

# Short Bounce Rolls – doubles, triples, fours

A series of two, three, or more bounces per arm stroke that are of equal intensity and distance (spacing). The character of multiple bounce rolls should be seamless (equal intensity) whether or not the player is executing a measured or unmeasured roll. Although, extremely important technically, the number of bounces per arm stroke are frequently not specified in musical notation.

1. **Arm** movement is the foundation of an excellent bounce roll. Pivoting the arm from the shoulder provides momentum and helps control the number of attacks. Arm speed determines the rolls density; the faster the arm stroke - the louder and denser the roll. The ideal number of arm motions per macrobeat in each context is determined by the desired intensity (dynamic) and density (attacks per unit of time). “Roll speed” is the term used to describe this rate of arm movement.

2. **Fingers** control the relative dynamics. As the stick makes contact and bounces, the forfinger and middle finger gently pull the stick towards the palm simultaneously with the upward motion of the arm. This increases the force of the later bounces making them dynamically equal to the initial attack. In addition, the subtle weight and position of the forefinger on top of the stick helps control the bounce proximity. The third and fourth finger contact on the stick is seldom needed and may actually inhibit the bounce..

3. **Wrist** movement is very important in all percussion technique, including bounce rolls. Often, students initially over-emphasize the wrist, at the exclusion of the arm, so I advise an initial corrective practice period of little or no wrist movement so they can learn how much bounce potential is available from the arm and fingers. Once this is understood, then the wrist can be reincorporated to form a comprehensive muscular system. I believe it a misunderstanding to assume that the wrist should not move while playing bounce rolls.

**Palm**-the base of the palm on or just outside the skin crease, functions as a literal backstop where the stick comes to rest (because of gravity and the forward weight of the stick) while the other hand is playing. In comparison, the middle, ring, and pinky fingers are slightly more closed than while playing loud continuous rebound strokes.

**Roll textures.** Standard rolls are listed below on a continuum from most open in character (i.e. stroke rolls) to most closed (i.e. bounce rolls).

1. Single stroke roll. The most open (least dense) character of any roll, usually measured. Rebounding each stroke assures equal spacing and intensity.

2. Double stroke roll. A distinctly open character, usually measured.

3. Triple bounce roll. This is the best sounding and most versatile roll in orchestral contexts as it produces the most open character of the various bounce rolls. Both arm strokes and bounces are measured to assure consistent spacing and intensity. The primary exception being a long duration roll consisting of various dynamics - in which case the triple bounce remains constant, but the frequency of arm strokes will increase or decrease as the dynamic increases or decreases, regardless of the rhythmic content of the music. A subtle lifting sensation of the arms will help equally space and articulate the bounces while maintaining their open character.

4. Quadruple bounce roll. Produces a moderately dense character, consisting of four bounces per arm stroke. Strokes and bounces are usually measured. A gentle sensation of pushing against the drumhead is required to achieve consistent spacing and intensity.

5. Closed multiple bounce (5 or more bounces). Produces a closed (dense) character consisting of 5 or more bounces (usually unmeasured if more than 5 bounces) per arm stroke. It is executed in approximately the same manner as the triple bounce roll except that greater tension is applied by the middle finger, as well as, the thumb-index finger pair. A sensation of pushing (hence the term press roll) against the drumhead is required to maintain this dense character. When a triple bounce roll is gradually closed down to a denser, silky, smooth sound (most frequently at softer dynamics) the number of attacks per hand gradually increase – becoming a multiple bounce roll - these attacks are impossible to perceive without the aid of variable speed film.

**Roll speed** is the rate of arm motion – or the base stroke. To make informed musical decisions about roll intensity and density, one must be aware of the relationship between macrobeat tempo, roll speed, and the number of bounces per base stroke. Appropriate microbeat divisions, or the base rhythm, are determined, in large part, by the tempo and dynamics. Also important is the rhythmic character of the music immediately before and after the roll in question, to insure smooth rhythmic transitions in and out of rolls.

As illustrated in the table of base rhythms and tempi below, all the even and odd microbeat divisions between two and twelve are useful at certain tempi. Therefore, we should master all the rhythmic divisions at the tempi we will encounter. Using divisions of 5, 7, 9, 11 can be just as useful as the “common” even numbers. Odd number divisions are not inherently difficult, merely less familiar. Developing mastery of all microbeat divisions should be of primary importance in snare drum pedagogy. Unfortunately, many students do not learn this and therefore lack the skills to make appropriate musical decisions about intensity and density; how to distinguish roll speed, the number of bounces, and the ability to perform any microbeat division. Rather, they are often learn only several rhythms, such as 2 and 4 microbeat divisions in duple meter and 3 and 6 in triple meter. Further, these limited rhythms are often applied in a rigid manner (based on purely a visual interpretation of musical notation) regardless of the musical context. Hence, many students lack the skills to perform an appropriate roll at any tempo, with a variety of densities and intensities - i.e. rhythmic subdivisions – or simply – they can’t play rolls.

**Roll application in various musical styles.** In the rudimental and drum corps traditions, simple rhythmic formulas are a central element of the tradition, yet this style must be clearly distinguished from the orchestral tradition of bounce rolling. Rudimental rolls are played as double stroke rolls. However, in orchestral contexts where there is just one player, it is crucial to determine the ideal roll speed at any given tempo because of the unique sound desired.

**Dynamic consistency.** It is important to control the strength of the initial attack, not allowing it to overpower the succeeding bounces. The louder the first attack, the more effort it takes to produce equal bounces. Try to play all attacks from no higher than 4-5 inches. The most common problem with dynamic consistency in bounce rolls is from excessive stick height caused by a combination of too much wrist motion and not enough arm motion.

**Measured and unmeasured rolls.** Multiple bounce rolls can be measured (counting base strokes and/or bounces) or unmeasured (not counting base strokes and/or bounces). Pedagogically, whether teaching rudimental or orchestral style, it is wise to teach measured rolls (be they closed or open), first as they provide a precise objective.

1. Measured rolls count the number of arm motions (strokes) per macrobeat and the number of bounces per arm motion. The most commonly measured multiple bounce rolls are double and triple bounce rolls.
2. Unmeasured rolls may count the strokes, but not the bounces.

**Bounce roll releases.** These can be played as either a lift during the final bounce or as a single stroke after the final bounce series.

**Double stroke roll releases.** These can be interpreted as either connected or disconnected to the next written attack. Connected releases (no space) will be interpreted as either accented or unaccented depending on the context. Disconnected gestures (a slight space)) require consideration of the tempo, predominant rhythmic feel, and the desired duration of the roll.

**Roll Notation.** There are three common notational practices: horizontal lines through the note stem, a “Z” through the note stem, or a “tr.....” above the note.

“Tr.” has historically been used, particularly in Europe, to indicate a tremelo – which is a series of rapid re-articulations. This notation is not to be confused with “Tr” in pitched notation to indicate a trill, a rapid alternation between two pitches. For clarity, tremelo should be notated as “tre” and trill as “tr”. Such notation is common in orchestral music and in the snare drum literature of French percussionist Jacques Delecluse.

Three horizontal lines through a note stem have historically been interpreted either as double stroke rolls or multiple bounce rolls, depending on the context and desired texture. In military music and

drum corps they are typically interpreted as double stroke rolls. In orchestral music they may be interpreted as bounce rolls or double stroke rolls.

The most recent notational development is the use of a “Z” to indicate a multiple bounce texture. This notation is endorsed by the Percussive Arts Society to distinguish between double stroke and multiple bounce rolls and is now relatively standard in most contemporary rudimental and drum corps literature.

**Types of bounce rolls and their applications.**

1. Triple Bounce Roll- for general roll applications p-ff

Quarter note = 90-150 (or 70-130 for beginners)

Begin at a comfortable mf-f dynamic and later practice softer dynamics.

Remember - large motions are easier to master than small motions.

This technique is the most versatile technique for orchestral style rolls.

2. Multiple Bounce Roll- for soft roll applications

Quarter note = 60-120

Achieve maximum bounce duration.

Keep sticks 1/2 inch from head.

Feel the sensation of pressing into the head.

Use less flesh on the grip to increase bounce efficiency.

3. Double Bounce Roll- for fast and soft (mp-pp) rhythms where double strokes are not appropriate.

Quarter note = 100-138

Maintain a stick height of one inch or less.

4. Quadruple Bounce Roll – for medium to soft applications where a more closed texture is desired than possible with the triple bounce roll.

**Triple Bounce Roll Speed and Tempo Relationships**

Roll speed is determined by context tempo, desired dynamic level (intensity), and desired roll density. The median is the tempo in the middle range of the piano and forte extremes - typically played at a mezzo piano or mezzo forte level. Arm (roll) speed rhythms are divisions of a single microbeat - quarter note. Tempi are interpreted as quarter notes. Memorize the median tempi and arm speeds. The piano and forte tempi may be slightly different for various players.

Arm speed rhythms	Dynamics & Tempi		
	Piano	Median	Forte
2 Eight notes	180	240	300
3	124	160	194
4 Sixteenths	96	120	144
5	76	94	112
6	64	82	100
7	50	76	80
8 Thirty seconds	48	60	72
9	42	52	64
10	38	48	58
12	35	40	46

**Extremely short multiple bounce rolls.** The number of attacks played in extremely short multiple bounce rolls is determined by the desired duration, intensity, and tempo. If only two arm strokes are used, they are typically played as a set of two overlapping multiple bounces, which produces more density than a one hand multiple bounce. Short rolls often conclude without a distinct roll release attack. The release is typically played by rapidly lifting both hands during the bounces.

**Bounce roll interpretation at fast tempi**

When tempi are so fast as to make playing the typical roll speed microbeats impractical, the divisions should then be interpreted over longer units of time, at least several macrobeats, so as to not force too many strokes into one macrobeat.

For example, at tempi quarter note = 220-250 the following passage might, on the one hand, be un-playable or sound forced (too dense) if played with two arm strokes per quarter note. On the other hand, it would not contain enough density if played with one arm stroke per quarter note. A solution would be to consider the arm strokes over a half-note span; this not only makes the roll playable, but provides the proper density.

