Thermal 3 vs Thermal 2 Parameters – Parameter List by Subsystem – Field Access

Subsystem	TH2 Parameter	What it does	TH3 Parameter	What it does
BBS	**bbs maximumerror**	Configure the maximum allowable beam-balance error	**bbs maximumerror**	Configure the maximum allowable beam-balance error
BPD	**bpd holdcurrent**	Configures the beam-pointing actuator hold current		
			bpd ab	Input weighting of the proportional gain for the PID controller for laser A
			bpd aki	Integral gain for the PID controller for laser A
			bpd akp	Proportional gain for the PID controller for laser A
			bpd ascendoffseta	Ascending offset for the "A" beam-pointing actuator
			bpd ascendoffsetb	Ascending offset for the "B" beam-pointing actuator
			bpd ascendslopea	Ascending slope for the "A" beam-pointing actuator
			bpd ascendslopeb	Ascending slope for the "B" beam-pointing actuator
			bpd b	Input weighting of the proportional gain for the PID controller for the centroid
			bpd bb	Input weighting of the proportional gain for the PID controller for laser B
			bpd bki	Integral gain for the PID controller for laser B
			bpd bkp	Proportional gain for the PID controller for laser B
			bpd dbpsconfig	Differential beam-pointing sensor configuration
			bpd descendoffseta	Descending offset for the "A" beam-pointing actuator
			bpd descendoffsetb	Descending offset for the "B" beam-pointing actuator
			bpd descendslopea	Descending slope for the "A" beam-pointing actuator
			bpd descendslopeb	Descending slope for the "B" beam-pointing actuator
			bpd diffcal	Calibration factor for the differential beam-pointing sensor
			bpd doffset	Differential offset for the for the beam-pointing control loop
			bpd ki	Integral gain for the PID controller for the centroid
			bpd kp	Proportional gain for the PID controller for the centroid
			bpd offset	Position offset for the beam-pointing control loop
			bpd psdoffset	PSD offset for the PSD sensor
			bpd sensormode	Sets the sensor mode of the beam-pointing system
			bpd xtalkab	Crosstalk co-efficient for the differential beam-pointing sensor
			bpd xtalkba	Crosstalk co-efficient for the differential beam-pointing sensor
			bpd xtalkdira	Crosstalk co-efficient for the differential beam-pointing sensor
			bpd xtalkdirb	Crosstalk co-efficient for the differential beam-pointing sensor

FOC	**foc actmode**	A variable used to choose "current control" when set to zero, or "force control" when set to one		
	foc edgespotwidth	Specifies the edge detect spot width in um, used for featureless edge detection		
	foc tfuture	The force control algorithm requires an estimate of where the actuator will be in the future. The tfuture parameter determines how far into the future the algorithm will look. The value of this parameter is in milliseconds, and depends on the actuator.		
			foc Bandwidth	Closed-loop position servo bandwidth
			foc CurrentLimit	Current ljmit of voice coil lens tube actuator
			foc DmodSync	Focus laser demodulator delay
			foc ForceConstant	Actuator Focus Constant
			foc LaserFreq	Focus laser frequency
	foc lpos	Specifies the position (in microns) of the final objective lens	**foc lpos**	Focus lens position in ‘fixed’ mode
	foc offset	Adjusts for differences between 'best' image focus and that measured by the focus sensor	**foc Offset**	Focus offset in microns
			foc PayloadMass	Mass of lens tube assembly
			foc PositionSensitivity	Lens tube position sensitivity
			foc TransmitGain	Focus laser power gain to compensate for transmissivity
HIF	**hlc brt**	Delay required before initiating a beam-balance	**hlc brt**	Delay required before initiating a beam-balance
	hlc lrt	Delay required before launching the first image	**hlc lrt**	Delay required before launching the first image
	hlc sssa	Component of sub-scan shift adjust dependent on the exposure head	**hlc sssa**	Component of sub-scan shift adjust dependent on the exposure head
IBS			**ibs maxumumerror**	Configure the maximum allowable internal balance error
LDD	**ldd laserontime**	The laser on time for the laser diode		
	ldd nominalcurrent	The nominal current of the laser diode		
LVD	**lvd strokeoffset**	Configure the pixels used for plotting		
	lvd strokewidth	Configure the pixels used for plotting		

Subsystem	TH2 Parameter	What it does	TH3 Parameter	What it does
MED	**med <media index> beamcurve**	The target curve for the beam-balance	**med <media index> beamcurve <polarity>**	The target curve for the beam-balance
			med <media index> beampiston	Link the target profiles for the beam-balance
	med <media index> beamslope	The target slope for the beam-balance	**med <media index> beamslope <polarity>**	The target slope for the beam-balance
	med <media index> colour	The media colour for the identifying media	**med <media index> colour**	The media colour for identifying media
	med <media index> drumspeed	The drum speed for the media	**med <media index> drumspeed**	The drum speed for the media
	med <media index> edgesr	The surface reflectivity of the media when the head is in edge detect mode		
	med <media index> focuslasermode	The focus laser mode for the media		
	med <media index> focusmode	The focus mode for the media	**med <media index> focusmode**	The focus mode for the media
			med <media index> focuspower	The focus laser power reaching the surface of the media
			med <media index> imagemode	The image mode for identifying media
	med <media index> laserpower	The write laser power for the media	**med <media index> laserpower**	The write laser power for the media
			med <media index> mdiff	The diffusivity of the media
	med <media index> name	The media name for identifying media	**med <media index> name**	The media name for identifying media
	med <media index> rcvrgain	The focus laser receiver gain for the media	**med <media index> rcvrgain**	The receiver gain for the media
	med <media index> scorr <spot pair>	The stroke correction table for the media	**med <media index> scorr <polarity / spot quad>**	The stroke correction table for the media
	med <media index> sd	The surface depth of the media	**med <media index> sd**	The surface depth of the media
	med <media index> sensitivity	The sensitivity for the media	**med <media index> sensitivity**	The sensitivity for the media
	med <media index> sensitivity adjust	The sensitivity adjustment for the media	**med <media index> sensitivity adjust**	The sensitivity adjustment for the media
	med <media index> stroke <spot pair>	The stroke table for the media	**med <media index> stroke <polarity / spot quad>**	The stroke table for the media
	med <media index> strokeoffset	Configure the pixels used for plotting	**med <media index> strokeoffset**	Configure the pixels used for plotting
	med <media index> strokewidth	Configure the pixels used for plotting	**med <media index> strokewidth**	Configure the pixels used for plotting
	med <media index> surfacevelocity	The surface velocity for the media	**med <media index> surfacevelocity**	The surface velocity for the media

SYS			**sys annealaccrual**	The accrual time for the light valve annealing
			sys annealsetpoint	The setpoint time for the light valve annealing
	sys comment	A comment that applies to the exposure head	**sys comment**	A comment that applies to the exposure head
	sys dpi	The maximum DPI of the exposure head	**sys dpi**	The maximum DPI of the exposure head
	sys ignore laser	Ignore write laser commands from the host		
			sys imagedata	Configure the source for the image data
			sys imagetiming	Configure the source for the image timing
			sys laseranneal	Enable/disable the light valve annealing
	sys lasercurrent	Configure the write laser current in current mode		
	sys laserenable	Enable/disable the write laser	**sys laserenable**	Enable/disable the write laser
			sys laserstandby	Enable/disable the write laser standby
	sys plotenable	Enable/disable plotting	**sys plotenable**	Enable/disable plotting
			sys polarity	Configure the polarity type
	sys powerloop	Enable/disable the write laser power control loop		
	sys powermode	Configure write laser power or current mode		
	sys powermonitor	Enable/disable the write laser power monitor		
			sys ratedpower	Set rated power for the exposure head
	sys serialnumber	The serial number of the exposure head	**sys serialnumber**	The serial number of the exposure head
			sys standbyperiod	Period for the write laser standby
			sys standbythreshold	Threshold for the write laser standby
			sys standbytimeout	Timeout for the write laser standby
			sys tpgpattern	Configure the TPG pattern