

Switch*plusIP*®

Secure Operator Interface Unit (SOIU)



Powerful dedicated audio processing for advanced operators in multi-level security enclave environments

Simplifying secure operator audio

The SOIU is one of the Switch*plusIP*® core building blocks and is the communications hub of the Switch*plusIP*® Secure operator position. It provides the operator with dedicated DSP audio processing resources that enable efficient support for a range of audio equipment. It efficiently converts the audio from these devices to standards-based Voice over IP (VoIP) which can be streamed to any enabled compatible device via multi security enclaves. It also supports dual LAN interfaces in each enclave ensuring that mission critical audio always gets through to its destination.

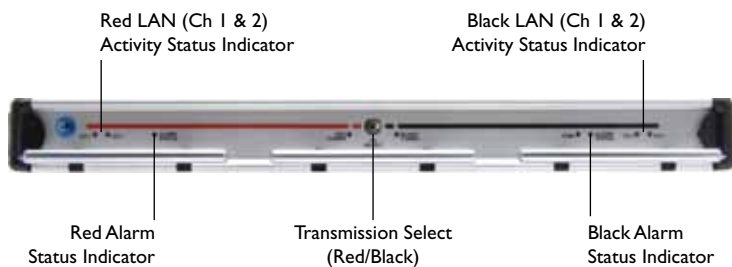
The SOIU is used as part of a larger total C4i secure communications solution.

Simplifying connection of operator audio equipment

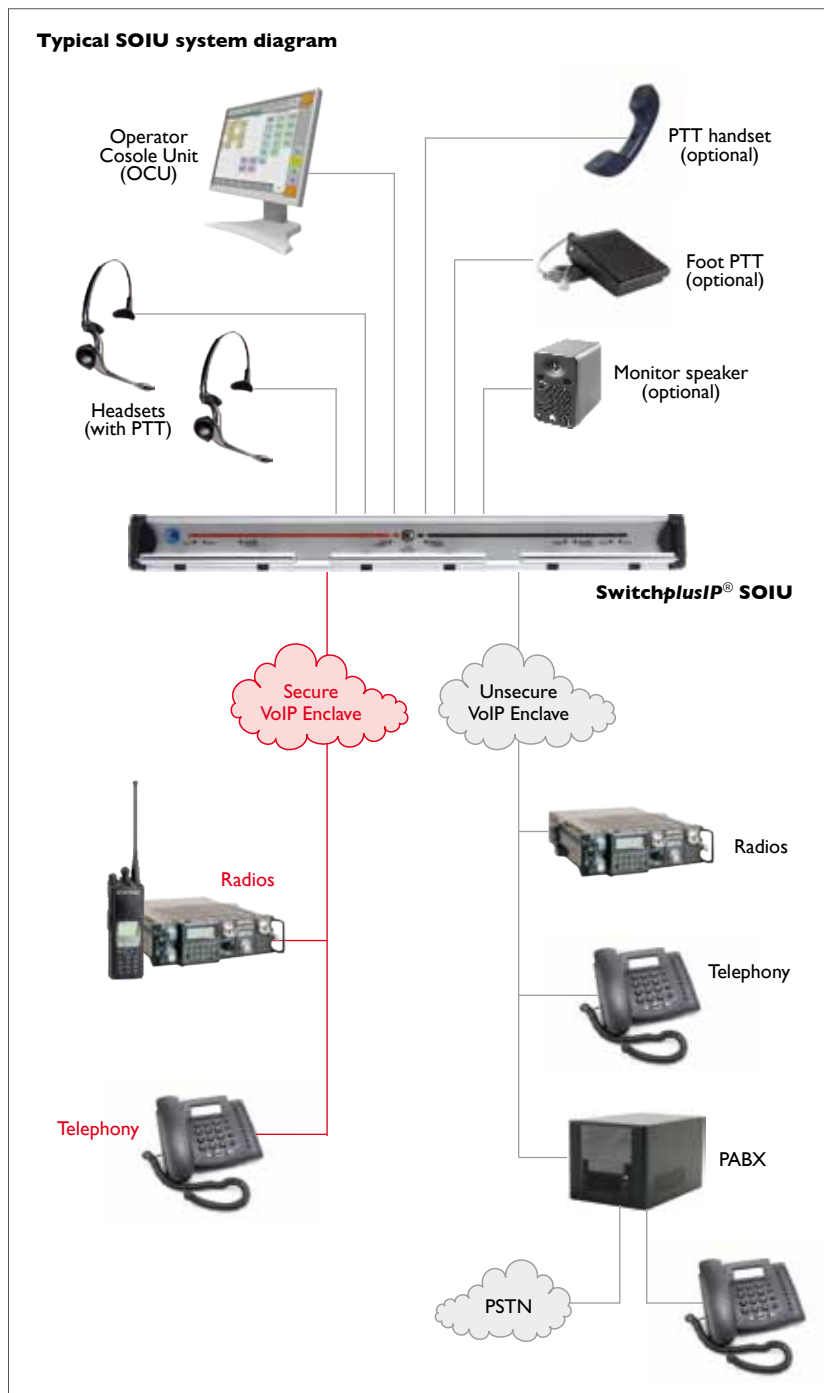
The SOIU greatly simplifies the operator's task when operating in environments requiring simultaneous access to multiple security domains.

The SOIU allows its operators to listen to audio from multiple domains in a single headset and, via a single touchscreen, control communications in both domains.





Typical SOIU system diagram



Specifications

Dimensions (W x H x D)	435 x 44 x 422 mm 17.13 x 1.73 x 16.61 in
Weight	5.9 kg / 13 lbs
Mounting Type	1U high Rack, shelf or proprietary mountable (Installation specific. For full-width 19 inch rack, proprietary mounting kit available)
Isolation	NSTISSAM TEMPEST/I-92 & NSTISSAM TEMPEST/2-95

Power Input (configuration dependant)

PoE	48VDC from Ethernet Switch. RED and BLACK sides powered individually from respective IP switches. Class 3 Powered Device (<13W each for RED and BLACK side)
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Connection Interfaces

DC Power	PoE supplied from Ethernet Switch via the Tx/Rx LAN pairs
Headset/Handset (non-isolated)	2 x stereo headsets Connection via D-Sub 9 connectors on rear of enclosure. One D-Sub 9 pin connector per headset
Black Aux. Audio (isolated)	1 x audio output for use with speaker; voice recorder 1 x audio output for a "Line" input
Red Aux. Audio (isolated)	2 x audio outputs for use with speaker; voice recorder
PTT Switch	1 x D-sub 9 pin connector for 2 separate Footswitch inputs: dry closure
Ethernet (to Red System LAN)	2 x IEEE 802.3 10/100 Base-T; 1 x D-Sub 9 pin socket (2 x Ethernet ports)
Ethernet (to Black System LAN)	2 x IEEE 802.3 10/100 Base-T; 1 x D-Sub 9 pin socket (2 x Ethernet ports)
Ethernet (to Black Control Port)	1 x IEEE 802.3 10/100 Base-T; 1 x D-Sub 9 pin socket (1 x Ethernet port)
Software Protocols	FoIP/VoIP, SIP & RTP
Environmental	
Operating Temperature	-20°C to +60°C / -4°F to 140°F (MIL-STD 810F – 501.4 & 502.4 (Op, Tablet))
Storage Temperature	-40°C to +75°C / -40°F to 167°F (MIL-STD 810F – 501.4 & 502.4 (Non-Op))

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Simplifying communications