

The upper computer receiving port number is 45454

The lower computer receiving port number is 45455

Send data format(hexadecimal data, little endian data)

数据头 Data Header	Data area (maximum 450 bytes)		
	指令 instruction	数据 data	校验 check
10 bytes	10 bytes	Minimum 0 Maximum 437 (450-10-3) bytes	3 bytes

Each time data is sent, it is **data header + data area**

Data Header						
1-2	3-4	5	6-7	8	9	10
03 D9	Machine Model	Number of packets sent	The last packet data length	The current packet of data	Data Status	Filling Data

Machine model (short): generally not used. Mainly used by the lower machine to return
Number of packets sent: The maximum length of **the data area** is 450. There may be multiple packets, usually 1 packet.

The last packet data length: short data

(When sending data, if the machine receives data, it will set the data status to 1 and return this data header (only the data header 10 bytes))

Data status: 00 (send data) 01 (response data)

Fill data: Currently not used

指令 instruction						
1	2	3	4	5	6-9	10
55	功能码 Function code	控制码 Control Code	通道号 Channel Number	段码 Segment Code	Link 码 Link Code	输入输出标志 Input and output sign

Function code: control function

Control code: 00 control and return data, 01 control only without returning data, 02 query data

Channel number: start from 00 (00 represents 1 channel)

Segment code: generally used for EQ, start from 00

Link code (int): control several channels at the same time, not recommended, all 00 is OK

Input and output sign: 00 input, 01 output **distinction between input and output**

校验 check	
1-2	3
数据区的长度 The length of the data area	数据区的数据相加的低 8 位 The lower 8 bits of the data in the data area are added

Function code	Corresponding data						
Power on/off 0F	00: on 01: off						
volume 0A	00: Mute 01: Unmute						
volume 09	Float data (4 bytes) -80 to 18						
Status of Temperature /Current/ Voltage 06	92 bytes of data						
	1-20	21-36	37-52	53-56	57-72	73-88	89-92
	Temperature	输出电压 Output Voltage	输出电流 Output Current	输出状态 Output Status	输入电压 Input Voltage	输出限幅 Output Limiting	输入 Clip Input Clip
	5 个 float 数据通道和电源温度 5 float data channels and power supply temperature	4 个 float 数据 4 float data	4 个 float 数据 4 float data	4 字节数据对应 4 bytes data corresponds to	4 个 float 数据 4 float data	4 个 float 数据 4 float data	00 Clip 01 Normal
状态 Status: 00Normal 01Standby 02Fault 03open 04overload 05Clip 06dcp_state 07PowerError 08None							

Example

Note: If the request for machine data returns only 10 bytes, the communication IP may be locked. You can send a data request

03 d9 00 00 01 0d 00 01 00 00 55 1B 02 00 00 00 00 00 00 00 0d 7F

A large amount of data will be returned, no processing is required, and subsequent normal communication can be carried out

1. Power on and off

Remote power on and off //24 bytes of data 00: power on 01: standby

Control value Check digit

03 d9 94 01 01 0e 00 01 00 00 55 0f 00 00 00 00 00 00 00 01 00 0e 73

//Fixed 10 bytes

03 d9 //Fixed beginning

94 01 //Machine model, communication can be ignored, mainly the lower machine returns

01//The number of packets sent, the maximum is 450 bytes per packet, so there may be multiple packets

0e 00//The length of the last packet sent (Note: This length is calculated from 0x55 and does not include the first 10 data)

01 //Which packet of data

00//Data status: 00 Send data, 01 Response data

00//Supplementary data, Not used yet

//Fixed 10 bytes

55// Fixed beginning
 0f// Function code, specifies the control function 0f: Power on/off
 00// Operation requirement code: 00 Operate and return data, 01 Operate without return, 02 Query data
 00// Channel number starts from 0
 00// Segment code is generally used in EQ to control the EQ segment
 00 00 00 00//Control the conversion of several channels at the same time. For example, 01 10 00 00 means channels 2 and 3. It is not recommended.
 00//Input/output: 00 for input and 01 for output. Some functions have both input and output.you can distinguish from it.
 //Data area: size depends on the function, or none
 01 //Power on
 //Check area: the last three digits
 00 0e //Total data length: Count from 55, the first 10 are not counted
 73 //Check: Add all from 55, then take the lower 8 bits

Check digit operation:

$(55 + 0f + 00 + 00 + 00 + 00 + 00 + 00 + 00 + 01 + 00 + 0e) \&0xff = 0x73$

Power on/off status request: Function code 0f Query data 02

03 d9 94 01 01 0E 00 01 00 00 55 0F 02 00 00 00 00 00 00 00 00 0e 74

Reply data: 00 power on 01 standby

03 D9 94 01 01 0E 00 01 00 00 55 0F 01 20 0A 00 00 00 00 00 00 00 9D

03 D9 94 01 01 0E 00 01 00 00 55 0F 01 20 0A 00 00 00 00 00 01 00 0E 9E

2. Mute 00 mute, 01 Unmute

Control mute: 24 bytes, function code 0a, mute channel 00, control value 00

03 d9 94 01 01 0e 00 01 00 00 55 0a 01 00 00 00 00 00 00 01 00 00 0e 6f

Query the mute status 23 bytes (the value can be empty when querying)

03 d9 94 01 01 0D 00 01 00 00 55 0a 02 00 00 00 00 00 00 01 00 0d 6f

Return data

03 d9 94 01 01 0e 00 01 00 00 55 0a 01 00 00 00 00 00 00 01 00 00 0e 6f

3. Volume float data

Channel number Volume value (-37.0)

03 d9 94 01 01 11 00 01 00 00 55 09 01 00 00 00 00 00 00 00 00 14 c2 00 11 46

4. Get the channel, temperature, current, voltage, status

Request for basic information such as temperature, current, voltage, etc. : 23-bit data, Function code 06, Query data 02

03 d9 00 00 01 0d 00 01 00 00 55 06 02 00 00 00 00 00 00 00 00 0d 6a

Received data: 115 bytes of data (10+10+92+3)

03 d9 94 01 01 69 00 01 00 00 55 06 01 20 0a 00 00 00 00 00 16 30 4b 42 50 d8 47

42 06 a7 55 42 db 3b 56 42 3d 5c 23 42 4d f8 a7 41 00 00 00 00 00 a2 00 41 00 00

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 08 08 08 08 c3 df 07 3e cd

cc be 36 4e f7 07 3e 66 66 c2 36 00 00 00 00 00 00 00 00 00 00 00 00 00 00

01 01 01 01 00 69 59

```
16 30 4b 42 //Amplifier channel 1 temperature
50 d8 47 42 //Amplifier channel 2 temperature
06 a7 55 42 //Amplifier channel 3 temperature
db 3b 56 42 //Amplifier channel 4 temperature
3d 5c 23 42 //Power supply temperature
```

```
4d f8 a7 41 //Amplifier channel 1 output signal voltage
00 00 00 00 //Amplifier channel 2 output signal voltage
00 a2 00 41 //Amplifier channel 3 output signal voltage
00 00 00 00 //Amplifier channel 4 output signal voltage
```

```
00 00 00 00 //Amplifier channel 1 output signal current
00 00 00 00 //Amplifier channel 2 output signal current
00 00 00 00 //Amplifier channel 3 output signal current
00 00 00 00 //Amplifier channel 4 output signal current
```

(00 Normal 01 Standby 02 Protection 03 Open Circuit 04 Overload 05 Limit
06 DC Protection 07 Power Failure 08 No Status)

08//Amplifier 2 channel output status

08//Amplifier 4 channel output status

```
c3 df 07 3e //Amplifier channel 1 input signal voltage
cd cc be 36 //Amplifier channel 2 input signal voltage
4e f7 07 3e //Amplifier channel 3 input signal voltage
66 66 c2 36 //Amplifier channel 4 input signal voltage
```

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

01 01 01 01

Set the sound source: 24 bytes, function code 0b, sound source channel 00, control value 00

Query 23 bytes

Return data

6. Recalling a preset

[illegible]

00 2f c2

Transfer the 2nd paragraph03 d9 00 00 01 2f 00 01 00 00 55 3b 01 00 00 00 00 00 00
00 02 01 00
00 00 00 00 00 00 00 00 00 00 2f c3

Function code list

Note: The string encoding is GB2312

Function code	Corresponding data			
Basic information of the machine 00	75 bytes of data (usually only query the last 4 bytes are meaningless)			
	1-32 Version Number	33-64 Device Name	65-70 MAC Address	No. 71 Maximum Gain
	32-byte string	32-byte string	6 bytes	1 byte
Signal Type 0B	1 byte(0 Analog, 1 Dante, 2 AES3, 3 Auto, and the 2 is Auto when AES3 is not available)			
Display lock 11	1 byte(0 unlock 1 lock)			
Phase 12	1 byte(0 non-inverting 1 inverting)			
mean compression is enabled or not 2E	1 byte 0 Enable 1 Disable			
the peak pressure limit is enabled or not 2F	1 byte 0 Enable 1 Disable			
fixed resistance, fixed voltage 31	1 byte(0 fixed resistance 1 70V 2 100V)			
bridge 32	1 byte(0 bridge 1 normal)			
Preset Data 3B	34 bytes of data			
	Byte 1		Byte 2	3-34
	0 read all preset names 1 save preset 2 read back preset 3 clear preset 4 read current preset name		Preset serial number (starting from 0)	Default name 32 bytes
Machine Name 3C	32 bytes (can be empty when querying)			
Noise Gate 45	1 byte(0 on 1 off)			