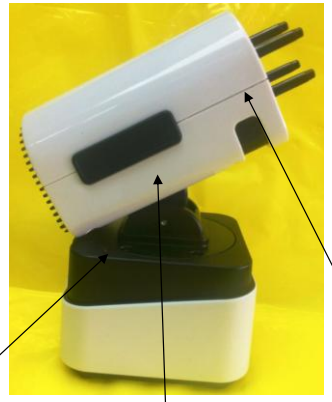
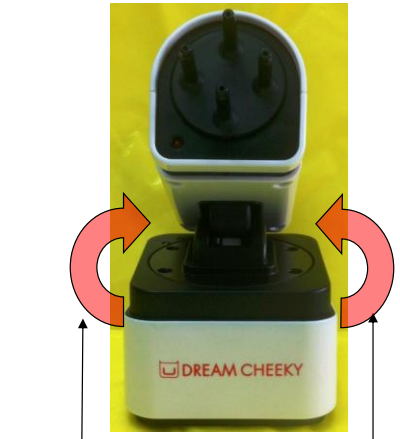
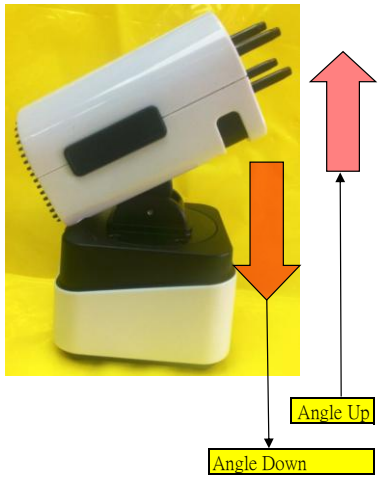
Communication Protocol V0.3R
358 iLaunch Thunder



Motor 0	Motor 1	Motor 2
Base Control	Elevation angle Control	Launcher Control
(Turn Left or Right)	(Angle Up or Down)	(Fire and switch missile)





Data Format			
Head	Data Body (Use ASCII)	CheckSum (Use ASCII)	Tail
0x0a	5Bytes	2Bytes	0x0d

Motor Control (Host --> Device)							
Data Body	Head	Byte 0	Byte 1	Byte 2	Byte 3	Byte4	CheckSum (Use ASCII)	Tail
	0x0a	Motor 0 Direction	Motor 0 Speed	Motor 1 Direction	Motor 1 Speed	Motor 2 Speed	2Bytes	0x0d
		"0"-->Turn Left ,"1"--> Turn Right	0~10 (0 is Stop)	"0"-->Angle Up ,"1"--> Angle Down	0~10 (0 is Stop)	0~10 (0 is Stop)		

Device Return (Device --> Host) (Total 9Bytes)								Reserve (Total 15Bytes)
Data Body	Head	Byte 0	Byte 1	Byte 2	Byte 3	Byte4	CheckSum (Use ASCII)	Tail	
	0x0a				Host CheckSum Status	Battery Level	2Bytes	0x0d	All Fix 0x00
		"1"-->Left Limit,"2"-->Right Limit ,other is Nothing	"1"-->Up Limit,"2"-->Down Limit, Other is nothing	"1"-->Fire, Other is nothing	"0"-->OK "1"-->CheckSumError	"0"~"F"			

Checksum calculation

ex.Turn Left speed is 5 ,and angle up speed 4,and fire speed 1

Data Format								
	Head	Byte0	Byte1	Byte2	Byte3	Byte 4	CheckSum (0xFA)		Tail
Hex Code	0x0a	0x30	0x35	0x30	0x34	0x31	0x46	0x41	0x0d
Ascii Code	LF	0	5	0	4	1	F	A	CR

CheckSum = Byte0+Byte1+Byte2+Byte3+Byte4

0x30+0x35+0x30+0x34+0x31= 0xFA