



SOUNDSENTRY™ SECURE MEETING ROOM

EFFECTIVE SECURITY FOR DYNAMIC MEETING ENVIRONMENTS, ELIMINATING THE RISKS OF EAVESDROPPING AND DATA BREACHES



SOUNDSENTRY™

SECURE MEETING ROOM

Meeting rooms are a hub for secure, proprietary, and confidential communications. This environment is a prime target for cyber attacks, including data breaches and eavesdropping. The SoundSentry product family protects sensitive meetings from these threats and facilitates simple operation, even when conducted in a cross-domain environment.

The SoundSentry solution has different modes of operation, depending on the type of meeting: **fully secure mode, local meeting mode, and video conference mode**. Depending on the mode selected, the SoundSentry devices may be active or powered down – all at the push of a single remote control button.

THE FAMILY

OF SOUNDSENTRY PRODUCTS

- **Videobar** – A specially designed videobar that can be shared between networks but is immune to data leakage. No wireless interfaces typically found in soundbar/videobar products making WiFi and Bluetooth attacks impossible. No battery-backed internal storage, which prevents using the Videobar as an intermediary between networks.
- **SC42PHU-4/SC82PHU-4 Combiner** – A NIAP certified completely secure KVM Combiner switch with advanced multiview capabilities.
Note: HSL's secure line of Combiner and Mini-Matrix products are SoundSentry compatible.
- **Videobar Diode** – An audio and webcam diode that prevents inadvertent microphone and video transmissions, high-frequency modem data exfiltration, and enforces unidirectional flow of all data streams to prevent data leaks.
- **Multi-Domain Remote Control** – Invoke meeting room presets for local conferences, videoconferences, and classified conversations at the push of a button.
- **SmartSwitch Power Strip** – Powers or disconnects the Videobar, Videobar Diode, and displays with the push of a remote-control button, ensuring the appropriate environment based on the meeting's security level.
- **AQB (Active Quiet Box)** – The ultimate eavesdropping protection for smartphones. Physical anechoic technology ensures acoustic isolation, and active noise obfuscation prevents eavesdropping.

KEY PERFORMANCE FEATURES

VIDEOBAR

- 4K UHD @ 30Hz video
- 121° wide field of view
- Up to 5X optical zoom; pan/tilt $\pm 15^\circ$
- Integrated beamforming microphone with a pickup distance of 6 meters
- Full frequency, high fidelity loudspeaker
- Video output: HDMI; Compression: H.264/MJPEG/YUY2/NV12
- USB interface: 1 X USB3.0, Type C; 1X USB2.0, Type A
- Automatic dominant speaker video tracking
- No wireless WiFi or Bluetooth interfaces
- No battery-backed internal memory for data storage



SC42PHU-4 / SC82PHU-4 SECURE COMBINER

Note: The SoundSentry solution is compatible with any of HSL's secure Mini-Matrix and Combiner KVM switches

- 4/8 source ports, depending on model; 2 console display ports
- Advanced multiview capabilities including tiled and scaled views of all sources on a single display.
- NIAP PP4.0 PSD certified
- 4K UHD @ 30Hz



AQB (ACTIVE QUIET BOX)

- Capacity for 8 or 4 smartphones
- Reduces ambient sounds passively using an anechoic physical barrier
- Active random noise obfuscation using human speech recordings



REMOTE CONTROL

- 8 programmable buttons for controlling the secure Combiner and the SmartSwitch Power Strip
- Can be daisy-chained for additional capacity



VIDEOBAR DIODE

- Media flow is enabled only after pressing a dedicated button. Overridable auto-shutdown of media streams after a user-configured period of time.
- Low pass filter prevents turning speakers into high-frequency transmitters
- Unidirectional diodes prevent retasking speakers into listening devices
- Unidirectional diodes inhibit using peripherals for data exchange

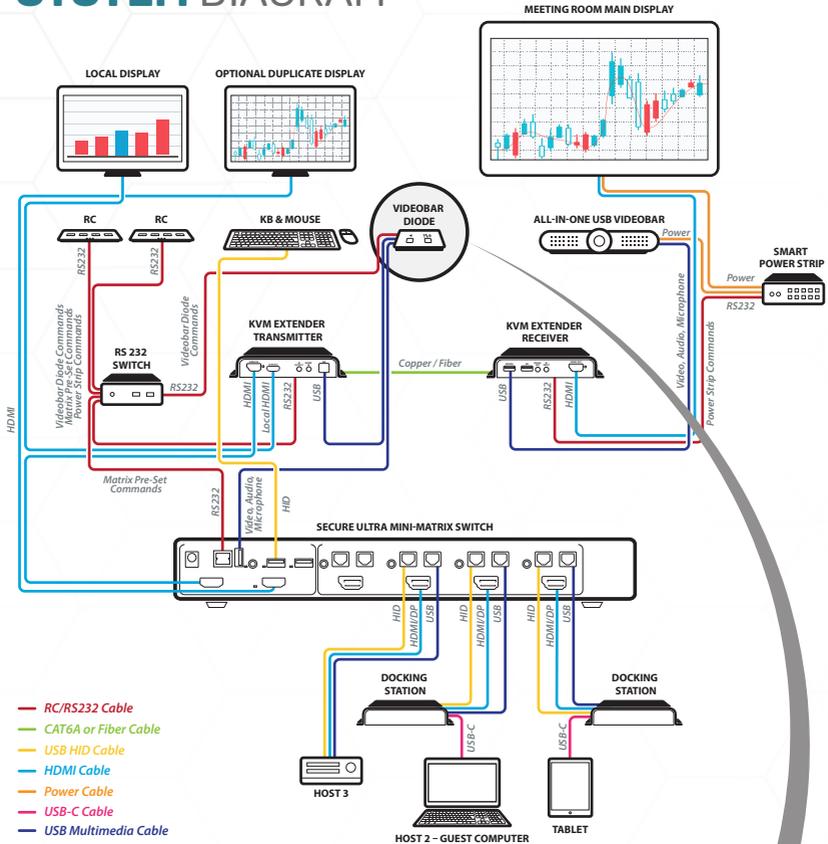


SMARTSWITCH POWER STRIP

- Controls the power supply to up to 4 peripherals including display screens and videobars.
- Integrates with the remote control – a single button controls the power state of the peripherals.
- Overridable auto-shutdown of power to devices after a user-configurable period of time.



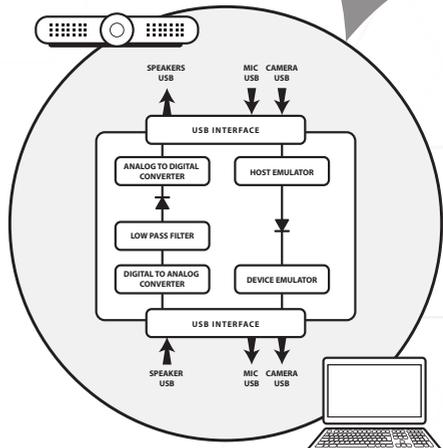
SYSTEM DIAGRAM



VIDEOBAR DIODE: INTERNAL STRUCTURE

WORKING MODES:

- **Fully Secure** - Main display & Videobar disconnected
- **Local Meeting** - Main display operational, Videobar disconnected
- **Video Conference** - Main display & Videobar operational



SECURITY FEATURES

- Audio stream is protected by a low-pass filter preventing high frequency data breaches.
- Unidirectional data flow prevents data breaches through peripheral devices and the retasking of audio speakers as microphones.
- Optical data diodes prevent mixing data between sources, including guest computers.
- Immune to wireless hacking attempts.
- No back-up batteries – information cannot be stored in a device for delayed exfiltration.
- Normally closed Videobar Diode prevents inadvertent audio and video transmissions.
- Remote controlled SmartSwitch Power Strip cuts power to the Videobar, display and Videobar Diode, depending on the classification level of the meeting.
- Smartphone eavesdropping prevention through anechoic isolation and active noise obfuscation.
- Anti-tamper mechanism and holographic anti-tamper labels.
- TAA & BAA compliant secure supply chain and manufacturing prevent zero-day supply chain attacks.

HIGH SEC LABS (HSL)

DEVELOPS HIGH-QUALITY CYBER-DEFENCE SOLUTIONS FOR PROTECTING NATIONAL ASSETS AND INFRASTRUCTURE IN THE FIELD OF NETWORK AND PERIPHERAL ISOLATION.



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