



Quick Installation Guide

2/4/8 Ports High Security DP/HDMI KVM Switches

Introduction

Thank you for purchasing this HSL Secure KVM Switch. This KVM Switch is designed for use in secure defense and intelligence environments across wide security gaps.

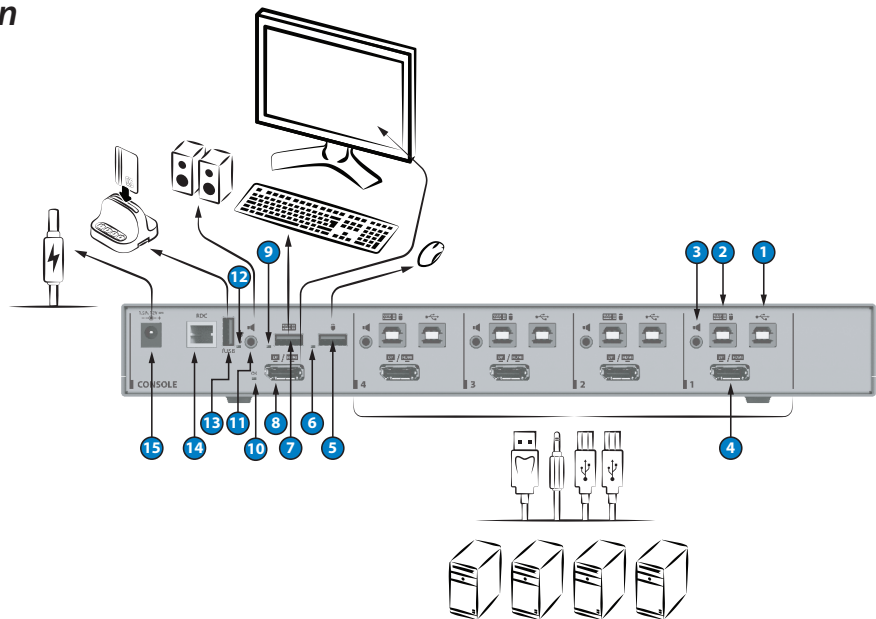
Objectives

- This guide includes instructions for installing and basic operation of HSL's DP/HDMI Secure KVM Switch **SK21PH-4, SK41PH/PHU-4, SK81PH-4, DK22PH-4, DK42PH/PHU-4, DK82PH-4** devices.
- For further assistance please refer to HSL website: <http://www.highseclabs.com>
- The following diagram references the SX42PHU-4 device but it is applicable to devices covered in this manual.

SK41PHU-4 Model is shown

Rear Panel Index:

1. PC fUSB input
2. PC Keyboard/Mouse input
3. Analog audio input
4. PC Video DP/HDMI input
5. Console Mouse
6. HID - Console Mouse LED
7. Console Keyboard
8. DP/HDMI Output
9. HID - Console Keyboard LED
10. Output Display LED
11. Analog audio output
12. fUSB output LED
13. fUSB output
14. Remote Desktop Control port (for AFP)
15. DC in



Installation Precautions:

Do not connect this product to computing devices that:

- Are TEMPEST computers
- Include telecommunication equipment
- Include frame grabber video cards
- Include special audio processing cards.

WARNING: Peripherals' Warning - For security reasons, this product does not support wireless keyboards. It is recommended not to connect a microphone or headset to the audio output port.

NOTE: In order to comply with the product's Common Criteria evaluation and to prevent unauthorized administrative access to the product, the default administrator username and password must be changed prior to first product use.

Installation:

- Verify that all peripherals and computers are turned OFF prior to connecting them to the product.
- Connect the computers and peripherals to the HSL KVM as shown in the above diagram.
- It is possible to connect an HSL AFP (remote control) to the RDC port of these devices. Please refer to the AFP datasheet on how to connect it.
- Power ON the monitors and the PCs: Make sure that the monitor is turned ON prior to powering ON the KVM.
- Power ON the system: Power ON the KVM by plugging it to the AC wall outlet. By default, after product power-up, the active channel will be computer #1, indicated by the applicable front panel push button LED lit.

NOTE : HSL devices covered by this manual include a special DP/HDMI connector, enabling the user to use the product with both video formats as input and output.

NOTE : In models supporting fUSB, it is possible to connect additional USB devices and use them on the host PCs. By default, authentication devices such as CAC readers, smart card readers, and biometric readers are enabled. It is possible to enable other USB devices. Please refer to HSL's administrator manual on how to enable additional USB devices.

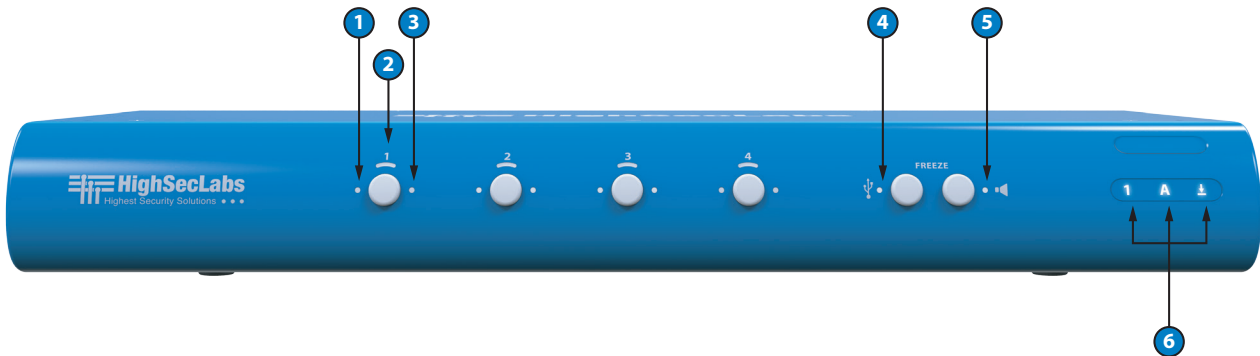
Using the HSL KVM Switch:

Control of the HSL KVM Switch is done, primarily, using the illuminated push buttons on the product front panel.

- **Active channel select:** The user can select the active channel by pressing its illuminated front panel button.

- **Freeze functions:** Audio and fUSB interfaces can be frozen to a specific channel by pressing the appropriate FREEZE button on the front panel. The LED next to the channel flickers to indicate when an interface is frozen to this channel and the appropriate Freeze

button's LED lights steadily. The freeze option prevents switching the chosen interface (fUSB, Audio or both) to other channels along with all the other peripherals that are switched upon channel change.



Front Panel LEDs Index:

1. fUSB freeze indication LED (flickering when active)
2. Active PC channel LED
3. Audio freeze indication LED (flickering when active)
4. fUSB freeze button active LED
5. Audio freeze button active LED
6. Keyboard LEDs Num/CAPS/SCRL

KVM Front Panel/Rear Panel LED Indications:

The HSL KVM has several indications on its front and rear panels:

EDID LED (rear panel):

- Off – no EDID
- Flicker – EDID read in progress
- On – EDID received

Note: EDID is only read in the first few seconds of device boot. The secure switch does not support hot plug or swap of display while working. In every swap of display it is recommended to restart the KVM.

fUSB LED:

- Off – no device detected
- Flicker – device rejected
- On- device approved

HID LED:

- Off – no device detected
- Flicker – device rejected
- On- device approved

Important Notes:

1. **Anti-Tampering System:** This HSL high security product is equipped with an always-on active anti-tampering system. If mechanical intrusion is detected, the product is permanently disabled and abnormal LED behavior is activated, with all LEDs blinking continuously.
2. **Power ON Self-Test Procedure:** As the product powers-up, it performs a self-test procedure. In case of self-test failure for any reason, including jammed buttons, the product is inoperable and self-test failure is indicated by abnormal LED behavior.

In the above-mentioned cases, please call Technical Support and avoid using the product. For further information please refer to the product administrator and setup guides.

Covered Models:

PN	Model	Description
CGA19475	SK21PH-4	2 ports single head secure DP\HDMI 4K 60HZ KVM Switch
CGA19253	SK41PH-4	4 ports single head secure DP\HDMI 4K 60HZ KVM Switch
CGA19255	DK22PH-4	2 ports dual head secure DP\HDMI 4K 60HZ KVM Switch
CGA19476	DK42PH-4	4 ports dual head secure DP\HDMI 4K 60HZ KVM Switch
CGA19258	SK41PHU-4	4 ports single head secure DP\HDMI 4K 60HZ KVM Switch w DPP
CGA19260	DK42PHU-4	4 ports dual head secure DP\HDMI 4K 60HZ KVM Switch w DPP
CGA19262	SK81PH-4	8 ports single head secure DP\HDMI 4K 60HZ KVM Switch
CGA19472	DK82PH-4	8 ports dual head secure DP\HDMI 4K 60HZ KVM Switch

Safety and Regulatory Statements

Safety Symbols

This One or more of the following symbols may be included in your product documentation and/or on the product.



Instructions: This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the product user manual.



Dangerous Voltage: This symbol is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



Power On: This symbol indicates the principal on/off switch is in the ON position.



Power Off: This symbol indicates the principal on/off switch is in the OFF position.



Protective Grounding Terminal: This symbol indicates a terminal which must be connected to earth ground prior to making any other connections to the equipment.

Safety Precautions

WARNING: To avoid a potentially fatal shock hazard and possible damage to equipment, please observe the following precautions.

- **Instructions:** Do not disable the power grounding plug. The grounding plug is an important safety feature.
- Plug the power cord into a grounded (earthed) outlet that is easily accessible at all times.
- Disconnect the power from the product by unplugging the power cord from either the electrical outlet or the product. The AC inlet is the main disconnect for removing power to this product. For products that have more than one AC inlet, to remove power completely, all AC line cords must be disconnected.
- This product has no serviceable parts inside the product enclosure. Do not open or remove product cover.

CAUTION: Some HSL products contain a lithium battery. This battery is not a field replaceable item, and replacement should not be attempted by a user. If errors occur when using the product and the battery is suspected, contact HSL Technical Support.

WARNING: For Service Personnel Only - There is a risk of explosion if the battery is replaced with an incorrect type. Dispose of used batteries according to the manufacturer's instructions.

This product is for use with other products that are Listed or Certified by a Nationally Recognized Testing Laboratory (NRTL).

NIAP Protection Profile

This product is certified to the NIAP Protection Profile PSD version 4.0 certification for peripheral sharing switch devices.

Security Vulnerability

If you are aware of a potential security vulnerability while installing this product, contact Technical Support immediately by:

- Web form: www.highseclabs.com/support/case/
- Email: security@highseclabs.com
- Tel: +972-4-9591191/2

CAUTION: Anti-tamper Caution - This product is equipped with an always-on, active anti-tampering system. Any attempt to open the product enclosure will activate the anti-tamper triggers, rendering the unit inoperable and voiding its warranty.

WARNING: Unit Enclosure Warning - If the unit's enclosure appears disrupted or if all LEDs flash continuously, remove the product from service immediately and contact Technical Support.

Change Management

For change management tracking, perform a quarterly log check to verify that the RFD was not improperly used to override the current device policy by an unauthorized person.