

## NEW SYMBOLS FOR HAND POSITIONS IN THE BELL FOR NATURAL HORN

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**A**s natural horn playing becomes more and more popular, it is obvious to me that the old and respectable methods of Dauprat, Gallay and others masters of the 19th century do not offer a rapid and efficient aid to 20th-century horn players. Today's natural horn players have already "paid their dues" concerning beginning lip technique and general musical knowledge. It is not necessary to cover these elements as do the old masters. It is necessary to learn hand technique without being obligated to spend one's time on basic exercises for the lips. I have researched a system of symbols to indicate the use of the hand and fingers in the bell in order to show as simply as possible a hand technique that will progressively and rapidly arrive at the mastering of sound and intonation of the natural horn.

Depending on the notes to be played, the old methods sometimes mention in an imprecise manner the differences between stopped, half stopped, three-quarters stopped and other various positions. I have tried to clarify this complex problem, but don't believe that I have the one and only answer. I still have some unanswered questions and am also aware that the bore of the horn as well as its length (a high or low crook) and the size of one's hand will perhaps require adaptations to my chart.

Pitches other than the harmonic series must be "artificially" produced by the use of the hand in the bell. This technique brings with it a change in the sound quality. It is necessary to mention the importance of minimizing the difference between open and stopped sounds as recommended by the early masters. The movement of the hand must be supple yet rapid. To this end, I have classified the different pitches into six categories based on the position of the hand necessary to produce them, and assigned a symbol to each position (see chart). The symbols facilitate learning hand technique.

For very stopped notes ● and "normally" stopped notes + the thumb is in position at the top of the knuckle of the first/index finger with the fleshy part of the thumb on the upper side of the finger. For very stopped notes ● the hand is deep in the bell and the palm expanded so that there are no "holes" at all and the horn is thus at its shortest possible length. (To aid in the correct intonation of these notes, the lips may also be used.) Similarly, the stopped notes position + is probably the way most horn players play stopped notes on the modern valve horn. For notes marked ⊕ the thumb pivots towards the palm of the hand creating a "hole" or air passage.

The remaining symbols represent varying degrees of openness. The triangle △ represents the hand in a position a bit more closed than the "normal" position for modern horn players. This is so that there will be less difference between these often-used notes and various stopped notes. The ○ represents the hand a bit more open for those notes

that are naturally a bit flat and must be played fully open in order to be in tune (see chart for comment about the 13th harmonic, high A).

I have just finished a progressive method for natural horn with the goal of rapid evolution in technique through exercises and etudes using the technique of the six different positions of the hand in the bell. The method is intended for accomplished horn players who no longer have significant problems with lip technique or with articulations. (For the natural horn I use trombone articulation technique for the legatos.) I combine the different hand positions first by twos and then in combinations using increasingly difficult intervals. The result is an automatic reflex that makes it easier to assimilate the new hand technique. After this reflex is achieved, it is indispensable to practice the Gallay preludes or other similar etudes.

### Hand Position Chart for Full Range

The chart displays three staves of music. The first staff is in bass clef and contains notes from G2 to G3. The second and third staves are in treble clef and contain notes from G3 to G4. Hand positions are indicated by symbols: a plus sign (+) for the 8th position, a triangle (Δ) for the 9th position, a solid circle (●) for the 10th position, a circle with a plus sign (⊕) for the 11th position, an inverted triangle (∇) for the 12th position, and an open circle (○) for the 13th position. Some notes have multiple symbols, indicating different hand positions for the same note. The notes are marked with (1) and (2) above them, indicating different crooks or positions.

1) These notes are only possible on short crooks.

2) Thumb position between + and ⊕

## The Functions of the Six Standard Hand Positions

Harmonics 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 15

SYMBOLS

Harmonics 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 15

Black notes = natural harmonics

- 1) These notes are only possible on short crooks
- 2) Correct the pitch using the lips, hand, thumb or all three, depending on the crook
- 3) This harmonic is too flat on the short crooks in the very open position. To compensate, passages that require an open A can be played with the tuning slide pushed in farther than normal
- 4) Thumb position between  $\oplus$  and  $\ominus$