

Quick Installation Guide

2/4 Port Single/Dual-Head DisplayPort Secure KVM Switches

Objectives

- Scan the QR code or visit Belkin Cybersecurity YouTube Playlist for Secure KVM Unboxing and Troubleshooting videos.
- This guide includes instructions for installing Belkin F1DN102KVM-D-4, F1DN102KVM-DC-4, F1DN104KVM-D-4, F1DN104KVM-DC-4, F1DN104KVMDCU-4, F1DN202KVM-D-4, F1DN202KVM-DC-4, F1DN204KVM-D-4, F1DN204KVM-DC-4, F1DN204KVMDCU-4 Secure KVM Switches.
- DisplayPort Secure KVM allows sharing keyboard, video, mouse, audio and USB peripherals between multiple computers.
- This guide and additional product documentation is available for online download on Belkin website. For further assistance please refer to: <https://www.belkin.com/business/cybersecurity-and-secure-kvm/resources/>.



General

- **IMPORTANT:** Most SKVM or display compatibility behavior issues are resolved when operating on the latest PC/laptop BIOS and dock firmware. If you have not already done so, please update all appropriate firmware on the system(s) you are operating.
- The Belkin Multi-Monitor Mouse Driver is necessary when connected computers have multiple monitors. The driver can be found at www.belkin.com/us/support-article?articleNum=286117.
- Verify that all peripherals and computers are turned OFF prior to connecting them to the product.
- The KVM's back panel is divided into sections of Console Ports and Computer Ports.
 - Connect the peripherals to be shared by the KVM to the Console Ports.
 - Connect each computer that needs access to shared peripherals to a specific Computer Ports section.
 - Make sure that every computer is connected to a separate Computer Port section.
 - The push buttons on the KVM's front panel indicate which computer has current access to shared peripherals.
 - To switch peripherals between computers, press the appropriate push button on the KVM's front panel.
 - Before installing, an administrator may need to configure the KVM for CAC or DPP and channel Illumination colorization. Consult your administrator for details.

F1DN204KVMDCU-4 Model is shown

1 Connect peripherals to the KVM Console Ports:

- **Keyboard & Mouse:** Connect a USB keyboard and mouse to the corresponding KVM console port. The keyboard and mouse indicator lights (rear panel) will illuminate green. If the keyboard or mouse are not authorized, the lights will illuminate red.
- **Video:** Connect the monitor cable to the KVM console video port. The EDID LEDs (rear panel) will operate as follows:
 - Off: no EDID
 - Flicker: EDID read in progress
 - On: EDID received

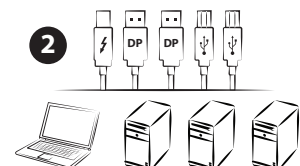
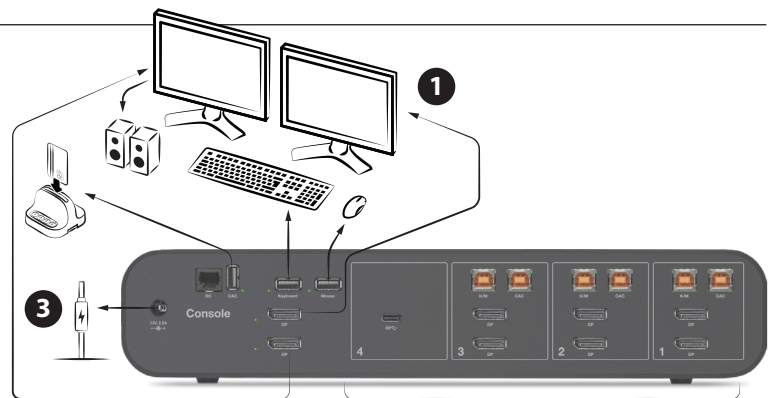
Note: EDID is only read in the first few seconds of device boot. The secure switch does not support hot plug or swap of displays. In any swap of display(s) it is required to restart the KVM.

- **Audio peripherals: IMPORTANT:** DisplayPort SKVM delivers digital audio via your monitor(s). If supported, connect headphones or speakers to the appropriate input source on your monitor(s). Please refer to your monitor manufacturer's manual for further details.
- **Common Access Card (CAC/DPP) Configuration and Operation:** Please refer to the relevant section.

2 Connect peripherals to the KVM Computer (Host) Ports:

- **Computer keyboard & mouse connection:** Connect each computer to the KVM keyboard & mouse computer port using a USB A to USB B cable. Connect the USB A end to the computer and the USB B end to KVM.
- **Computer Video connection:** Connect each computer to the KVM computer video port using the corresponding DisplayPort video cable. If two video connections exist, make sure each PC video 1 is in the bottom connector.

Note: Secure KVM models with USB-C input port (F1DN104KVMDCU-4 & F1DN204KVMDCU-4) only require a USB-C 3.1 cable connected into a computer's USB-C 3.1



DisplayPort Alt Mode port. No docking station or KVM cables are required.

- **Computer Audio connection: IMPORTANT:** DisplayPort SKVM delivers digital audio via the DisplayPort connection on your monitor(s). If supported, select your desired monitor as the output source on each connected computer. Please refer to your computer manufacturer's manual for further details.

3 Common Access Card (CAC/DPP) Configuration and Operation (if equipped):

CAC/DPP connection to the computer (if equipped) requires a separate USB cable connection and allows the user to specify whether there is a connected device required for that computer or not. This allows the CAC/DPP port to be connected and controlled separately to the keyboard, mouse and video.

• Step 1 – Installation:

1.1 Using the appropriate USB cable, connect one end of the cable to the computer that requires CAC/DPP, and the other end to the CAC/DPP port on the KVM Switch that corresponds to the computer. Important Note: Do not connect the USB cable if CAC/DPP functionality is not needed for that computer.

1.2 If only some of the computers use CAC/DPP functionality, make sure that computer #1 is connected to the CAC/DPP device. If needed, switch channels/computer mapping to create this configuration.

1.3 If CAC/DPP is connected, it is automatically enabled.

1.4 Once configured, the CAC/DPP connection will be switched only when required by the connected computer. When switching from a CAC enabled port to a non-CAC-enabled port, CAC/DPP can be frozen on a channel (if equipped) and allow for the operator to utilize the peripheral connected to a channel when switched to another channel.

To freeze CAC/DPP to a channel, press the channel button to be frozen 3 times in succession. The CAC freeze light will illuminate.

To unfreeze CAC/DPP to a channel, press any channel button 3 times in succession. The CAC freeze light will extinguish.

1.5 In case the connected USB device cannot be detected by the secure product, the CAC status LED will not illuminate when frozen.

The USB device will be detected only if it is fully compliant with appropriate USB standard and is included in the list of recognized USB devices defined by the administrator (see your administrator for details). When configuring CAC functionality, possible reasons for USB device not being detected:

- Non-standard USB device
- Failed USB Device

1.6 If the device is detected but is not authorized, the device will be rejected for security reasons. This will be indicated by a flickering or non green lit CAC connection LED (back panel). Smart card readers and CACs are included in the authorized USB devices list as standard.

4 Power ON your system:

- **Power ON the monitor(s):** Make sure that the monitor(s) is/are turned ON prior to powering ON the KVM.
- **Power ON the system:** Connect all peripherals and computers to the KVM prior to powering it up. Power ON the KVM by plugging it into the AC wall outlet. By default, after product power-up, the active channel will be computer #1, indicated by the applicable lit front panel push button LED.
- **Important Notes:**
Anti-Tamper System: This Switch is equipped with active anti-tamper triggers. Any attempt to open the enclosure will activate the anti-tamper triggers, render the unit inoperable and void the warranty. If the unit's enclosure

appears disrupted or if all the port LEDs flash continuously, please call Belkin Technical Support at (800) 282-2355.

- **Product Enclosure Warning Label and Tamper Evident Labels:** Belkin Secure KVM uses product enclosure warning label and holographic tamper evident labels to provide visual indications in case of enclosure intrusion attempt. If for any reason one of these seals is missing or appears disrupted, please avoid using product and call Belkin Technical Support at: (800) 282-2355.
- **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 will be Inoperable and self-test failure will be 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. **Please note:** Belkin Secure KVMs cannot be upgraded, serviced or repaired.

5 Switching between computers:

Switch between computers by pressing the corresponding front panel button on the KVM. The front panel button of the selected computer will illuminate.

LEDs Index:

- | | |
|---------------------------------|----------------|
| a. Active port | d. Num Lock |
| b. CAC/DPP active (if equipped) | e. Caps Lock |
| c. Channel Buttons 1-4 | f. Scroll Lock |



To learn how to change front panel colors, go to:
<https://www.belkin.com/cybersecurity/resources> or scan



6 Keyboard color configuration:

- Open WordPad or Notepad on the computer connected to channel #1.
 - If operating on Windows 11, it is recommended that another text editor be used due to potential compatibility issues.
- Using the keyboard connected to the SKVM, press and release the following keys in this order: Left CTRL, Right CTRL, "t". This will cause the SKVM to enter Terminal Mode. During this time, the SKVM will intercept your keyboard key presses and output text into the text application.
- Text will appear in WordPad or Notepad asking for a user name. The default user name is: "admin1234". This account ID cannot be changed or deleted. Type in the user name, then click Enter.
- The default first device logon password is: "1234ABCDefg!@#". Type in the password, then click Enter. (At first logon, the administrator must set a new, nondefault, password. The new password must be at least: 8 characters long but not longer than 24; at least one capital and one lower-case letter; at least one number; at least one symbol).

- Once authentication is successful, type option 3 – configure sc followed, then click Enter.
- Under configure sc, type option 7 – rgb fp configuration, then click Enter.
- On choosing Option 7 – RGB Front Panel Configuration a new menu will appear with the following options:
 - Upload FP configuration from a host
 - Select Colors for Channels
 - Back
 - Exit terminal mode

Upon choosing Option 1, the user can upload an external file with RGB configuration. Option 2 opens a dialog where user will choose the color configuration, as follows:

- Select a channel [1..4] (*or 1-8 in 8 Port units) or press esc to go back
- Select a color.

r – red	c – cyan
o – orange	b – blue
y – yellow	p – purple
w – white	t – magenta
m – mint	8 – Back
g – green	

- Choose option 9, Exit Terminal Mode.



Supported Hardware

DisplayPort Secure KVMs support most standard USB keyboards and mice. Additionally, most standard speakers and headsets are supported but are dependent on compatible monitors. Please refer to your monitor manufacturer's manual to confirm compatibility.

Note: For security reasons:

- Microphones or headsets with microphones should not be used and are not supported.
- Wireless keyboards, mice and audio should not be used and are not supported.

DisplayPort Secure KVMs support DisplayPort video from computers and monitors. The maximum supported resolution is 3840X2160 @60Hz.

Belkin cable sets are recommended for connecting computers and monitors for optimal performance and security reasons. Belkin offers a complete line up of cables to support customer needs. Please contact your Belkin sales representative or go to Belkin Website: <https://www.belkin.com/business/cybersecurity-and-secure-kvm/>

Environmental

- Operating temperature is 32° to 104° F (0° to 40° C).
- Storage temperature is -4° to 140° F (-20° to 60° C).
- Humidity requirements are 0-80% relative humidity, non-condensing.

Operating Systems

- Microsoft® Windows®
- Red Hat®, Ubuntu® and other Linux® platforms
- Mac OS® X v10.3 and higher

Power

12-volt DC (+/- 10%) , 2.5-Amp (max)

F1DN102KVM-D-4 and F1DN102KVM-DC-4 Dimensions

12.6 (W)x2.64 (H)x6.17 (L) Inches, Weight: 4.93 Lbs
320 (W)x67.1 (H)x156.8 (L) mm, Weight: 2.24 kg

F1DN202KVM-D-4 and F1DN202KVM-DC-4 Dimensions

12.6 (W)x2.64 (H)x6.17 (L) Inches, Weight: 5.37 Lbs
320 (W)x67.1 (H)x156.8 (L) mm, Weight: 2.44 kg

F1DN104KVM-D-4, F1DN104KVM-DC-4, and F1DN104KVMDCU-4 Dimensions

12.6 (W)x2.64 (H)x6.17 (L) Inches, Weight: 5.16 Lbs
320 (W)x67.1 (H)x156.8 (L) mm, Weight: 2.34 kg

F1DN204KVM-D-4, F1DN204KVM-DC-4, and F1DN204KVMDCU-4 Dimensions

12.6 (W)x2.64 (H)x6.17 (L) Inches, Weight: 5.42 Lbs
320 (W)x67.1 (H)x156.8 (L) mm, Weight: 2.46 kg

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

In addition we, Belkin International Inc, of 555 S. Aviation Blvd. Suite 180, El Segundo, CA 90245-4852, declare under our sole responsibility that the products described in this carton comply to the declarations found at:

<https://www.belkin.com/us/support-article?articleNum=316284>