TVC Profile definition

A TVC Profile is loaded by EGSE SW through definition of a CSV file.

CSV file must fullfil the following definition:

Name	definition	type	id	delay_or_step_duration	axis	offset	is_200Hz_cmd	ampl_or_stepinc_or_finalpos1	finalpos2	nb_item_or_first_patt_num	nb_repet_or_last_patt_num	slope	interval_duration
Type of data	*enumerate*	*enumerate*	*int*	*float*	*enumerate*	*float*	*bool*	*float*	*float*	*int*	*int*	*float*	*float*
Field number	*0*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Definition of 1 sinus pattern	pattern	sinus	sinus_num	delay	-	offset	true	amplitude	-	nb_points	nb_repet	-	-
Definition of 1 square pattern	pattern	square	square_num	step_duration	-	offset	true	step_increment	-	nb_steps	-	-	-
Definition of 1 bang bang pattern	pattern	bangbang	bangbang_num	delay	-	offset	true	final_position	-	-	-	slope	-
Definition of 1 trapezoid pattern	pattern	trapezoid	trapezoid_num	step_duration	-	offset	true	final_position1	final_position2	-	-	slope	interval_duration

Definition of 1 sinus bloc	bloc	sinus	seq_num	delay	axis	-	-	-	-	first_pattern_num	last_pattern_num	-	-
Definition of 1 square bloc	bloc	square	seq_num	delay	axis	-	-	-	-	first_pattern_num	last_pattern_num	-	-
Definition of 1 bang bang bloc	bloc	bangbang	seq_num	delay	axis	-	-	-	-	first_pattern_num	last_pattern_num	-	-
Definition of 1 trapezoid bloc	bloc	trapezoid	seq_num	delay	axis	-	-	-	-	first_pattern_num	last_pattern_num	-	-

Readability

- blank lines are allowed to improve readability of file
- comment lines beggining with # are allowed to improve readability of file

Constraints

- *type* column only contains items of {*sinus, square, bangbang, trapezoid*} list
- *delay_or_step_duration* >= 0
- *is_200Hz_cmd* column = True
- within same pattern definition, id's must be unique (for example, two sinus pattern shall not have the same id's)

sinus patterns

- *amplitude* must be > 0
- *nb_points* must be > 0
- *nb_repet* must be > 0

square patterns

- *step_duration* > 0
- *step_increment* > 0
- *nb_steps* >= 2
- *nb_steps* is even
- *nb_steps* <= 30

- *step_duration* > 0

trapezoid pattern

- *slope* > 0
- *step_duration* >= 0
- *interval_duration* >= 0

bangbang pattern

- *slope* > 0

bloc definition

- id's must be unique
- *seq_num* >= 1
- *axis* is in {*« U », « V », « +U+V », « +U-V »*} list
- *fisrt_pattern_num* >= 0
- *last_pattern_num* >= 0
- sinus bloc: *fisrt_pattern_num* and *last_pattern_num* must exist in sinus patterns
- square bloc: *fisrt_pattern_num* and *last_pattern_num* must exist in square patterns
- bangbang bloc: *fisrt_pattern_num* and *last_pattern_num* must exist in bangbang patterns
- trapezoid bloc: *fisrt_pattern_num* and *last_pattern_num* must exist in trapezoid patterns

Fichier	Verrouillé par	Modifié(e)