Raspblock Driver Board Agreement

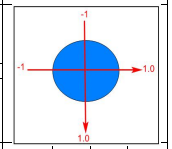
1、	Packet header	Function word	Length	Mode	Speed-P	Speed-I	Position-P	Position-I	Position-D	Yaw-P	Yaw-I	Yaw-D	checksum	Name of library function	Call library function
Speed and position PID adjustment	0xff 0xfe	0x01	9	0:Speed mode 1:Position mode	0-255	0-255	0-255	0-255	0-255	0-255	0-255	0-255	0-255		PID_Mode_control(Mode, Speed_KP, Speed_KI, Location_KP, Location_KI, Location_KD, Yaw_holdKP, Yaw_holdKI, Yaw_holdKD)

2、	Packet header	Function	Length	high 8 bits high of angle_1	low 8 bits high of angle_1	high 8 bits high of angle_2	low 8 bits high of angle_2	checksum						Name of library function	Call library function
Servo control	0xff 0xfe	0x02	4	horizontal direction	horizontal direction	vertical direction	vertical direction	0-255							Servo_control(angle_1, angle_2)
Double-	Range: 500-2500			Range: 500-1950											

2、	Packet header	Function	Length	Servo number(index)	high 8 bits high of angle	low 8 bits high of angle	checksum							Name of library function	Call library function
Servo control	0xff 0xfe	0x02	3	1~4	0	0	0-255								Servo_control_single(index, angle)
Single-control					Range:500-2500										

3、	Packet header	Function	Length	Mode	XH-XL	YH-YL	ZH-ZL	direction	checksum					Name of library function	Call library function
															Speed_axis_control(Speed_axis_X, Speed_axis_Y, Speed_axis_Z) Parameter range X:-25~25 Y:-25~25 Z:0-200
Rocker control	0xff 0xfe	0x03	8	0x01	Horizontal coordinate relative to original position	Vertical coordinate relative to original position	Rotation angle relative to original position	0b00000XYZ	0-255						
Without Self-stabilizition				Control mode without self-stable rocker	the right is positive, the left is negative Range: -25 ~ 25 (absolute value is taken)	the up is positive, the down is negative Range: -25 ~ 25 (absolute value is taken)	Clockwise is positive; counterclockwise is negative Range: 0-200	X: 0-Positive 1-negative Y: 0-Positive 1-negative Z: 0-Positive 1-negative							

Rocker picture



4、	Packet header	Function	Length	Mode	XH-XL	YH-YL	reserve1	reserve2	direction	checksum				Name of library function	Call library function
															Speed_axis_Yawhold_control(Speed_axis_X, Speed_axis_Y) Range X:-25~25 Y:-25~25
Rocker control	0xff 0xfe	0x03	8	0x03	Horizontal coordinate relative to original position	Vertical coordinate relative to original position	0	0	0b000000XY	0-255					
With Self-stabilizition				Self-stabilizition rocker mode	the right is positive, the left is negative Range: -25 ~ 25 (absolute value is taken)	the up is positive, the down is negative Range: -25 ~ 25 (absolute value is taken)			X: 0-Positive 1-negative Y: 0-Positive 1-negative						

5、	Packet header	Function	Length	Mode	A	B	C	D	reserve1	reserve2	direction	checksum		Name of library function	Call library function
Mecanum wheel control	0xff 0xfe	0x03	8	0x02					0	0	0b0000DCBA	0-255			Speed_Wheel_control(Speed_WheelA, Speed_WheelB, Speed_WheelC, Speed_WheelD)
				Wheel mode	+	+	+	+			ABCD:0-positive 1-negative				

6、	Packet header	Function	Length	Mode	XH-XL	YH-YL	ZH-ZL	direction	checksum					Name of library function	Call library function
Rocker control	0xff 0xfe	0x03	8	0x04	Horizontal coordinate relative to original position	Vertical coordinate relative to original position	Rotation angle relative to original position	0b00000XYZ	0-255						
With Self-stabilizition				Position mode	the right is positive, the left is negative	the up is positive, the down is negative	Clockwise is positive; counterclockwise is negative	X: 0-Positive 1-negative Y: 0-Positive 1-negative Z: 0-Positive 1-negative							Position_disp_control(Position_disp_X, Position_disp_Y, Position_disp_Z)

7、	Packet header	Function	Length	Switch	checksum									Name of library function	Call library function
Buzzer	0xff 0xfe	0x04	1	0/1	0-255										Buzzer_control (switch_state)
				Turn off/ Turn on											

8、	Packet header	Function	Length	Function number	checksum									Name of library function	Call library function
															Buzzer_control (switch_state)
Get the underlying data	0xff 0xfe	0x05	1	0-1~8	0-255										
				0:Start reporting 1~4:Encoder 5:Voltage 6: Pitch 7: Roll 8:Yaw 9:Close reporting										
Return:	{1:250}#														