

## Sync device data packet format

0	1	2	3	4			
uint8 <b>cmd</b>					<b>Description</b>	<b>Mode</b>	<b>Reply</b>
uint8 <b>'L'</b>	uint8 <b>lasers</b>	bool <b>ALEX</b>			Set <u>L</u> aser shutter states	CS	OK\n
uint8 <b>'A'</b>	uint32 <b>acq_period_us</b>				Set <u>A</u> cquisition period between frames/bursts	S	OK\n
uint8 <b>'E'</b>	uint32 <b>exp_time_us</b>				Set laser <u>E</u> xposure time	CS	OK\n
uint8 <b>'C'</b>	uint32 <b>n_frames</b>				Start <u>C</u> ontinuous imaging	C	OK\n
uint8 <b>'D'</b>	uint32 <b>shutter_delay_us</b>				Set shutter <u>D</u> elay	CS	OK\n
uint8 <b>'I'</b>	uint32 <b>cam_readout_us</b>				Set camera readout <u>I</u> nterval	CS	OK\n
uint8 <b>'S'</b>	uint32 <b>n_frames</b>				Start <u>S</u> troboscopic imaging	S	OK\n
uint8 <b>'M'</b>					<u>M</u> anually open laser shutters	NA	OK\n
uint8 <b>'Q'</b>					Stop acquisition ( <u>Q</u> uit)	CS	OK\n
uint8 <b>'R'</b>	uint8 <b>addr</b>				<u>R</u> ead register	NA	uint8 <b>value</b>
uint8 <b>'W'</b>	uint8 <b>addr</b>	uint8 <b>value</b>			<u>W</u> rite register	NA	
0	1	2	3	4			

### Legend

Normal font shows data type (uint8, uint16).

Bold font shows member names.

Gray hatched areas are filled with ZERO.

Modes: C - continuous, S - stroboscopic (includes ALEX and timelapse)

### Notes

Each data packet is always 5 byte long. If shorter than that, pad it with zeros.

On startup, the system prints *Synchronization device is ready. Firmware version: <x.y.z>\n*

Wrong formatted packets are silently ignored (wrong command or too short data packet).

If a command has wrong argument values, the reply is *ERR\n* (NOT IMPLEMENTED)

Once the data acquisition is completed, the reply is *DONE\n*