

A comprehensive solution for effectively conducting sensitive meetings without the risks of eavesdropping and data breaches



MEETING ROOMS

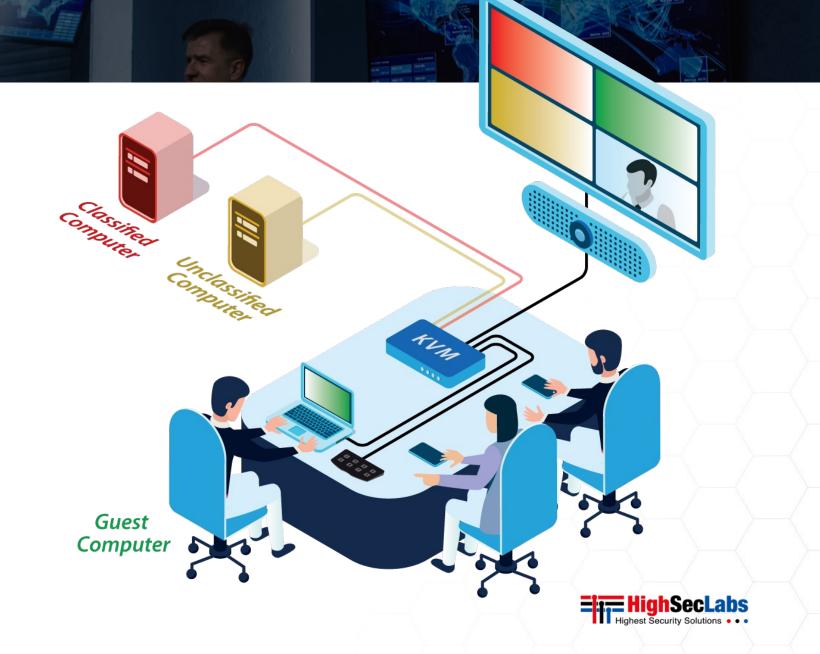
Meeting rooms bring together

- Multiple computer sources and networks
- Presenters & computers from outside the organization
- Sophisticated AV equipment with internal clients & open interfaces
 - Display screens
 - Videobars
 - KVM switches
 - ► Remote controls
- Multiple attendees with personal devices



MEETING ROOM CHARACTERISTICS

- Intersection of classified and unclassified information:
 - Conversations
 - Videocalls / phone calls
 - Network sources
 - Guest computers
- Applies to:
 - Meeting rooms
 - Board rooms
 - Executive offices
 - Briefing rooms



SECURITY THREATS (1)

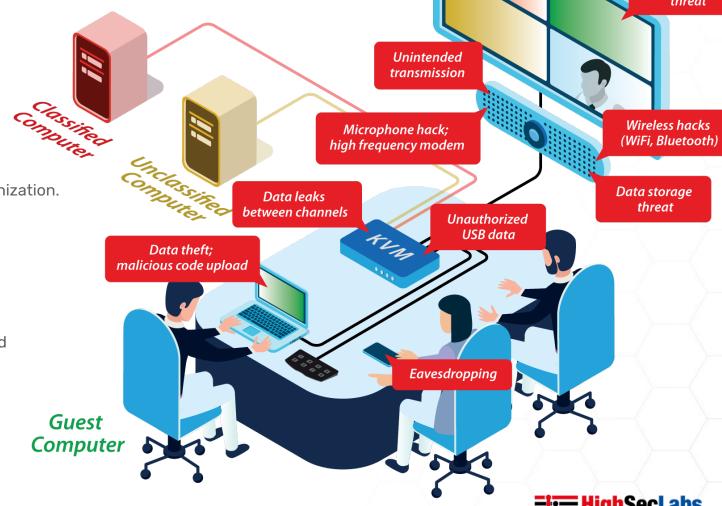
Data storage threat

> Data exchange threat

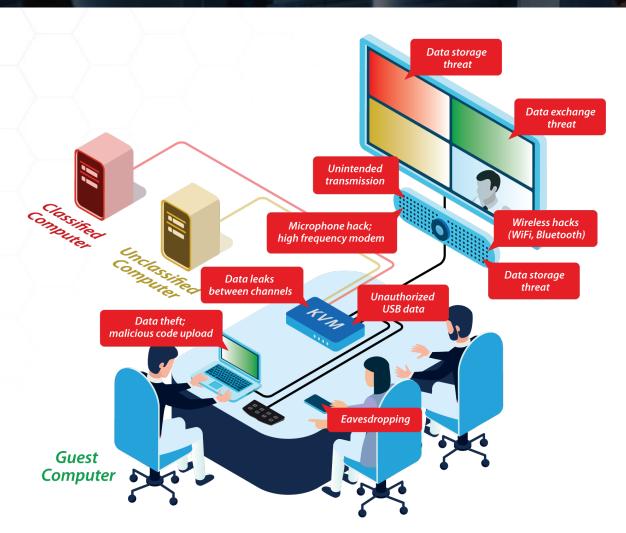
- The nexus of networks, computers, devices and people creates vulnerabilities in meeting rooms:
 - **Data Leaks and Breaches** Information from classified network can leak to quest equipment or unclassified networks.
 - **Eavesdropping** Classified conversations can be recorded and transmitted outside of the organization.

Threats:

- Unintended transmissions of audio/video when videobars are not completely shut off.
- Hacked smartphones record conversations, even when turned off.
- Malicious code from guest computers is uploaded to display and videobar memories.
- Unsecure KVM switches leak data between channels.
- Wireless connections (WiFi, Bluetooth) are conduits for hacking peripherals.



SECURITY THREATS (2)



Threats:

- Infecting networks with viruses that extract information from the networks and hack peripheral devices.
- Exfiltrating information through "Black" networks or by using display / videobar memory that is accessed later by another guest computer.
- Hacking loudspeakers & transmitting data using high-frequency modem technology
- Hacking loudspeakers & retasking speakers as microphones that record conversations
- Exploiting display control channels (EDID, MCCS) to transfer data



THE SOUNDSENTRYTM SOLUTION

The **SoundSentry** family is a comprehensive solution for conducting classified and unclassified meetings using the same room with no risk of data leakage.

It is the world's only solution **specifically designed** to protect classified & sensitive information.

The SoundSentry solution is **TAA** and **BAA** compliant and uses previously certified components and technologies.



SOUNDSENTRY SOLUTION FAMILY OF SECURE DEVICES







VIDEOBAR



REMOTE CONTROL





USB-C Extended Docking



MINI-MATRIX / COMBINER



SMARTSWITCH POWER STRIP



VIDOEBAR DIODE



USB-C Docking Station





SOUNDSENTRY **VIDEOBAR**

Videobars and soundbars create substantial security risks:

- Recording meetings
- Data storage to internal memory
- Data leaks and introduction of malicious code through wireless interfaces like Bluetooth & WiFi

SoundSentry Videobar

- Wired-only connectivity no wireless access
- No battery back-up. Power cycling, including when KVM switches channels, deletes all volatile internal data
- Secure Boot with locked (OTP) firmware image prevents modifying the Videobar's behavior
- TAA/BAA compliant & manufactured in a secure production facility

Videobar





SOUNDSENTRY VIDEOBAR DIODE

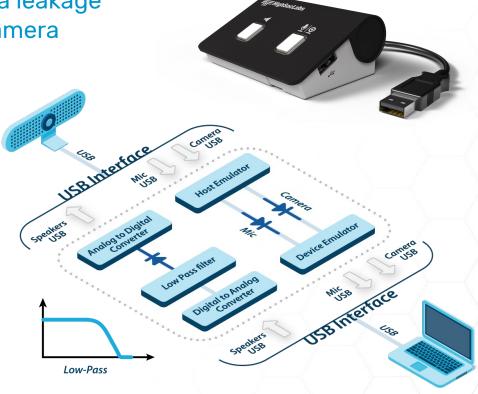






Share the Videobar between multiple networks without data leakage risks by using the **Videobar Diode**. The mic, speaker and camera channels are isolated, protected and filtered separately.

- **Videobar Diode NIAP PP4.0 compliant**
 - Unidirectional data flows
 - Digital audio is converted to analog and then back to digital preventing non-audio data exchange with hosts
 - Video is sent over a unidirectional parallel bus, preventing crosstalk.
 - No data transfer possible using the videobar as an intermediary
 - No retasking of the videobar speakers as microphones
 - Low pass filter prevents high frequency data modem transmission exfiltration
 - Timer Controlled, Normally Closed Operation
 - Prevents inadvertent audio/video transmissions





SOUNDSENTRY SMARTSWITCH POWER STRIP





- **SmartSwitch Power Strip** Managed power strip that powers devices on or off depending on the sensitivity of the meeting:
 - Video conferencing
 - Display ON, Videobar ON
 - Local presentation
 - Display ON, Videobar OFF
 - Classified Meeting
 - Display OFF, Videobar OFF
- Easy, remote-controlled operation at the push of a single button
- TAA/BAA compliant







SOUNDSENTRY AQB (Active Quiet Box)





- Prevents smartphones from eavesdropping on conversations and recording or transmitting them for an outside source
- Anechoic chamber provides physical acoustic isolation
- Noise obfuscation bombards smartphones with human conversation gibberish
- Keep phones in the meeting room & not unattended outside



SOUNDSENTRY ADVANCED KVM SWITCHES

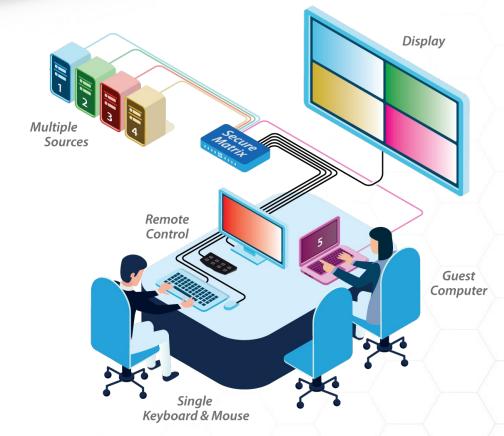


#F HighSecLabs





- HSL'S **SECURE** KVM switch product line is compatible with the SoundSentry meeting room family of products.
- The SECURE meeting room KVM product line includes advanced functionality and display options:
 - Mini-Matrix & Ultra Mini-Matrix family
 - Combiner family
- Products are easily controlled using HSL's remote controls & preset configurations.
- NIAP PP4.0 for PSD certified No data leaks
- Dual console displays & up to 8 source ports



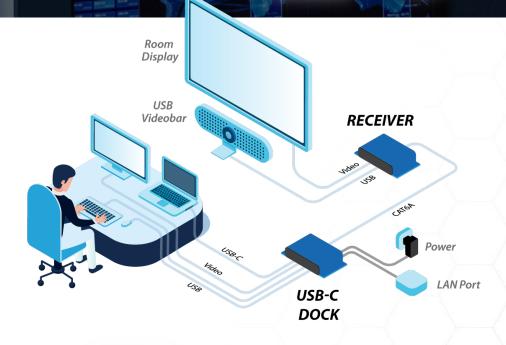


SOUNDSENTRY **USB-C DOCKING & EXTENSION**





- Facilitate using smartphones, tablets, and **USB-C** laptops in meetings
- USB-C extension enables provisioning the KVM switch wherever convenient in the room.
- Docking station provides PD and peripheral connectivity to USB-C only devices.











USB-C Docking Station



SOUNDSENTRY REMOTE CONTROLS





HSL'S programmable remotes are SoundSentry compatible

- Cascade remotes to support any installation, regardless of size.
- Enter the desired meeting sensitivity mode with the push of a button:
 - Videoconference
 - Local Meeting
 - Classified meeting
- Invoke Mini-Matrix / Combiner presets with the push of a button.





SOUNDSENTRYTM SECURE MEETING ROOM

SMART POWER-STRIP

Remote controlled disconnect of display and videobar

MEETING ROOM ULTRA MATRIX

Channel isolation, data diodes, USB filtering

AQB (ACTIVE QUIET BOX)

Acoustic isolation and active noise obfuscation

REMOTE CONTROL

Video presets, power strip on/off

Guest Computer

VIDEOBAR DIODE

Normally closed, low pass filter, unidirectional flow



SECURE VIDEOBAR Wired only connection, no battery back-up



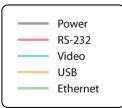
A description of how the SoundSentry solution secures various types of meeting rooms

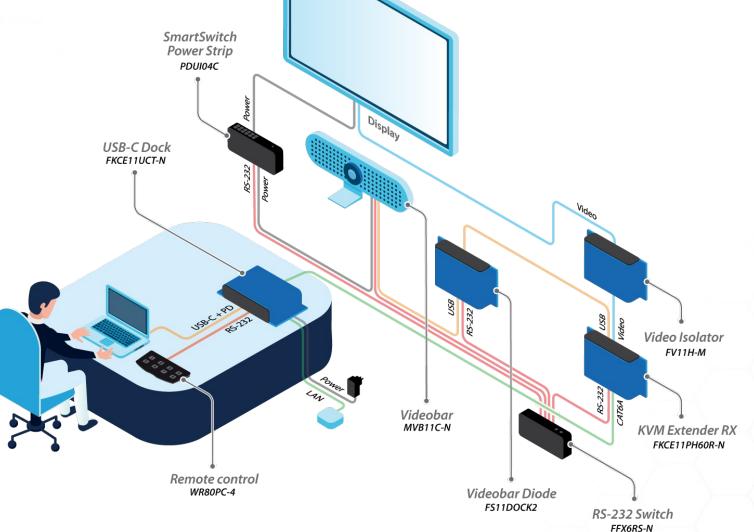


SECURE MEETING ROOM

REMOTE CONTROL

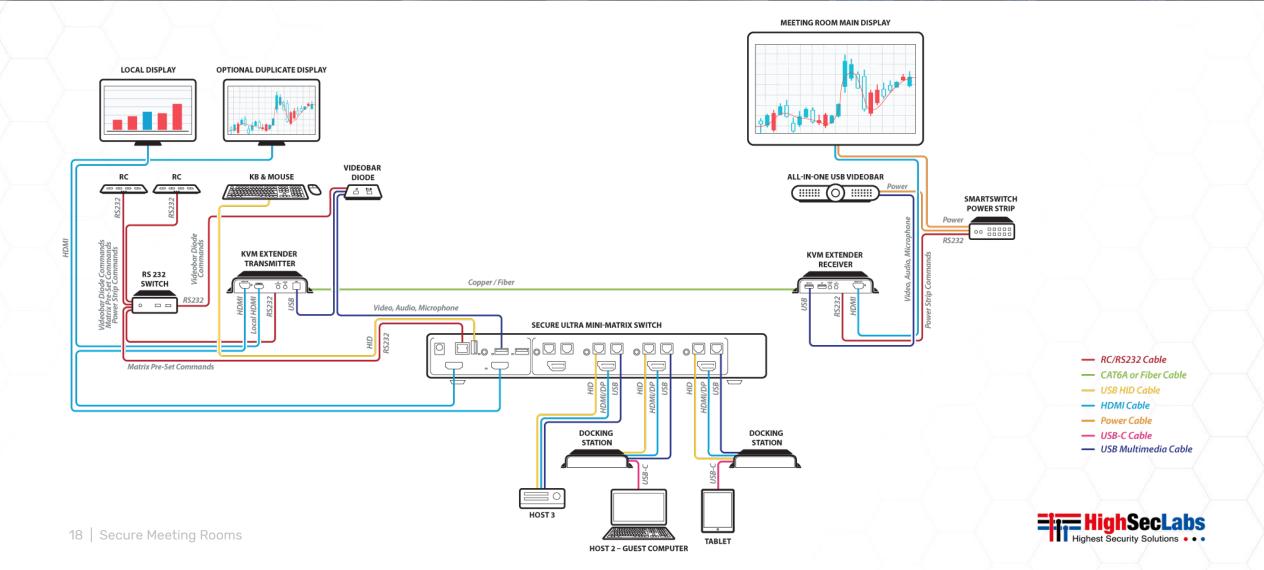
- 1. Shut off AV Cut power to Videobar and display
- 2. Display only Display is powered on, Videobar is powered off
- 3. Room On Display, Videobar and Videobar Diode are activated
- 4. Extend meeting time on Videobar Diode
- 5. Extend activation of display, Videobar and Videobar Diode





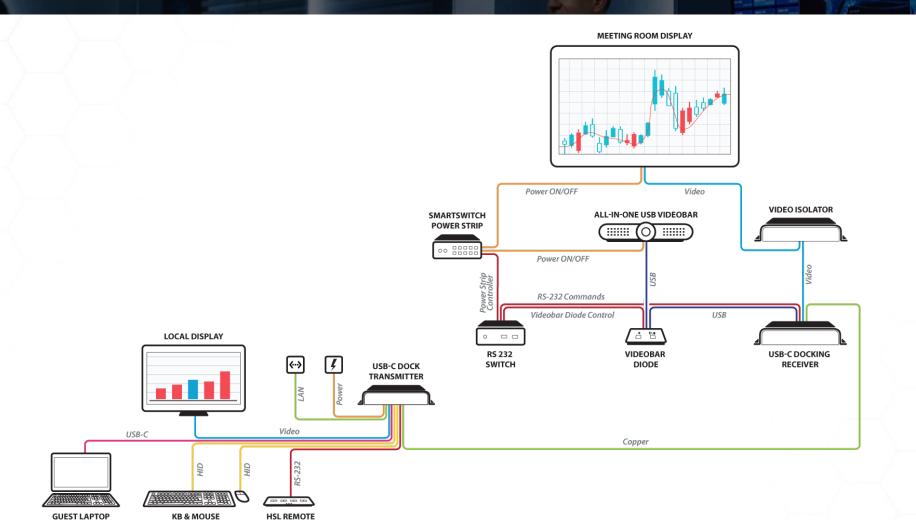


SECURE MEETING ROOM WIRING DIAGRAM



SECURE **EXECUTIVE OFFICE** SmartSwitch Power Strip PDUI04C KVM Ultra-Matrix SC42PHU-4X USB-C KVM Cable USB-C KVM Cable SCBLN11CCL DCBLN12CCL Video Isolator FV11H-M Video + USB KVM Extender RX — Power Videobar FKCE11PH60R-N --- RS-232 MVB11C-N Video — USB — Ethernet Videobar Diode FS11DOCK2 RS-232 Switch RS-232 Switch FFX6RS-N FFX6RS-N Remote control KVM Extender TX WR80PC-4 FKCE11PH60T-N 19 | Secure Meeting Rooms

SECURE **EXECUTIVE OFFICE WIRING DIAGRAM**



- RC/RS232 Cable
- CAT6A or Fiber Cable
- USB HID Cable
- HDMI Cable
- Power Cable
- USB-C Cable
- USB Multimedia Cable



SECURE BOARD ROOM SmartSwitch Power Strip PDUI04C KVM Ultra-Matrix SC42PHU-4X USB-C KVM Cable DCBLN12CCL Video Isolator FV11H-M ---- Power ---- RS-232 Video --- USB KVM Extender RX Ethernet FKCE11PH60R-N Videobar MVB11C-N RS-232 Switch **Docking Station** FFX6RS-N UK12PHC-N Videobar Diode RS-232 Switch FS11DOCK2 Remote control KVM Extender TX FFX6RS-N 21 | Secure Meeting Rooms WR80PC-4 FKCE11PH60T-N



- TAA and BAA compliant products
- Complete supply chain root of trust
- Certified components to assure isolation
- A complete end to end customizable solution for any meeting room



