REPRESENTATION

****mint** — melodic interval representation

DESCRIPTION

The ****mint** representation provides a means for characterizing sequential (melodic) pitch distances. The ****mint** representation permits the encoding of four types of data tokens: interval tokens, pitch offsets, rests, and barlines.

Interval tokens consist of up to three component parts: (1) interval direction, (2) diatonic interval size, and (3) interval quality. The interval direction is signified by a leading plus sign (+) for ascending motion, or a leading minus sign (-) for descending motion. No special signifier is provided to denote unison motion. Note that interval direction information is optional, and so is not a mandatory aspect of the ****mint** representation.

The diatonic interval size is signified by integer values — 1 for unison, 2 for second, 3 for third, 11 for eleventh, and so on.

Interval qualities are signified as follows: the upper-case letter 'M' for major intervals, lower-case 'm' for minor intervals, upper-case 'P' for perfect, lower-case 'd' for diminished, upper-case 'A' for augmented. Doubly-diminished and doubly-augmented intervals are represented by 'dd' and 'AA' respectively. Triply- and quadruply- diminished or augmented intervals are similarly represented by character repetition, e.g. 'AAA'. Note that interval quality information is optional, and so is not a mandatory aspect of the ****mint** representation.

The normal or canonical order for data elements in a ****mint** interval token is as follows: (1) direction of interval motion, (2) diatonic interval size, (3) interval quality. Note that more than one interval token may appear within Humdrum multiple-stops.

Pitch offsets indicate initial or starting absolute pitches from which successive pitch intervals arise. Pitch offsets are optional and need not appear in a ****mint** representation. Pitch offsets are distinguished by square brackets. Within the square brackets appears a pitch designation using any one of the following pitch-related representations: ****kern**, ****pitch**, ****solfg** or ****Tonh**. For example, the following ****mint** pitch offsets are considered equivalent: 'b' (****kern**), 'B5' (****pitch**), 'si5' (****solfg**), 'H5' (****Tonh**). Where necessary, several pitch offsets may appear as a Humdrum multiple-stop.

Rests are denoted by the lower-case letter 'r'.

Barlines are represented using the "common system" for barlines — see **barlines (2)**.

FILE TYPE

It is recommended that files containing predominantly `**mint` data should be given names with the distinguishing '.mnt' extension.

SIGNIFIERS

The following table summarizes the ****mint** mappings of signifiers and signifieds.

0-9	interval size signifiers; measure numbers
A	augmented interval quality
d	diminished interval quality
M	major interval quality
m	minor interval quality
P	perfect interval quality
r	rest
=	barline; == double barline
–	descending interval
+	ascending interval
;	measure pause

Summary of ****mint** *Signifiers*

EXAMPLES

The following example shows a `**pitch` spine on the left and a corresponding `**mint` spine on the right.

INPUT	OUTPUT
!! Wagner, Tristan Prelude	!! Wagner, Tristan Prelude
**pitch	**mint
*M6/8	*M6/8
A3	[A3]
=1	=1
F4	+m6
.	.
E4	-m2
=2	=2
F3 B3 D#4 G#4	-M7 -P4 -m2 +M3
*-	*-

PERTINENT COMMANDS

The following Humdrum command produces ****mint** data as outputs:

mint produces ****mint** output from ****pitch**, ****kern**, ****solfg**,

or **Tonh input

TANDEM INTERPRETATIONS

The following tandem interpretations can be used in conjunction with **mint:

meter signatures	*M6/8
key signatures	*k[f#c#]
key	*c#:

Tandem interpretations for **mint

SEE ALSO

barlines (2), **hint (2), **hint** (4), **kern** (2), **mint** (4), **solfg** (2), **Tonh** (2), **xdelta** (4), **ydelta** (4)