

SmartVideo

SmartVideo provides a single zone of TrueCommand, video processing and scaling, video switching and includes popular control formats for residential and business applications. SmartVideo delivers a complete Savant SmartSystem™ when paired with an external host.

SmartVideo can also be used as a standalone video processor and scalar in residential, commercial or business applications. For instance, for scaling video sources commonly found in conference rooms or boardrooms, such as computers or projectors.



TrueCommand

TrueCommand is an on-TV menu system overlaid onto live video. TrueCommand provides a visually engaging way to navigate, browse and select diverse control subsystems and multimedia content by boldly presenting them on your HD displays. TrueCommand is powered by Savant's video mixing and overlay technology, combining and supporting HD and semi-transparent graphics up to 1080p60.



By using TrueCommand in tandem with Savant Remotes—or an iPhone®, iPod touch®, or iPad® running our TrueControl App—you can easily navigate and switch from cable TV to the Blu-ray player, play music, adjust the heat, dim the lights, get the weather and sport scores all from the comfort of your couch, or from a podium lectern.

BENEFITS AND FEATURES

- ▼ TrueCommand platform
Video mixing and overlay technology delivering spectacular on-screen displays
- ▼ World-class video processing
- ▼ Professional video scaling and deinterlacing
- ▼ Blend of Popular Control Formats
(2) – RS-232 Serial Ports
(6) – IR Transmitter Ports
(1) – Relay (Dry Contact)
(1) – General Purpose Input/Output
- ▼ 5 x 1 Video switching
- ▼ 1U form factor, reduces rack space
- ▼ Fan-less design for in-room placement
- ▼ Savant industrial design signature, metal enclosure with matte finish
- ▼ Configured and customized using RacePoint Blueprint™

Broadcast-Quality Video Processing and Scaling

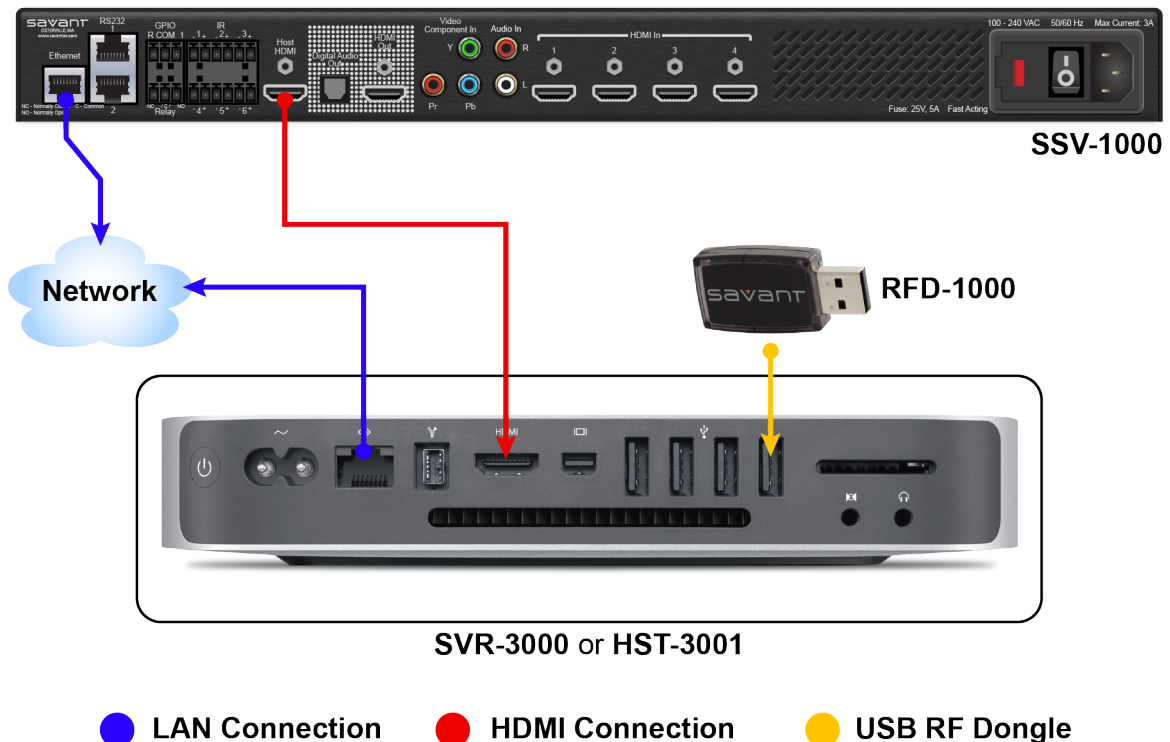
SmartVideo also provides video processing and scaling capabilities. The integrated world-class video processor enhances image detail and quality with four-field motion adaptive de-interlacing, expanded 12-bit color processing and detail enhancement. The result transforms standard-definition sources to HD quality and makes HD look even more detailed. Moreover, the video processor also provides real-time clean up of highly compressed artifacts of block and mosquito noise from lower-quality sources.

SmartVideo incorporates three noise reduction techniques — adaptive mosquito, block and temporal — to selectively reduce image artifacts. Moreover, the SSV-1000 also contains resolution enhancement technology that generates pristine and detailed upscaled images to make standard definition content look near-HD in quality and can even further enhance detail in HD content.

SmartVideo also functions as a video scalar. Video scaling features include aspect ratio: anamorphic and panoramic full screen, pillar box and more. Video processing features include: hue, saturation, brightness, contrast (HSBC) and noise reduction.

Typical Connection Diagram

The figure below depicts a typical connection diagram of the SmartVideo platform connected to a Savant User Interface Server (SVR-3000) or an external host (HST-3001). RFD-1000 is an Radio Frequency Universal Serial Bus (USB) dongle, which is used to wirelessly communicate to our family of TrueCommand Remotes (RTR-1000 or RRC-1000). The HDMI host connection is primarily used for distributing blended Mac® graphics.



TECHNICAL SPECIFICATIONS

Model Numbers	SmartVideo platform, SSV-1000
Front Panel I/O	Status Indicators
Rear Panel I/O	<p>Control Ports</p> <p>Ethernet: (1) RJ45 Ethernet 10/100 base-T ports, which automatically negotiates connection speed.</p> <p>Serial (Ports 1–2): Two RS-232 control ports using RJ45 connectors. Both ports support CTS/RTS (clear to send/ready to send).</p> <p>IR (Ports 1 – 6): Six IR control ports</p> <ul style="list-style-type: none"> • Two 6-pin screw down connector (3.8 mm) provides IR port termination <p>Relay: One Relay port, Normal Open / Normal Close contacts</p> <ul style="list-style-type: none"> • One 3-pin screw down connector (3.8 mm) provides Relay port termination <p>General Purpose IO: One GPIO (12V Trigger IO)</p> <ul style="list-style-type: none"> • One 3-pin screw down connector (3.8 mm) provides GPIO port termination <p>Video Inputs and Outputs plus additional IO includes</p> <ul style="list-style-type: none"> • (1) –HDMI Host Input (Mac® graphics, audio and control) • (4) – HDMI Inputs, HDMI 1.4 capable with locking HDMI connectors • (1) – HDMI Output, HDMI 1.4 capable with locking HDMI connectors • (1) – Component Input, YPrPb • (1) – Reset button <p>Audio Inputs and Outputs</p> <ul style="list-style-type: none"> • (1) Analog inputs, R and L RCA jacks • (1) Digital output, TosLink • Up to 4 internal digital sources from the External Host
Navigation and Control	Paired with Savant User Interfaces
Video Processor and Scalar Features	<p>Advanced Noise Reduction - Powerful noise reduction algorithms use advanced adaptive motion, power and spatial estimation techniques to selectively reduce image artifacts. The following noise reduction algorithms are available:</p> <ul style="list-style-type: none"> • Mosquito Noise Reduction (MNR) - Noise around the edges of objects due to compression loss • Temporal Noise Reduction (TNR) - Film grain, random noise and sensor noise • Block Artifact Reduction (BAR) - Block artifacts caused by over compression <p>Motion Adaptive Video Processing</p> <ul style="list-style-type: none"> • Four-field, motion adaptive, de-interlacing • Multi cadence support • Adaptive motion processing for trick-mode play and poor quality video <p>Scalar and Resolution Enhancement</p> <ul style="list-style-type: none"> • Edge-adaptive up-scaling • Per-pixel resolution enhancement • Support for wide, zoom and non-linear panoramic scaling <ul style="list-style-type: none"> - Full Screen Aspect Ratio Mode - Pillar Box Screen Aspect Ratio Mode - Panoramic Screen Aspect Ratio Mode <p>Adaptive Contrast Enhancement</p> <ul style="list-style-type: none"> • Optimizes image dynamic range • Improves black and white level detail • Adaptive Detail Enhancement, Adaptive Brightness Enhancement <p>Adaptive Color Support</p> <ul style="list-style-type: none"> • 12-bit color space conversion on input and output • 12-bit color Gamma conversion • Adaptive Detail Enhancement • xvYCC/custom display color gamut mapping • Full 6-axis hue and saturation control • Hue, saturation, brightness and contrast (HSBC) adjustment <p>High Bandwidth Input and Output</p> <ul style="list-style-type: none"> • 36-bits/pixel deep color input and output • Input and output resolutions up to a maximum of 1920 x 1080p @ 60Hz (video) and 1920 x 1200 @ 60Hz with reduced blanking (graphics) • 12-bit color Gamma conversion • 1080p @ 24Hz Pass through support • Video Frame Latency, Fixed Sub-Frame • Graphics Frame Latency, Fixed 1 Frame • Graphics Frame Rate, 1080p @ 60 Hz and 720p @ 60 Hz

TECHNICAL SPECIFICATIONS

Dimensions (HWD)	1U (rack unit high), 1.75 x 17.3 x 8.5 inches, 4.4 x 44 x 21.5 centimeters
Weight	10 Lbs (4.5 Kg)
Input Power	100 - 240 VAC, 50/60Hz <ul style="list-style-type: none"> • Nominal Input Power 22 Watts • Max. Input Power 33 Watts • Max. Current 3A • Fuse 250V, 2.5A Fast-Acting
Maximum BTU	115 BTU per hour
Enclosure	Metal with black matte finish with Savant's industrial design signature
Included Items	Removable rack ears, mounting hardware and AC power cord Quick Reference Guide Installation Kit <ul style="list-style-type: none"> • (2) Six position connector for IR ports • (2) Three position connector for GPIO and Relay ports • (2) AC power cord
Optional Accessories	Master Host Controller, Model Number HST-1001 or HST-3002
Navigation and Control	Paired with Savant User Interfaces
Compliance	Safety and Emissions <ul style="list-style-type: none"> • CSA NRTL/C and FCC Part 15 Class B RoHS Compliant
Design Tool	RacePoint Blueprint™ is an advanced, intelligent and easy to use graphical user interface (GUI) tool for configuring, programming, and customizing Savant systems—without the need for low-level programming.

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