USB_Focus

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Protocol, How to

USB_Focus device uses virtual serial device driver to communicate with Laptop.

Once opened this virtual serial connection you can communicate, configure and play with USB_Focus motor and temperature sensor. Details here after :

Command	Response
FAUTOM	P=wxyz LFCR + 10ms + T=+/-xy.z LFCR
Purpose : starts temperature compensation automated mode	

Command	Response
FMANUA	! LFCR
Purpose : stops automated mode	

Command	Response
FPOSRO	P=vwxyz LFCR
Purpose : get position, vwxyz = 0 to 65535	

Command	Response
FTMPRO	T=+/-xy.z LFCR
Purpose : get temperature in °C	

Command	Response
Innnnn	* LFCR
Purpose : moves nnnnn steps (max 65535) IN	

Command	Response
Onnnnn	* LFCR
Purpose : moves nnnnn steps (max 65535) OUT	

Command	Response
FREADA	A=0xyz LFCR
Purpose : get temperature compensation coefficient, xyz = 0 to 999 steps/°C	

Command	Response
FTxxxA	A=x LFCR
Purpose : get temperature compensation coefficient sign, x=0 (negative), x=1 (positive)	

Command	Response
FZSIGn	DONE LFCR
Purpose : set temperature compensation coefficient sign, n=0 (negative), n=1 (positive)	

Command	Response
FLXnnn	DONE LFCR
Purpose : set temperature compensation coefficient, nnn = 000 to 999	

Command	Response
SEERAZ	DONE LFCR
Purpose : Reset parameters to default values	

Command	Response
SGETAL	C=n-n-n-nnn-nnn-nnnn-nnnnn
Purpose : get all parameters value (C=[rotation]-[stepmode]-[motor speed]-[Temp coeff]-[Temp comp mini]-[fw version]-[maxpos])	

Command	Response
SMAnnn	DONE LFCR
Purpose : set minimum number of steps over which motor will move in temp compensation mode. nnn = 0 to 999	

Command	Response
Mnnnnn	DONE LFCR
Purpose : set parameter Max position, nnnnn = 0 to 65535	

Command	Response
SMO00n	DONE LFCR
Purpose : set parameter Motor speed n = 2 to 9 (4 by default)	

Command	Response
SMROTH	
Purpose : set parameter motor clockwise rotation	

Command	Response
SMROTT	
Purpose : set parameter motor anti-clockwise rotation	

Command	Response
SMSTPF	
Purpose : set parameter motor in full step	

Command	Response
SMSTPD	
Purpose : set parameter motor in half step	

All commands are 6 digits. For example : I00100 moves 100 steps (or half steps) intra focal.