
BASICS

Tremolo

Tremolo is a series of small détaché strokes played as fast as possible in the upper half of the bow – usually as close to the point as possible:



Where is tremolo powered from in the arm?

There are two ways of performing a tremolo: with the hand alone, or with a combination of arm and hand. A third way is to use the arm alone, but this may easily lead to fatigue or tension problems. Looking around an orchestra you can usually see all three methods being used.

Tremolo can be likened to vibrato, where the two main types are hand vibrato and arm vibrato. As in vibrato, the question in playing tremolo is whether to make the movement from the hand or from the arm. It often seems that players who use a hand vibrato perform tremolo with a hand movement, and those that use an arm vibrato do not (or cannot) use the hand alone to perform tremolo.

Continuing the analogy with vibrato, the difference between hand and arm vibrato used to be described as follows. In hand vibrato the forearm remains entirely motionless, the hand moving at the wrist to perform the rapid backwards-and-forwards vibrato motion; in arm vibrato there is no movement whatsoever at the wrist, all the vibrato coming instead from a rapid backwards-and-forwards motion of the forearm.

However, if you vibrate like that it tends to be too wide and slow because the lever used to produce the movement – the forearm – is too large. A more practical arm vibrato uses the forearm to create a sympathetic shaking in the hand, so that there is indeed a movement of the hand at the wrist in arm vibrato. During a fast, relaxed and free arm vibrato it is possible for someone to grip your arm just below the wrist (at the watch-strap), without the vibrato in the hand stopping.

In tremolo, using the hand alone seems to be best since it follows the principle of ‘the faster the movement the smaller the movement’. The arm remains passive and the hand moves alone. However, many players cannot achieve a fast enough movement with the hand alone and instead use a rapid forearm movement which causes a passive, ‘sympathetic’ shaking of the hand.

The third way of performing a tremolo, moving the forearm (or whole arm) as a solid unit with no visible movement at the wrist, may cause severe and almost immediate fatigue in the arm and hand. Many an orchestral player dreads a long passage of tremolo, as they know that pretty soon their arm is going to burn with pain or seize up entirely.

The movement of the hand in tremolo

The hand cannot easily perform a fast, sideways motion moving at the wrist. The apparent fast motion of the hand in tremolo is actually an up-and-down movement, not a sideways movement. This is achieved by a slight anticlockwise turning of the forearm so that the angle of the fingers on the bow is altered. This turning of the forearm is called pronation, and causes the hand to turn more on to the first finger. A very slight lifting of the right elbow also helps to achieve the correct angle.

The hand movement does not happen in isolation, but in combination with an invisible degree of forearm rotation. Forearm rotation is like the movement of turning a key.

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Taking fingers off the bow

Many players find that these movements of the hand, and the slight forearm rotation, happen automatically if they tilt the bow towards the bridge and play on the side of the hair nearest to them. In addition, it is often helpful to take some of the fingers off the bow. It is common to see people performing a tremolo without the third or fourth fingers, and even to do without the second finger as well.

Speed of tremolo

The tremolo should be extremely fast, the movement of the fingers and the movement of the point of the bow becoming completely blurred. A slow tremolo may occasionally be required as a special effect, but normally it is considered poor and a mark of technical deficiency. Make sure you tremolo fast, since although somebody may not be able to hear you, a slow-moving tremolo can be clearly visible from a long way away and make you stand out as a low-energy contributor to the section!

One obvious approach to building the tremolo is to use a metronome, starting slowly and gradually speeding up. Remember to speed up by using smaller movements, not by increasing muscular tension.

♩ = 60, 65, 70, 75, 80, 85, 90, 95

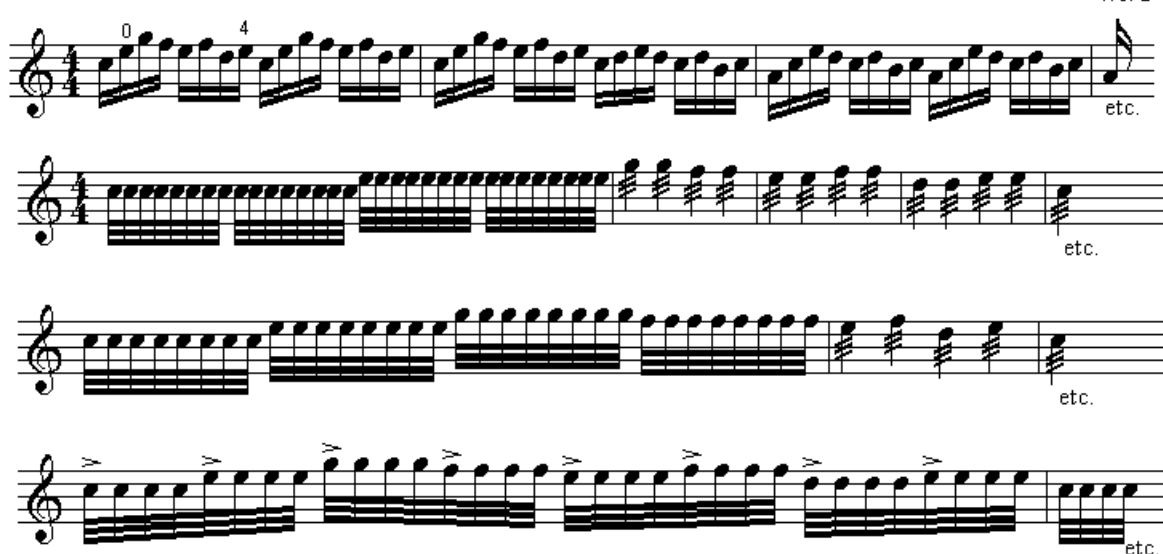


Another way to speed up with the metronome is to begin at, say, 60, and to play quavers, semiquavers, and demisemiquavers before moving on to the next metronome speed:



It is often a good idea to take a simple study like Kreutzer No. 2, and practise the tremolo using 16, 8 and 4 strokes to each note.

42 Etudes ou caprices, Kreutzer
No. 2



Experiment with different effects: atmospheric, impressionist tremolo at the point of the bow, near the fingerboard; stronger, more articulated strokes a little lower in the bow and nearer the bridge; more or less hair, and so on.