

all commands begin with '#' (0x23) and end with '↵' (0x0D)

If a command is successfully sent, the camera returns ACK (0x06), else NAK (0x15)

Command	Parameter	Return value	Comment
#N	None	1846-ST-***	Serial Number
#f	None	B****,C****,F****	Firmware version
#B	(*)	None	Baud Rate ID (0..4) = 9600 (default), 19200, 38400, 57600, 115200
#G	None (*)	0 .. 5 None	Gain ID (0..5) = 1, 1.5, 2, 2.25, 3, 4
#F	None (*)	0 .. 1 None	FPN Correction ON(1) or OFF(0)
#L	None (*)	0 .. 1 None	LUT ON(1) or OFF(0)
#l	↵*↵*↵ .. ↵*↵	None	Update LUT ⁽¹⁾
#S	None (*)	0 .. 1 None	External Synchronisation ON(1) or OFF(0)
#P	None (*)	0 .. 1 None	Synchronisation Polarity High(1) or LOW(0)
#m	None (*)	0 .. 1 None	Synchronisation Mode Level(1) or Edge(0)
#s	None (*)	0 .. 1 None	Synchronisation Source FrameGrabber(1) or Cable(0)
#R	None (****,****) (****,****,****,****)	x,y,w,h w,h None	Frame Format (XStart, YStart, XWidth, YHeight) ⁽²⁾
#r	None (*****)	FrameRate None	Frame Rate (Frame per second)
#A	None	FrameRateMax	Maximum Frame Rate (Frame per second) ⁽³⁾
#e	None (****)	ExposureTime None	Exposure Time (μs)
#a	None	ExposureTimeMax	Maximum Exposure Time (μs) ⁽⁴⁾
#D	None (*)	0 .. 1 None	Dual Slope ON(1) or OFF(0)

#d	None (*****)	DualSlopeTime None	Dual Slope Time (μs)
#T	None (*)	0 .. 1 None	Tripple Slope ON(1) or OFF(0)
#t	None (*****)	TrippleSlopeTime None	Tripple Slope Time (μs)
#C	None (*)	0 .. 4 None	Camera Link Mode ID ⁽⁵⁾ (0..4) = 2taps*8bits, 2taps*10bits, 4taps*10bits, 8taps*8bits, 10taps*8bits
#I	None (*)	0 .. 1 None	Test Image Mode ON(1) or OFF(0)
#v	None (*)	0 .. 7 or A .. J None	Current Mode Load UserMode (0..7) or FactoryMode ⁽⁶⁾ (a..j)
#V	None (*)	0 .. 7 or A .. J None	Set StartUp Mode ⁽⁶⁾
#u	(*)	0 .. 7	Record on User Mode
#o	None	None	Reset Camera
#z	None (***)	BlackLevelValue None	Black Level (0 .. 255)
#c	None (*)	0 .. 2 None	Camera Link Data Frequency ID (0..2) = 66Mhz, 75MHz, 85MHz
#h	None (*)	0 .. 3 None	Number of ROI (1 .. 4)
#H	(*) (*,****,****)	x,y None	ROI Xstart and Ystart
#k	None (*)	0 .. 6 None	Non Destructive Readout (1 .. 7 Frames)
#E	None	Last Error	Last Error
#Q	None (*)	0 .. 3 None	Invert in X and Y direction (0..3) : None, Invert X, Invert Y, Invert X and Y
#K	(*)	None	Calibration mode : 0 to calibrate 2nd CL driver, 1 to calibrate 3rd CL driver
#M	(1,*) (0)	None	Enable moving window, set y step Disable moving window
#X	None	List of parameters	Camera State
#Z	None (*)	0 .. 1 None	Frame Stamping Mode

(1) Update LUT Command needs 1024 values (0..255). The first value replaces the value 0, the second value replaces the value 1, etc... The last value replaces the value 1023.

(2) XStart must be set modulo 8, XWidth is modulo "number of taps"

(3) Maximum Frame Rate changes with Frame Format and Camera Link parameters

(4) Maximum Exposure Time changes with Frame Rate.