

## 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*

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