

Cross-String Ornaments, Part 1 of 3

By Douglas Niedt

Cross-String Ornaments vs. Slurred Ornaments

If you are unfamiliar with cross-string ornaments, listen to this short excerpt from Handel's *Harpsichord Suite No. 7* performed by guitarist David Russell. Russell packs a bucket load of cross-string ornaments into the first several opening measures.



G.F. Handel Harpsichord Suite No. 7, guitar played by David Russell WITH FADE

[CLICK TO WATCH THE VIDEO on douglasniedt.com](https://douglassniedt.com)

The notes in many types of ornaments may be played either with slurs (hammers and pulloffs) or plucked on two separate strings (cross-string). The musical example below shows several ornaments in their slurred version and then their cross-string version. Notice the many possible right-hand fingering combinations for the cross-string versions. If you try out some of these and watch the next video, you will hear that cross-string ornaments have a brilliant, incisive, and aggressive sound whereas the slurred ornaments produce a smooth, legato, and gentler sound.

A selection of ornaments and some sample executions and fingerings.

The notation and execution of these ornaments will vary according to the time period in which the piece was written, composer, country, musical context, instrument, time value of the ornament and the notes preceding and following it, tempo, style of the music, and personal taste and opinion.

Acciacatura Slur Version (Pulloff) Cross-String Version 1. Cross-String Version 2.

① ① ② ②

m i i m
a i
m p
i p
a p
i (drag finger across strings) i
m (drag finger) m
a (drag finger) a

Ascending Acciacatura Slur Version (Hammer on) Cross-String Version 1. Cross-String Version 2.

② ③ ② ③

i m m i
a i
p m
p i
p a
i (drag finger across strings) i
m (drag finger) m
a (drag finger) a

Inverted Mordent Slur Version Cross-String Version

② ③ ② ③

i m i
i a
p i
p m
p a
m a
m a
i m
i a
i a
p m
p i

Or:
i m m (drag finger)
i a a (drag finger)
m a a (drag finger)

Mordent Slur Version Cross-String Version

② ③ ②

m i m
a i
i p i
m p m
a p a
a m i
m i a
a i m

Slur Version

Cross-String Version

a	i	m	p	m	i	a	i
a	i	m	p	m	i	a	m
i	p	a	m	m	i	a	p
a	m	i	m	m	i	m	p
i	p	i	p	i	p	m	p
m	i	a	i	i	p	m	p
m	i	a	m	a	p	i	p
m	i	a	p	m	p	m	p
a	i	m	p	a	i	a	i
m	p	i	p	a	p	m	p

Slur Version

Cross-String Version

a	i	m	p	a	i	or	p	m	i	m	i	m	i
a	i	m	i	a	i	or	p	a	i	a	i	a	i
i	p	a	m	i	p			m	i	m	p	m	i
a	m	i	p	a	m	or	p	i	p	m	p	i	p
a	p	a	p	a	p			a	p	i	p	a	p
i	p	i	p	i	p			m	p	a	p	m	p
m	i	a	i	m	i	or	p	a	i	a	p	a	i
m	i	a	p	m	i	or	p	m	p	i	p	m	p
a	p	a	p	a	p			a	p	m	p	a	p
m	p	m	p	m	p								

Slur Version

Cross-String Version

m	i	m	p	m	i	m	p
a	i	a	p	a	i	a	p
i	p	i	p	i	p	i	p
m	p	m	p	m	p	m	p
a	p	a	p	a	p	a	p
i	p	a	m	i	p	a	m
a	i	m	p	a	i	m	p
a	m	i	p	a	m	i	p
a	i	m	i	a	i	m	i
m	i	a	p	m	i	a	p

Trill beginning on principal note

Slur Version

Cross-String Version

Turn or Gruppetto

Slur Version

Cross-String Version

Inverted Turn

Slur Version

Cross-String Version

i a m i p
m a i m p
i m i a i
i m i a p
p i p i p
p m p a p
p i p a p
p a p i p
i m i m p

The image displays musical notation for three types of ornaments: Trill, Turn or Gruppetto, and Inverted Turn. Each ornament is shown in two versions: 'Slur Version' and 'Cross-String Version'. The Trill section includes a list of fingerings (i, a, m, i, p) for each note in the sequence. The notation uses a treble clef and a single sharp (F#) key signature. Fingerings are indicated by numbers 1, 2, 3, and 4. Slurs and cross-stringing are indicated by brackets and specific note placements.

Watch this video as I demonstrate several of these ornaments. Here is a list of ornaments I cover and the time code for each:

- 00:00 Acciacatura
- 02:32 Ascending Acciacatura
- 04:17 Inverted Mordent
- 05:39 Mordent
- 06:08 Trill (shorter; 4 notes)
- 07:36 Trill (longer; 6 to 8 notes)
- 08:41 Turn or gruppetto
- 09:44 Inverted turn or gruppetto

Remember, the notation and execution of these ornaments will vary according to the time period in which the piece was written, composer, country, musical context, instrument, time value of the ornament and the notes preceding and following it, tempo, style of the music, and personal taste and opinion.

Right click on video to choose to view on full screen (recommended). Click escape key to return to normal view.



Tech Tip Cross String Ornaments Overview

Pros and Cons of Cross-String and Slurred Ornaments

Some guitarists love cross-string ornaments. Others hate them and prefer slurred ornaments. And then many guitarists are okay with either one depending on the piece or passage in which the ornaments occur. However, many feel it is not a good idea to mix both within the same piece. Here are some of the pros and cons of each:

Proponents of Cross-String Ornaments Say:	Proponents of Slurred Ornaments Say:
They are cleaner, clearer, more articulate, and have more "bite". In fact, the name of one common ornament, the mordent, comes from the Latin "mordeo" (I bite).	Slurred ornaments sound more natural in the flowing line of the music. They are not interruptive or distracting. They sound more tasteful.
The volume level does not decay. The dynamic level (loudness and softness) can be controlled. It is possible to maintain an even volume in long ornaments. Or, the volume (and even tone color) can be varied through a long ornament.	The volume has a natural decay. With practice, the evenness of the volume can be maintained if necessary even in long ornaments
They sound more "authentic" in transcriptions of keyboard music, particularly of harpsichord music (Scarlatti, Bach, Cimarosa).	Slurred ornaments are more appropriate in the lute music of Bach, Weiss, etc. Cross-string slurs make the guitar sound like a harpsichord. Who wants that? English conductor Sir Thomas Beecham supposedly once said the harpsichord sounds like "two skeletons copulating on a tin roof in a thunderstorm." Also, Bach's lute pieces were purportedly written for the lute-harpsichord, a harpsichord altered to sound like a lute. Why try to make guitar ornaments sound like a harpsichord when Bach was trying to imitate the lute?
Ornaments are not supposed to be subtle. They are a form of accent.	Cross-string trills are distracting. They stand out too much in the context of the music.
Performers of the baroque period were often admired for the virtuosity of their ornamentation. Cross-string ornaments are flashier than slurred ornaments.	Guitarists who use cross-string ornamentation are showoffs and overuse the ornaments. Performers in the baroque period were often admired for the <i>tastefulness</i> of their ornamentation.
Ornaments that are too difficult to be played clearly with slurs (for instance trills using the left hand 3rd and 4th fingers) are more playable and much clearer with cross-string technique.	Cross-string slurs cannot be used in many passages because of fingering difficulties or the notes and chords around them. Slurred ornaments are more user and context friendly.

Execution of Cross-String Ornaments

Ornamentation is a huge subject. Many books and treatises have been written on the subject over the past few hundred years. Please note that this technique tip is not going to delve into the notation of ornaments. Nor will it get into the battle over the subtleties of their execution. Musicologists and performers still engage in vicious verbal brawls over such things as whether to begin a trill on the principal note or the note above (the upper auxiliary or upper neighbor) and whether to begin an ornament on the beat or ahead of the beat. Sometimes I think these people have way too much time on their hands.

One of my favorite Julian Bream stories relates that on the way back to his hotel after a concert, Bream was asked by a snarky young guitarist, "Mr. Bream, according to the latest musicological research you are supposed to begin trills in Baroque music on the upper note. Why did you start some of your trills on the principal note instead of the note above?" Bream looked at him squarely in the eye and replied, "Because I *like* them that way (you twit)." Okay, I added the "you twit" part.

The performance of ornaments is affected by many factors, among them:

1. Time period in which the piece was written
2. Composer
3. Country
4. Musical context
5. Instrument
6. Time value of the ornament and the notes preceding and following it.
7. Tempo
8. Style of the music
9. Personal taste and opinion

The bottom line is that ornaments can be executed in a variety of ways. "There simply is no 'definitive' solution to any given ornament in any given situation." Such are the words of one of my favorite musicologists, Frederick Neumann. Neumann wrote the 630-page, four-pound book, *Ornamentation in Baroque and Post-Baroque Music*. He was a central figure in many of the aforementioned verbal and written brawls during the 1980's and 1990's. I think he is a god, others think he is a charlatan.

My advice to you is to remember that life is short. Take a lesson from Julian Bream and play the darn things the way they sound best to you.

WARNING:

Do not practice cross-string ornaments for too long at a time. The sound of these practiced over and over will drive anyone within hearing distance to the brink of insanity. Over-practice can also cause brain damage to the guitarist—this is evident when you read the vicious arguments about cross-string ornamentation on internet guitar forums and YouTube video comments pages.

Right-Hand Fingering Formulas

The main hurdle to playing cross-string ornaments is to play them fast. Cadential trills and long trills are often started slower and then speed up. But most trills and other ornaments are best executed fast. The notes that comprise an ornament must also be played with an even volume.

Note that the thumb has the potential to sound heavier than the fingers. Because of this some guitarists are careful about or do not use the thumb in their ornaments except on the final note where an accent is often more appropriate. Also, some guitarists prefer the patterns that don't use the thumb to play the repeated notes of the ornament so it is free to play bass and/or accompaniment notes.

I have illustrated many possible right-hand patterns. A few of the mordent fingerings even include the technique of dragging one finger across two strings. You will have to experiment with what pattern or patterns suits you best. Some guitarists choose one pattern for every ornament. The pattern is extended or reduced according to how many notes are in the ornament.

For example, David Russell and others prefer "aimp" as a basic pattern. "aim" is used for three-note ornaments or portions of the "aimp" pattern can be repeated for extended ornaments. For example, "aimp-ai" or "aimp-aimp".

Sharon Isbin prefers "miai" as a basic pattern. "mia" would be used for a three-note ornament, "miai-mi" and "miai-miai" for longer ornaments.

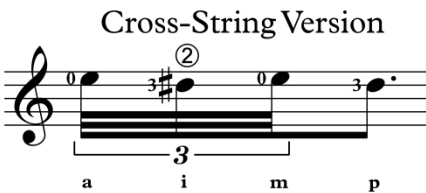
Personally, I ignore the ornament police and do not follow rigid rules about ornamentation. Do not misunderstand—I do not play ornaments randomly with no thought. I have read and continue to study historical treatises. I have studied all 630 pages of Frederick Neumann's *Ornamentation in Baroque and Post-Baroque Music*. I have it on my bedside table and enjoy re-reading sections of it from time to time (I should probably be in therapy for this). Neumann's and my conclusion is that ornamentation through every historical period is so varied and peculiar to each situation, even within the same piece, that it is not a good idea for the experienced guitarist to adapt formulaic rules to address every ornament. Therefore I use dozens of right-hand fingerings in my ornamentation. BUT, for someone just learning cross-string ornaments, choosing one pattern to start with is a great idea.

How to Learn to Play a Cross-String Ornament

Some teachers advocate practicing cross-string ornaments slowly at first and then speeding up. Others say the only way to learn to play fast is to practice fast. I have found it all depends on the student. But I would try practicing fast from the beginning. You can save yourself a lot of time. If that does not work, then try slow practice.

The Fast-Practice Method

I will use this short trill (with David Russell's recommended fingering) to explain how to learn to play a cross-string ornament:



For fast practice use a combination of reflex practice (commonly called "speed bursts") and compound strokes.

The First Note Pair

Step #1

Begin by focusing on only the first two notes of the ornament:



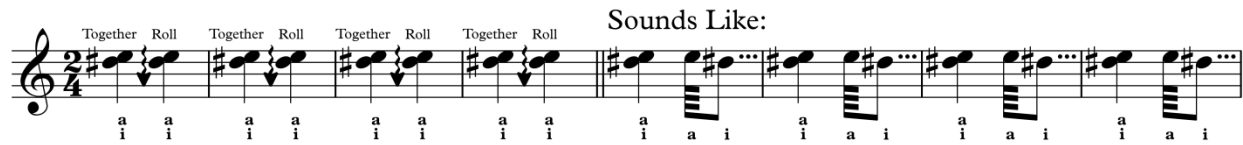
First, play the two notes together:



Step #2

Next, learn to play the "ai" combination not as two separate notes but as a compound stroke. In the compound stroke the two fingers pluck together as a unit but arpeggiate or "roll" across the two strings

from the 1st string then the 2nd string. Alternate between playing the notes together and then rolling them (be sure to plant both fingers on their strings before plucking:



Step #3

Next, before playing the rolled intervals plant the "a" finger on the first string but prepare the "i" finger right in front of (but not touching) the second string. Play the two notes as a compound stroke with the same feeling of rolling the interval as when both fingers were planted.

Step #4

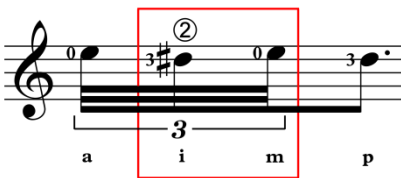
Next, prepare "a" close to but not touching the first string. Plant "i" on the second string simultaneously as "a" plucks the first string. Again, maintain the feel of rolling the interval.

Step #5

Finally, prepare both fingers very close to their strings with no planting and play the two notes together and then as a compound stroke. Maintain the feeling of rolling the interval when performing the compound stroke.

The Second Note Pair

Now practice the next two notes of the ornament as a compound stroke:



Step #1

So, we will focus on just these two notes:



First, play the two notes together:



Step #2

Next, learn to play this "im" combination not as two separate notes but as a compound stroke.

Remember, in the compound stroke the two fingers pluck together as a unit but arpeggiate or "roll" across the two strings, this time from the 2nd string then the 1st string. Alternate between playing the notes together and then rolling them (be sure to plant both fingers on their strings before plucking):



Step #3

Next, before playing the rolled intervals plant the "i" finger on the second string but prepare the "m" finger right in front of (but not touching) the first string. Play the two notes as a compound stroke with the same feeling of rolling the interval as when both fingers were planted.

Step #4

Next, prepare "i" close to but not touching the second string. Plant "m" on the first string simultaneously as "i" plucks the first string. Again, maintain the feel of rolling the interval.

Step #5

Finally, prepare both fingers very close to their strings with no planting and play the two notes together and then as a compound stroke. Maintain the feeling of rolling the interval when performing the compound stroke.

Combine the First and Second Note Pairs

Now the goal is to combine the first note pair and second note pair to play the first three notes of the ornament. The goal is to make the "aim" group feel like one movement, not three separate plucks. Some call it a "gesture".

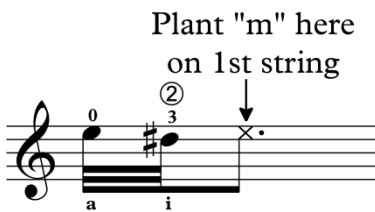


There are a couple ways to accomplish this. First, simply try adding "a" in front of the "im" compound stroke with no pre-planting. If that doesn't work, try these steps. You may need to practice these a few times slowly in addition to playing them fast as speed bursts.

1. Plant "a" on the first string, then play the three notes as a speed burst.
2. Plant "i" on the second string, and then play the three notes as a speed burst.
3. Plant "a" and "i", then play the three notes as a speed burst.
4. Play the three notes as a speed burst planting "m" on the second string at the same time "i" plucks the second string.

Or, try playing the first note pair, second note pair, then the three notes together. Try this several times. You may need to play the first note pair two or three times, the second note pair two or three times, and then play all three notes together.

Yet another method to connect the two note pairs is to play the first note pair and then plant "m" on the first string (but don't pluck it) *immediately* after "i" plucks the second string:



Once that is solid, then go ahead and play all three notes as a speed burst:



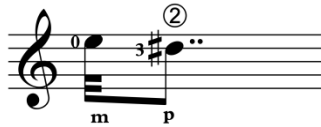
The Third Note Pair

Finally, learn the third note pair:



Step #1

Now, we will focus on just these two notes:



First, play the two notes together:



Step #2

Because the thumb is involved, this combination does not require a compound stroke. Instead, simply plant the thumb on the second string. Play the first string with “m” *immediately followed* by the thumb playing the second string. Alternate between playing the notes together and playing “m” to “p” (with “p” pre-planted on its string) as a speed burst or reflex movement. Don’t think of it as two separate strokes. Think of it as one movement or gesture:



Step #3

Next, plant “m” on the first string. Prepare the thumb very close to the second string. Play the first string with “m” *immediately followed* by the thumb playing the second string. Alternate between playing the notes together and playing “m” to “p” (this time with “m” pre-planted on its string) as a speed burst or reflex movement. Don’t think of it as two separate strokes. Think of it as one movement or gesture.

Step #4

Play the two notes without any planting. Be sure both the finger and thumb are prepared very closely to their strings so they can’t miss. Alternate between playing the notes together and playing “m” to “p” (no planting) as a speed burst or reflex movement. Again, don’t think of it as two separate strokes. Think of it as one movement or gesture.

How to Play the Complete Ornament

The easiest to put it all together is to simply add “p” plucking the second string to the “aim” you have already learned. You will probably have to go back through and review playing the first note pair, second note pair, and connecting the first two note pairs (the first three notes). But once “aim” is secure, it is usually easy to add the final “p”.

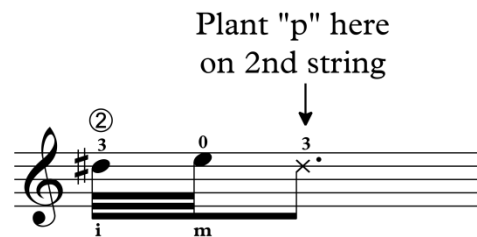
If that doesn't work, try these steps. You may need to practice these a few times slowly in addition to playing them fast as speed bursts.

Play the second note pair, third note pair, and then the three notes together. Try this several times.

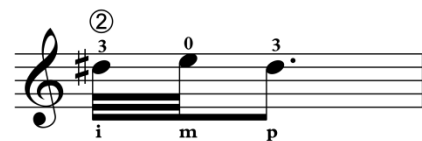


You might have to practice the second note pair two or three times, the third note pair two or three times, and then play all three notes together.

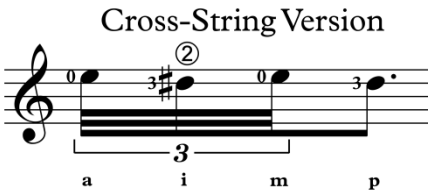
Yet another method to connect the two note pairs is to play the second note pair and then plant "p" on the second string (but don't pluck it) *immediately* after "m" plucks the first string:



Once that is solid, then go ahead and play all three notes as a speed burst:



Now add "a" at the beginning and play the entire ornament:



If it isn't working, figure out where it is breaking down. Is it the first note pair, second note pair, or third note pair? Or is the transition from note pair #1 to #2 or note pair #2 to #3? Is the "aim" combination not secure? Whichever it is, go back and review the steps that apply to that problem.

Do not over practice. You will find you learn ornaments much more quickly if you practice them in small doses of 10-15 minutes at a time, two or three times a day, over a period of 2-7 days. Do not practice an ornament for an hour straight! Your brain will be addled and your fingers confused.

End of Part 1

I am going to stop here. Use the next few weeks to try out the "Fast-Practice Technique" to learn a few cross-string ornaments. It will take that long to see if the practice technique works for you.

Next month in Part 2, I will explain the "Slow-Practice Technique" which should do the trick if this month's method doesn't work for you. I will also explain the role of the left hand in executing cross-string ornaments.

Finally, coming up in Part 3, I will explain how to use cross-string ornaments in real-life repertoire.