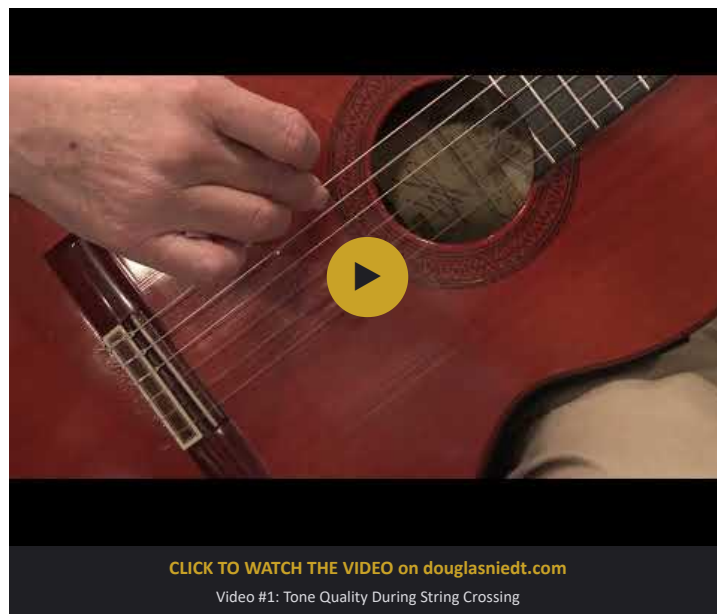


Video #1: *Tone Quality During String Crossing*



Maintain the Correct Hand Position

The angle at which the nail plucks the string will be affected by your hand position. Use the forearm to move the entire hand as you move back and forth between higher and lower strings. Do not keep the forearm in one position and reach with your fingers or change the amount of arch in the wrist.

Two Schools of Thought

1. One school of thought on positioning during string changes recommends moving the forearm using the elbow as a fulcrum. The problem with this is that the distance of the hand from the bridge changes as you move from playing the bass strings (further from the bridge) to the treble strings (closer to the bridge). This produces a rather dramatic change of tone color. Plus, the fingers must grapple with larger changes in string tension than if the fingers plucked consistently at the same distance from the bridge.
2. The other school of thought (which I highly recommend) is to move the forearm from the shoulder. This does NOT mean to lift the forearm off the guitar! Many of us can simply move on the loose skin of the forearm. Others may have to slide the forearm on the edge of the guitar. By the way, one must be certain not to play with a bare forearm on the guitar. Always play in a long-sleeve shirt or use a sock on the forearm to enable the forearm to slide effortlessly back and forth. Otherwise, your arm will stick to the guitar with no mobility.

Follow one school or the other. Otherwise the hand itself will have to change its position which will cause the fingernails to pluck each string with a different angle of attack.

Watch me demonstrate in Video #2.

★ Be sure to watch on full screen. In the lower right corner of the video, click the full-screen icon:

Video #2: *How to Move the Forearm to Maintain the Correct Hand Position During String Crosses*



Thumb Positioning

All the exercises in this technique tip that are for the fingers alone may be played with the thumb planted on the guitar or on a string. Or, the thumb may be allowed to hover freely above the strings (but extended out to the left of the index finger in ready-to-play position). Both scenarios will be used when playing repertoire.

Planting the thumb has the advantage of providing a spatial reference point for the fingers. It also stabilizes the hand in general. However, some may find it a bit restrictive of the freedom of movement needed to traverse the strings back and forth.

How the thumb is planted will vary according to the size of your hand and length of the thumb. It will also change according to whether you are plucking the strings rest stroke or free stroke and the angle at which you contact the strings with the fingernails.

Some players plant the thumb on the soundboard of the guitar when playing the bass strings and move it onto the 6th string to play the treble strings on both rest stroke and free stroke. I do that when I play free stroke. But if I am playing rest stroke, my thumb stays planted on the soundboard while playing the 6th through 3rd strings and then plants itself on the 6th string while I play the 1st and 2nd strings.

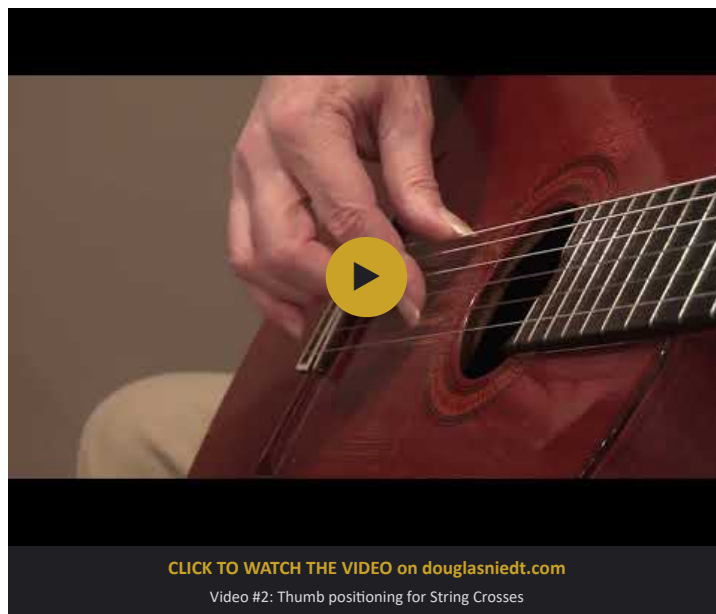
Other players, especially those with small hands, plant the thumb on a different string for each string change or change of two strings. The thumb follows the fingers. If you have small hands and that is what you need to do, fine. But for others, I think that complicates things. Changing the position of the thumb so frequently seems to defeat the purpose of having a stable base and reference point for the hand and fingers. But some players use the strategy successfully.

Use these exercises to experiment with your own thumb positioning to find a strategy that works for you. Do not be reluctant to use one strategy for rest stroke and another for free stroke including no planting at all.

In Video #3, watch me demonstrate how the thumb positioning options work.

★ Be sure to watch on full screen. In the lower right corner of the video, click the full-screen icon:

Video #2: Thumb positioning for String Crosses



The Exercises

Play slowly at first. Remember you do not want to practice mistakes! Concentrate on using the shoulder/forearm to maintain a consistent hand position. Be sure the fingernails are contacting each string at the same angle to produce a good tone.

Don't Overdo It

Playing through the exercises with all the finger alternation patterns rest stroke and free stroke would take hours! I would spend 5-15 minutes on these exercises each day for a month or two or until you feel like you have good control over string crossing in general. *Rotate through the exercises over a period of weeks.* One day practice exercise X with "ma" free stroke. The next day play it with "ma" rest stroke. The next day focus on "im". Then "mi" etc.

You will find that certain patterns are especially difficult or tricky to play perfectly. Make a note of those patterns and focus on those once you have mastered the easier ones.

And of course, you can gradually increase your speed (but never sacrifice accuracy). Extreme speed and practice with a metronome is not necessary.

We begin by playing each string four times with just a single finger to give you time to think about the following concepts:

1. Maintain the same angle of attack and contact point with the fingernails as you move from string to string. To accomplish that you must use the shoulder/forearm to move the hand just a little bit to a new position for each string. Six different positions! Do not straighten or extend the fingers to reach for the strings.
2. Do not change the arch of your wrist as you traverse the strings.
3. You may want to change the lateral position of the hand as you change from the treble strings to the wound bass strings. On the treble strings, the strings should be contacted with the left sides of the fingernails. For the bass strings, you may want the fingernails to contact the wound strings more straight on to minimize extraneous noise and scraping.
4. Keep the hand the same distance from the bridge for each string.

Example #4:

Play each string once.

1. Practice all the way through with "i" rest stroke and then again with free stroke.
2. Practice all the way through with "m" rest stroke and then again with free stroke.
3. Practice all the way through with "a" rest stroke and then again with free stroke.



Kick it Up a Notch and Alternate the Fingers

Crossing strings using the same finger is fairly easy. Alternating two fingers on a single string is also not difficult. But crossing strings AND *strictly alternating the fingers* is a new challenge.

Once you feel secure with the forearm movement and maintenance of the hand position using one finger, move on to the exercises below that use the different patterns of finger alternation.

But First, a New Problem Rears its Ugly Head

When playing string crosses, string crossings, or string changes we will encounter "good" string crosses and "bad" string crosses. I quote from a previous technique tip, [Good String Crosses Gone Bad](#):

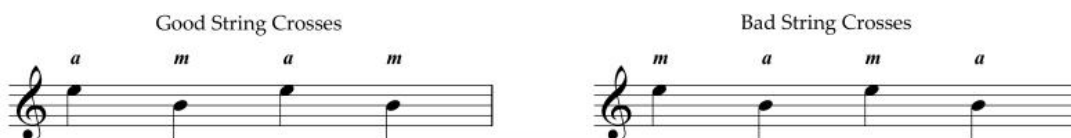
When playing a piece with "i, m, and a," and changing from string to string, we experience what I call "good" string crosses and "bad" string crosses. For example, using "m" to play the first string E and then "i" to play the second string B is a "good" string cross—it feels natural. But using "i" to play the first string E and "m" to play the second string B is a "bad" string cross—it feels awkward:

Example #1 from "Good String Crosses Gone Bad":



You can detect the same feeling of right and wrong with "m" and "a":

Example #2 from "Good String Crosses Gone Bad":



And even with "a" and "i":

Example #3 from "Good String Crosses Gone Bad":

Good String Crosses



Bad String Crosses



To feel the difference more dramatically, try playing on the first and third strings:

Example #4 from "Good String Crosses Gone Bad":

Good String Crosses



Bad String Crosses



Good String Crosses



Bad String Crosses



Good String Crosses



Bad String Crosses



Most normal arpeggio patterns use "good" string crosses:

Example #5 from "Good String Crosses Gone Bad":

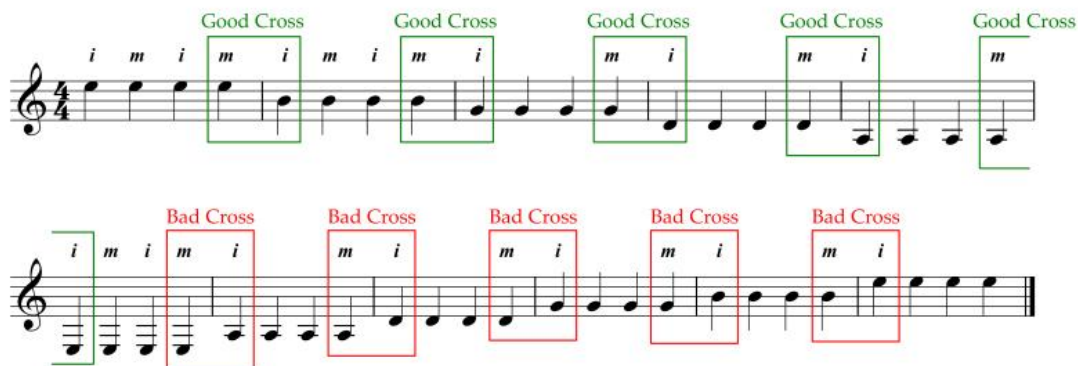
Good String Crosses	Bad String Crosses
Good String Crosses	Bad String Crosses
Good String Crosses	Bad String Crosses
Good String Crosses	Bad String Crosses
Good String Crosses	Bad String Crosses

I go on in the article to recommend that one should try to "set up the right-hand fingering" in a passage to get as many good string crosses as possible and minimize the number of bad string crosses. However, there is no way to eliminate all bad string crosses in the repertoire. They will be present no matter what. Therefore, we must deal with them. We must master them.

For that reason, it is important to practice each of the following exercises starting with either finger. For instance, let's begin with an exercise playing each open string four times with "i" and "m". If you begin with "i" the string crosses from the treble strings to the bass strings are all good string crosses. But all the crosses going from the basses to the trebles are bad string crosses:

Example #5:

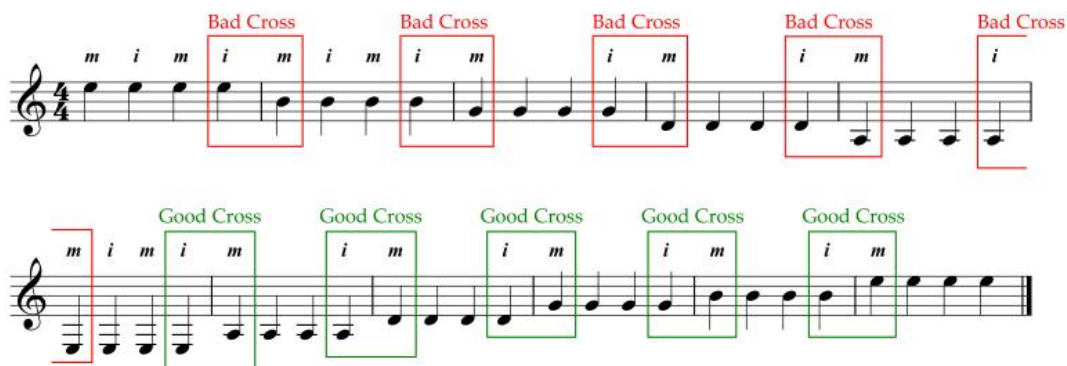
Good and bad string crosses are determined by which finger begins the passage and the direction of the cross, whether from higher-lower or lower-higher string:



But if you begin the exercise with "m", the opposite occurs. The string crosses from the trebles to the basses are bad and the crosses from the basses to the trebles are good:

Example #6:

If one begins the passage with a different finger, the disposition of good and bad string crosses is reversed:



On ALL the exercises, *be very vigilant that you do not repeat a finger when doing a string cross*. A finger will be greatly tempted to repeat itself in order to avoid having to do a bad string cross. Bad finger!

Ultimately, one should be able to play these exercises accurately without looking at the fingers. But at first it is a good idea to watch to be certain that the fingers are not repeating themselves. In passages from the repertoire that contain challenging string crosses, allowing fingers to repeat themselves will usually result in disaster. It is best to correct or prevent the bad habit now with these basic exercises than to have to continually deal with the problem again and again in your pieces.

An Important Note About Rest Stroke

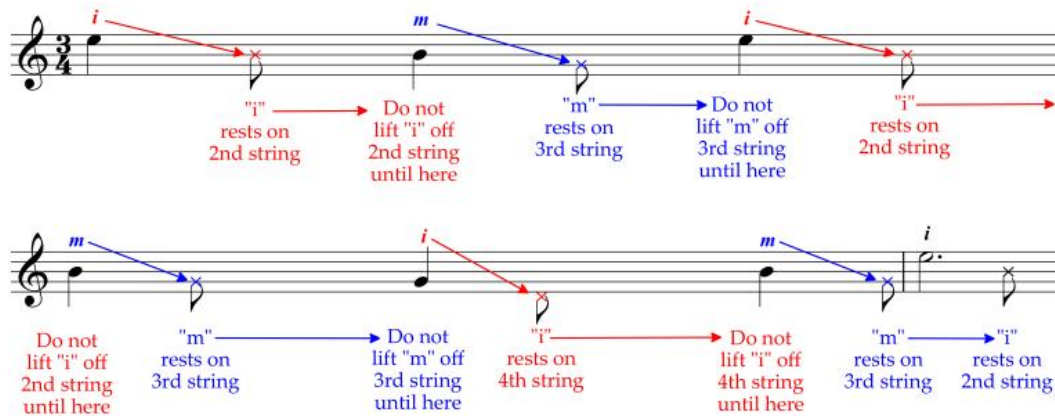
When using rest stroke in string crosses, especially bad string crosses, it is common for the fingers not to fully come to rest on the adjacent string. I call it not "sticking" on the string.

A finger may play pluck a string and come to rest briefly on the adjacent string, but it *comes off the string before the next finger plucks*. When this happens, one loses two of the great benefits of rest stroke:

1. **STABILITY.** When rest stroke is executed correctly, one finger is always resting on a string. That finger is supporting the hand and maintaining contact with the instrument. You do not want to lose that stability at a critical moment such as a string cross.
2. **SPATIAL REFERENCE POINT.** When the finger that just executed its stroke comes to rest on the adjacent string, it provides a reference point for the other fingers to gauge string spacing and string locations. It is especially important to maintain and use this reference point during string crosses!

Example #7:

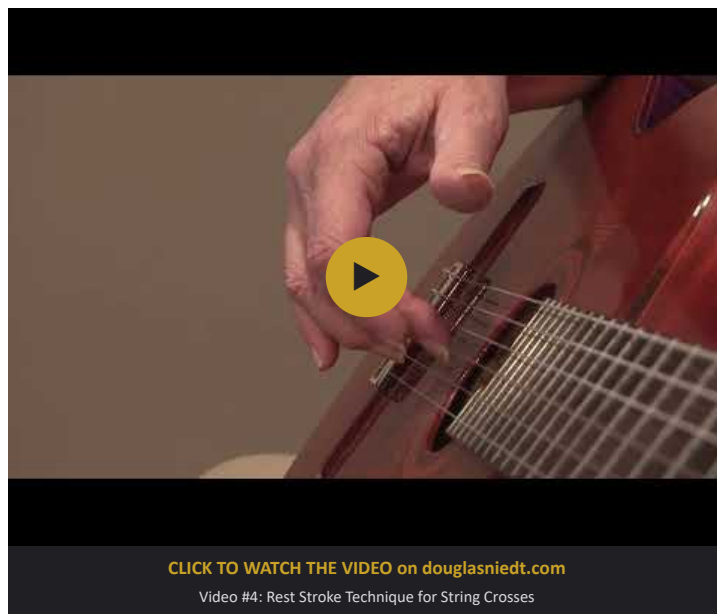
When using rest stroke, be sure the fingers come to a full rest on the adjacent string **and stay there** until the next finger plucks:



Watch me demonstrate rest stroke technique during string crosses, string crossings, and string changes in Video #4.

★ Be sure to watch on full screen. In the lower right corner of the video, click the full-screen icon:

Video #4: *Rest Stroke Technique for String Crosses*



CLICK TO WATCH THE VIDEO on douglasniedt.com

Video #4: Rest Stroke Technique for String Crosses

Proceed to these String Crossing Exercises with Finger Alternation

Example #8:

Begin by playing each string 4 times to give yourself time to think about all these points:

1. Practice all the alternation patterns.
2. Practice each pattern rest stroke and free stroke.
3. Experiment with thumb positioning.
4. Move the forearm/shoulder to a new position for each string.
5. Maintain strict finger alternation.
6. Keep the hand the same distance from the bridge for each string.
7. Maintain the same angle of attack and fingernail contact point for the treble strings.
8. Maintain the same angle of attack and fingernail contact point for the wound bass strings.
9. Anticipate and think about each upcoming string cross as you play the last repetition of a string.



Example #9:

Next, play each string 2 times.

Be sure to keep focusing on the points listed for the previous exercise:

Use the same six finger alternation patterns.



Example #10:

Next, play each string 6 times. Play the notes in groups of 3, accenting the first and fourth note of each measure. This will help prepare you for the next exercise which is much more difficult.

Be sure to keep focusing on the nine points listed for the previous exercises:

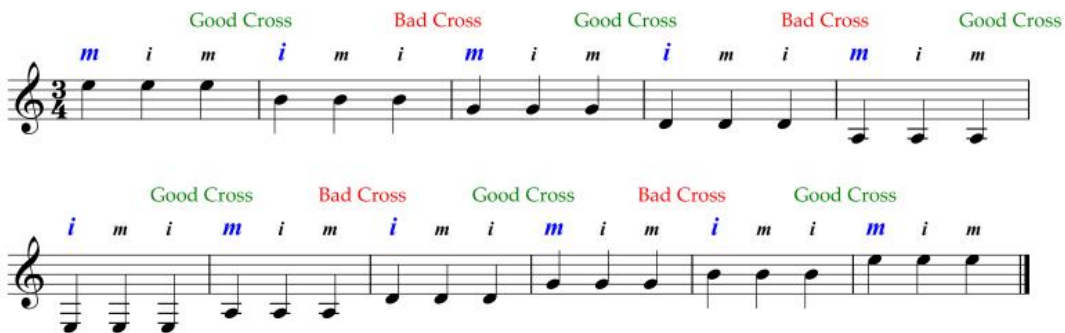


Exercises that repeat a string three times are especially challenging. See Example #11:

Example #11:

Playing each string 3 times can be difficult and challenging.

1. Each measure will start with a different finger.
2. Each string cross will alternate between being a good cross and a bad cross.



Now, try out the technique on Example #12:

Example #12:

Play each string 3 times.

Be sure to keep focusing on the points listed for the previous exercises.

Especially be certain to maintain strict finger alternation!

i m i m i m i m i m i m etc.
a m a m a m a m a m a m a m etc.

Also practice a i and i a patterns.

Example #13:

This rhythmic pattern has a similiar effect to the previous exercise in groupings of three.

Each string starts with a different finger and the string crosses alternate good/bad.

Practice with all 6 finger alternation patterns. Rest stroke and free stroke.

Example #14:

Finally, play each string once.

Be sure to keep focusing on the nine points listed for the previous exercises:

Practice with all 6 finger alternation patterns. Rest stroke and free stroke.

Are You Bored Yet?

If practicing nothing but open-string exercises starts to get on your nerves, you can certainly hold chords with the left hand for variety. Holding chords also has the benefit of varying the string tension to add a bit more reality to the exercises and thus improve the right-hand touch and control even more.

You could hold simple chords in first position. Example #15:

Example #15:

Example #15 shows four simple chords in first position on a single staff. Above each chord is a chord diagram and a label: C, E, G, and A. The C chord is a C major triad (C4, E4, G4). The E chord is an E major triad (E4, G4, B4). The G chord is a G major triad (G4, B4, D5). The A chord is an A major triad (A4, C5, E5). Each chord is held for a full measure.

Or if you want to challenge your left hand, you could hold a few nasty "monster" bar chords! Example #16:

Example #16:

Monster bar chords!

Example #16 shows five monster bar chords in first position on a single staff. Above each chord is a chord diagram and a label: F, Fm, F7, Db, and Bb. The F chord is an F major triad (F4, A4, C5). The Fm chord is an F minor triad (F4, Ab4, C5). The F7 chord is an F dominant seventh triad (F4, Ab4, C5, Eb5). The Db chord is a Db major triad (Db4, Fb4, Ab4). The Bb chord is a Bb major triad (Bb4, Db5, Fb5). Each chord is held for a full measure. Fingerings are indicated by numbers 1-4 below the notes.

But be careful. Don't hold these chords too long and strain your hand. Also, remember the focus is supposed to be on the right hand. Don't get distracted by the left hand!

All of that should keep you busy for a few weeks! Next month we will conclude with some advanced exercises and discuss anticipatory planting and staccato practice.