CAYIN

Versatile Digital Signage Player for 4-Display Video Wall
SMP-8000

DisplayPort   RS-232   HTML5   RSS   Flash

Cloud Resources   4 display outputs (4K)   1080p Full HD   4K UHD   Portrait Display
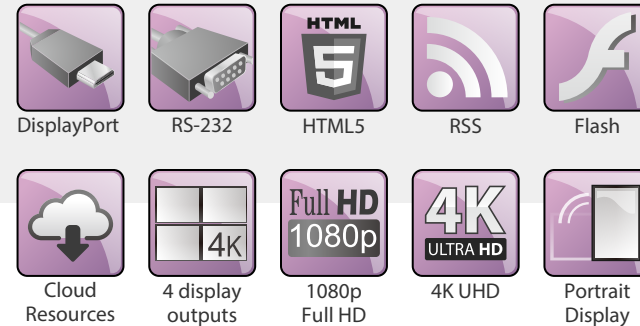
Highlights

- Equipped with 4 DisplayPort outputs, tailored for 3 or 4-display video wall applications

- Support 4 signal output modes: single, clone, extended, and distinct modes

- Provide 3 playback modes to show both zone-type displays and full-screen digital posters

- Support 1080p Full HD video, Flash®, HTML5, weather, social media, etc.

- Offer flexible task scheduling based on once, daily, weekly, monthly, or yearly timescales

- Allow self-designed template creation either directly on SMP player or on your PC

- Make rich Library and cloud resources freely available

Ready-to-use Digital Signage Player

SMP-8000, the industrial-grade hardware, is bundled with dedicated digital signage software, SMP-NEO, as a complete media player for digital sign applications. SMP-8000 and SMP-NEO are optimized to work well together. You can not only enjoy a seamless user experience, but also manage the device remotely from your web browser without installing any additional software.

Tailored for Video Wall and Multi-display Purposes

SMP-8000 supports four DisplayPort outputs, allowing extended mode such as 2x1, 1x2, 3x1, 1x3, 4x1, 1x4, or 2x2, that are suitable for video wall solutions. You can even define the screen resolution by yourselves. The screen rotation, including Landscape and Portrait, can also be implemented for simple multi-display setup. You will be able to execute flexible multimedia contents on your video walls by integrating SMP-8000 into your digital signage projects.

Four Signal Output Modes Widely Broadening Applications

SMP-8000 supports the following four signal output modes to provide more flexible combinations of presentations:

Single Mode: connect to one screen

Clone Mode: present identical contents on four screens

Extended Mode: link two/three/four screens together and present content stretching across screens

Distinct Mode: present different contents on two screens or two sets of playback configurations on four screens

Built to Convey Instant and Media-rich Messages

SMP-8000 supports a variety of multimedia formats and can playback 1080p Full HD video, Flash® animation, HTML5 web page, image, music, and text ticker. Incorporated with CAYIN CMS server or UVC compatible USB camera, the player can even play live video. The richness of your digital signage networks is not limited to promotional videos, other contents such as news, weather, social media, streaming videos or any partial web page can also be easily adopted to enrich your digital signage presentations.

## Intelligent and Intuitive Scheduling Management
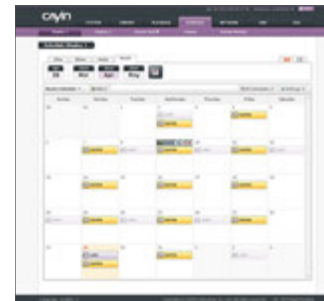
Playback schedules can be arranged in a variety of ways! You can insert a one-time event or arrange periodic tasks based on daily, weekly, monthly or yearly timescales. You can assign a date, a time period, or even a day in a specific week of a month (e.g. 2nd Sunday in May). Location-based scheduling is also doable to largely increase the flexibility.

SMP-8000 provides two viewing modes, calendar and timetable, for you to facilitate schedule management. In addition to editing a schedule directly on an individual SMP media player, you can also choose to centrally control multiple players in groups by a CMS server.

Easy-to-Use Template Creation in Two Ways

With SMP-NEO, SMP-8000 provides a web-based Skin Editor so that users can perform a drag-and-drop operation to define the size and the location of each zone directly on SMP players. In addition, experienced web designers can also utilize any web-editing tool to create HTML pages with the greatest of flexibility.
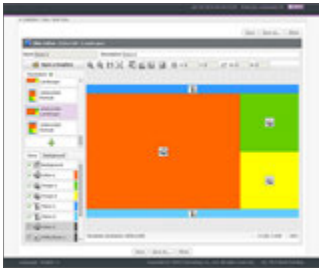
Instant Remote Diagnostics and Preliminary Maintenance

Administrators can perform troubleshooting remotely by retrieving log records and monitoring key operational activities, such as system resource usage, CPU temperature, fan speed, and network topology. To obtain the optimal performance and functionality, users will be prompted to install patches when new software updates are available. If an abnormal situation occurs, SMP-8000 is equipped with a self-repair mechanism to restart the system automatically. Administrators can also restore configurations or recover a system immediately whenever it is necessary.

Powerful Player to Meet Versatile Media Demands

SMP-8000 supports three playback modes for all occasions and applications. You can choose to divide the screen into several zones, each of which applies different media with independent schedules and settings. Packing all zones into one program for a special season or holiday is also an option. If you simply want to deliver a full-screen presentation as a digital poster, you can edit playlists and take turns playing different multimedia contents.
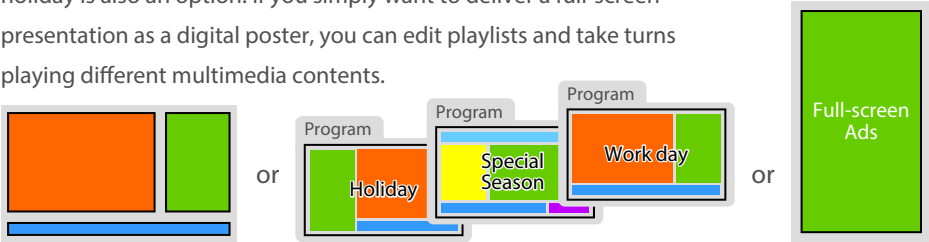
Flexible Platform for Extended Integration

SMP-8000 can be integrated with other external devices to meet requirements from diversified vertical markets. For instance:

Touch Screen:
easily extend to an interactive digital signage system incorporated with USB HID compliance touch screens.

RS-232:
turn on/off screens, adjust brightness, and control other devices, e.g. lamps or control panels.

Mobile Devices:
use mobile phones or tablets to change playlists

Web Server & Database:
possess great flexibility to integrate with web servers (RSS, weather, Twitter, etc.) and databases, such as CAYIN xPost.

Rich Library and Cloud Resources

All necessary raw materials, including multimedia files, fonts, clocks, skins, programs, and playlists, can be accessed easily in the Library to assist you in organizing resources. Moreover, the system allows you to upload your desired fonts or even to download the latest templates from CAYIN's Cloud service for free to greatly enrich your content.

System Specifications

System software	SMP-NEO	

Content Creation	Zone type	• Able to use CAYIN Skin Editor to create templates either directly on SMP players or on your PC
		
		• Display zone (Single, Clone, & Extended modes):
		
		  • Video zone x 2 (video file/streaming/audio)
		
		  • HTML zone x 3
		
		  • Image zone x 2
		
		  • Ticker zone x 2
		
		  • Clock zone x 1
		
		  • Background image x 1
		
		• Number of zones can be doubled in Distinct mode

	Full-screen	• Use any web-editing tool to create HTML pages without limitations of zone numbers
Multimedia Playback	Playback modes	• 3 options: Skin, Program, and Playlist
	Web Pages	• Full-screen browser: embed Firefox V 28 • Web language: support HTML 5[1] , JavaScript and CSS • Plug-in: Adobe® Flash® Player (V 11, Linux build), CAYIN Media Player (Video and Audio), CAYIN Ticker, CAYIN Image Slideshow • Content: show whole or part of HTML/Flash files, remote URL, weather, social media (e.g. Twitter) or integrate with users' network facilities and databases
	Streaming Video	• CAYIN RTB (MPEG4-TS, MPEG2-TS; bit rate: 1~5 Mbps) • RTP (MPEG TS; Codec: MPEG-2/MPEG-4) • HTTP/MMS

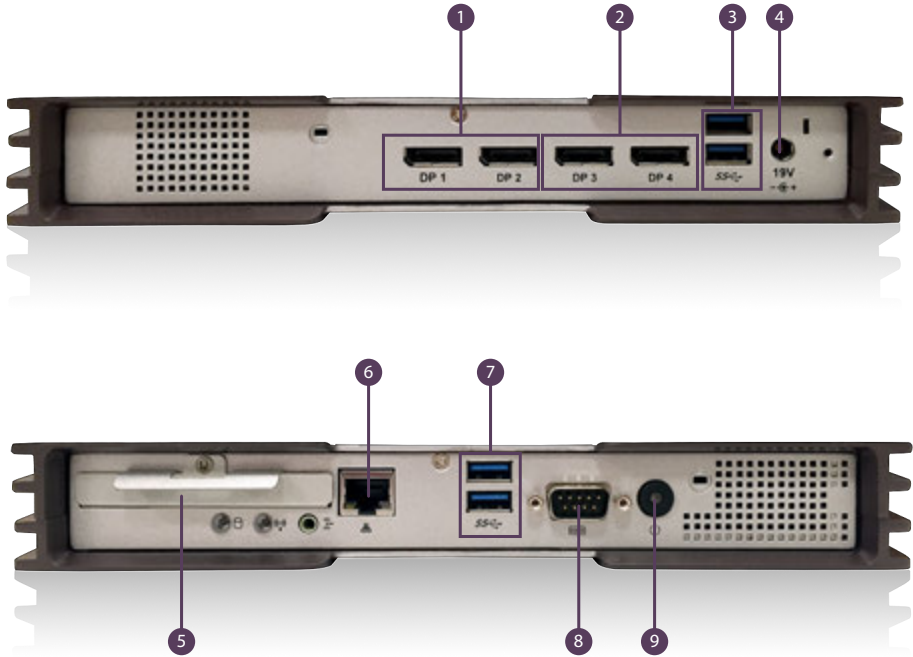[1] The compatibility is based on built-in Firefox browser.

Multimedia Playback	Video Files	• Format: MPEG (MPG, VOB), AVI, WMV, WMA, MP3, MP4 • Codec: MPEG-1/2, MPEG-4 ISO, WMV 7/8/9, H.264 • Bit-rate: 15 Mbps (MPEG2, MPEG4, WMV, H.264), [Single mode/Landscape, 25 fps, single video playback] • Resolution: up to 1080p (1920x1080)
	Audio Files	• Format: WMA, MP3 • Codec: MP3, WMA 7/8
	Image Files	• Format: JPEG/GIF/BMP • Resolution: up to 1920x1080 (2 million pixels)
	Preview	• Playback simulator: image, HTML/Flash, remote URL, and ticker
Schedule	Playback	• Local & central scheduling: edit schedules directly on an SMP player or centrally control multiple players in groups by a CMS server • View type: calendar or time table • Schedule mode: once, daily, weekly, monthly, yearly, and location • Playback type: able to edit scheduled tasks for each zone or as a full-screen display
	Screen, volume & system	• Set schedules to turn on/off the screen, adjust SMP's volume, or restart the system
Content Update	Methods	• Online (manually): FTP, Network Shares (Network Neighborhood), SMP's Web Manager • Online (automatically): CAYIN CMS server • Offline: USB Storage Device
System Settings	Language	• User Interface: Chinese (Traditional), Chinese (Simplified), English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Thai • Ticker Support: Unicode (UTF-8) compatible languages; able to use default fonts or upload TTF/OTF fonts [2].

[2] CAYIN doesn't guarantee that SMP-NEO is compatible to all font files.

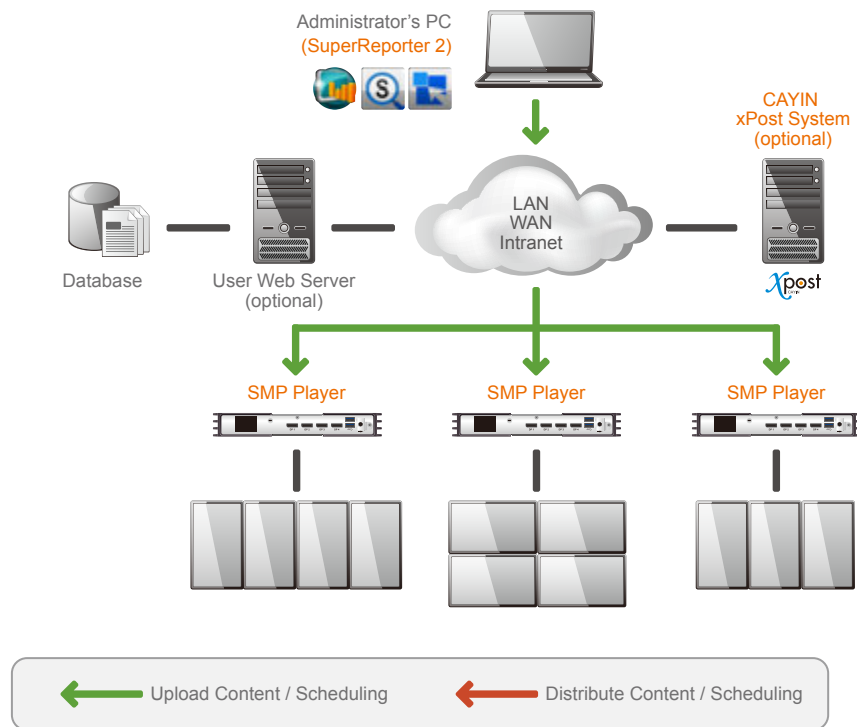|		

System Settings	Display	• Video Wall Array: 2x1, 1x2, 3x1, 1x3, 4x1, 1x4, 2x2 (in extended mode)
		
		• Screen resolutions: 640x480, 800x600, 1024x768, 1152x864, 1280x720 (720p), 1280x768, 1280x1024, 1360x768, 1366x768, 1600x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200, 1920x1440
		
		  - Single mode: support 4K UHD resolution and up to 4096 pixels for one side by User-defined mode
		
		  - Clone/Extended/Distinct mode: support up to 2048 pixels for one side by User-defined mode
		
		• Portrait Mode: Support 90 and 270 degree display rotation
		
		• 4 signal output modes: Single, Clone, Extended, and Distinct modes
		
		• Support to detect EDID/DDC parameters
		
		• Support the screensaver function
		
		• Support to incorporate with USB HID compliance touch screen

	Time	• Set system time manually or synchronize the clock from an NTP server
	Location	• Track SMP's current location by GPS or simply show a static location in Google Maps
Remote Diagnostics and Maintenance	Hardware Monitor	• Check CPU temperature, fan speed, and utilization of CPU, system DRAM, and hard drive
	Log	• Create log files recording the system status • Able to purchase SuperReporter 2 to generate advanced playback reports
	System Update	• Automatic notification of patch and firmware updates
	Self-repair	• Able to restart/shutdown/recover the system and backup/restore configurations remotely.
Network	Protocol	• Support static IP and dynamic IP (DHCP) • Support HTTP, SMB, ICMP, RTP MMS, SYSLOG, FTP
Resources	Cloud-based	• Provide templates and materials in Library and Online Resources
Web Manager	Recommended browsers	• IE 9 or later, Chrome 35 or later, Firefox 28 or later

Hardware Specifications

CPU	• Intel Dual core Celeron Processor
Graphic	• AMD Radeon discrete GPU
Memory	• DDR3 4GB
Dimension	• 250 (W) x 190 (D) x 35 (H) mm
Weight	• 2.2 Kg
Network	• 10/100/1000 Mbps Ethernet
	• 802.11 b/g/n Wireless controller (optional)
	• 3G Data Network (optional)
Internal Storage	• 2.5" SATA Hard-disk drive, 500G Byte
Video	• DisplayPort 1.2 x 2, DisplayPort 1.1x2
Audio	• Phone Jack (Analog Stereo)
	• DP Audio (on DP1 only)
Power	• 10W (Idle), 37W (maximum without expansion)
	• DC 19V, 3.42A
	• 100-240V AC (with external adaptor)
Others	• RS-232 (COM) x 1
	• USB 3.0 x 4
Peripherals	• Wall mount bracket
Certificate	• CE, FCC, BSMI, RoHS

❶ DisplayPort1.2	❷ DisplayPort 1.1	❸ USB 3.0 x 2	❹ DC-IN
❺ HDD	❻ LAN	❼ USB 3.0 x 2	❽ COM
❾ PWR Button			

System Structure

Networked Standalone Digital Signage Player

Administrator's PC
(SuperReporter 2)

CAYIN
xPost System
(optional)

LAN
WAN
Intranet

Database

User Web Server
(optional)

SMP Player   SMP Player   SMP Player

⬅ Upload Content / Scheduling   ⬅ Distribute Content / Scheduling

Digital Signage Network with Client-Server Structure (CMS server + SMP player)

Administrator's PC
(SuperMonitor 4) (SuperReporter 2)

CAYIN
xPost System (optional)

CMS Server

LAN
WAN
Intranet

User Web Server
(optional)

Database

Group 1
SMP Player   SMP Player

Group 2
SMP Player   SMP Player