

Elevator Controller Protocol (updated on 23/09/24)							
A. General Descriptions							
1	Data Format	UART or USB/RS232/RS485 to UART, 8bits, 1Stop Bit Baud Rate 9600 bit/s, ASCII, Separator: space (' ')					
2	Packet Train	Header	Identify ^[1]	Data Type ^[2]	Command	Data	Sum ^[3]
3	Example 1	#	99	1	1	-1	100
		Command the elevator go to home position.					
4	Example 2	#	99	1	1	200	301
		Command the elevator to move 250 mm from the home position.					
5	Example 3	#	99	0	4	199	302
		Read door sensor status (data in return packet = 1: opening, 0:closed)					
^[1]	Identify	Used to identify slaves board If there is more than one, default: 1					
^[2]	Data Type	Specify the type of data, 0: Read, 1: Write and 2 Return packet					
^[3]	Sum	Verify package authenticity, Sum = Identify + Data Type + Command + Data					
6	return and second return	The first return to confirm received of command and the second return occurs for commands that take time to execute, 0: fail, 1: succeed and 2: timeout					
B. Cammand Table							
7	Command	Descriptions			Data Type	Data Range	Times Return
8	0: Greet	Saying hello, is anyone there?			W	Random Integer	1
9	1: Elevator Control	Control the up and down according to relative position, unit mm, -1: home			R/W	-1, 0-500	2
10	5: Door open	10: active and other numbers: nothing			R/W	10	2
	6: Door close						
11	3: Latch Control	Control the door latch to 1: lock and 0: unlock (operate time ~200ms)			R/W	0, 1	1
12	4: Door sensor status	Read door sensor status by 1: opening and 0: closed			R	Random Integer	1