4}$  to  $\frac{1}{2}$  the volume compared to the humbucker setting. Coil Taps can be done one for each pickup or you can tap both pickups on a single switch or push/pull pot

**Q: What does a "Series / Parallel Switch" do?**

A: It allows you to switch from "Series" (hotter, more bass and midrange) to "Parallel" (slightly less output, more treble with less bass and midrange). The pickup must have the 4-conductor wire to use this feature. The Parallel setting gives you a very close tone to a single coil without losing the hum-cancelling of a humbucker and not as much volume loss as a coil tap.

**Q: What does a "Series / Single / Parallel Switch" do?**

A: It allows you to switch from Series, Single Coil and Parallel all on one mini 3-way switch. The pickup must have the 4-conductor wire to use this feature.

**Q: What does the "5-way Megaswitch" do?**

A: It is for use on guitars with two humbucker pickups with 4-conductor wiring on both pickups. It is a 5-way blade style switch which gives you 5 very useful tones from the following selection options.

Positions:

- 1 Bridge pickup, series
- 2 Inner pickup coils, parallel
- 3 Outer coils, series
- 4 Outer coils, parallel
- 5 Neck pickup, series

**Q: What is "Full EQ" and what does it do?**

A: Full EQ or 3-band EQ allows you to boost and cut your separate bass, mid and treble signals from the preamp.

**Q: What is "Fret Size"?**

A: Although the actual fretwire is categorized by a number system, frets are generally referred to as small, medium or jumbo. Some players are very opinionated about which fret size is best, but in the last decade or so, most manufacturers have made the jumbo fret wire a standard and most players agree that it is the most comfortable and practical fret size.

**Q: What's a "Hipshot" tuner?**

A: Hipshot is a particular brand name, but the company makes a lightweight aluminum tuner that is becoming very popular. Hipshot is also known for their "D-Tuner" which uses a lever to drop the pitch of an open string.

**Q: What is the effect of an "Exotic Wood Neck Binding"?**

A: We use exotic wood binding as a contrasting visual effect mainly.

**Q: What is the effect of a "Carved Top"?**

A: A carved top on an electric guitar makes the instrument look more sleekly detailed, beautiful and customized.

**Q: What do you get when you order "Custom carving (3-D relief carving)"?**

A: We can carve graphics into the guitar such as a wolf head or an eagle... whatever. Keep in mind that we are creating a one-of-kind piece of sculpted artwork and this tedious work can be very expensive. Quotes are available upon request.

**Q: What is your standard nut material?**

A: We use a type of plastic called Delrin which lends itself perfectly to a guitar nut. The material is quite "slippery" and prevents the strings from becoming bound in the slots.

**Q: What type of reinforcement is in the neck?**

A: Our multi-laminate neck construction and separate fingerboard are naturally strong and stable. We also use Purpleheart wood in our multi-string guitars and basses (guitars with more than 6 strings; basses with more than 4 strings). We call Purpleheart "nature's graphite" because it is so strong and stable. Of course we also install a two-way adjustable truss rod in our necks to correct for a concave or convex condition due to seasonal humidity and temperature changes. We also offer carbon fiber reinforcement rods at an additional upcharge. In general we don't feel they are necessary but for those who like to be overly cautious, we now offer them.