

INSTALLATION GUIDE

37-Pin High-Voltage Accessory Safety Kit

This guide describes how to use a 37-pin high-voltage D-SUB National Instruments accessory to connect a 37-pin high-voltage D-SUB National Instruments device to your system.

Safety keying is required to ensure that a high-voltage accessory can only be plugged into a high-voltage DAQ device. For example, if you have a PCI-651x 37-pin low-voltage D-SUB device inserted in the same system with a 37-pin high-voltage D-SUB device such as the PCI-6521, keying for safety will allow your high-voltage accessory to only be connected to the high-voltage device. By including the safety keying kit with all high-voltage devices, National Instruments ensures that you can key any NI high-voltage accessory for use with any NI high-voltage DAQ device.

Your 37-pin high-voltage accessory kit contains the following items:

- Two thermoplastic keying plugs (size 20)
- Two Electrical Shock/Electrocution Hazard warning labels
- This installation guide



Caution Failure to connect the cable to the high-voltage NI device using the following precautionary steps can result in electrical shock or death.



Caution Before you begin installation, ensure that no high-voltage signals are connected to your accessory.

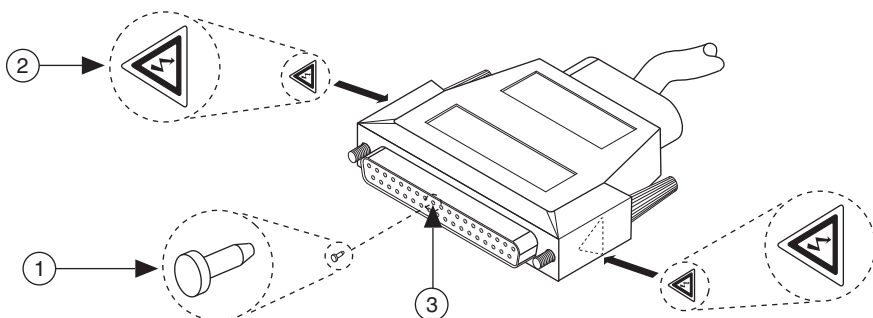


Caution Signal connections should be made by a qualified technician or service personnel.

1. Apply a small amount of high-strength adhesive to the tip of the keying plug. NI recommends using a cyanoacrylate adhesive.
2. Insert the keying plug into the pin 11 socket of the I/O connector, as shown in the following figure. The keying plug must be inserted into the corresponding socket for pin 11. Otherwise, keying for safety will not work.



Tip To aid in identifying each pin/socket, the pin numbers are marked in small raised font on the black plastic portion of the D-SUB connector.

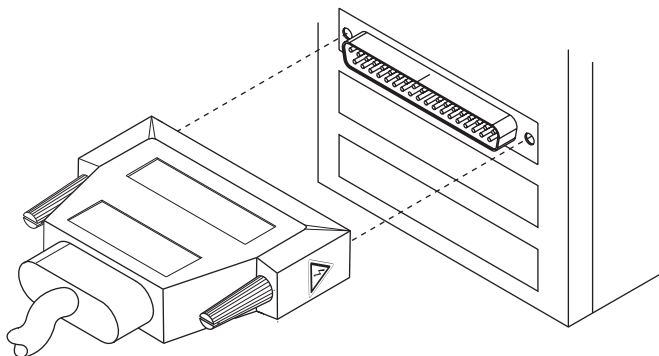


1	Safety Keying Plug	2	High-Voltage Warning Label	3	Pin 11 Socket
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- Remove the adhesive backing and affix the two high-voltage warning labels to the sides of the female I/O connector, as shown in the previous figure.
- Connect the female connector of your high-voltage 37-pin D-SUB accessory to the corresponding I/O connector on the installed high-voltage NI device and tighten the thumbscrews, as shown in the following figure.



Note If the female accessory will not plug into the male front connector on your high-voltage NI device, do not force the connection. Ensure that pin 11 is absent from the male front connector, indicating that the device is high-voltage keyed. Ensure that the plug is in the pin 11 socket in the female end of the accessory.



- Connect signals to your accessory as indicated in the wiring instructions in your high-voltage NI device documentation.

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