

Data packet format

									Member	Description	Reply							
uint8 cmd																		
uint8 bytes[0]	uint8 bytes[1]	uint8 bytes[2]	uint8 bytes[3]	uint8 bytes[4]	uint8 bytes[5]	uint8 bytes[6]	uint8 bytes[7]	uint8 bytes[8]	uint8 bytes[9]									
uint8 'R'	uint8 addr								struct Register R	<u>R</u> ead register	uint8 value							
uint8 'W'	uint8 addr								uint8 value	struct Register R	<u>W</u> rite register	OK\n						
uint8 'F'	uint16 fluidics_delay_ms								struct Fluidics F	Set <u>F</u> luidics injection delay	OK\n							
uint8 'L'	uint8 active								uint8 idle	bool ALEX	struct Shutter L	Set <u>L</u> aser shutter states	OK\n					
uint8 'C'	uint16 exp_time_n64us								uint16 n_frames		struct Timer1 T	Start <u>C</u> ontinuous timer	OK\n					
uint8 'S'	uint16 exp_time_n64us								uint16 n_frames		uint16 interframe_ time_n64us	uint16 timelapse_ delay_s	struct Timer1 T	Start <u>S</u> troboscopic timer	OK\n			
uint8 'E'	uint16 exp_time_n64us								struct Timer1 T							Change <u>E</u> xposure time	OK\n	
uint8 'Q'										Stop timer (<u>Q</u> uit)	OK\n							
i	0								1	2	3	4	5	6	7	8		

Legend

Color shows belonging to a particular data structure.

Normal font shows data type (uint8, uint16).

Bold font shows member names.

Bold italic shows constant values.

Gray hatched areas are filled with ZERO.

Notes

Each data packet is always 9 byte long. If shorter than 9 bytes, pad it with zeros.

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

Wrong formatted packets are silently ignored (wrong command or shorter than 9 bytes).

If a command has wrong arguments, the reply is *ERR\n*