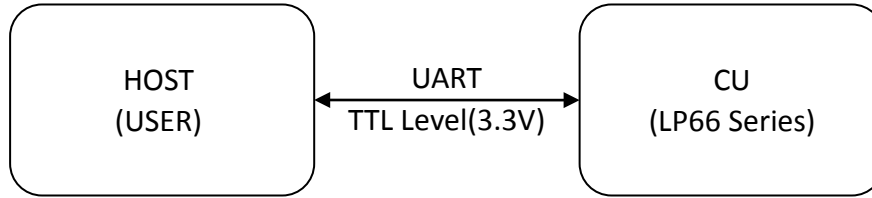


## Connection Interface and Communication Protocol of LP66 Series

### 1. Connection Diagram



UART(TX,RX) BaudRate:115200,1 Stopbit,No Parity

### 2. Connection Interface

Pin1:CU 5V

Pin2:CU GND Connect host GND

Pin3:CU RX Connect host TX

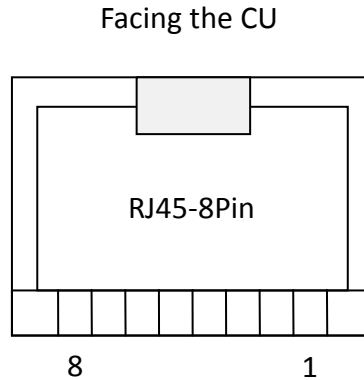
Pin4:CU TX Connect host RX

Pin5:Not Connect

Pin6:Not Connect

Pin7:Not Connect

Pin8:Not Connect



### 3. Communication Protocol

#### 3.1 Data Frame Structure

uint8	Head, 0xFA
uint8	ID
uint8 x N	Data Segment
uint16	Frame Counting
uint8	Frame Check, XOR all the characters except the Head and Tail
uint8	Tail, 0xFD

Note: Character 0xFE should be added in front of certain characters (0xFA, 0xFD, 0xFE) excluding the Head and Tail while it is not included in data length calculation and not take participant in Frame Check.

e.g: FEFA = FA, FEFD = FD, FEFE = FE

### 3.2 Command Format

#### a. Request Data Stream (System Data) <HOST TO CU>

FA	13	03	FF	00	64	XX	XX	XX	FD
Head	ID	SYS DATA		Time Interval		Frame Counting		Frame Check	Tail

#### b. Request Data StreamAck(System Data) <CU TO HOST>

FA	14	03	FF	00	XX	XX	XX	FD
Head	ID	SYS DATA		Success	Frame Counting		Frame Check	Tail

#### c. System Data Stream<CU TO HOST>

FA	03	XX	XX	XX	XX	XX	XX	XX	FD
Head	ID	INDEX		Height Parameter		Frame Counting		Frame Check	Tail
				8 High Byte	8 Low Byte				

#### d. Control Operation (Uplift/Stop) <HOST TO CU>

FA	17	03	01/00	XX	XX	XX	FD
Head	ID	CMD	Uplift/Stop	Frame Counting		Frame Check	Tail

#### e. Control Operation (Descent/Stop) <HOST TO CU>

FA	17	04	01/00	XX	XX	XX	FD
Head	ID	CMD	Descent/Stop	Frame Counting		Frame Check	Tail

#### f. Control Operation (Reset/End) <HOST TO CU>

FA	17	02	01/00	XX	XX	XX	FD
Head	ID	CMD	Reset/End	Frame		Frame	Tail

				Counting	Check	
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g. Move to Memory Setting1 <HOST TO CU>

FA	17	06	01	XX	XX	XX	FD
Head	ID	CMD	Move/Stop	Frame Counting		Frame Check	Tail

h. Move to Memory Setting2 <HOST TO CU>

FA	17	07	01	XX	XX	XX	FD
Head	ID	CMD	Move/Stop	Frame Counting		Frame Check	Tail

i. Move to Memory Setting3 <HOST TO CU>

FA	17	08	01	XX	XX	XX	FD
Head	ID	CMD	Move/Stop	Frame Counting		Frame Check	Tail

j. Memory Current Height to Memory Setting1 <HOST TO CU>

FA	17	20	01	XX	XX	XX	FD
Head	ID	CMD	CMD	Frame Counting		Frame Check	Tail

k. Memory Current Height to Memory Setting2 <HOST TO CU>

FA	17	21	01	XX	XX	XX	FD
Head	ID	CMD	CMD	Frame Counting		Frame Check	Tail

l. Memory Current Height to Memory Setting3 <HOST TO CU>

FA	17	22	01	XX	XX	XX	FD
Head	ID	CMD	CMD	Frame Counting		Frame Check	Tail

m. System Error <CU TO HOST>

FA	A0	XX	XX	XX	XX	FD
Head	ID	CODE	Frame Counting		Frame Check	Tail

n. System Error Ack <HOST TO CU>

FA	A1	XX	XX	XX	XX	FD
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Head	ID	CODE	Frame Counting	Frame Check	Tail
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o. Restore to Factory Settings <HOST TO CU>

FA	1D	FF	XX	XX	XX	FD
Head	ID	CMD	Frame Counting		Frame Check	Tail