

## iWall HD55 API

### 1. PROTOCOL DEFINITION

Protocol	RS232
Baud rate	9600 bps
Data length	6 Bytes
Data Format	Hexadecimal (Hex)

### 2. DATA STRUCTURE

Header	Start address	End address	Command	Control parameters	End Code
0xD5	0x11	0x11	XX	XX	0xAA

**Example:** HDMI channels 2x3 videowall command:

**0xD5 0x11 0x32 0x20 0x05 0xAA**

The composition of a single videowall address data is: the upper 4 bits are the column address, and the lower 4 bits are the row address.

Note: XX in the data represents a hexadecimal parameter. For details, see Part 3 of this article.

For the central control instructions , please refer to the appendix at the end of the article:

### 3. PARAMETERS

Commands	Parameters	Function Description
0x10	0x00	Shutdown
	0x01	Power On

0x20	0x03	Videowall under DVI channel
	0x05	Videowall under HDMI channel
0x21	0x03	Single screen display under DVI channel
	0x05	Single screen display under HDMI channel
0x30	0x00	Reduce contrast by 1 unit
	0x01	Increase contrast by 1 unit
0x31	0x00	Reduce brightness by 1 unit
	0x01	Increase brightness by 1 unit
0x32	0x00	Decrease saturation by 1 unit
	0x01	Increase saturation by 1 unit
0x34	0x00	Reduce clarity by 1 unit
	0x01	Increase clarity by 1 unit
0x35	0x00	Reduce red gain by 1 unit
	0x01	Increase red gain by 1 unit
0x36	0x00	Reduce green gain by 1 unit
	0x01	Increase green gain by 1 unit
0x37	0x00	Reduce blue gain by 1 unit
	0x01	Increase blue gain by 1 unit
0x3A	0x00	Reduce red compensation by 1 unit
	0x01	Increase 1 unit of red compensation
0x3B	0x00	Reduce 1 unit of green compensation
	0x01	Increase 1 unit of green compensation
0x3C	0x00	Reduce blue compensation by 1 unit
	0x01	Increase 1 unit of blue compensation
0x59	0x00	View current bezel compensation
0x5A	(0x00-0x32)	Set the horizontal shift in bezel compensation
0x5B	(0x00-0x32)	Set the vertical shift in bezel compensation
0x5C	0x00	Image freeze function under HDMI/DVI channel
0x60	0x01	User reset
0x61	0x00	Turn off screen subtitles
	0x01	Turn on screen subtitles
0x62	0x00	Default font size for subtitles
	0x0 1	The median font size of subtitles
	0x0 2	Maximum font size of subtitles
0x63	0x00	The subtitles are located at the bottom of the screen

	0x0 1	Subtitles are located at the top of the screen
0x64	0x00	The font color of the subtitle is white
	0x0 1	The font color of the subtitle is red
	0x0 2	The font color of the subtitle is green
	0x0 3	The font color of the subtitle is blue
0x65	0x00	Subtitle background is not transparent
	0x0 1	Subtitle background transparency is 20%
	0x0 2	Subtitle background transparency is 50%
	0x0 3	Subtitle background transparency is 100 %
0x66	0x00	The font in the subtitle does not scroll
	0x0 1	Font scrolling in subtitles
0x70	0x01	Save current settings
0x76	0x00	Automatic fan control
	0x01	Fan always on
	0x02	Fan always off
0x80	0x00	LVDS output JIEDA mode TI0
	0x01	LVDS output VESA mode TI1
0x82	0x01	View the current software version
0x85	0x00	No signal background is set to blue
	0x01	No signal background is set to black
0x88	0x00	Menu language set to English
	0x01	The menu language is set to Chinese
0x90	0x00	Reduce backlight value by 1 unit
	0x01	Increase backlight value by 1 unit
0x94	0x00 (  BIT2   BIT1   BIT0)	Color interconnection control: BIT2 is red gain / BIT1 is green gain / BIT0 is blue gain
0xA0	(0x0 1 ~0x10)	Plan Save
0xA1	(0x0 1 ~0x10)	Plan settings
0xA5	0x00	LVDS output AB group does not switch AB0
	0x01	LVDS output AB group switching AB1
0xB8	0x00	Reduce horizontal width by 1 unit - repetition rate
	0x01	Increase horizontal width by 1 unit - repetition rate
0xB9	0x00	Decrease vertical height by 1 unit - recurrence rate
	0x01	Increase vertical height by 1 unit - recurrence rate

0xBA	0x00	Reduce the starting point of the level by 1 unit - recurrence rate
	0x01	Increase 1 unit level starting point - recurrence rate
0xBB	0x00	Reduce the vertical starting point - recurrence rate by 1 unit
	0x01	Increase the vertical starting point - recurrence rate by 1 unit
0xBC	0x01	Reproducibility reset
0xC5	0x00	HDMI mode is PC mode
	0x01	HDMI mode is DVD mode
0xC7	0x00	The LOGO image is not displayed when the display is turned on
	0x01	Display LOGO image when booting
0xC8	0x00	Boot logo single screen display
	0x01	Boot logo videowall display
0xDD	0x00	Aging mode Off
	0x01	Aging mode On
0xE2	0x00	Reduce backlight frequency by 1 unit
	0x01	Increase backlight frequency by 1 unit
0xE3	0x00	The default polarity of LVDS is 0.
	0x01	The default polarity of LVDS is 1.
0xE4	0x00	LVDS output 10BIT data
	0x01	LVDS output 8BIT data
	0x02	LVDS output 6BIT data
0xEF	0x01	System total reset
0xF6	0x00	The image is not inverted and is displayed normally.
	0x01	Image flip 180°

#### 4. APPENDIX

Reference for adding power on/off commands to the central control:

Central control protocol selection: **HEX**

Baud rate setting reference:

Baud rate	9600	▼
Data bits	8	▼
Stop bits	1	▼
Parity	None	▼
Flow control	None	▼

Reference instructions:

Power on command: **C6 11 FF 10 01 EE**

Shutdown command: **C6 11 FF 10 00 EE**

At the same time, the product also supports the following power on and off commands (the central control recommends adding the following commands):

Power on command: **D5 11 FF 10 01 AA**

Shutdown command: **D5 11 FF 10 00 AA**

or

Power on command: **D5 11 FF 10 01 AB**

Shutdown command: **D5 11 FF 10 00 AB**