

TCF-S Temperature Compensating Focuser Serial Interface Protocol

(Valid for TCF-S PIC versions 2.10 and higher)

<u>SYNTAX</u>	<u>Variable Definitions</u>	<u>Function</u>	<u>Return / Response</u>
FMODE	<i>none</i>	<i>Establish serial connection</i>	!
FAMODE	<i>none</i>	<i>Select Auto-A mode</i>	A
FBMODE	<i>none</i>	<i>Select Auto-B mode</i>	B
FI <i>nnnn</i>	<i>where nnnn = number of steps to move, [valid input: 0000 to 7000]</i>	<i>Move focuser IN by nnnn steps, [absolute position value decreases]</i>	*
FO <i>nnnn</i>	<i>where nnnn = number of steps to move, [valid input: 0000 to 7000]</i>	<i>Move focuser OUT by nnnn steps, [absolute position value increases]</i>	*
FCENTR	<i>none</i>	<i>Move focuser to Center position [absolute value 3500]</i>	CENTER
FPOSRO	<i>none</i>	<i>Query focuser position</i>	P=<i>nnnn</i>
FTMPRO	<i>none</i>	<i>Query temperature</i>	T=<i>nnnn</i>
FSLEEP	<i>none</i>	<i>Put focuser in low power mode.</i>	ZZZ
FWAKUP	<i>none</i>	<i>Re-establish full power mode.</i>	WAKE
FREADA	<i>none</i>	<i>Query focuser temperature coefficient or slope for Auto-A mode.</i>	A=0<i>nnn</i>,
FREADB	<i>none</i>	<i>Query focuser temperature coefficient or slope for Auto-B mode.</i>	B=0<i>nnn</i>,
FLA <i>nnn</i>	<i>where nnn = slope* for Auto-A mode.</i>	<i>Load focuser temperature coefficient for Auto-A.</i>	DONE
FLB <i>nnn</i>	<i>where nnn = slope* for Auto-B mode.</i>	<i>Load focuser temperature coefficient for Auto-B.</i>	DONE
FFMODE	<i>none</i>	<i>Free focuser from serial mode.</i>	END

* A typical temperature coefficient or slope for a 10" SCT at f/10 should be about 100.