# RaspBlock APP Remote Control Agreement

**Rocker pciture**

### 1. Mecanum wheel Mecanum wheel

| Packet header | Command word | Data separator | X | X_value | Y | Y_value | of pac |
|---|---|---|---|---|---|---|---|
| $ | 01 | , | X | -0.01~1.00 | Y | -0.01~1.00 | # |
| Eg: | $01,X-0.35Y0.99# | | | | | | |

### 2.Left and right rotation

| Packet header | Command word | Data separator | Left and right rotation | End of packet |
|---|---|---|---|---|
| $ | 02 | , | 1(left), 2(right), 3(stop) | # |
| Eg: | $02,2#   Turn right | | | |

### 3.Camera movement control

| Packet header | Command word | Data separator | Direction control | End of packet |
|---|---|---|---|---|
| $ | 03 | , | up|down|left|right|stop|Return to ce | # |
| Eg: | $03,3#   Turn left | | | |

### 4.Target tracking

| Packet header | Command word | Data separator | Color Tracking mode | End of packet |
|---|---|---|---|---|
| $ | 04 | , | 0(stop), 1~6(red|green|blue|yellow|orange |stop)7(face) | # |
| Eg: | $04,5#   Tracking orange | | | |

### 5.Voice broadcast

| Packet header | Command word | Data separator | Broadcast text | End of packet |
|---|---|---|---|---|
| $ | 05 | , | | # |
| Eg: | $05,Hello#   Boardcast Hello | | | |

### 6.Recognition

| Packet header | Command word | Data separator | aster swit | Identification type | dcast s | End of packet |
|---|---|---|---|---|---|---|
| $ | 06 | , | 0/1 | 1~3(QR code|Object|Gesture) | 0/1 | # |
| Eg: | $06,131#   Start object recognition and boardcast | | | | | |

### 7.Choose mode

| Packet header | Command word | Data separator | Mode | End of packet |
|---|---|---|---|---|
| $ | 07 | , | 0~1~2~3(surround|translation|self-stabilization) | # |
| Eg: | $07,1#   Start surrounde mode | | | |

### 8.Mecanum wheel individually controlled

| Packet header | Command word | Data separator | Wheel | Speed | End of packet | headstock | |
|---|---|---|---|---|---|---|---|
| | | | | | | Left_1(M4) | right_1(M1) |
| $ | 08 | , | 1~4(left_1,left_2,right | - | # | left_2(M3) | right_2(M2) |
| Eg: | $08,3,25#   right_1 whell forward with 25 speed | | | | | | |

### 9.Mecanum wheel be controlled together

| Packet header | Command word | Data separator | Left_1 | Left_2 | right_1 | right_2 | End of | headstock | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Left_1(M4) | right_1(M1) |
| $ | 09 | , | -25~25 | -25~25 | - | -25~25 | # | left_2(M3) | right_2(M2) |
| Eg： | $09,25,-25,25,-25#   Four wheel be controlled | | | | | | | | |

### 10.Whistle

| Packet header | Command word | Data separator | Swicth | End of packet |
|---|---|---|---|---|
| $ | 10 | , | 0/1 | # |
| Eg: | $10,1#   buzzer make sound | | | |

### 11.Autopilot

| Packet header | Command word | Data separator | Swicth | End of packet |
|---|---|---|---|---|
| $ | 11 | , | 0/1 | # |
| Eg: | $11,1#   Start Autopilot | | | |

### 12.Control speed

| Packet header | Command word | Data separator | Remote Speed / | Data separator | Max sp | End of packet |
|---|---|---|---|---|---|---|
| $ | 12 | , | 1~2 | , | 0-200 | # |
| Eg: | $12,1,25#   Remote control with max speed | | | | | |

Remote control speed:0-25   default:12
Steering speed:0-200   default：12

### 13.Position mode

| Packet header | Command word | Data separator | position_X | position_Y | positio | End of packet |
|---|---|---|---|---|---|---|
| $ | 13 | , | X | Y | Angle | # |
| Eg: | $13,X100,Y100,Z20# | | | | : XY turn 20 degrees cl | |

### 14.Interface entry mode

| Packet header | Command word | Data separator | The current interface | of packet |
|---|---|---|---|---|
| $ | 14 | , | 0-1~7 | # |
| | | | 0: exit interface send 1: remote control interface 2: Mecanum wheel 3: Choose mode 4: Target tracking 5: Recognition 6: Voice broadcast 7: Autopilot | |
| Eg: | $14,1#   Enter remote control interface | | | |

### 15.Remote control self-stabilization switch

| Packet header | Command word | Data separator | Mode | End of packet |
|---|---|---|---|---|
| $ | 15 | , | 0/1 | # |
| Eg: | $15,1#   Select the area to fix the width and height | | | |

### 16.Mobile tracking

| Packet header | Command word | Data separator | ing coordin | Data separator | Swicth | End of packet |
|---|---|---|---|---|---|---|
| $ | 16 | , | (0,90) | , | 0/1 | # |
| Eg: | $16,(10,100),1#   Select the area to fix the width and height | | | | | |

### 17.Autopilot screen switching

| Packet header | Command word | Data separator | Switch | End of packet |
|---|---|---|---|---|
| $ | 17 | , | 1 | # |
| Eg: | $17,1#   Autopilot screen switching | | | |

## Raspblock reports data to APP Agreement

| Packet header | Command word | Data separator | voltage | Data separator | Roll | Data separator | Pitch | Data separator | Yaw | Data separator | End of packet |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Eg: $01,V,Roll,Pitch,Yaw,# | | | | | | | | | | | |