|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ff | ff | ff | ff | 00 90 |  | 00 |

# MBOXUDP data

|  |
| --- |
| **Annotation [z1]: Captcha** |
| **Annotation [z2]: Pass code** |
| **Annotation [z3]: Function code** |
| **Annotation [z4]: Determined to be six axes** |
| **Annotation [z5]: determine which platform the UDP data is from** |
| **Receive, there is a reply from that platform, (all FF, means all receive, all reply)** |
| **Annotation [z6]: Sequence number of the UDP command sent** |
| **Annotation [z7]: Timecode** |
| **Annotation [z8]: data for six axes, 4 for each axis** |
| Bytes |

00 00 00 00 00 00 00 00 00 00

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 55 aa | | | |  | 00 00 |  | 13 01 |  | 00 01 |  | ff ff ff ff |  | 00 00 00 | |
|  | 00 00 00 00 |  | 00 00 00 00 00 00 00 00 00 00 00 00 00 00 | | | | | | | | | | |  |
|  | | | | | | | |  | 12 34 |  | 56 78 ab cd |  | | |

01

UDP data area

Suppose that the stroke of the electric cylinder is 50 mm, the lead of the electric cylinder is 5 mm, and the number of pulses per revolution is 10,000.

Each electric cylinder is from 0 to 25 mm. Calculate the number of pulses required: 25/5 \* 10000 = 50000, converted into hexadecimal is 0x0000c350, (Note: You can set the length of each cylinder extension according to the needs. The length of each cylinder extension is the same.)

1. Six-axis data and absolute time mode (function code is 1301)

55 aa 00 00 13 01 00 01 ff ff ff ff 00 00 00

01 00 00 00 00 00 00 c3 50 00 00 c3 50 00 00 c3 50 00 00

c3 50 00 00 c3 50 00 00 c3 50 12 34 56 78 ab cd

# 2. Six-axis data and relative time mode (function code is 1401)

55 aa 00 00 14 01 00 01 ff ff ff ff 00 00 00

|  |
| --- |
| **Annotation [z11]: 0x00000064 = 100 milliseconds,**  **Complete the action specified by this UDP instruction in 100 milliseconds.** |

01 00 00 c3 50 00 00 c3 50 00 00 c3 50 00 00

00 00 00 64

00 00 c3 50 12 34 56 78 ab cd

00 00 c3 50

c3 50

3. Three axis data and absolute time mode (function code is 1301) 55 aa 00 00 13 01 00 00 ff ff ff ff 00 00 00

01 00 00 00 00 00 00 c3 50 00 00 c3 50 00 00 c3 50 12 34

56 78 ab cd

**4. Three axis data and relative time mode (function code is 1401)** 55 aa 00 00 14 01 00 00 ff ff ff ff 00 00 00

01 00 00 00 64 00 00 c3 50 00 00 c3 50 00 00 c3 50 12 34

56 78 ab cd

It is recommended to use six-axis data when programming. If the UDP instruction is six-axis data of XYZUVW and the number of axes of the platform is three, MBOX will take the three-axis data of UDP of the UDP instruction according to the actual number of axes of the platform, and discard the UVW data behind. Therefore, the six-axis UDP command is compatible with all platforms smaller than six-axis.

**5. Platform emergency stop command (function code is 1201)**55 aa 00 00 12 01

01

00 00

00 01

|  |
| --- |
| Annotation [z12]: 0x00000064 = 100 milliseconds, |
| Complete the action specified by this UDP instruction in 100 milliseconds |
| Annotation [z13]: Object channel is 0, which means modification |
| Parameter register, but not saved |
| Comment [z14]: start address of parameter register |

# 6、6. The platform cancels the emergency stop command (function code is 1201)

55 aa 00 00 12 01

00 00

**Annotation [z17]: Object channel is 0, which means modification**

**Parameter register, but not saved**

**Annotation [z18]: start address of parameter register**

**0x0090**

**Annotation [z19]: The length of the register is 1, which means that only one register is accessed**

00 00

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ff | ff | ff | ff | 00 90 |  | 00 |

01

# 7、Platform reset command (function code is 1201)

55 aa 00 00 12 01

01

**8、特效输出**

00 02

00 00

|  |
| --- |
| **Annotation [z20]: The target channel is 2, which means the command register** |
| **Comment [z21]: The starting address of the command register is**  **0, indicating the playback control register** |
| **Annotation [z22]: The length of the register is 1, which means**  **Operate on only 1 register** |
| **Annotation [z23]: The command register data is:**  **0x0000 for reset operation** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ff | ff | ff | ff | 00 00 |  | 00 |

The 12 switching values in the instruction correspond to the special effect output.

This is a 16-bit data. The upper 4 bits are reserved. The lower 12 bits indicate 12 digital outputs.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| B15 | B14 | B13 | B12 | B11 | B10 | B9 | B8 | B7 | B6 | B5 | B4 | B3 | B2 | B1 | B0 |
| save | | | | 12 digital output setpoints | | | | | | | | | | | |