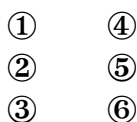


Braille Music Notation

Music 253/254

1. Basic structure of a Braille Cell

Braille is based on a system of six raised dots contained within a cell—two dots on the top, middle, and bottom rows reading from left to right. Each dot is known by its number:



The numeration of dots is invariable: top left = Dot 1; middle left = Dot 2; bottom left = Dot 3; upper right = Dot 4; middle right = Dot 5; bottom right = Dot 6.

Within each of these six-dot cells it will be recognized that there are 64 possible combinations (one being no dots), many more than the 26 combinations required to form the letters of the English alphabet.

Braille music uses these same characters to convey musical meaning. *Whereas print music is pictorial, Braille music is linear.* Thus the need to print musical staves is redundant. It is important to note that the symbols used for the note name and its value are bound up within the one character and that separate signs are used to denote pitch.

Note name and duration are given within a single cell. Dots 1, 2, 4, and 5 in combination give the note name. Dots 3 and 6 give the duration. Each duration has two possible meanings:

DOT 3	DOT 6	ALTERNATIVE MEANINGS
on	on	whole note or 16th note
on	off	half note or 32nd note
off	on	quarter note or 64th note
off	off	eighth note or 128th note

The dot combinations for the pitch names C . . B duplicate those of the letters D . . J.
 These values represent eighth notes.

PITCH NAME	DOTS ON	CELL
C	1 45	
D	1 5	
E	12 4	
F	12 45	
G	12 5	
A	2 4	
B	2 4	
rest	1 34 6	

To create quarter notes Dot 6 must be switched on:

PITCH NAME	DOTS ON	CELL
C	1 45 6	
D	1 5 6	
E	12 4 6	
F	12 45 6	
G	12 5 6	
A	2 4 6	
B	2 45 6	
rest	12 3 6	

Dot 3 is added to create half notes:

PITCH NAME	DOTS ON	CELL
C	1 345	
D	1 3 5	
E	12 34	
F	12 345	
G	12 3 5	
A	2 34	
B	2 345	
rest	1 3 6	

Whole notes look like this:

PITCH NAME	DOTS ON	CELL
C	1 3456	
D	1 3 56	
E	1234 6	
F	123456	
G	123 56	
A	234 6	
B	23456	
rest	1 34	

Note that the eighth, quarter, half, and whole rests are equivalent to the letters X, V, U, and M.

Accidentals

Accidental signs are made from the codes for the letters A, B, and C with Dot 6 turned on:

SIGN	DOTS ON	CELL
♯	1 6	
♭	12 6	
♯	1 4 6	

Note that in the normal ordering of symbols, these precede the pitch names. Double sharps and double flats are created by reiterating the sign.

Layout Formats

Bar-Over-Bar Format

The bars in this layout are aligned vertically. Piano music would usually have two parallel lines, i.e., right-hand and left-hand.

Open-Score Format

This is a method of placing music and words close together, i.e., music beginning at the left-hand margin of one line, the words starting on the line below with an indentation of two spaces. This method is the nearest equivalent to sight-reading.

Short-Score Format

The parts of a choral work are combined to form a parallel approach, similar to that of the bar-over-bar format.

Section-By-Section Format

In this format, a composition is divided into sections with each part or hand being written in a separate paragraph.

Single-Line Format

The music is written for a single instrumental part using a new print line as a dividing point. These, with appropriate bar numbers, are indented two spaces on a free line. The music itself starts at the left-hand margin and continues for as many Braille lines as are necessary to complete it.

Key signatures reflect only the number of sharps or flats, not, as in print, the pitches.

Special provisions for encoding

Braille music transcription makes use of several concepts designed to simplify encoding. Among these are the *doubling*, *interval*, *in-accord*, and *repeat* modes.

- *Doubling mode* is a system of transcription in which a sign remains in effect until it is specifically terminated.
- *Interval mode* is used, for instance, to indicate secondary notes of chords or two parts with similar rhythmic values. The highest or lowest note must be indicated by name. The associated notes are represented by their intervallic relation to this note.
- *In-accord mode* is used to show the difference between two rhythmically independent parts that are aligned vertically in print.
- *Repeat mode* can be used to indicate the repetition of notes, beats, half-bars, and bars.