

SBPRO-FHD

LED PLAYBACK CONTROL PROCESSOR



INTRODUCTION

The SBPro-FHD is a playback control processor specially designed for indoor LED screens. It integrates the Android system and sending card functions into one unit, and allows third-party apps to run on it, featuring powerful interaction and playback control capabilities.

The SBPro-FHD Pro allows users to control the LED screen with a remote and supports wireless screen mirroring from Windows, macOS, iOS, and Android devices. It offers four different modes tailored for various applications, ensuring the best display quality for document presentations, video playback, and remote meetings.

The SBPro-FHD Pro has no requirements of redesigning or changing the screen structure and can be mounted on the wall or placed on a surface, allowing for quick environment setup and use. It can be widely used in corporate exhibition halls, meeting rooms, government and corporate educational halls, hotel lobbies, remote meetings and other LED single-screen application scenarios.

FEATURES

Inputs and Outputs

- 2x HDMI 1.3 inputs
- 3x USB 2.0 inputs for multimedia playback and function extension
- 4x Ethernet outputs, capacity up to 2.6 million pixels
- 2x audio outputs
 - 1x SPDIF digital audio output
 - 1x 3.5- mm audio output
- Output image scaling
 - Width range: 64 to 4096 pixels
 - Height range: 64 to 1920 pixels
 - Total device load capacity $\leq$ 2.6 million pixels



Note

When using the scaling function and pixel - to- pixel display, the maximum load capacity is 2.6 million pixels. For any questions, please contact Starview technical support.

System Functions

- Android 11 based desktop UI system, supporting third - party apps
- Screen drawing and commenting (To use this feature, please purchase a whiteboard activation code separately.)
- Wireless screen mirroring from Windows, macOS, iOS and Android
- Working with the Starview app to achieve reverse control

The speaker can reversely control the LED screen via the terminal.
- Powerful processing performance
 - Quad- core 1.8 GHz ARM A55 processor
 - Support high- definition video decoding of H.264 4K@ 30Hz and H.265 4K@60Hz
 - 4 GB of RAM
 - 32 GB of storage space
- Excellent playback performance

Support playback of 2 streams of 4K video, 5 streams of 1080p video, 5 streams of 720p video, 8 streams of 480p video, or 10 streams of 360p video.



Note

Videos between 2K and 4K will be processed into 4K format.

- Playback control via different terminals
 - Intelligent control via mobile app: Install Starview App on your smartphone for program editing and publishing and screen control.

- Convenient playback control via remote: Perform playback control of local programs and simple program editing on the screen.
 - USB playback: Support standalone playback, plug and play, or copy and play.
 - Free receiving card connection
- Blank spaces do not occupy load capacity, and there's no rectangular frame restrictions, allowing Ethernet port bandwidth to be fully utilized.

Note

For receiving card models that support this feature, please contact Starview technical support.

- Eye comfort mode
 - Dual Wi-Fi modes
- Allow for Wi-Fi and wireless hotspot connections at the same time.
- Image quality enhancement
- Improve the display effect from the three dimensions of image contrast, detail and color. So that the overall sense of image gradation is richer and more delicate; the edge details are clear and sharp; the color is bright and vivid.
- Effect adjustment
- Offer 4 display modes including standard, meeting, vivid and skin, and allow you to adjust the brightness, color temperature, saturation, contrast, etc.

Device Controls

- Gigabit Ethernet control port with TCP/IP protocol support
 - Low-power (less than 0.5 W) mode during standby, and wakeup from standby via Infrared remote
 - A relay can be connected for convenient power management of LED screen
 - Intelligent control via mobile app
 - Control the LED screen with a remote
 - Bluetooth 5.1
- Can connect to up to 7 common peripherals such as the Bluetooth voice remote, Bluetooth mouse, Bluetooth keyboard, and Bluetooth sound system.
- Support peripherals such as camera, sound system and infrared touch frame.

Note

For supported peripheral device models, please contact Starview technical support.

APPEARANCE

Front Panel

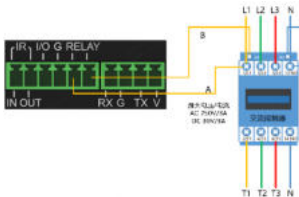


Name	Description
Status LED	• Solid green: The device is running normally. • Off: The device is not running.
Standby button	• Press the button to power on/off. • Hold down the button to restart the device.
USB 2.0	Support a mouse, keyboard, USB drive and other common USB devices . • Supported image formats: *.jpg, *.bmp, *.png *.gif, *.webp • Supported video formats: *.avi, *.mov, *.mkv, *.mp4, *.ts, *.flv, *.3gp, *.webm • Support FAT32 and NTFS file systems. Do not support exFAT or FAT16 file system.

Rear Panel



Type	Connector	Description
Input	HDMI IN 1-2	2x HDMI 1.3 (Type A) • Max resolution: 2048×1152@60Hz • Min resolution: 800×600@60Hz • Custom resolutions supported - Width range: 800- 4096 (Forced) - Height range: 600- 4096 (Forced) • Accepts 8- bit input sources.

		• YCbCr and RGB color space settings supported • Supported frame rates: 30 Hz, 50 Hz, 60 Hz • Do NOT support interlaced signal input. • Embedded audio supported • HDCP 1.4 (enabled by default) compliant, backwards compatible
	USB 2.0 1-2	2x USB 2.0 to support a mouse, keyboard, USB drive and other common USB devices • Supported image formats: *.jpg, *.bmp, *.png, *.gif, *.webp • Supported video formats: *.avi, *.mov, *.mkv, *.mp4, *.ts, *.flv, *.3gp, *.webm • Supported file systems: FAT32, NTFS; not supported: exFAT, FAT16
Output	1-4	4x RJ45 (1 Gbps)
	HDMI OUT	Support output of standard 1080p videos.
	AUDIO	3.5- mm audio output Note: 3- conductor audio connectors are supported.
	SPDIF	For digital fiber optic audio output
Control	ETHERNET	Connect to external network or to the Starview software on the control PC.
	SENSOR	Sensor connector to connect to a light sensor or temperature and humidity sensor.
	Phoenix connector (4 pins)	1x RS232 central control connector (4 pins) to connect to the central control device • Baud rate: 115200 bps • Data bits: 8; stop bits: 1; no parity bit; no flow control
	Phoenix connector (6 pins)	• 1x IR IN (Reserved) • 1x IR OUT (Reserved) • 1x I/O (Reserved) • 1x G, A grounding connector • 1x RELAY – Connect to a relay to control the switch on and off of the connected device. – Voltage: 30 V DC; max current: 3 A 

		A, B: Relay switch signals The above wiring diagram is only for illustration purpose. For actual applications, please refer to the relevant AC contactor manual.
Antenna	Wi- Fi AP 1- 2	Specifications: 2T2R. Connect to the Wi - Fi antenna and Bluetooth antenna.
	Wi- Fi STA	Specifications: 1T1R. Connect to the Wi - Fi antenna
Power	DC 12 V $\pm$ 10%	

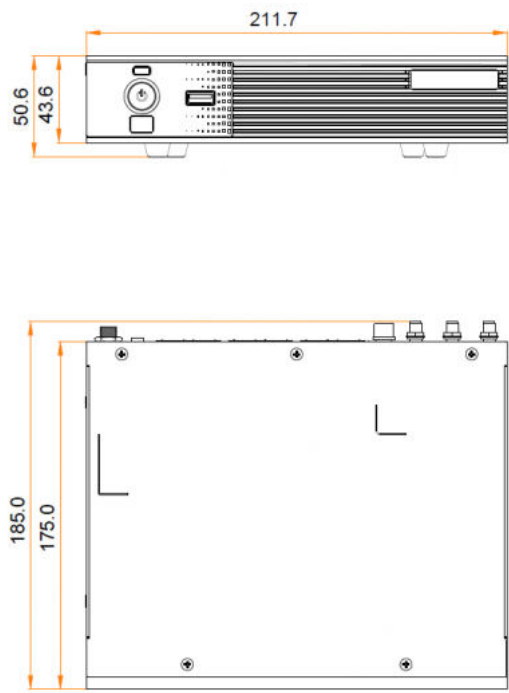


Note

For the internal source (Android), the maximum load capacity is 2.6 million pixels and custom resolutions (width range: 800~4096, height range: 600~4096) are supported.

DIMENSIONS

SBPro-FHD



Tolerance: ±0.3 Unit: mm

APPLICATIONS

LED Screen



Notes

- SBPro-FHD product package in this diagram is described in the packing list in the specifications table.

SPECIFICATIONS

Electrical Specifications	Input voltage	DC 12V 3A, Negative Outside Positive Inside (power adapter input)
	Rated power consumption	21 W
Storage Space	RAM	4 GB
	Internal storage	32 GB
Operating Environment	Temperature	- 20°C to +50°C
	Humidity	0% RH to 80% RH, non - condensing
Storage Environment	Temperature	- 20°C to +70°C
	Humidity	0% RH to 95% RH, non - condensing
Physical Specifications	Dimensions	211.7 mm × 185.0 mm × 50.6 mm
	Net weight	1.12 kg
	Gross weight	2.9 kg Note: It is the total weight of the product, accessories, and packing materials packed according to the packing specifications.
Packing Information	Dimensions (L×W×H)	387 mm × 359 mm × 173 mm
	List	• 1x SBPro-FHD • 1x Power adapter • 1x Bluetooth voice remote • 1x Ethernet cable • 1x HDMI cable • 2x Hanging brackets • 2x AAA batteries

The current and power consumption may vary depending on the product settings, usage environment and measuring status.

MEDIA DECODING SPECIFICATIONS

Image

Type	Decoding	Resolution	Format	Note
JPEG	JFIF file format 1.02	64×64 pixels to 4096×2304 pixels	JPG, JPEG	Support for interlaced scan only Support for SRGB JPEG Support for Adobe RGB JPEG
BMP	BMP	64×64 pixels to 4096×2304 pixels	BMP	N/A
GIF	GIF	64×64 pixels to 1920×1088 pixels	GIF	Supported frame rate range: 1 fps to 30 fps
PNG	PNG	64×64 pixels to 4096×2304 pixels	PNG	N/A
WEBP	WEBP	64×64 pixels to 4096×2304 pixels	WEBP	N/A

Video

Codec	Resolution	Max Frame Rate	Max Bit Rate (Ideal Condition)	Format
H.265/HEVC	64×64 pixels to 4096×2304 pixels	60fps	100Mbps	MP4, MKV, MOV
H.264	64×64 pixels to 4096×2304 pixels	30fps	80Mbps	MP4, AVI, MKV, MOV
MPEG4	64×64 pixels to 1920×1088 pixels	30fps	38.4Mbps	MP4, AVI, MKV, MOV
VP9	64×64 pixels to 4096×2304 pixels	60fps	80Mbps	MKV, WEBM
VP8	64×64 pixels to 1920×1088 pixels	30fps	38.4Mbps	MKV, WEBM