Models:

FICE11PH-M - DP/HDMI Secure Copper KVM Extender
FVCE11PH-M - DP/HDMI Secure Copper Video Extender
FIFE11PH-M - DP/HDMI Secure Fiber KVM Extender
FVFE11PH-M - DP/HDMI Secure Fiber Video Extender

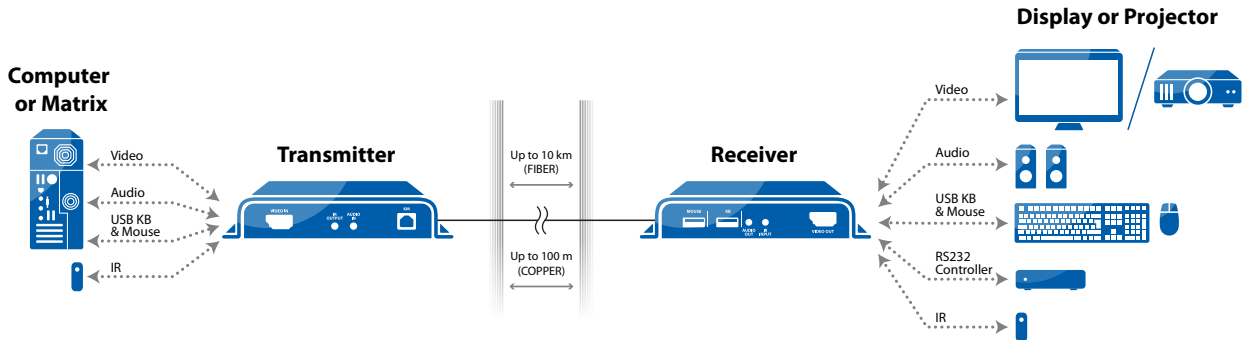## TABLE OF CONTENTS

INTRODUCTION

HSL Secure KVM Extenders Family

The **Secure KVM Extender** extends video, audio and Keyboard/Mouse signals up to hundreds of meters while it prevents vulnerable peripherals from mediating between compromised and secure computers by ensuring that video, audio and KM flow are in a single direction.
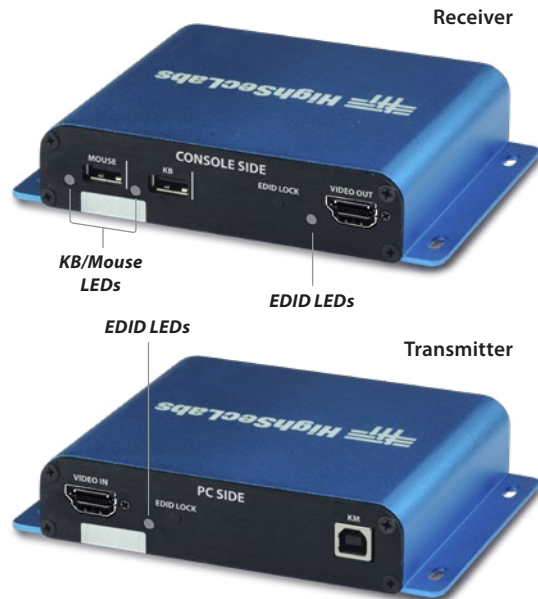
INSTALLATION

Step 1 – Connect the Secure KVM Extender's Receiver and the Transmitter parts

The device's Receiver and Transmitter may be located in different rooms or even different buildings.

Connect the two parts with a suitable cable through the connection port:

- **Models FICE11PH-M, FVCE11PH-M and FICE11CH-M** - with a Copper Cable
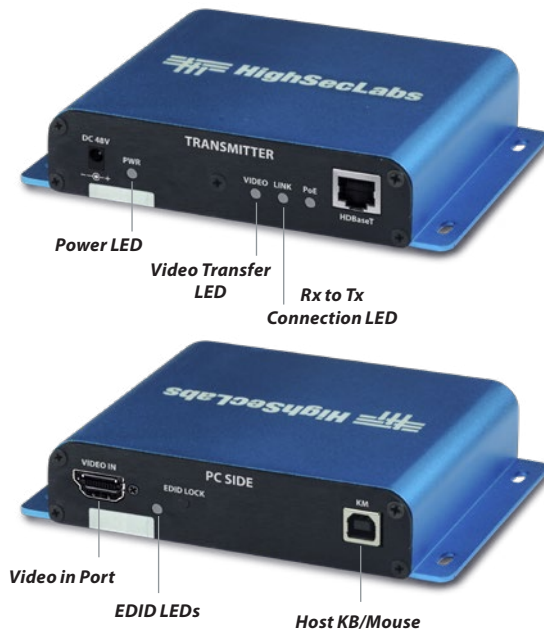- **Models FIFE11PH-M and FVFE11PH-M** - with Optical Fiber Cable

Note: If either LED remains OFF, the Isolator does not recognize the device. Use an alternative device!

Receiver

KB/Mouse LEDs

EDID LEDs

EDID LEDs

Transmitter

INSTALLATION

Step 2 – Connecting the Transmitter (PC side) to the PC

1. **Video connection:** For all models, connect the PC to the Isolator Extender's VIDEO IN port, using the HDMI or DP video cable

2. **PC Keyboard and Mouse connection:** For FICE11PH-M, FIFE11PH-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 Extender's COMP/MOUSE port.

Power LED

Video Transfer LED

Rx to Tx Connection LED

Video in Port

EDID LEDs

Host KB/Mouse

INSTALLATION

Step 3 – Connecting the peripherals to the

Secure KVM Extender Receiver (CONSOLE SIDE)

1. **Video connection:** For all models, connect the monitor/projector cable to the Isolator's VIDEO OUT port.

2. **PC keyboard and mouse connection:** For FICE11PH-M, FIFE11PH-M models, connect a USB mouse and keyboard, to the Isolator Extender Receiver's corresponding MOUSE and KB ports.

Both mouse and keyboard LEDs should light continuously green when KB and Mouse are connected and device is turned on.

Note: If either LED remains OFF, the Extended Isolator does not recognize the device.
Use an alternative device!

*Rx to Tx
Connection LED*

*Video Transfer
LED*

Power LED

KB/Mouse LED

EDID Lock

EDID LED
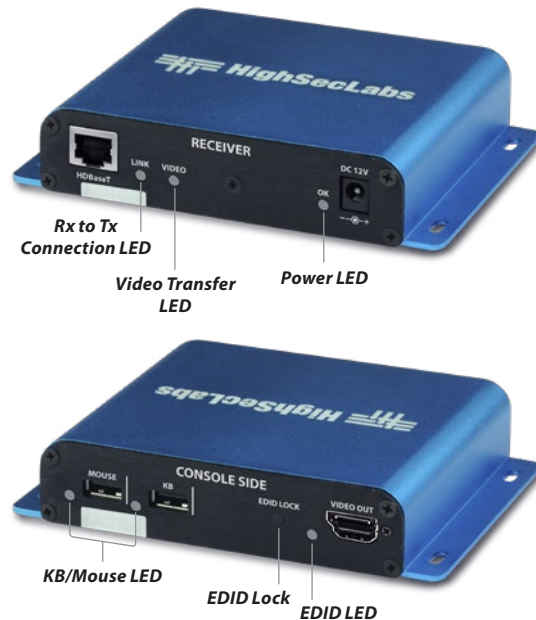
INSTALLATION

Step 4 – Power ON

1. For all models, connect the power adapters on both the Secure KVM Extender's Transmitter and Receiver at the PC SIDE, DC IN port. Power ON the unit by plugging it into an AC wall outlet.

2. The PC SIDE Power LED should light green continuously. If not, check the connections.

Step 5 – Make sure the connected PC on the Transmitter side and Display or Projector on the Receiver side are powered ON.

Power LED

Power LED

OPERATION

Running an EDID Capture

Before using the Extender, run a one-time EDID capture on both sides – Transmitter and Receiver. 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 both the units, according to the Installation Instructions.

• Make sure the PC, display, and the units are ON.

To run an EDID capture:

1. On the Receiver, short-click the EDID Lock button. Wait 5 seconds and then restart the unit, by unplugging the network cable and power supply. At first, the EDID LED flickers for a few seconds and then, once captured lights green continuously.

2. Make same on the Transmitter, short-click the EDID Lock button, wait 5 seconds and then restart the unit. The EDID LED will now light green continuously.

Note: If the EDID LED is OFF, check the connections and that the PC or the Display are powered ON. Then, repeat the procedure.

3. Restart both units.

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

Receiver

EDID Lock Button

EDID LED

Transmitter

EDID LED

EDID Lock Button
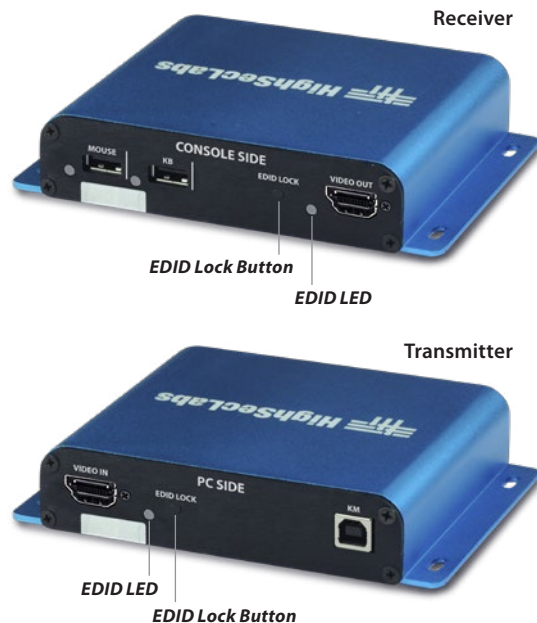
SAFETY AND REGULATORY STATEMENTS

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.

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

Installation Precautions

Note: HSL Secure Extended Isolators 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.

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/
- Email: 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.

Highseclabs.com