

Escape Sequences

FlexTalk accepts a number of special input strings, or escape sequences, which change the resulting output speech. They are commonly used to fine-tune particular sentences for specific applications such as perception tests. Vowels can be shortened, pauses lengthened, stresses changed, etc.

Note that each entire sequence must be surrounded by some white space (or the beginning of a line) and not mixed in with, among other things, punctuation.

Escape Sequences for Text Analysis Control:

!\n<class><mode>

where class is one of:

- a - addresses
- d - dates
- f - fractions
- i - measurements
- m - money
- n - proper names
- o - ordinal numbers
- p - telephone numbers
- t - times

and mode of the class detector is one of:

- o - off
- c - conservative
- r - risky

!\sb ... !\se_	Spell Mode Begin/End
!\mb ... !\me	Math Mode Begin/End
!\rb ... !\re	Raw Mode Begin/End
!\pb ... !\pe	Proofread Mode Begin/End
!\ab ... !\ae	Acronym Spell Mode Begin/End
!\eb ... !\ee	Abbreviation Expansion Mode Begin/End
!\hmv ... !\hnt	Set Numerical Hyphen Verbose/Terse Mode
!\hav ... !\hat	Set Alphabetic Hyphen Verbose/Terse Mode
!\br	Force End of Sentence
!\cb	Switch to Case Significant Mode
!\ce	Switch to Case Insignificant Mode
!\co	Show Current Setting of Text Class Detection and Text Expansion Modes
!\de	Reset All Text Class Detection and Text Expansion Modes to Defaults
!\pn	Identifies the following word as a proper noun

Escapes NOT Presuming Phrasing:

!\r<rate>, !\R<rate> sets speaking rate. <rate> is in the range 0.1 - 2.0, with 1.0 default, 1.2 for 20% slower, 0.5 for 50% faster, etc. The strings "normal", "fast", "slow", "fastest" and "slowest" are also recognized. (Roughly, "slowest" corresponds to about 85 words per minute; "normal" to about 190 words per minute; "fastest" to 355 words per minute.) The 'R' form changes rate permanently; the 'r' form only for the current major phrase

!\-	de-accent the following word
!*<tone><prominence>	accent following word with tone L*, H*, L+H*, L*+H, H+L*, or H*+L and optional prominence value
!!*<tone><prominence>	as above, but also de-accent subsequent words in the orthographic minor
!\c	cliticize the following word: i.e., de-accent it and remove any duration-influencing stresses
!\#<emphasis>	set emphasis of the following word
!\ <emphasis>	set emphasis of the boundary following the preceding word
!_	down step every non-initial pitch accent in the orthographic minor
!\@	down step the next word

<code>!\f</code>	insert a floating phrase accent
<code>!\%<pitch>, !\%%<pitch></code>	set pitch scaling; 1.0 is the normal scaling; '%%' form sets pitch permanently, '%' only for current major phrase
<code>!\C<string></code>	place <string> in the comment field of the next real word

Escapes Presuming Phrasing:

`!\{<param><value>` Set Phrase Parameters with Reset
The settings apply only to the current major phrase and are reset to prior settings after the phrase is spoken.

`!\{!<param><value>` Set Phrase Parameters without Reset
The new settings are retained after the current phrase is spoken.

sets "param" for this minor phrase, where "param" is one of the following F0 phrasal parameters with defaults (<male>, <female>):

T - minor top line (115Hz, 195Hz)
R - minor reference line (96 Hz, 165Hz)
B - minor base line (75Hz, 140Hz)
X - alternating prominences ... (60%, 60%)
P - alternating prominences ... (50%, 50%)
K - major downstep ratio (60%, 60%)
F - major final lowering ratio (90%, 90%)
C - major rate scalar (75%, 75%)
D - ratio for H* legs (40%, 40%)
E - major final raising ratio (120%, 120%)
G - end effect time (50%, 50%)
U - time fraction for H- (30%, 30%)

<code>!\p<tone><prominence></code>	Set phrase accent for current minor phrase; "tone" is high (H) or low (L) *****need value definitions.
<code>!\i<tone><prominence></code>	Set initial boundary tone for current minor phrase; "tone" is high (H) or low (L)
<code>!\b<tone><prominence></code>	Set final boundary tone for current minor phrase; "tone" is high (H) or low (L)
<code>!\s<position><csec></code>	Add silence to minor phrase at position initial (i) or final (f); interval in centiseconds
<code>!\?</code>	Put a yes/no question intonation pattern on the current minor
<code>!\/</code>	Cause a continuation rise at the end of the current minor
<code>!\us<gender>, !\uS<gender></code>	Set speaker's gender to male (m) or female (f); use 's' to change current minor phrase, 'S' for permanent change
<code>!\u<position><scale></code>	Scale back (b) or front (f) of vocal tract for this minor; use B or F to change scale permanently. 1.0 is default; > 1.0 is larger; < 1.0 is smaller.
<code>!\wH<value></code>	Controls voice aspiration ("breathiness" or "coarseness"). Values range from 0.0 upward, but larger than about 5.0 becomes unintelligible.
<code>!\WS<value></code>	Controls spectral tilt; larger values make the voice sound hushed, almost whispering.

Other Escape Sequence

Listed below are the remaining escape sequences and their functions.

<code>!\br</code>	force end of sentence regardless of punctuation,
<code>!\cb</code>	switch to case significant mode (default),
<code>!\ce</code>	switch to case insignificant mode,
<code>!\de</code>	set all text class detection modes and text expansion modes to default,

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