PENSARLED

# LED Display & TU Series

## Control Protocol Guide

2025

# Overview

This document introduces functions of the control protocol for the meeting room display and the brief use of these functions. This document also introduces how to use a debugging tool for Windows to perform common function debugging and testing. If collaborative development is required, please reach out to the appropriate developers for assistance.

# Protocol Description

## Request Packet

Each Cell represents 1 byte

| | |
|---|---|
| 55H | AAH |
| ACK | Labels |
| Source Address | Destination Address |
| Device Type | Port Address |
| Board Address [7:0] | Board Address [15:8] |
| Code | Reserved |
| Register Unit Address [7:0] | Register Unit Address [15:8] |
| Register Unit Address [23:16] | Register Unit Address [31:24] |
| Valid Data Length [7:0] | Valid Data Length [15:8] |
| Write Data 0 | |
| Write Data 1 | |
| ... | |
| Write Data N | |
| Checkout [7:0] | Checkout [15:8] |

Note: Currently, the checkout field is not validated.

# Protocol Description

## Response Packet

Each Cell represents 1 byte

| | |
|---|---|
| AAH | 55H |
| ACK | Labels |
| Source Address | Destination Address |
| Device Type | Port Address |
| Board Address [7:0] | Board Address [15:8] |
| Code | Reserved |
| Register Unit Address [7:0] | Register Unit Address [15:8] |
| Register Unit Address [23:16] | Register Unit Address [31:24] |
| Valid Data Length [7:0] | Valid Data Length [15:8] |
| Write Data 0 | |
| Write Data 1 | |
| ... | |
| Write Data N | |
| Checkout [7:0] | Checkout [15:8] |

# Protocol Description

## Field Description

| Field | Length (Byte) | Definition |
|---|---|---|
| Package Header | 2 | 55AAH indicates a request packet. AA55H indicates a response packet |
| ACK | 1 | Response status code<br>• 0x00: ok<br>• 0x01: error<br>• 0x02: Request packet validation error<br>• 0x03: Response packet validation error<br>• 0x04: Unsupported command |
| Labels | 1 | Command serial number, default to 0x0 |
| Source Address | 1 | Command source address<br>• Terminal: 0xfc<br>• Remote: 0x00 |
| Destination Address | 1 | Command destination address<br>• 0xfc: Terminal device<br>• 0x00: Remote device |
| Device Type | 1 | The device type corresponds to the operational functions described in the document.<br><br>This field has high maintenance priority, and any addition of new operational functions requires an update here.<br>• 0x00 3.1 Sending Card<br>• 06x01 3.2 Receiving Card<br>• 0x02 Multifunction Card<br>• 0x06 3.3 Monitoring Functions at the Android Card End<br>• 0x07 3.4 Remote Control Functions 00<br>• 0x08 3.5 Android Card Control Functions |
| Port Address | 1 | 1 Ethernet port address |
| Board Address | 2 | The address of the receiving card carried by the Ethernet port. |
| Code | 1 | Transaction code<br>• 0x00 Read<br>• 0x01 Write |
| Reserved | 1 | 1 Reserved field, default to 0x00 |

# Protocol Description

## Field Description

| Field | Length (Byte) | Definition |
|---|---|---|
| Register Unit Address | 4 | Operational function tags correspond to the sub-functions under each operational function (Device Type), with maintenance permissions assigned to each specific operational function.<br><br>For example, in section 3.3.1 "USB Drive Status," the device type is 0x06, and the register unit address is 0x01. |
| Valid Data Length | 2 | The length of the payload valid data. Not present in read request packets or write response packets. |
| Data | N/A | Valid data, the data length should correspond to the valid data length. |
| Checkout | 2 | Checksum. The checksum is obtained by summing all the data bytes (excluding the package header) and adding the constant 0x5555 |

# Supported Functions and Descriptions

## Sending Card Functions

### Link Status

Note: TU15 and TU15 Pro only support 4 Ethernet ports (1-4) currently.

Read: 55AA0001FC000000000000002A00000001007D56

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 00 7D 56 no link

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 01 7E 56 port 1 link

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 02 7F 56 port 2 link

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 03 80 56 ports 1, 2 link

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 04 81 56 port 3 link

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 08 85 56 port 4 link

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 10 8D 56 port 5 link

Response: AA 55 00 01 00 FC 00 00 00 00 00 00 2A 00 00 00 01 00 20 9D 56 port 6 link

## Receiving Card Functions

### Brightness

(1) Set the receiving card brightness to 0x32

Write: 55AA0001FC0001FFFFFF0100010000020100328759

Response: AA 55 00 01 00 FC 01 FF FF FF 01 00 01 00 00 02 00 00 54 59

(2) Read brightness value of the first receiving card on Ethernet port 1 of the sending card

Read: 55 AA 00 01 FC 00 01 00 00 00 00 00 01 00 00 02 01 00 57 56

Response: AA 55 00 01 00 FC 01 00 00 00 00 00 01 00 00 02 01 00 32 89 56

# Supported Functions and Descriptions

## Voltage

(1) Read voltage of the first receiving card on Ethernet port 1 of the sending card

Read: 55AA0001FC000100000000000300000A01006156

Response: AA 55 00 01 00 FC 01 00 00 00 00 00 03 00 00 0A 01 00 A9 0A 57

Note: Taking the lower 7 bits of A9, it is 41. The unit is 0.1 V. Therefore, the actual value is 4.1 V

## Temperature

(1) Read temperature of the first receiving card on Ethernet port 1 of the sending card

Read: 55AA0001FC000100000000000100000A01005F56

Response: AA 55 00 01 00 FC 01 00 00 00 00 00 01 00 00 0A 01 00 48 A7 56

Note: Converting 48 to a decimal, it is 72. The unit is 0.5°C. Therefore, the actual value is 36°C.

# Supported Functions and Descriptions

## Monitoring Functions at the Android Card End

### USB Drive Status

Read: 55AA0001FC0006000000000001000000001005A56

Response: AA55000100FC0600000000000100000000100015B56 USB drive inserted

Response: AA55000100FC0600000000000100000000100005A56 USB drive not inserted

Note: 1: The USB drive is inserted; 0: The USB drive is not inserted.

### HDMI Status

Note: The Mee210, Mee310, and TU series are equipped with only two HDMI inputs.

On the Mee210, HDMI2 is reserved for Windows. On the TU series, both HDMI1 and HDMI2 are reserved for Windows.

Read: 5AA0001FC0006000000000002000000004005E56

Response:AA55000100FC0600000000000200000004000000005E56 No HDMI connected

Response: AA55000100FC0600000000000200000004000100005F56 HDMI1 connected

Response: AA55000100FC0600000000000200000004000001005F56 Only HDMI2 (Windows) connected

Response: AA55000100FC0600000000000200000004000000105F56 Android connected

Note: In the highlighted byte array, the value at index 0 represents whether HDMI1 is connected, the value at index 1 represents whether HDMI2 (Windows) is connected, and the value at index 2 represents whether Android is connected. Multiple connections can be active simultaneously.

(01 represents connected, 00 represents not connected)

# Supported Functions and Descriptions

## Screen Mirroring Status

Read: 55AA0001FC0006000000000003000000001005C56

Response: AA55000100FC0600000000000300000001000 05C56 (No screen mirroring)

Response: AA55000100FC0600000000000300000001000 15D56 (1 screen mirroring)

Note: The data in red indicates the quantity of accessed screen mirroring.

## Current Display Source (Mee210, Mee310, and TU series only have two HDMI inputs)

Applicable to Mee210 and Mee310 (16*9 AiBox500_V1.0.0.5.C16 and later versions)

Read: 55AA0001FC0006000000000004000000001005D56

Response: AA55000100FC0600000000000400000001000 05D56 Android source

Response: AA55000100FC0600000000000400000001000 15E56 HDMI1 source

Response: AA55000100FC0600000000000400000001000 25F56 HDMI2 (Windows) source

Note:

- 0 represents the Android source (full screen via Android)
- 1 represents the HDMI1 source (full screen via HDMI)
- 2 represents the HDMI2 source (full screen via OPS)

## System Volume

Read: 55AA0001FC0006000000000005000000002005F56

Response: AA55000100FC0600000000000500000002000 329156 (Not muted, volume at 50)

Response: A55000100FC0600000000000500000002001 329256 (Muted, volume at 50)

Note: In the byte array in red, the data that has index 0 indicates whether it is mute (1: mute; 0: not mute). The data that has index 1 indicates the volume. The data that is read is hexadecimal. Please convert it to a decimal.

# Supported Functions and Descriptions

## Wi-Fi Status

Read: 55AA0001FC0006000000000006000000003006156

Response: AA55000100FC0600000000000600000000300**02013A**9E56

(Wi-Fi turned on and connected. Signal strength at –58)

Response: AA55000100FC0600000000000600000000300**0100006**256 (Wi-Fi turned off)

Note: In the byte array in red, the value at index 0 indicates the Wi-Fi status (0: unknown; 1: turned off; 2: turned on; 3: turning off; 4: turning on).

- The value at index 1 indicates Wi-Fi connection (1: connected; 0: not connected).
- The value at index 2 indicates Wi-Fi signal strength
- (This value is the absolute value of the actual value. The strength is expressed as a negative number)

## Wired Network

Read: 55AA0001FC0006000000000007000000001006056

Response: AA55000100FC0600000000000700000001000**0**6056 (Wired network not connected)

Response: AA55000100FC0600000000000700000001000**1**6156 (Wired network connected)

Note: 0: not connected; 1: connected.

## Hotspot

Read: 55AA0001FC0006000000000008000000003006156

Response: AA55000100FC0600000000000800000001000**10000**XXXX (Hotspot enabled|Frequency band|Channel)

Response: AA55000100FC0600000000000800000001000**FF0000**XXXX (Failed to retrieve system service, exception occurred)

Note:

- 0: turned off;
- 1: turned on.

# Supported Functions and Descriptions

## Bluetooth

Read: 55AA0001FC0006000000000009000000002006356

Response: AA55000100FC0600000000000900000002000201 6656

(Bluetooth turned on but not discoverable. Can be connected by previously paired devices)

Response: AA55000100FC0600000000000900000002000000 6356

(Bluetooth turned off, not discoverable, and cannot discover other devices)

Response: AA55000100FC0600000000000900000002000202 6756

(Bluetooth turned on, both discoverable and can be connected to other devices)

Note: In the byte array in red, the value at index 0 indicates the Bluetooth status (0: turned off; 1: turning on; 2: turned on; 3: turning off).

The value at index 1 indicates the Bluetooth discoverability

(0: Not discoverable and cannot be connected; 1: Not discoverable, but can be connected by previously paired devices;

2: Discoverable and can be connected by other devices.)

## Screen Mirroring Activation Status

Read: 55AA0001FC000600000000000A00000001006356

Response: AA55000100FC0600000000000A0000000100006456 (Not activated)

Response: AA55000100FC0600000000000A0000000100016556 (Trial activated)

Response: AA55000100FC0600000000000A0000000100026656 (Commercially activated)

Response: AA55000100FC0600000000000A0000000100FF (Failed to retrieve screen mirroring service)

Note: FF: Failed to retrieve screen mirroring service; 00: Not activated; 01: Trial activated; 02: Commercially activated.

# Supported Functions and Descriptions

## Retrieve System Mute Status

Read: 55AA0001FC000600000000000B00000001006456

Response: AA55000100FC0600000000000B0000000100016556 (Muted)

Response: AA55000100FC0600000000000B0000000100006456 (Not muted)

Note: FF: Failed to retrieve Audio service; 00: Muted; 01: Not muted.

## Retrieve Whether the Wired Network is Using DHCP

Read: 55AA0001FC000600000000000C00000001006556

Response: AA55000100FC0600000000000C0000000100016656 (DHCP)

Response: AA55000100FC0600000000000C0000000100006556 (Static)

## Retrieve System Status

Read: 55AA0001FC000600000000000D00000001006656

Response: AA55000100FC0600000000000D0000000100FF6557 (Power service failed)

Response: AA55000100FC0600000000000D0000000100016756 (Normal display)

Response: AA55000100FC0600000000000D0000000100006656 (Standby)

Note: FF: Failed to retrieve Power service; 00: Standby; 01: Normal display.

# Supported Functions and Descriptions

## Obtain Current Display Mode

Read: 55AA0001FC0006000000000000E00000001005D56

Response: AA55000100FC0600000000000E0000000100005D56 Indicates no split screen

Response: AA55000100FC0600000000000E0000000100015D56 Indicates ANDROID_HDMI

Note: 1-6 are only applicable to Mee310 21*9, 32*9

0 indicates that the split-screen mode is not activated

1 indicates ANDROID_HDMI (split-screen mode, Android on the left and HDMI on the right)

2 indicates HDMI_ANDROID (split-screen mode, HDMI on the left and Android on the right)

3 indicates OPS_HDMI (split-screen mode, OPS on the left and HDMI on the right)

4 indicates HDMI_OPS (split-screen mode, HDMI on the left and OPS on the right)

5 indicates ANDROID_CENTER (Android centered)

6 indicates OPS_CENTER (OPS centered)

Note: 7-9 are only applicable to Mee310 21*9

7 indicates HDMI_CENTER (auxiliary mode, HDMI centered)

8 indicates SPLIT_HDMI_RIGHT_2K (standard mode, Android on the left and HDMI on the right)

9 indicates SPLIT_HDMI_2K (standard mode, HDMI on the left and Android on the right

# Supported Functions and Descriptions

## Remote Control Functions

### Home

Write: 55AA0001FC0007000000010001000000100005C56

Response: AA55000100FC0700000001000100000000005B56 Successful execution

Response: AA55010100FC0700000001000100000000005C56 Execution failed

### Back

Write: 55AA0001FC0007000000010002000000100005D56

Response: AA55000100FC0700000001000200000000005C56 Successful execution

Response: AA55010100FC0700000001000200000000005D56 Execution failed

### Menu

Write: 55AA0001FC0007000000010003000000100005E56

Response: AA55000100FC0700000001000300000000005D56 Successful execution

Response: AA55010100FC0700000001000300000000005E56 Execution failed

### Power Off/Standby

Write: 55AA0001FC0007000000010004000000100005F56

Response: AA55000100FC0700000001000400000000005E56 Successful execution

Response: AA55010100FC0700000001000400000000005F56 Execution failed

# Supported Functions and Descriptions

## Remote Control Functions

### Switch Signal Source

Write: 55AA0001FC000700000001000500000000100006056

Response: AA55000100FC07000000010005000000000005F56 Successful execution

Response: AA55010100FC07000000010005000000000006056 Execution failed

### Increase Volume

Write: 55AA0001FC000700000001000600000000100006156

Response: AA55000100FC07000000010006000000000006056 Successful execution

Response: AA55010100FC07000000010006000000000006156 Execution failed

### Decrease Volume

Write: 55AA0001FC000700000001000700000000100006256

Response: AA55000100FC07000000010007000000000006156 Successful execution

Response: AA55010100FC07000000010007000000000006256 Execution failed

### Up

Write: 55AA0001FC000700000001000800000000100006356

Response: AA55000100FC07000000010008000000000006256 Successful execution

Response: AA55010100FC07000000010008000000000006356 Execution failed

# Supported Functions and Descriptions

## Remote Control Functions

### Down

Write: 55AA0001FC0007000000010009000000100006456

Response: AA55000100FC0700000001000900000000006356 Successful execution

Response: AA55010100FC0700000001000900000000006456 Execution failed

### Left

Write: 55AA0001FC0007000000001000A0000000100006556

Response: AA55000100FC0700000001000A00000000006456 Successful execution

Response: AA55010100FC0700000001000A00000000006556 Execution failed

### Right

Write: 55AA0001FC0007000000001000B0000000100006656

Response: AA55000100FC0700000001000B00000000006556 Successful execution

Response: AA55 0101 00FC0700000001000B00000000006656 Execution failed

### OK

Write: 55AA0001FC0007000000001000C0000000100006756

Response: AA55000100FC0700000001000C00000000006656 Successful execution

Response: AA55010100FC0700000001000C00000000006756 Execution failed

# Supported Functions and Descriptions

## Android Card Control Functions

### Standby

Write: 55AA0001FC000800000001000100000000100005D56

Response: AA55000100FC080000000100010000000005C56 Successful execution

Response: AA55010100FC080000000100010000000005D56 Execution failed

### Wake Up from Standby

Write: 55AA0001FC000800000001000200000000100005E56

Response: AA55000100FC080000000100020000000005D56 Successful execution

Response: AA55010100FC080000000100020000000005E56 Execution failed

### Power Off

Write: 55AA0001FC000800000001000300000000100005F56

Response: AA55000100FC080000000100030000000005C56 Successful execution

Response: AA55010100FC080000000100030000000005D56 Execution failed

# Supported Functions and Descriptions

## Android Card Control Functions

### Switch to a Specified HDMI Source

(Applicable to Mee210 and Mee310 (16*9 AiBox500_V1.0.0.5.C16 and later versions); Split-screen commands for Mee310 in 32*9 and 21*9 are currently not supported)

**(1) HDMI1**

Write: 55AA0001FC0008000000010004000000010001 6156

Response: AA55000100FC080000000100040000000005F56 Successful execution

Response: AA55010100FC080000000100040000000006056 Execution failed

**(2) HDMI2 (Windows)**

Write: 55AA0001FC0008000000010004000000010002 6256

Response: AA55000100FC080000000100040000000005F56 Successful execution

Response: AA55010100FC080000000100040000000006056 Execution failed

**(3) ANDROID**

Write: 55AA0001FC0008000000010004000000010003 6356

Response: AA55000100FC080000000100040000000005F56 Successful execution

Response: AA55010100FC080000000100040000000006056 Execution failed

# Supported Functions and Descriptions

## Mute/Unmute

**(1) Mute**

Write: 55AA0001FC0008000000010005000000100015E56

Response: AA55000100FC0800000001000500000000005D56 Successful execution

Response: AA55010100FC0800000001000500000000005E56 Execution failed

**(2) Unmute**

Write: 55AA0001FC0008000000010005000000100005E56

Response: AA55000100FC0800000001000500000000005F56 Successful execution

Response: AA55010100FC0800000001000500000000006056 Execution failed

## Set System Volume

Write: 55AA0001FC0008000000010006000000100335E56

Response: AA55000100FC0800000001000600000000005F56 Successful execution

Response: AA55010100FC0800000001000600000000006056 Execution failed

Note: Volume adjustable range: 0 to 100 or 0x00 to 0x64. If the value exceeds 100, it will be set as 100.

## Turn On/Off the Relay

Write: 55AA0001FC0008000000010007000000200000115E56

Response: AA55000100FC0800000001000700000000005F56 Successful execution

Response: AA55010100FC0800000001000700000000006056 Execution failed

Note:

- For the 2 bytes used to turn on/off the relay, the first byte indicates the relay ID and the second byte indicates on/off (0: on; 1: off).
- For the Mee210, the relay IDs range from 0 to 3, representing the four relays. Additionally, ID 4 corresponds to the opto-isolated switch.
- For the TU series, only relay ID 0 is available. Attempting to use other IDs will result in failure.

# Supported Functions and Descriptions

## Eco Mode Setting

(Not supported currently due to implementation constraints)

Write: 55AA0001FC0008000000010008000000**01**00**00**5E56

Response: AA55**00**0100FC0800000001000800000000005F56 Successful execution

Response: AA55**01**0100FC0800000001000800000000006056 Execution failed

## Turn On/Off Wi-Fi Station

Write: 55AA0001FC0008000000010009000000010**01**5E56

Response: AA55000100FC0800000001000900000000005F56 Successful execution

Response: AA55010100FC0800000001000900000000006056 Execution failed

## Turn On/Off WiFi AP

Write: 55AA0001FC000800000001000A00000001**00**15E56

Response: AA55000100FC080000000100**0**A00000000005F56 Successful execution

Response: AA55010100FC080000000100**0**A00000000006056 Execution failed

Note: 01: On; 00: Off.

# Supported Functions and Descriptions

## Turn On/Off Bluetooth

### Bluetooth On

Write: 55AA0001FC0008000000001000B0000000100015E56

Response: AA55000100FC0800000001000B00000000005F56 Successful execution

Response: AA55010100FC0800000001000B00000000006056 Execution failed

### Bluetooth Off

Write: 55AA0001FC0008000000001000B0000000100005E56

Response: AA55000100FC0800000001000B00000000005F56 Successful execution

Response: AA55010100FC0800000001000B00000000006056 Execution failed

# Supported Functions and Descriptions

## Program Playback Control (Applicable to TU Series Only)

### 1) Initialize Program List

The maximum number of programs is 0xFF, represented by one byte. If the total number of programs exceeds 0xFF, only 0xFF will be returned.

Read: 55AA0001FC00080000000000C000000 01005E56

Where FF represents the number of programs (for example purposes only, it is a real value)

Response: AA5500 0100FC080000000000C000000 0100FF5F56 List initialization successful

Response: AA5501 0100FC0800000000000C00000000006056 Failed

### 2) Play a Specified Program

0x0201 in the data area corresponds to playing the first program, while 0x0202 indicates playing the second program.

Write: 55AA0001FC00080000000100C000000 0200 02015E56

Response: AA5500 0100FC0800000001000C00000000005F56 Successful execution

Response: AA5501 0100FC0800000001000C00000000006056 Execution failed

### 3) Pause the Program Being Played

Write: 55AA0001FC00080000000100C000000 0100 035E56

Response: AA5500 0100FC0800000001000C00000000005F56 Successful execution

Response: AA5501 0100FC0800000001000C00000000006056 Execution failed

### 4) Resume Playback

Write: 55AA0001FC00080000000100C000000 0100 045E56

Response: AA5500 0100FC0800000001000C00000000005F56 Successful execution

Response: AA5501 0100FC0800000001000C00000000006056 Execution failed

# Supported Functions and Descriptions

## Program Playback Control (Applicable to TU Series Only)

### 5) Exit the Playing/Paused Program

Write: 55AA0001FC00080000000100C000000010005 5E56

Response: AA5500 0100FC0800000001000C00000000005F56 Successful execution

Response: AA5501 0100FC0800000001000C00000000006056 Execution failed

### 6) Switch to the Previous Program in the List

Write: 55AA0001FC00080000000100C000000010006 5E56

Response: AA5500 0100FC0800000001000C00000000005F56 Successful execution

Response: AA5501 0100FC0800000001000C00000000006056 Execution failed

### 7) Switch to the Next Program in the List

Write: 55AA0001FC00080000000100C000000010007 5E56

Response: AA5500 0100FC0800000001000C00000000005F56 Successful execution

Response: AA5501 0100FC0800000001000C00000000006056 Execution failed

# Supported Functions and Descriptions

## Switch to a Specified Mode

Note: 1-6 are only applicable to Mee310 21*9, 32*9

### (1) ANDROID_HDMI
(split-screen mode, Android on the left and HDMI on the right)

Write: 55AA0001FC00080000000100 0d00000001000 16356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

### (2) HDMI_ANDROID
(split-screen mode, HDMI on the left and Android on the right)

Write: 55AA0001FC00080000000100 0d00000001000 26356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

### (3) HDMI_OPS
(split-screen mode, HDMI on the left and OPS on the right)

Write: 55AA0001FC00080000000100 0d00000001000 36356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

### (4) OPS_HDMI
(split-screen mode, OPS on the left and HDMI on the right)

Write: 55AA0001FC00080000000100 0d00000001000 46356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

# Supported Functions and Descriptions

## Switch to a Specified Mode

Note: 1-6 are only applicable to Mee310 21*9, 32*9

### (5) ANDROID_CENTER (Android centered)

Write: 55AA0001FC000800000001000d0000000100056356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

### (6) OPS_CENTER (OPS centered)

Write: 55AA0001FC000800000001000d0000000100066356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

Note: 7-9 are only applicable to Mee310 21*9

### (7) HDMI_CENTER (auxiliary mode, HDMI centered)

Write: 55AA0001FC000800000001000d0000000100076356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

### (8) SPLIT_HDMI_RIGHT_2K
### (standard mode, Android on the left and HDMI on the right)

Write: 55AA0001FC000800000001000d0000000100086356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

# Supported Functions and Descriptions

## Switch to a Specified Mode

Note: 7-9 are only applicable to Mee310 21*9

### (9) SPLIT_HDMI_2K
### (standard mode, HDMI on the left and Android on the right)

Write: 55AA0001FC000800000001000d0000000100096356

Response: AA55000100FC0800000001000d00000000005F56 Successful execution

Response: AA55010100FC0800000001000d00000000006056 Execution failed

# Using the Debugging Software for Windows

## Windows

You can choose a TCP/UDP debugging tool for testing.

There are various options available, such as Iperf, Netcat, Nmap, hping3, or custom scripts/libraries in programming languages (Python, Java, etc.).

Different tools may have different user interfaces. Some key parameter settings are described below.

Step 1
Run the debugging tool.

Step 2
Set to TCP mode.

Step 3
Fill in the target remote host parameter (namely the IP address of the wired network of the product, such as 192.168.43.XX) and set the target port number to 5200.

Step 4
Set the wired network IP addresses of the local computer and the product to be on the same network segment.

Step 5
Click **Connect** to connect the target remote host.

Step 6
Select hexadecimal for the send data and received data.

Step 7
After the above settings are done, fill in the command in the send data area, click **Send**, and view the received packet in the received data area.