

Installing the String Rack

The String Rack is a device for the 12 string guitar that displaces a group of strings off the fingerboard. To get started let's use the String Rack to configure the 12 string guitar to a Koto-like tuning. Start by loosening the 1st, 2nd and 3rd strings along with their unison strings so they can be easily lifted off the fretboard. About 8 turns of the tuning peg. Place a String Rack under the strings just before the 16th fret. Make sure it is square with the neck and the strings are resting correctly against each peg on top. It should look like the below figure.



Getting Started

Now that the String Rack has been positioned we need to tune the strings.

The notation used to describe this configuration is:

D G D (e' E F G A Bb)16 |5th

The notes are:

String 6 5 4 3' 3 2' 2 1' 1

Notice the strings in parenthesis are the ones supported by the String Rack and the pitches are the ones sounded in front of the String Rack. The 5th indicates the interval the pitch behind and in front of the String Rack make. The 16 indicates the nearest fret to align with the center of the String Rack. You will know when the String Rack is properly position when the interval of a fifth is made. The below figure shows all the available notes that can be made with the open strings.

Behind String Rack In front of String Rack

String 6 5 4 3' 3 2' 2 1' 1 3' 3 2' 2 1' 1

Let's work through a musical example. Below is the Japanese folk song "Sakura". It is played with all open strings. The < indicates to play the notes behind the String Rack.

D G D (e E F G A Bb)16|5th

The first system of musical notation consists of four measures. The strings are labeled 1, 1', 2, 2', and 3. The notes are as follows:

- Measure 1: 1' has a 0; 2 has a 0; 2' has a 0.
- Measure 2: 1' has a 0; 2 has a 0; 2' has a 0.
- Measure 3: 1' has a 0; 2 has a 0; 2' has a 0.
- Measure 4: 1' has a 0; 2 has a 0; 2' has a 0; 3 has a <0.

 Vertical bar lines are present at the end of each measure. A bracket is located under the 3rd string in the 4th measure.

The second system of musical notation consists of four measures. The strings are labeled 1, 1', 2, 2', and 3. The notes are as follows:

- Measure 1: 1' has a <0; 2 has a <0; 2' has a <0.
- Measure 2: 1' has a <0; 2 has a <0; 2' has a <0.
- Measure 3: 1' has a 0; 2 has a 0; 2' has a 0.
- Measure 4: 1' has a <0; 2 has a 0; 2' has a 0.

 Vertical bar lines are present at the end of each measure. Brackets are located under the 2nd string in the 2nd and 4th measures.

The third system of musical notation consists of four measures. The strings are labeled 1, 1', 2, 2', and 3. The notes are as follows:

- Measure 1: 1' has a <0; 2 has a <0; 2' has a <0.
- Measure 2: 1' has a <0; 2 has a <0; 2' has a <0.
- Measure 3: 1' has a 0; 2 has a 0; 2' has a 0.
- Measure 4: 1' has a 0; 2 has a 0; 2' has a 0.

 Vertical bar lines are present at the end of each measure. A bracket is located under the 2nd string in the 2nd measure.

The fourth system of musical notation consists of two measures. The strings are labeled 1, 1', 2, 2', and 3. The notes are as follows:

- Measure 1: 1' has a <0; 2 has a <0; 2' has a 0.
- Measure 2: 1' has a <0; 2 has a 0.

 Vertical bar lines are present at the end of each measure. A bracket is located under the 2nd string in the 1st measure.

Conclusion

One of the unique qualities of the guitar is the ability to tune it however you want. Although there are practical advantages to standard tuning, there are many tuning configurations to explore, each having their own characteristics. Playing guitar with a String Rack can be a similar experience to playing with an alternate tuning. It can inspire new musical ideas. It can allow you to configure the String Rack to a song, or compose a song around a String Rack configuration.

Here are some practical things to consider when using the String Rack.

- Loosen the strings before positioning the String Rack. About 8 turns or so.
- After a String Rack has been positioned the string tension should be less than normal.
- The area where to press down on a string to sound an interval will be more predictable if the String Rack is consistently positioned on the fretboard.
- The String Rack is an experimental device. Care should be taken when placing it on the fretboard.

The combinations of using the String Rack and alternate tunings are endless and are waiting to be explored.

Have Fun!

The song “Rack It” featured on www.FretboardExplorer.com uses the tuning:

D A D (g G A C D E) 4th|16

