

Communication Protocol Format Specification

Version: V 1.0.1

Definitions and Declarations

- A. Numbers in the text are represented in 16-digit except after the decimal number (dec)
- B. Express integers in terms of high-bit bytes followed by low-bit bytes

Command and Answer Structure

Command

Field	STX	INX	LEN	DEVICE	CMD	DATA	CHK
Detail	STX	Index	LH LL	DH DL	CH CL	D1/D2/../Dn	Xor
Size(byte)	1(dec)	1(dec)	2(dec)	2(dec)	2(dec)	n(dec)	1(dec)

Field description:

STX: Header, STX fixed to AA

INX: Sequence number to send the command (range 00-FF, incremental each time)

LEN: Message content length, which is the sum of the length of DEVICE+CMD+DATA; LH high-bit bytes, LL low-bit bytes;

DEVICE: Device address, default to 0000;

CMD: Instruction code;

DATA: User data domain;

CHK: Message check bits, exclusive OR check for INX, LEN, DEVICE, CMD and DATA;

Answer

Field	STX	INX	LEN	DEVICE	CMD	STATUS	DATA	CHK
Detail	STX	Index	LH LL	DH DL	CH CL	status	D1/D2/../Dn	Xor
Size(byte)	1(dec)	1(dec)	2(dec)	2(dec)	2(dec)	1(dec)	n(dec)	1(dec)

Field description:

STX: Same as STX in the command field above;

INX: Same as INX in the command field above;

LEN: The length of DEVICE+CMD+STATUS+DATA; LH high-bit bytes, LL low-bit bytes;

DEVICE: Same as DEVICE in the command field above;

CMD: Same as CMD in the command field above;

STATUS: Instruction execution status;

DATA: Answer data fields;

CHK: Message check bits, exclusive OR check for INX, LEN ,DEVICE , CMD and DATA;