

# Introduction To The Nashville Numbering System

By Jack W Cannon

Most scores use an *absolute* system to designate the desired chord. “C” means to play a C chord (C E G). “D” means to play a D chord (D F# A). The chord descriptor tells the user exactly which chord is required.

Chords designated by the Nashville Numbering System (NNS) use a *relative* system to designate the desired chord. The specific chord to be played is dependent on the key of the piece being played. Therefore the number of the chord must be transformed to the specific chord required and that transformation is directly dependent on the key of the score. Instead of an *alphabetic* character, NNS uses a *numeric* character consisting of the numbers 1-7 (1 2 3 4 5 6 7).

The following is a basic description of all possible chords using the standard scale consisting of whole (W) steps and half (H) steps:

NNS Chord	1	2	3	4	5	6	7	1
Scale Spacing	W	W	H	W	W	W	H	
Key of C	C	D	E	F	G	A	B	C
Key of C#	C#	D#	E#	F#	G#	A#	B#	C#
Key of Db	Db	Eb	F	Gb	Ab	Bb	C	Db
Key of D	D	E	F#	G	A	B	C#	D
Key of Eb	Eb	F	G	Ab	Bb	C	D	Eb
Key of E	E	F#	G#	A	B	C#	D#	E
Key of F	F	G	A	Bb	C	D	E	F
Key of F#	F#	G#	A#	B	C#	D#	E#	F#
Key of Gb	Gb	Ab	Bb	Cb	Db	Eb	F	Gb
Key of G	G	A	B	C	D	E	F#	G
Key of Ab	Ab	Bb	C	Db	Eb	F	G	Ab
Key of A	A	B	C#	D	E	F#	G#	A
Key of Bb	Bb	C	D	Eb	F	G	A	Bb
Key of B	B	C#	D#	E	F#	G#	A#	B

Therefore, if the score is written in the key of D and the chord descriptor is “4” then the chord to be played is a G chord. Likewise, if the score is written in the key of F and the chord descriptor is “1” then the chord to be played is an F chord.

But why bother with requiring the musician to transform from the relative number to the absolute chord which depends on the key of the score?

For the musician, it has always been an ongoing problem with solo vocalists who can be fussy and want to sing in a different key. A professional musician that has memorized all the major scales can readily change the key of the melody. For example, it is fairly easy to change the melody from the key of C to the key of F. However, that is not true for the harmony. Changing the key requires that new sheet music be printed in order to specify the harmony. This is expensive and can create headaches for the director – particularly if the solo vocalist changes their mind again. The NNS allows the user to play any song in any key without changing the notation.

The NNS has been in development for decades. It initially started with the Jordanaires in the 1950s as a system designed for backup groups by Neil Matthews of the Jordanaires. However, Charlie McCoy of the TV series Hee Haw is generally credited for perfecting the NNS. Its specific purpose is to accommodate vocalists who want to change the key of the score. The musicians are expected to be able to change the key of the melody and then using the relative NNS, change the harmony to the proper chord without the need for creating and printing new sheet music whenever a key change is desired.

While there is no universally accepted set of symbols for the NNS, the following is the most accepted set of symbols and should be recognizable by all users.

As noted earlier the numbers 1-7 specify the basic chord root. There are modifiers to the basic chord root (as with absolute chords) that specify the type of chord. Two modifiers can be specified in front of the root number. They are “b” and “#” – the flat and the sharp. These are the only two characters that can be *preended* to the NNS number and are represented as superscripts.

Using 1-7 alone would allow only seven basic chords. But there are five other possible basic chords (exclusive of B# and E#) that use the flat and the sharp *preended* to the basic chord root.

Here are the five examples using the key of C:

C# or Db chord can be specified as <sup>#</sup>1 or <sup>b</sup>2  
D# or Eb chord can be specified as <sup>#</sup>2 or <sup>b</sup>3  
F# or Gb chord can be specified as <sup>#</sup>4 or <sup>b</sup>5  
G# or Ab chord can be specified as <sup>#</sup>5 or <sup>b</sup>6  
A# or Bb chord can be specified as <sup>#</sup>6 or <sup>b</sup>7

All remaining modifiers are *appended* to the basic chord root.

There are four main types of chords with the NNS modifier. They use superscript notation and immediately follow the basic chord root. The major type does not necessarily require any modifier.

These examples assume the key of C:

Major	1	C	E	G
Minor	2 <sup>-</sup>	D	F	A
Diminished	5 <sup>o</sup>	G	Bb	Db
Augmented	5 <sup>+</sup>	G	B	D#

Six other optional numbers are used to follow the chord type in superscript notation. They are 2, 4, 5, 6, 7, 9.

The following examples use a C chord in the key of C. While a major type can be designated with “M” or “MAJ”, the triangle is an accepted means to specify a major chord:

2	1 <sup>2</sup>	C	E	G	D	Major with added 9th
4	1 <sup>4</sup>	C	F	G		Suspended
5	1 <sup>5</sup>	C	G			Power Chord
6	1 <sup>6</sup>	C	E	G	A	Major 6
6	1 <sup>Δ6</sup>	C	E	G	A	Major 6
6	1 <sup>-6</sup>	C	E <sup>b</sup>	G	A	Minor 6
7	1 <sup>7</sup>	C	E	G	B <sup>b</sup>	Dominant 7
7	1 <sup>Δ7</sup>	C	E	G	B	Major 7
7	1 <sup>-7</sup>	C	E <sup>b</sup>	G	B <sup>b</sup>	Minor 7
9	1 <sup>9</sup>	C	E	G	B <sup>b</sup> D	Dominant 9
9	1 <sup>Δ9</sup>	C	E	G	B D	Major 9
9	1 <sup>-9</sup>	C	E <sup>b</sup>	G	B <sup>b</sup> D	Minor 9

Inversions are accomplished by following the chord with a “/” character. Then specifying the bass (also called root) note of the chord. Here are several examples of inversions using a C chord in the key of C:

1/3	E	G	C
#1/3	F	G#	C#
1 <sup>-7</sup> /7	B <sup>b</sup>	C	E <sup>b</sup> G
1 <sup>+</sup> /3	E	G#	C
1 <sup>Δ7</sup> /5	G	B	C E



The diamond symbol surrounding a chord (also called a “hold”) is used to indicate that the chord must be held for the entire measure.

The specific chord description is centered in the diamond and contained within the boundaries of the diamond.



<sup>1°</sup> A carat (“hat”) located above the chord indicates that the chord should be struck once and immediately cut off. The length of the chord is usually about an eighth note.

*The author gratefully acknowledges the assistance of:*

*Sherry Carlisle Smith*

*Miller Piano Specialists, Brentwood, TN  
and formerly of the Jordanares*

*Dave Martin*

*Miller Piano Specialists, Brentwood, TN*

*For their professional assistance in proof reading this document during its preparation.*

*This document may be freely distributed at will but without modification and without profitable monetary intentions.*

— *Jack W Cannon, 5/16/2016*