

| Shengbike Intelligent Background Music System RS485 Control Protocol | | | | | | |
|---|---|--|--|--|--|--|
| Communication method: RS-485 | | | | | | |
| RS-485 transmit parameters | Baud rate: 9600bps | | | | | |
| | Parity bit: none | | | | | |
| | Data bits: 8bits | | | | | |
| | Stop bit: 1bits | | | | | |
| Command: DATA1/DATA2/DATA3/DATA4/DATA5/DATA6 | | | | | | |
| DATA1:Start symbol (0xFA) | | | | | | |
| DATA2:ID number (0x00) (machine unique identifier, i.e., room number, 0 is broadcast) | | | | | | |
| DATA3:Function code See the table below | | | | | | |
| DATA4:Group ID (0x00) (the group to which the machine belongs, no need to change) | | | | | | |
| DATA5:Check code (Check) | Check=(Start symbol + room number + function code)&0xff Take the last 2 digits of the data sum (hexadecimal 4 bytes) | | | | | |
| DATA6: Protocol packet terminator (0xFE) | | | | | | |
| Function code (data3) list | | | | | | |
| Function code | Verification code | Function | Description | | | |
| 0x01 | 0xFB | Sound Level 1 | Playback status valid | | | |
| 0x02 | 0xFC | Sound Level 2 | | | | |
| 0x03 | 0xFD | Sound Level 3 | | | | |
| 0x04 | 0xFE | Sound Level 4 | | | | |
| 0x05 | 0xFF | Sound Level 5 | | | | |
| 0x06 | 0x00 | Sound Level 6 | | | | |
| 0x07 | 0x01 | Sound Level 7 | | | | |
| 0x08 | 0x02 | Sound Level 8 | | | | |
| 0x09 | 0x03 | Sound Level 9 | | | | |
| 0x0A | 0x04 | Sound Level 10 | | | | |
| 0x0B | 0x05 | Sound Level 11 | | | | |
| 0x0C | 0x06 | Sound Level 12 | | | | |
| 0x0D | 0x07 | Sound Level 13 | | | | |
| 0x0E | 0x08 | Sound Level 14 | | | | |
| 0x0F | 0x09 | Sound Level 15 | | | | |
| 0x10 | 0x0A | Sound Level 16 | | | | |
| 0x11 | 0x0B | Sound Level 17 | | | | |
| 0x12 | 0x0C | Sound Level 18 | | | | |
| 0x13 | 0x0D | Sound Level 19 | | | | |
| 0x31 | 0x2B | Previous song | | | | |
| 0x32 | 0x2C | Next song | | | | |
| 0x33 | 0x2D | Play in sequence | | | | |
| 0x34 | 0x2E | Single loop | | | | |
| 0x35 | 0x2F | Random play | | | | |
| 0x36 | 0x30 | List loop | | | | |
| 0x37 | 0x31 | Play | | | | |
| 0x38 | 0x32 | Pause | | | | |
| 0x39 | 0x33 | Stop playing | | | | |
| 0x40 | 0x3A | Return | | | | |
| 0x41 | 0x3B | Volume+ | | | | |
| 0x42 | 0x3C | Volume- | | | | |
| 0x43 | 0x3D | Mute | | | | |
| 0x44 | 0x3E | Unmute | | | | |
| 0x51 | 0x4B | Turn on the screen | | | | |
| 0x52 | 0x4C | Turn off the screen | | | | |
| 0x70 | 0x6A | Play TF card music | | | | |
| 0x71 | 0x6B | Play USB flash drive music | | | | |
| 0x77 | 0x71 | Switch to external audio source AUX mode | | | | |
| 0x78 | 0x72 | Switch to Bluetooth mode | Need to send a play command to start playing | | | |
| 0x7A | 0x74 | Switch to music mode | Need to send a play command to start playing | | | |
| 0x90 | | Query current status | See Note 2 | | | |
| 0x91 | | Current song length | Unit second, see note 3 | | | |
| 0x92 | | Current playback progress | Unit second, see note 4 | | | |
| 0x93 | | Current playing song name | UTF-8 format, see note 5 | | | |
| 0x94 | | Dual-source setup for synchronization or partitioning | | | | |
| 0x95 | | Switch to partition 1 | | | | |
| 0x96 | | Switch to partition 2 | | | | |

Note 1: After the control terminal sends a control command, the music host receives the command, executes the corresponding control, and then returns the accepted command to the control terminal

Such as:

Control end sends command to switch to online music mode: FA 00 7A 00 74 FE

Music host return status: FA 00 7A 00 74 FE

Note 2: The return format definition for function code 0x90

The return status format is

0xFA Room number (default 0x00) 0x90 Data1 Data2 0xFE

Data1

bit7 bit6

| | | |
|---|---|---------------------------|
| 0 | 0 | Indicates other status |
| 0 | 1 | Indicates playback status |
| 1 | 0 | Indicates pause state |

bit5 is muted

| | |
|---|--|
| 0 | Indicates not muted |
| 1 | Indicates mute (volume size is 0 when in mute state) |

bit4 bit3 bit2 bit1 bit0

5 bits used to represent volume size

Data2

bit7 Screen on/off status

| | |
|---|-------------------|
| 0 | Screen off status |
| 1 | Screen on status |

bit6 bit5 bit4 indicates the current music playback mode

| | | | |
|------|------|------|---------------|
| bit6 | bit5 | bit4 | |
| 0 | 0 | 0 | List loop |
| 0 | 0 | 1 | Play in order |
| 0 | 1 | 0 | Single Loop |
| 0 | 1 | 1 | Shuffle play |

bit3 bit2

These two have not been used yet

bit1 Current partition (1: Partition 1 0: Partition 2)

bit0 Current partition status (0: partition 1: broadcast)

Note 3: The return format definition of function code 0x91

Note: The return format definition of function code 0x91

0xFA Room number (default 0x00) 0x91 Data 1 0xFE

Data 1, 16-bit

Bit15 - bit0

Note 4: The return format definition of function code 0x92

The return status format is

0xFA Room number (default 0x00) 0x92 Data 1 0xFE

Data 1, 16-bit

Bit15 - bit0

Note 5: The return format definition of function code 0x93

The return status format is

0xFA Room number (default 0x00) 0x93 Data 1 0xFE

Data 1 longest 25 bytes