



**Models:**

FV11D-M – Secure DVI-I Video Isolator  
 FV11H-M – Secure HDMI Video Isolator  
 FV11PH-M – Secure DP/HDMI Video Isolator  
 FI11D-M – Secure DVI-I KVM Isolator  
 FI11H-M – Secure HDMI KVM Isolator  
 FI11PH-M – Secure DP/HDMI KVM Isolator

FV11PH-MM – DP-HDMI Secure Isolator  
 FV11HH-MM – HDMI-HDMI Secure Isolator  
 FV11HP-MM – HDMI-DP Secure Isolator  
 FV11PP-MM – DP-DP Secure Isolator

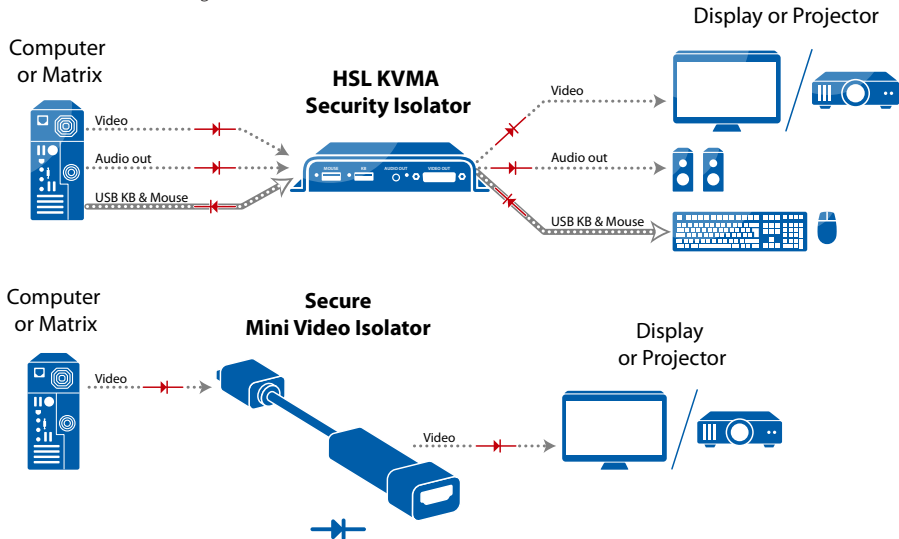
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## INTRODUCTION

## HSL Secure Isolators

The secure Isolator prevents vulnerable peripherals from mediating between compromised and secure computers by ensuring that video and audio flow in a single direction.



## INSTALLATION

### Connecting the Isolator

#### Step 1 – Connect the PC to the Isolator's PC SIDE:

1. Video connection: For all models, connect the PC to the Isolator's VIDEO IN port, using the corresponding video cable (DP/HDMI, DVI or HDMI).
2. PC Keyboard and Mouse connection: For FI11D-M, FI11H-M, and FI11PH-M models, connect the PC to the Isolator using a USB A to USB B cable. Connect the USB A end to the PC and the USB B end to the Isolator's COMP/MOUSE port. This step isn't applicable for FVxx models

FI11PH-M Model



## INSTALLATION

### Step 2 – Connect the peripherals to the Isolator’s CONSOLE SIDE:

1. Video connection: For all models, connect the monitor/projector’s cable to the Isolator’s VIDEO OUT port.
2. PC keyboard and mouse connection: For FI11D-M, FI11H-M, and FI11PH-M models, connect a USB mouse and keyboard, to the Isolator’s corresponding MOUSE and KB ports.

Both mouse and keyboard (HID) LEDs should light continuously.

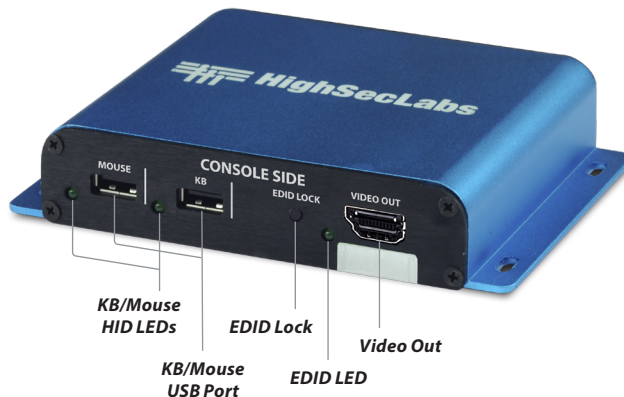
**Note:** If either LED remains OFF, the Isolator does not recognize the device; use an alternative device.

### Step 3 – Power ON the Isolator

1. For all models, connect the power adapter to the Isolator’s PC SIDE, DC IN port. Power ON the Isolator by plugging it into an AC wall outlet.
2. The PC SIDE Power LED should light continuously. If not, check the connections.

### Step 4 – Make sure the PC and display are powered ON

1. On power when the display isn’t connected, the EDID LED will blink green and the video signal will be disconnected. Connecting a powered display and re-powering the Isolator will renew the video signal.



## INSTALLATION

## Connecting the Mini Video Isolator

### Step 1 – EDID Selection:

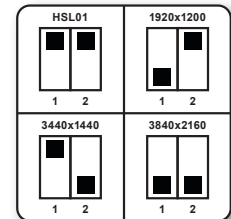
1. Select the resolution according to the DIP switch table as shown in diagram no. 1.

### Step 2 – How to connect:

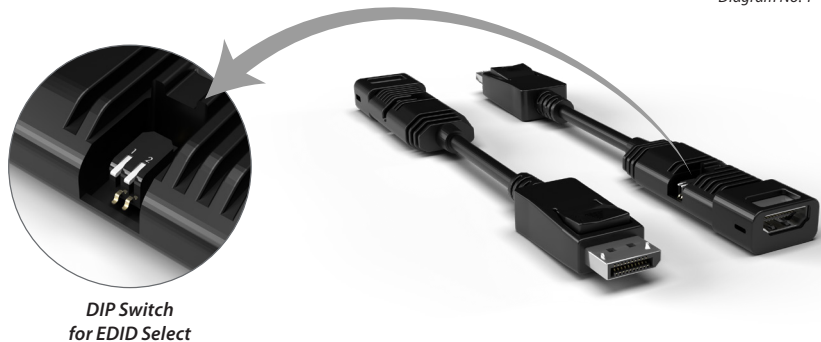
1. Connect the female side of the isolator to the video source (KVM console/PC).
2. Connect a regular video cable between the female side and the monitor.
3. The isolator is powered by the video source.

**Note:** Selecting HSL01 combination in the Resolutions Switch will Pseudo tamper the unit.

*Resolutions Switch*



*Diagram No. 1*



## OPERATION

## Running an EDID Capture

Before using the Isolator, run a one-time EDID capture. This prevents the continuous transfer of potentially malicious data - from the display to the PC – that could infect the PC, cause data leakage, and so on.

### Preparation:

- Connect the PC and all peripherals to the unit, according to the diagram.
- Make sure the PC, display, and unit are ON.

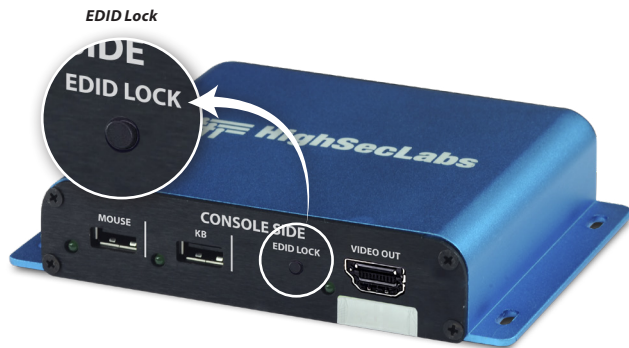
### To run an EDID capture:

1. On the PC SIDE, short-click the EDID LOCK button – for less than one second. Warning: Long-clicking the EDID LOCK button sends the unit into an undesired loop. If this happens, restart the unit and repeat the procedure. At first, the EDID LED flickers for a few seconds and then lights continuously.

**Note:** If the EDID LED is OFF, check the connections and that the display is powered ON. Then, repeat the procedure.

2. Restart the unit.

**Note:** An EDID capture needs to be performed for new installations and when changing a display.



## SAFETY AND REGULATORY STATEMENTS

### Supported Hardware

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).

**NOTE:** HSL Secure Isolator are protected with Holographic Tamper-Evident Labels on the product's enclosure to provide a visual indication in case the enclosure has been opened or compromised.

### NIAP Protection Profile

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

### Installation Precautions

As the product powers-up it performs a self-test procedure. In case of self-test failure for any reason, the product will be inoperable and self-test failure will be indicated by abnormal LED behavior, if applicable. In this case, please call Technical Support and avoid using the product.

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.

### 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/](http://www.highseclabs.com/support/case/)
- Email: [security@highseclabs.com](mailto:security@highseclabs.com)
- Tel: +972-4-9591191/2

**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.





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