SCORE Parameters

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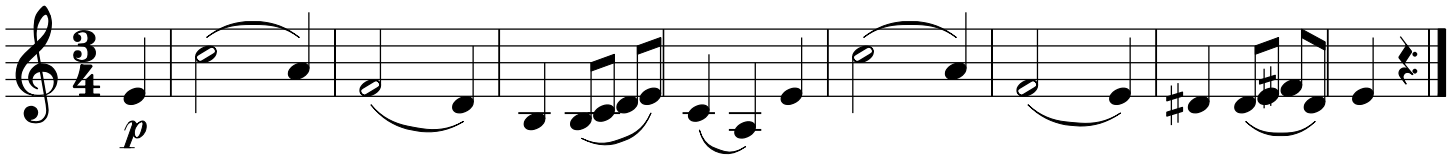
SCORE User Input



INPut menu settings:

IN1 0 0 1.0000 200
0 200

Pitch stage:
TR/3 4/E4/M/ CU/PA/M/ F/D/M/ B/B/C/D/E/M/ C/A/EU/M/ CU/A/M/ F/E/M/
DS/D/E/FS/D/M/ E/R/ML;

Rhythm stage:
Q/H/Q/H/Q/Q/EX4/QX3/H/Q/H/Q/Q/EX4/Q/Q;

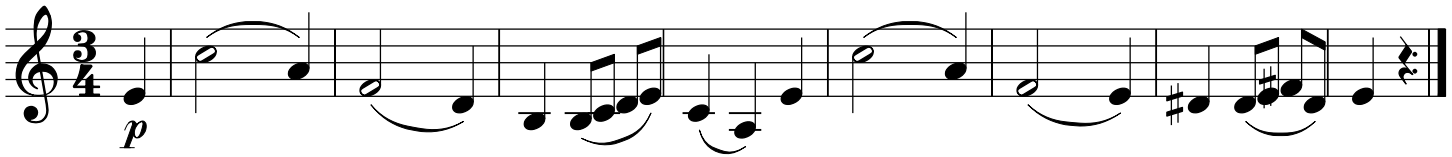
Mark stage:
P 1;

Beam stage:
2B;

Slur stage:
2 3/4 5/7 10/11 12/14 15/16 17/19 22;

- Input data can be saved to a text file (as shown above)
- This file can be loaded back into the SCORE editor later with the **RE**ad command.

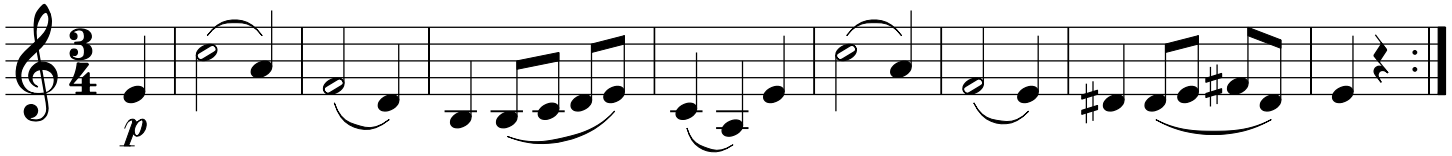
Line-up and Justify Command



- After music input, the spacing usually needs to be adjusted (above music was spaced linearly by duration)

LJ

1 1 Starting at staff 1, and including 1 staff in alignment



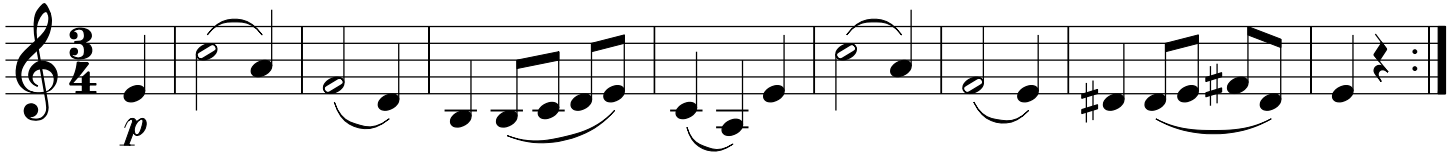
EDIt Command

- The EDIt command can be used to return to the User Input codes to change the music.
- Using the EDIt command will loose the spacing

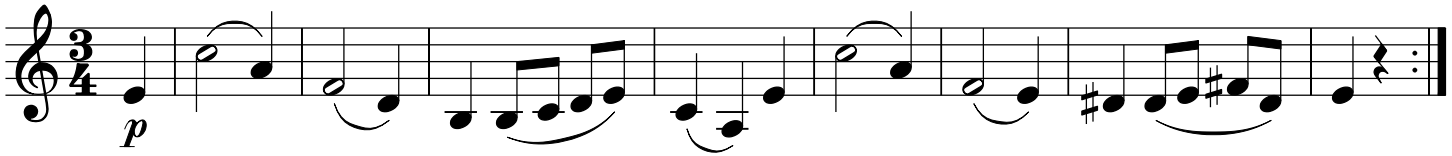
```
IN 1
1.5 200 1
TR/3 4/OE4/ M1/C5/A4/ M1/F/D/ M1/B3/B/C4/D/E/ M1/C/A3/E4/ M1/C5/A4/
        M1/F/E/ M1/DS/D/E/FS/D/ M1/E/R/ MRL1;
Q/H/Q/H/Q//EX4/Q///H/Q/H/Q//EX4/Q/;
P 1.09;
7 +8/9 +10/19 +20/21 +22;
2 +3/4 -5/7 -10/11 -12/14 +15/16 -17/19 -22;
```

- Notice that there is no spacing information, just sequential symbolic data.

Internal Graphic Representation

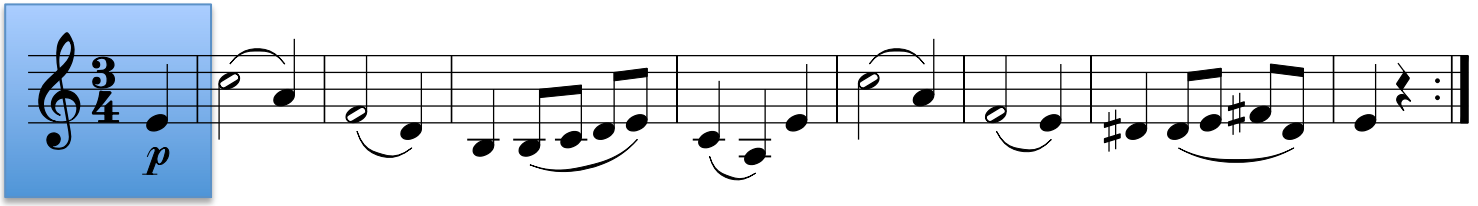


- User Input mode used for data entry
- Internally translated to a representation which can be graphically modified (such as LJ, or adjusting the beam height here)



- .mus files contain binary form of graphical data (stored with SA and SM commands)
- PMX command will save graphical data in ASCII text format.

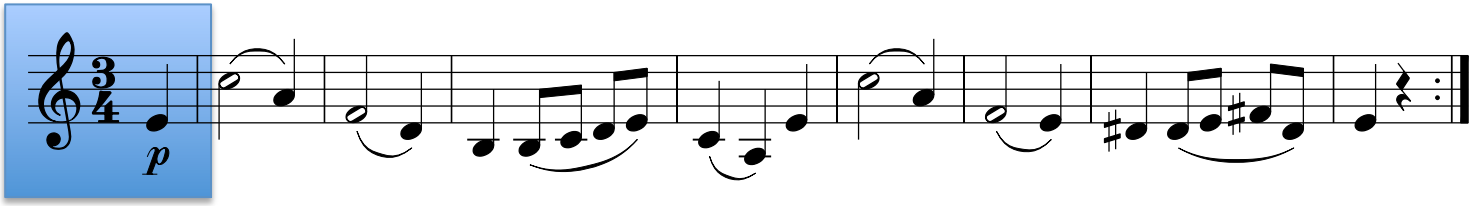
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

- Each row represents a graphical music object
- Each column represents a particular parameter for the object
- Empty trailing columns contain implicit zeros

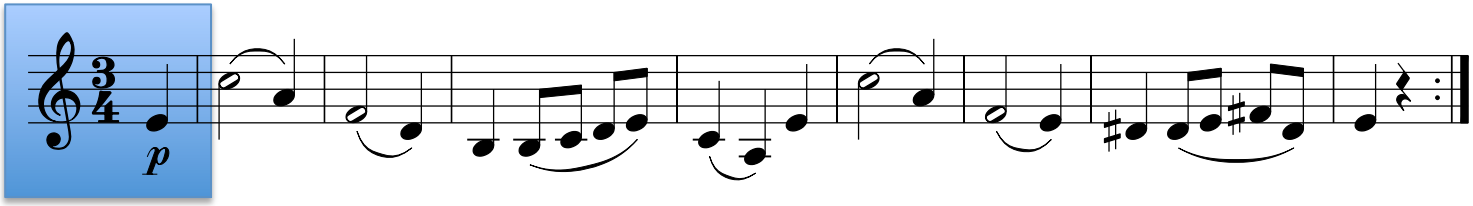
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

- Parameter 1 (P1) always means the “item type” for the line:
  - P1=**8** → staff
  - P1=**3** → clef
  - P1=**18** → time signature
  - P1=**9** → graphic symbol
  - P1=**1** → note
  - P1=**14** → barline

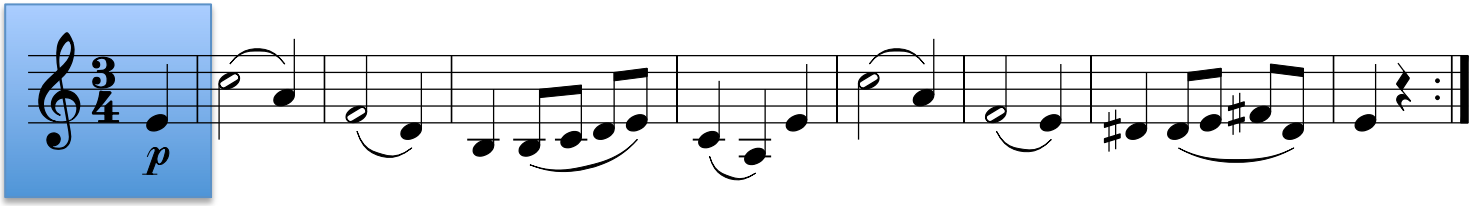
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

- Parameter 2 (P2) always means indicates the staff number on which item belongs
- In this case all items are on staff 1 (including the first item which are the staff lines

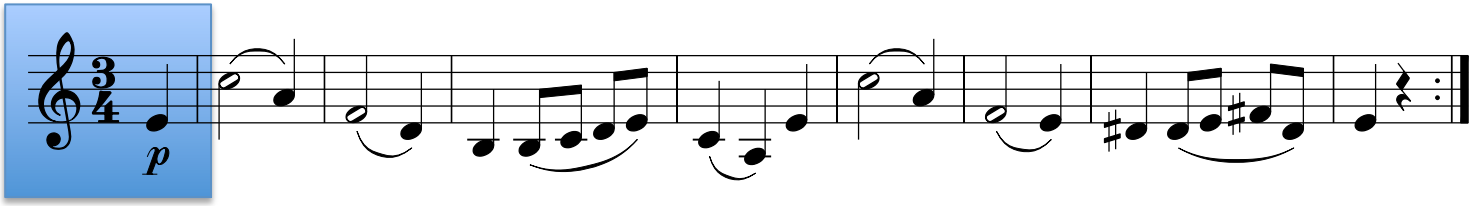
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

- Parameter 3 (P3) always means horizontal position
- Horizontal scale is fixed: 0 = left printing margin, 200 = right printing margin
- Some objects (staff, beam, slur) require two horizontal positions, in this case P3 is the left horizontal position of the item, and P6 is the right hor. pos. of the item.

SCORE Parameters

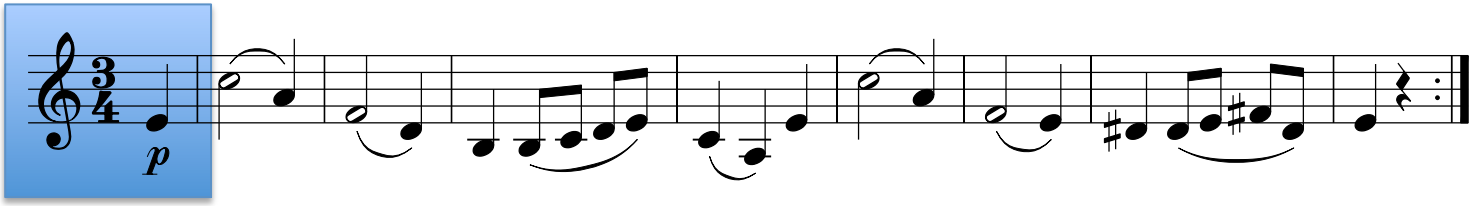


P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

- Parameter 4 (P4) *usually* means vertical position in terms of diatonic steps:

- Similar to DARMS

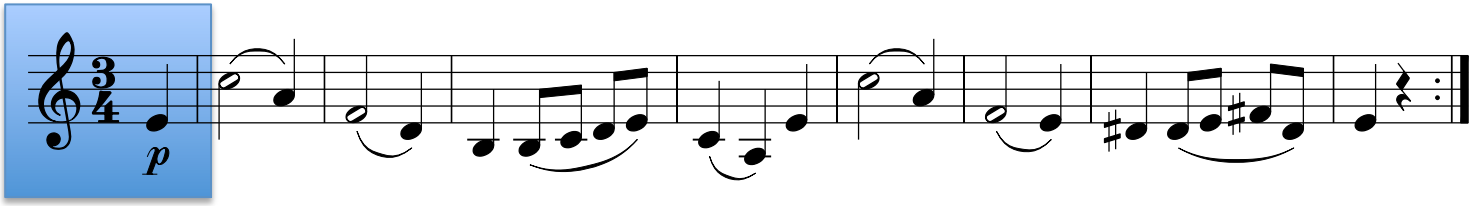
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

- Parameters above P3 will have contextual meanings depending on item type (P1 value)

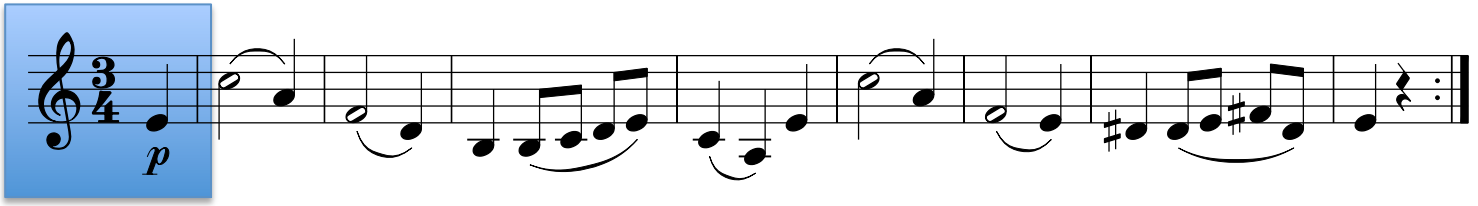
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

8	Staff-line item
1	Staff ownership (staff 1 on page)
0	Left horizontal position (left margin)
0	Vertical position (default position near bottom of page)
0	Staff size (default size, i.e., 0=1)
200	Right horizontal position (right margin)

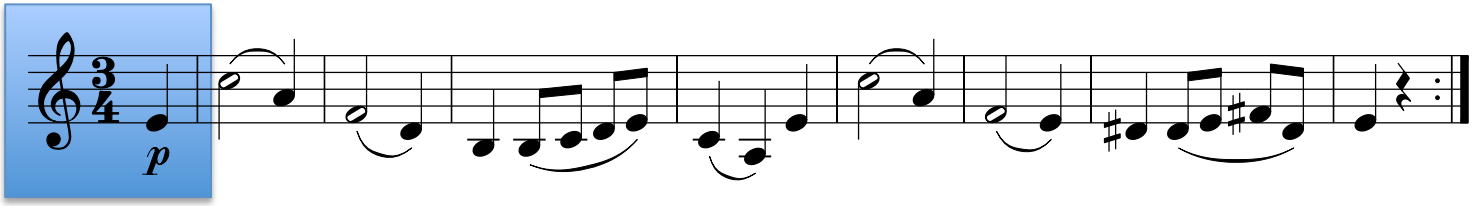
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

3	Clef item
1	Staff ownership (staff 1 on page)
1.5	Left horizontal position (near left margin, 0.75% along staff)
0	Vertical position (default position for clef)
0	Type of clef (0=G clef) (P4&P5→treble clef)
0	Horizontal size (0=1)
0	Vertical size (0=use P6 value)

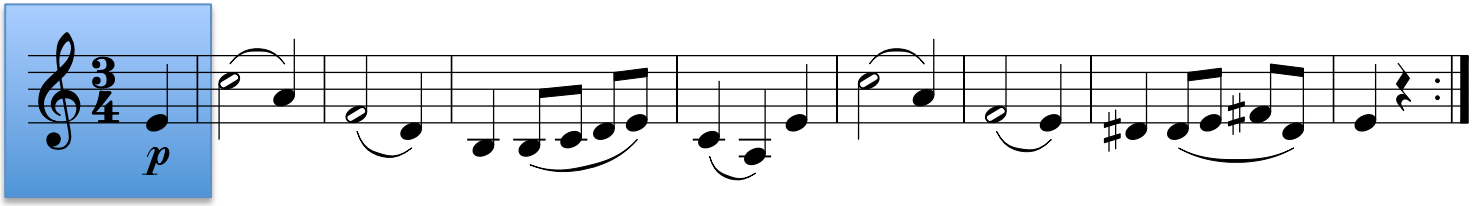
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

18	Time-signature item
1	Staff ownership (staff 1 on page)
8.999	Left horizontal position (near left margin, 4.5% along staff)
0	Vertical position (default position for time signature)
3	Top number
4	Bottom number
0	Size (0=1)

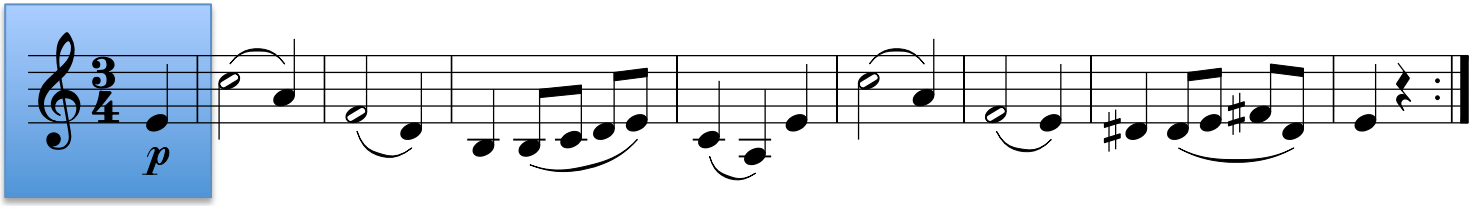
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

9	Graphical Symbol item
1	Staff ownership (staff 1 on page)
16.499	Left horizontal position
-2	Vertical position: origin of symbol at G3 pitch height
53	Symbol number (piano dynamic mark)
1	Horizontal size (1=default size)
0	Vertical size (0=use P6 value)

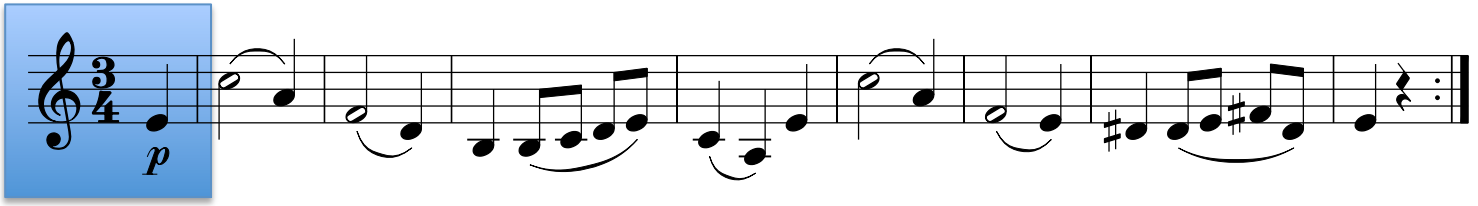
SCORE Parameters



P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

1	Note item
1	Staff ownership (staff 1 on page)
16.499	Left horizontal position
3	Vertical position: bottom line of staff
10	Stem, up (20 = stem down)
0	Notehead type (solid black)
1	Duration (quarter note)

SCORE Parameters



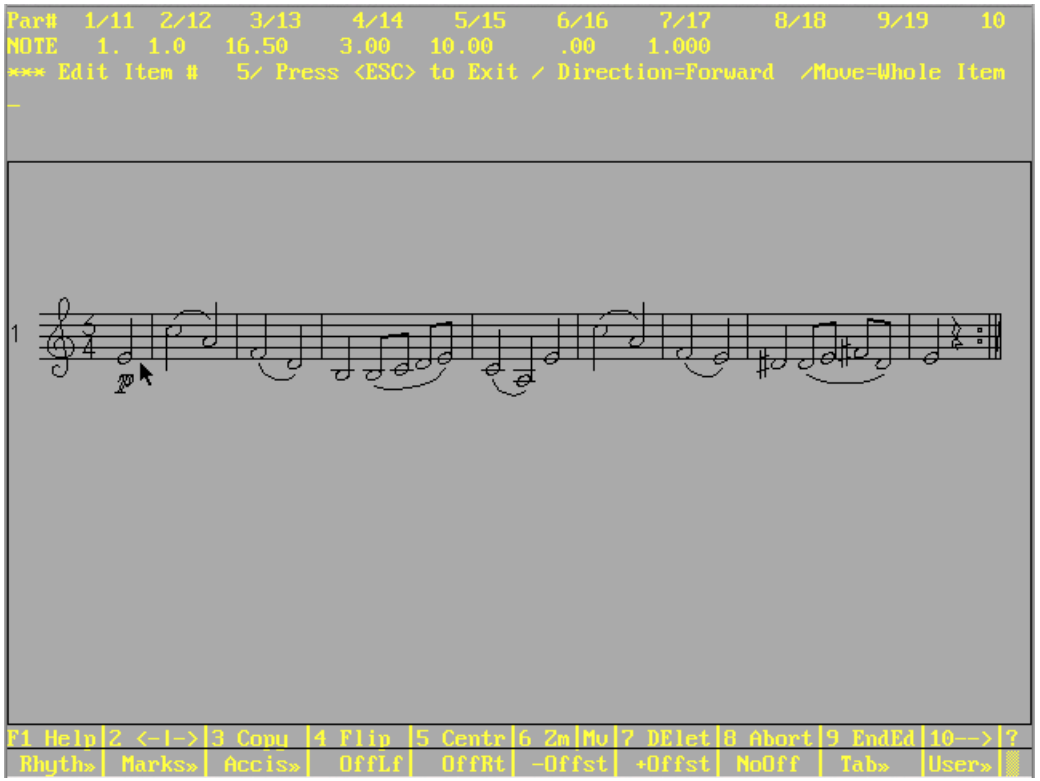
P1	P2	P3	P4	P5	P6	P7
8	1	0.000	0	0	200	
3	1	1.500				
18	1	8.999	0	3	4	
9	1	16.499	-2	53	1	
1	1	16.499	3	10	0	1
14	1	23.499	1			

14	Barline item
1	Staff ownership (staff 1 on page)
23.499	Left horizontal position
1	Number of staves (barline for only one staff)
0	Type of barline (0 = single, thin)
0	Thickness (default thickness)
0	Horizontal displacement (from P3; none)

SCORE Editor Parameter Access

- When editing an item, its parameters are displayed at the top of the window
- To edit an item, click on the lower left corner of the item (not the middle!)

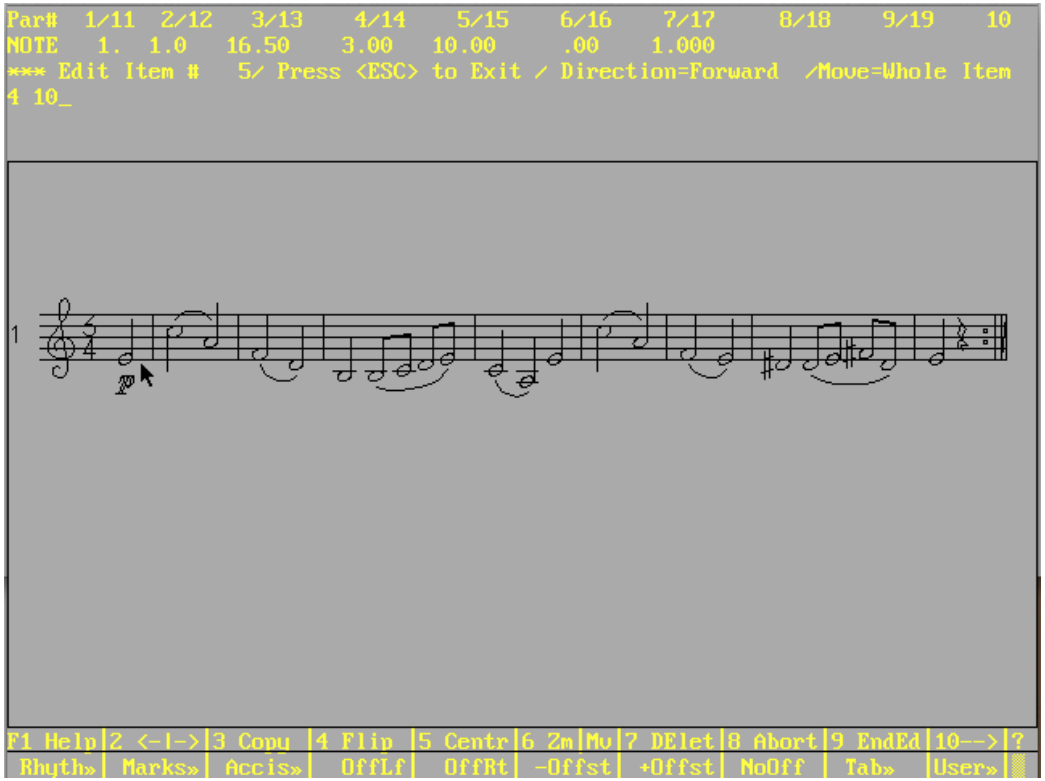
Parameter #
Param. value

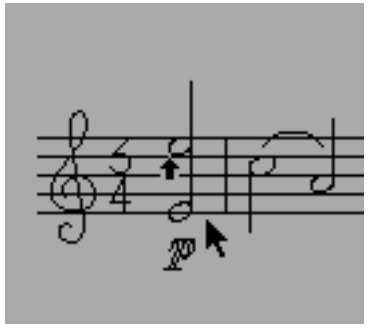


P1	1
P2	1.0
P3	16.50
P4	3.00
P5	10.00
P6	.00
P7	1.000

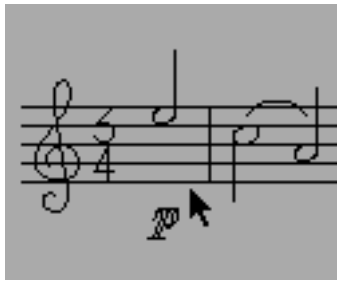
Change a parameter to a specific value

- When editing an item, type the parameter number, a space, then the new value.
- Move the note to the top space on the staff (P4=10): **4 10** (then enter key)





Press Esc key to finish edit.



- F8,esc to cancel changes; F3 to make a copy and keep original

Changing by addition/subtraction

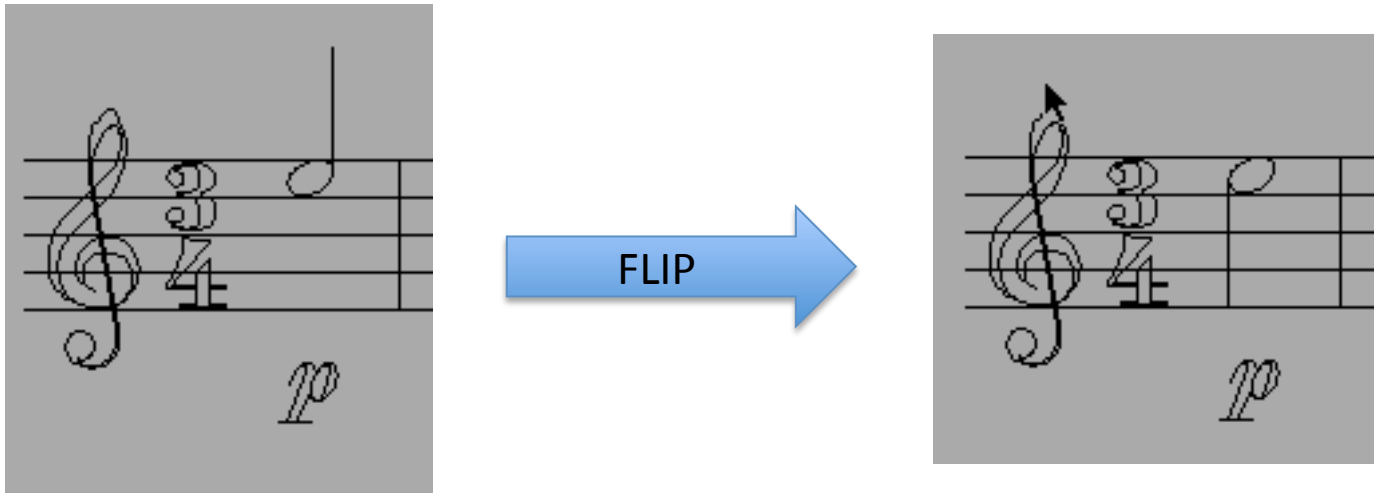
- To move note up 7 diatonic steps (an octave), you could also type:

400 7

* 400 “00” after parameter number means to add the following number to current value. If current value is 3, then after “400 7” change it will be 10 (3+7=10).

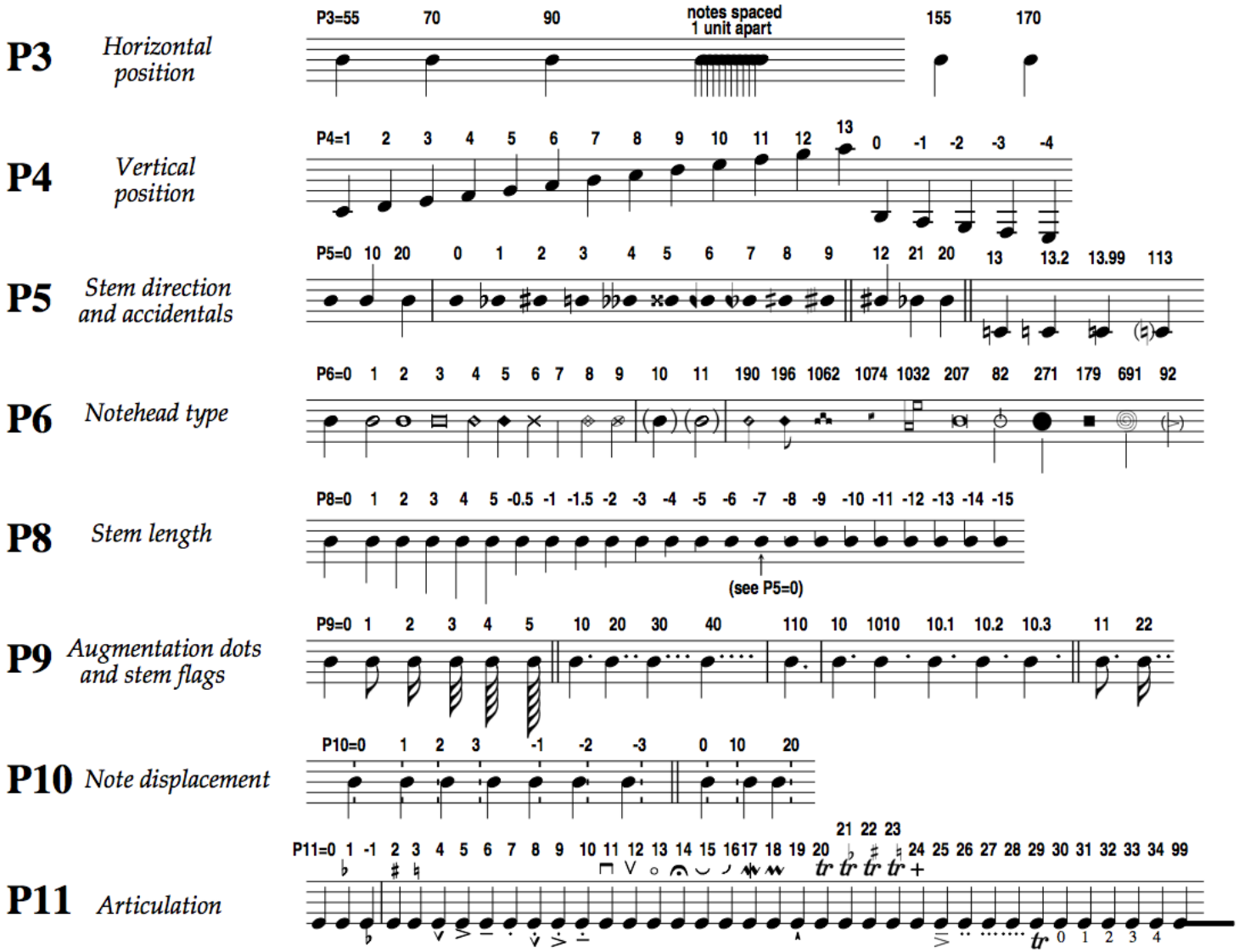
Changing by command

- Select a note with mouse, then type “FLIp” and the stem will flip direction:



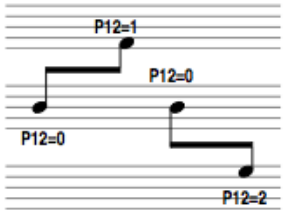
- Could also be done by typing “5 20” (but would not work if there was accidental which is stored in the 1’s digit of P5)
- Also “500 10” (add 10 to P5 to make it 20).

Example Note Parameters



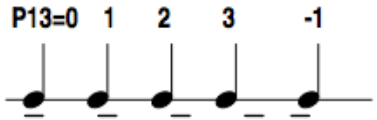
Example Note Parameters (2)

P12 *Staff displacement*

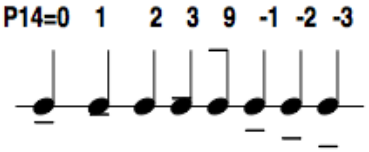


← Staff to which all four notes belong

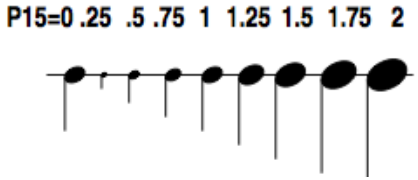
P13 *Articulation horizontal offset*



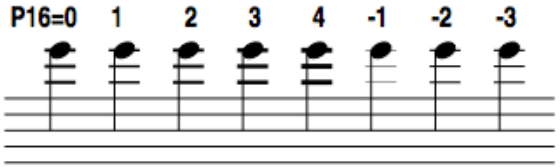
P14 *Articulation vertical offset*



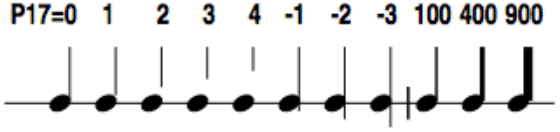
P15 *Note size*



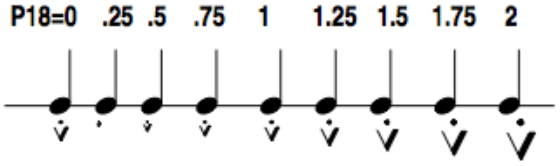
P16 *Ledger line thickness*



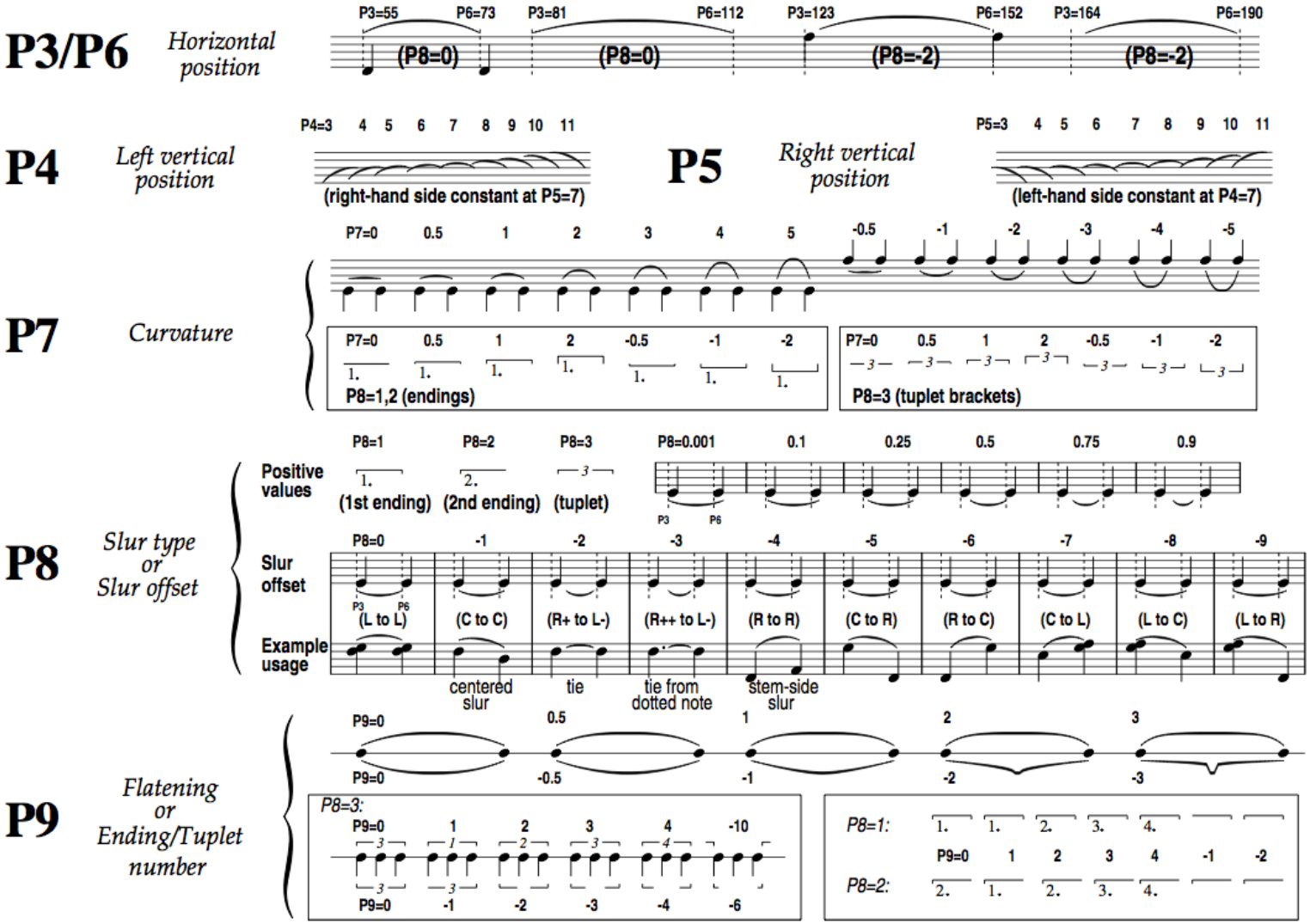
P17 *Stem origin and thickness*



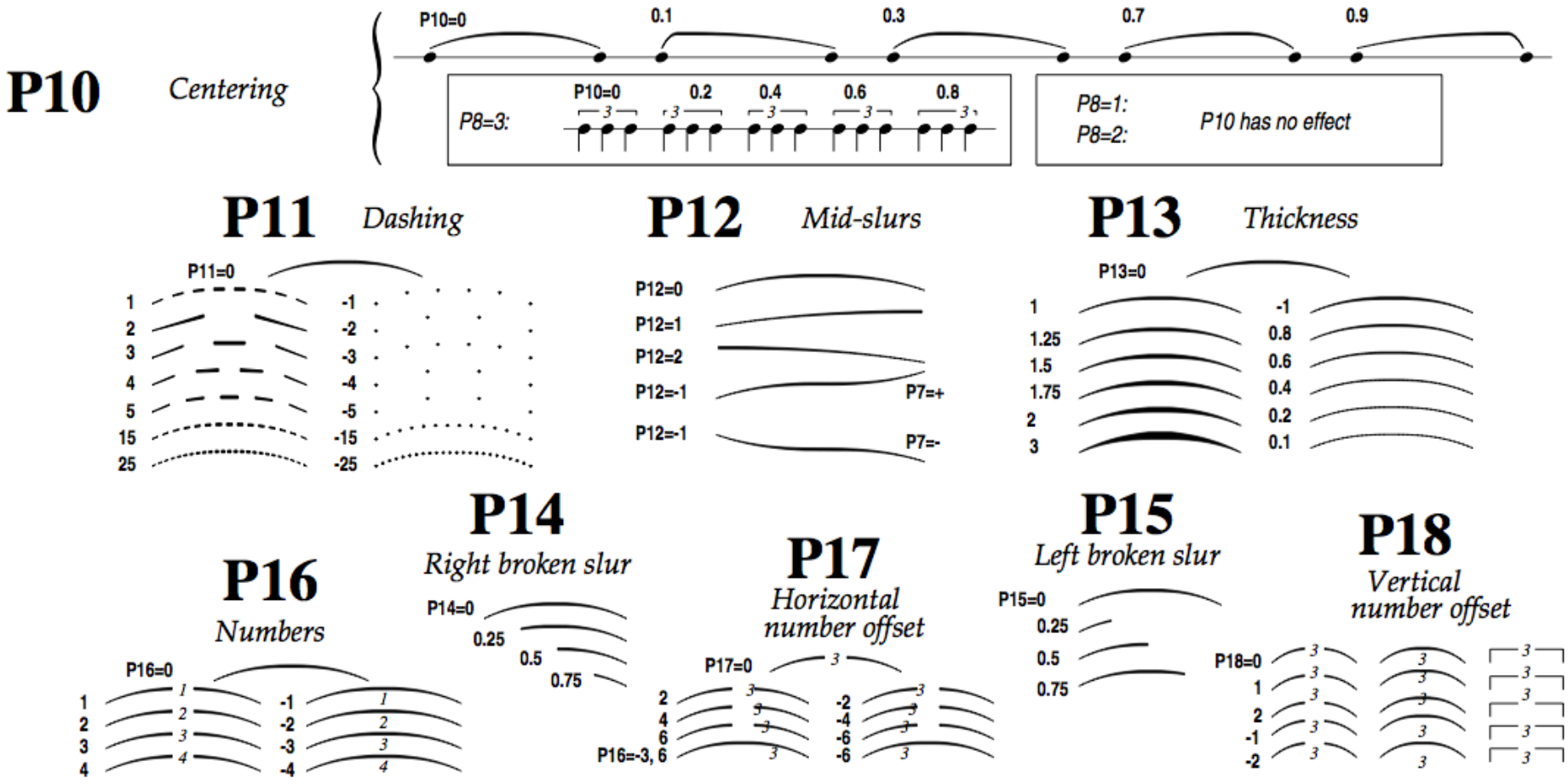
P18 *Articulation size*



Example Slur/Tie Parameters



Example Slur/Tie Parameters (2)



Visually change a parameter

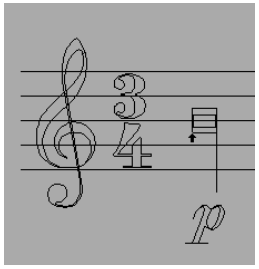
- Type alt-# while editing an object to allow the parameter to be changed by mouse or arrow keys. For example change the stem length by typing alt-8 and then moving the mouse up/down or left/ right; or usually better: use the arrow keys on the keyboard to increment the parameter one step at a time.

- You can set the increment size by typing (in command or edit modes):

  INC #

  where # is an increment amount. "INC 1" will set the increment size to 1 unit, "INC 0.25" sets it to 0.25 units. Typing "INC" by itself will report the current increment size.

- Try setting the increment size to 1, and the use alt-6 on a note to scroll through the notehead shapes.



P6 = 101

Adding Items by Parameter List

- Type in parameter list in command mode to insert item into data directly:

```
8  1  0   0  0  200

3   1  1.5

18  1  9  0  3  4

9  1  16.5  -2  53  1

1  1  16.5  3  10  0  1

14  1  23.499  1
```

Alternately:

staff 1

clef 1 1.5

meter 1 9 0 3 4

p 1 16.5

note 1 16.5 3

bar 1 23.5

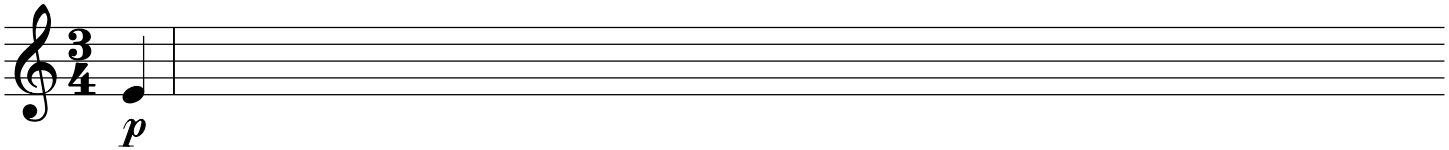
Data Ordering

- Items can come in any order:

```
8   1    0.000   0    0 200
3   1    1.500
18  1    8.999   0    3   4
9   1   16.499  -2   53   1
1   1   16.499   3   10   0  1
14  1   23.499   1
```

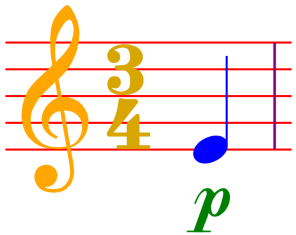
```
3   1    1.500
14  1   23.499   1
9   1   16.499  -2   53   1
1   1   16.499   3   10   0  1
18  1    8.999   0    3   4
8   1    0.000   0    0 200
```

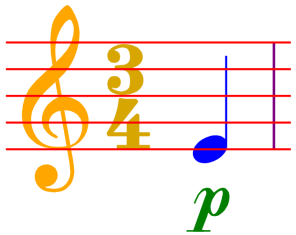
- Both versions produce the graphical music notation:



- Item order in data controls print order (in SCORE 4 and earlier):

Staff on bottom

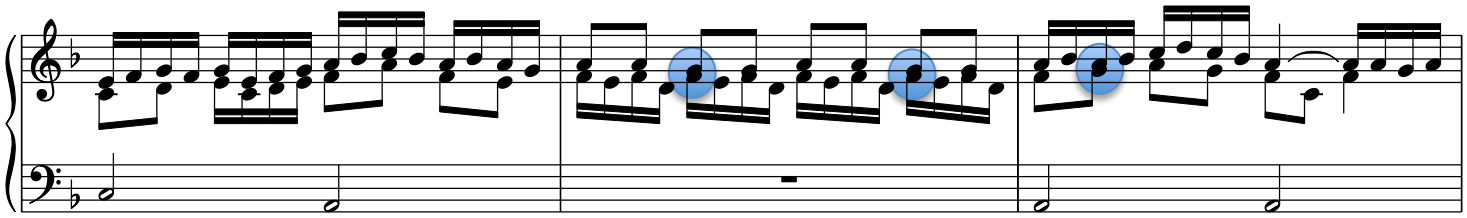




Staff on top

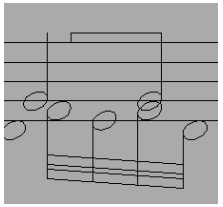
- In command mode “OS” orders from left-to-right on each staff (sort by P4;P3).
- “OH” orders everything by P3 value only.

HW Example 4 Cleanup

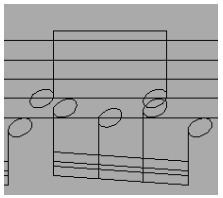


- Notational errors: need to offset notes in separate voices to make both visible.

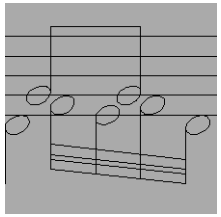
* Change P10 of first note in top voice to 20 (offset one notehead to left):



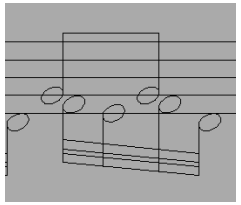
* Change P14 of beam in top voice to 20 (offset one notehead to left):



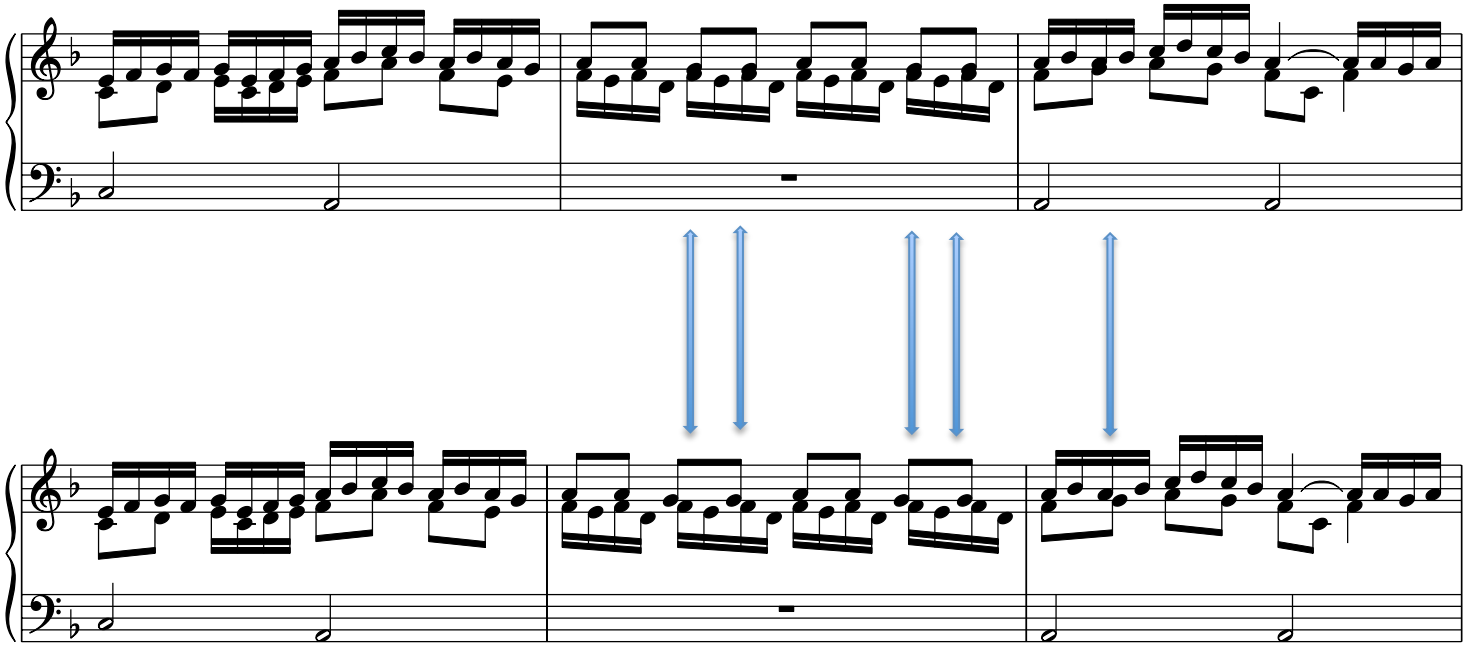
- Do same for next note in voice, change P15 to 10 on beam:



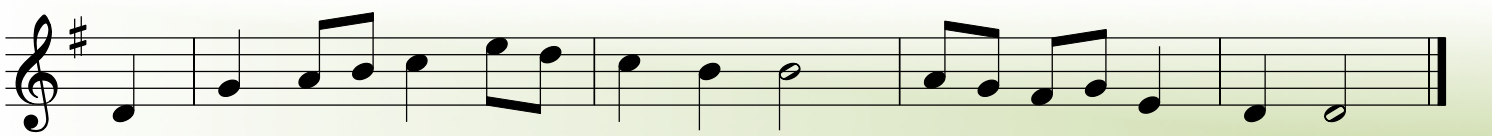
- Re-run LJ command to space correctly:



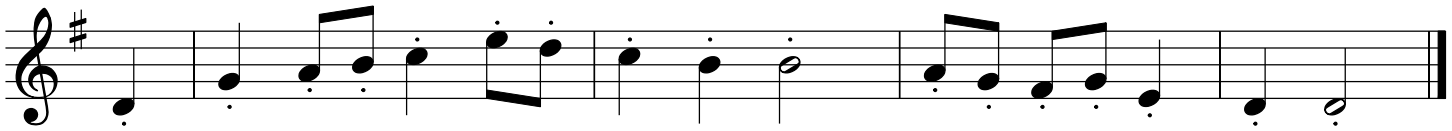
HW Ex#4 final version



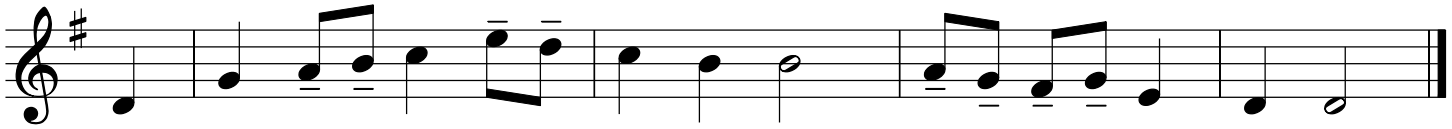
Conditional Commands



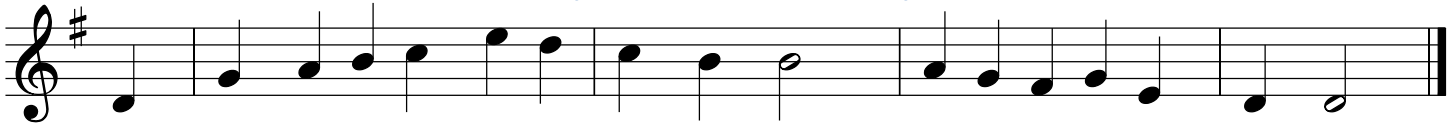
If p1=1 then p11=7 (if note then set articulation to staccato)



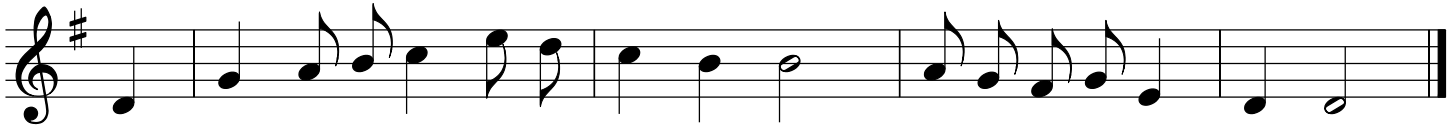
If p1=1 and p7=0.5 then p11=6 (if eighth-note then set articulation to tenuto)



If p1=6 then del (delete all beams)



If p1=1 and p7=0.5 then p9=1 (put a flag on every eighth note)



Saving ASCII Parameter List

- Type “PMX” then enter, then a filename to save parameter list in a text file
- Traditional file ending is .PMX which means “Parameter MatriX”.
- Also .TXT ending can be used (easier to open in text editors).
- To load back into SCORE editor, type “RE file.pmx”

- .MUS files are equivalent to PMX files, but data is stored in a binary format.
- Save .MUS files with the “SA file.mus” command.
- Load .MUS files with the “Get file.mus” command.

Some Editing Tips

- Refer to the reference manual for documentation about each item parameter.
- Press F1 while editing an object to view abbreviated information about the parameters.
- Type “?A” in command mode without quotes to list all of the commands which start with the letter A.

- Type alt-S to see the full-page layout (alt-S to exit full-page view).
- Type “SH” then “Z” to go to outline mode. Type “SHX” and “Z” to exit outline mode.
- Type “Z2” to zoom in 200%.

- Type “i” in command mode to go back to editing last item edited.
- Type “st 1 14” to start editing all barlines on staff 1 (press enter to navigate to next barline, press F2 to reverse the editing sequence).

- Type “H” to adjust the vertical height of the music
- Type “VJ” to vertically justify staves (then use H to add space between systems)