**Communication protocol**

**message:**

command

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | FD | FE | Message type | byte | byte | byte | byte | byte | byte | byte | byte | FE | FF |
| Rocker |  |  | 01 | Right X direction | Right X value | Right Y direction | Right Y value | Left X direction | Left X value | Left Y direction | Left Y value |  |  |
|  |  |  | 01/02/03 | 00-220 | 01/02 | 00-220 | 01/02 | 00-220 | 01/02 | 00-220 |  |  |
| key |  |  | 02 | Right up up | Right up down | Left up up | Left up down | Center right up | Center right down | Center left up | Center left down |  |  |
|  |  |  | 00 free  01 click 02 long press | 00 free  01 click 02 long press | 00 free  01 click 02 long press | 00 free  01 click 02 long press | 00 free  01 click 02 long press | 00 free  01 click 02 long press | 00 free  01 click 02 long press | 00 free  01 click 02 long press |  |  |

response

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | FD | FE | Message type | byte | byte | byte | byte | byte | byte | byte | byte | FE | FF |
| status |  |  | 01 | Front motor direction | Front motor current | dir motor direction | dir motor current | rear motor direction | rear motor current | battery current state | battery current |  |  |
|  |  |  | 01/02/03 | 00-0xFC | 01/02/03 | 00-0xFC | 01/02/03 | 00-0xFC | 01/02/03 | 00-0xFC |  |  |