

# Hand Horn Technique

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The modern valve horn can trace its origins back to European hunting horns, with written music dating back to the 14<sup>th</sup> century. These horns lacked valves, and naturally, their music was limited to pitches along the harmonic series. But Classical-era hornists were eager to unlock the chromatic capabilities of the instrument, and in the mid-18<sup>th</sup> century, they began to develop and master hand horn technique.

In this period, a hornist would carry around a set of crooks, allowing them to change the transposition of the horn to whatever a piece may call for. This way, players needed not worry about key signatures, and notation would tell them the most relevant information about playing the instrument, regardless of the actual key: which partial to buzz, and how far to bend the pitch with the right hand. By the advent of the Romantic period in the early 19<sup>th</sup> century, valve horns had become popular in professional orchestras, but some composers, like Brahms, stubbornly resisted the change and continued to write only for natural horn. Others, like Saint-Saëns, experimented with both varieties of horn playing together.

Today, we can change the key of the instrument swiftly and easily with valves, and horn music is almost always written transposed to F. But hand horn technique can still be useful for a number of reasons: to gain more control and flexibility on the instrument, to aid in reading transposed music, or to emulate the sound of a natural horn.

The harmonic series as playable on natural horn is shown here, starting on C and ascending chromatically. Partial numbers are listed to the right of each pitch, and deviation from the written pitch (in twelve-tone equal temperament) is shown below, rounded to the nearest 5 cents.

We can use our knowledge of hand stopping to bring some of these pitches into tune and reach additional pitches in between them. The following is a guide to hand positions for the natural horn. Every horn and hand is different, but an *open* position should produce the most desirable horn sound, and a *fully stopped* position should seal off as much of the bell as possible. The *extra open* position might necessitate removing the hand from the bell entirely. Positions for high F# and A are left blank in the exercises that follow—choose what works for you.

$\overset{+}{\underset{\circ}{\circ}}$  fully stopped    
  $\overset{\oplus}{\underset{\circ}{\circ}}$  echo (mostly stopped)    
  $\overset{\oplus}{\underset{\circ}{\circ}}$  half stopped    
  $\overset{\circ}{\underset{\circ}{\circ}}$  open    
  $\overset{\hat{\circ}}{\underset{\circ}{\circ}}$  more open    
  $\overset{\textcircled{\circ}}{\underset{\circ}{\circ}}$  extra open

The first system of musical notation for 'The Song of the Wraiths' is written on a single staff. It begins with a treble clef and a key signature of one sharp (F#). The notation includes various musical symbols such as notes, rests, and accidentals, along with a series of numbers (16, 17, 18, 19, 20, 11, 12, 13, 14, 15, 14, 15) and symbols (♯, ♭, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 11, 12, 13, 14, 15, 14, 15) that likely represent specific musical intervals or scales. The notation is complex and appears to be a form of musical shorthand or a specific notation system used in the manuscript.

## 1 Hand Horn Chromatic Scale









Repeat this exercise in **F**  $\sharp$ , **E**  $\natural$ , **E<sup>b</sup>**  $\flat$ , **D**  $\sharp$  and **C**  $\sharp$ , then **G**  $\sharp$ , **A**  $\sharp$  and **B<sup>b</sup>**  $\flat$  **alto**  $\hat{\theta}$ .

♩ = 76–176  
 $\hat{0} + \phi \ 0 + \phi \ \odot \ \phi \ 0 \ \phi \ 0 \ \phi \ \hat{0} \ \phi \ 0$   
*mp*

2

 fully stopped    
  echo (mostly stopped)    
  half stopped    
  open    
  more open    
  extra open

## Hand Horn Scales and Arpeggios in the Middle Register

Repeat these exercises in **F** , **E** , **E<sup>b</sup>** , **D**  and **C** , then **G** , **A**  and **B<sup>b</sup>** alto .

### 2 G Major



### 3 G Mixolydian/Dominant 7<sup>th</sup>



### 4 G Minor








### 5 E<sup>b</sup> Major



### 6 C Major



## Hand Horn Scales and Arpeggios in the High Register

Repeat these exercises in **F** , **E** , **E<sup>b</sup>** , **D**  and **C** .

### 7 C Major



### 8 B<sup>b</sup> Major

