

KBSW180160 Control Bus Protocol

ControlBus slamwarepdfControlBus [ControlBus](#)

Table 1 Request CMD Table

u8	u8	u8	u8[]	u8	
Flag	Length	<i>CMD</i>	Payload[n]	Checksum	Control Bus Packet
0x10	Length[7:0]	CMD	Data	checksum	----Standard Frame
0x50	Length[15:0]	CMD	Data	checksum	----Long Frame

CMD	NAME	DESCRIPTION	PAYLOAD[n]
0x00	SYNC		
0x01	ECHO	ECHO Slave	
0xF8	CTRL_BUS	Control BusPayload(Table 4).	Control Bus Table 4
0x02 – 0x0F	Reserved		NA

Table 2 Response CMD Table

u8	u8	u8	u8[]	u8	
Flag	Length	<i>Response</i>	Payload[n]	Checksum	Control Bus Packet
0x10	Length[7:0]	Resp	Data	checksum	----Standard Frame
0x50	Length[15:0]	Resp	Data	checksum	----Long Frame

Response	NAME	DESCRIPTION	PAYLOAD[n]
0x00	SYNC		
0x01	ECHO	ECHO	
0x02	OK	<OK>	
0x03	ERROR	<Error>(Table 3)	Table 3
0xFF	INVALID	<Invalid>	
	Reserved		NA

Table 3 Error Code Table

Error	DESCRIPTION
0x10	Slave
0x20	Slave
0x40	
0x8000	CMD Slave
0x8001	
0x8002	

Table 4 Control Bus Request Table

u8	u8	u8	u8	u8[]	u8	
Flag	Length	CMD	<i>Request</i>	<i>Data[n]</i>	Checksum	Control Bus Packet:
0x10	Length[7:0]	0xF8	CTRL_BUS_CMD	Data	checksum	----Standard Frame
0x50	Length[15:0]	0xF8	CTRL_BUS_CMD	Data	checksum	----Long Frame

Request	NAME	DESCRIPTION	Data[n]
0x10 *	CONNECT_BASE		u8
0x20 *	GET_BASE_CONF		
0x21	GET_BASE_CONF_ADV	SLAMWARE 0x8000 0x20	
0x30 *	GET_BASE_STATUS		
0x31 *	GET_BASE_MOTOR_DATA		
0x32 *	GET_BASE_SENSOR_DATA		
0x33 *	GET_BASE BUMPER_DATA		
0x34 *	GET_CHARGER_DATA		u8
0x35	GET_AUXILIARY_ANCHOR		
0x40 *	SET_BASE_MOTOR		s32[4]
0x41 *	SET_V_AND_GET_DEADRECKON	Deadreckon	Xs32 Ys32 s32
0x50 *	POLL_BASE_CMD	SLAMWARE CoreSLAMWARE Core	Table 5
0x5F *	POLL_BASE_ANS_CMD		
0x60 *	SEND_EVENT	SLAMWARE CORE.(Table 6)	u8Table 6
0x90 *	HEALTH_MGMT		0x01

*

Table 5 Control Bus External CMD Table

u8	u8	u8	u8	u8[]	u8	
Flag	Length	Response	<i>CMD</i>	<i>Data[n]</i>	Checksum	Control Bus Packet:
0x10	Length[7:0]	0x02	CTRL_BUS_CMD	Data	checksum	----Standard Frame
0x50	Length[15:0]	0x02	CTRL_BUS_CMD	Data	checksum	----Long Frame

CMD	NAME	DESCRIPTION	Data[n]
0x51	GET_INFO	SLAMWARE CORE	
0x52	RESET_WIFI	SLAMWARE CORE	
0x53	FW_UPGRADING	SLAMWARE CORE	
0x80	START_SWEEP	()	
0x81	STOP_SWEEP	()	
0x82	SPOT_SWEEP	()	
0x90	GET_HEALTH		
0xA0	MOVE_FORWARD		
0xA1	MOVE_BACKWARD		
0xA2	TURN_LEFT		
0xA3	TURN_RIGHT		

0xAF	CANCEL_ACTION		
0xB0	GET_AUXILIARY_ANCHOR		

Table 6 Slamcore System Event Table

CMD	NAME	DESCRIPTION
0x61	LIDAR_CONN_FAIL	LIDAR
0x62	LIDAR_RAMPUP_FAIL	LIDAR
0x63	SYSTEM_UP_OK	
0x64	FIRMWARE_UPDATE	
0x65	CORE_DISCONNECT	
0x66	FIRMWARE_UPDATE_OK	
0x80	START_SWEEP	()
0x81	END_SWEEP	()