

Baud rate: 9600 ; data bit: 8 ; stop bit: 1; verify bit: N

command format : packet head , packet length , ID ,data type , data , check sum, packet end

1. Packet head (2 bytes)

The packet head are : 0xfe, 0xff

2. Packet length(1 byte)

Packet length is the bytes of ((data type + ID + data + check sum))

3. Data type(1 byte)

Data type can be : 0x00, 0x01, 0x02, 0x03, 0x04 , 0x05, 0x06, 0x07

0x00 is the type of configuring parameters;

0x01 is the type of sending prices to the display;

0x02 is the type of reading back of parameters;

0x03 is the type of reading back of prices showing;

0x04 is the type of setting the position of decimal;

0x05 is the type of setting the ID of the display;

0x06 is the type of

0x07 is the type of reading back the position of decimal;

4. ID(1 byte)

ID can be 0x01~0xff

5. data(not a fixed length)

the information of the card that you want to write to the card or read back from the card, they are different for different data type;

6. check sum (one byte)

Check sum is the result of (packet length + ID + data type + data)

7. packet end (one byte)

The packet end is :0xef.

3. setting parameters

FE FF 09 02 00 00 01 04 00 01 11 EF

FE FF : packet head
09 : packet length the bytes of (09 02 00 00 01 04 00 01 11)
02 : id
00 : data type (configuring parameters)
00 : double sided flag (0 is for single side; 01 is for double sided)
01 : quantity of displays on one side (1 display)
04 : how many digits on one display (4 digits)
00 : showing 9/10 or not (0 is for not show; 1 is showing)
01 : the dot position (1 is for after the first digit)
11 : check sum

If the display receives the command correctly , the display will reply an answer as;

FE AF 05 02 00 00 07 EF

FE AF : reply packet head
05: bytes of (05 02 00 00 07)
02: id is 02
00 : the reply is for (receiving the command of setting parameters)
00: receive the command correctly (01 if for wrong)
07: check sum (05 +02+ 00 +00)
EF : packet end;

4. reading back parameters

FE FF 04 02 02 08 EF

FE FF : packet head
04 : packet length bytes of (04 02 02 08)
02 : id
02 : data type (reading back of the parameters)
08 : check sum
EF : packet end;

If the display receives the command correctly, it will reply an answer as
FE AF 0B 02 02 14 1A 00 01 04 00 01 43 EF

FE AF : packet head
0B : packet length the bytes of (0B 02 02 14 1A 00 01 04 00 01 43)
02 : id
02 : data type (reply for reading back parameters)
14 : the version of hardware (20)
1A : the version of software (26)
00 : double sided flag (0 is for single side; 01 is for double sided)
01 : quantity of displays on one side (1 display)
04 : how many digits on one display (4 digits)
00 : showing 9/10 or not (0 is for not show; 1 is showing)
01 : the dot position (1 is for after the first digit)
43 : check sum

5. setting the dot position

FE FF 10 02 04 01 01 01 01 01 01 01 01 01 01 01 01 01 22 EF

FE FF : packet head
09 : packet length bytes of (10 02 04 01 01 01 01 01 01 01 01 01 01 01 01 01 22)
02 : id
04 : data type(setting the position of decimal)
01 : the dot position for the 1st display
01 : the dot position for the 2nd display
01 : the dot position for the 3rd display
01 : the dot position for the 4th display
01 : the dot position for the 5th display
01 : the dot position for the 6th display
01 : the dot position for the 7th display
01 : the dot position for the 8th display
01 : the dot position for the 9th display
01 : the dot position for the 10th display
01 : the dot position for the 11th display
01 : the dot position for the 12th display
22 : check sum.
EF : packet end;

If the display receives the command correctly, it will reply an answer as;

FE AF 05 02 04 00 0B EF

FE AF : reply packet head
05: packet length bytes of (05 02 04 00 0B)
02: id is 02
04 : the reply is for (receiving the command of setting dot position)
00: receive the command correctly (01 if for wrong)
07: check sum (05 02 04 00)
EF : packet end;

6. reading back dot position

FE FF 04 02 07 0D EF

FE FF : packet head
04 : packet length bytes of (04 02 07 0D)
02 : id
07 : data type (reading back dot position)
0D : check sum
EF : packet end

If the display receive the command correctly , it will reply an answer as:

FE AF 10 02 07 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 25 EF

FE AF : reply packet head
10 : packet length bytes of (10 02 07 01 01 01 01 01 01 01 01 01 01 01 01 01 01 01 25)
02 : id
07 : data type(reply for sending the position of decimal)
01 : the dot position for the 1st display
01 : the dot position for the 2nd display
01 : the dot position for the 3rd display
01 : the dot position for the 4th display
01 : the dot position for the 5th display
01 : the dot position for the 6th display
01 : the dot position for the 7th display
01 : the dot position for the 8th display
01 : the dot position for the 9th display
01 : the dot position for the 10th display
01 : the dot position for the 11th display
01 : the dot position for the 12th display
25 : check sum.
EF : packet end;

7. setting ID

FE FF 05 00 05 02 0C EF

FE FF : packet head
05 : packet length bytes of (05 00 05 02 0C)
00 : broadcast ID
05 : data type (setting ID)
02 : setting ID to 02
0C : check sum;
EF : packet end;

If the display receive the command correctly , it will reply an answer as:

FE AF 05 02 05 00 0C EF

FE AF : reply packet head
05 : packet length bytes of (05 02 05 00 0C)
02 : id
05 : data type (reply for setting ID)
00 : receive the command correctly (1 for wrong)
0C : check sum
EF : packet end.