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IFW

Intelligent Filter Wheel
Serial Interface Protocol

(valid for IFW firmware version 2.01 and above)

Syntax	*Variable Definitions*	*Function*	*Return / Response*
WSMODE	*none*	*Establish serial connection*	!
WGOTO*x*	*where x = 1 .. 5 for wheels A ..E* *where x = 1 .. 8 for wheels F..H*	*Select filter position*	* *(after move)*
WFILTR	*none*	*Query filter position*	*x, where x = 1..8*
WHOME	*none*	*Home filter wheel*	*y, where y = A..H*
WIDENT	*none*	*Query filter wheel*	*y, where y = A..H*
WC$n_1n_2n_3n_4$	*n_1n_2 = 03..22, number of steps to adjust in CW direction.* *n_3n_4 = 03..22, number of steps to adjust in CCW direction.*	*Filter wheel centering adjustment, allows an adjustment of nn steps in each clockwise (CW) and counter clockwise (CCW) directions.*	***CW=**n_1n_2,* *where n_1n_2 = 03..22* ***CCW=**n_3n_4* *where n_3n_4 = 03..22*
WLOAD*y* * n_1 .. n_{40} or n_{64}	*where y = A .. E* *where $n_{1..40}$ or $n_{1..64}$ = ascii filter descriptions depending on wheel ID* *A..E uses $n_{1..40}$ and* *F..H uses $n_{1..64}$*	*Load filter wheel data* *Define filter data 1..5 for 5-position wheels (Wheel ID = A..E) or Define filter data 1..8 for 8-position wheels (Wheel ID = F, G, H)*	! (when load is complete) *see above*
WREAD		*Read current filter wheel data*	*$n_{1..40}$ or $n_{1..64}$ = ascii filter descriptions 1 through 5 or 1 through 8 depending on Wheel ID.*
WEXITS	*none*	*Terminate serial connection*	***END***