

SCXI™-1357/1358 KIT

This guide describes the components of the SCXI-1357 and SCXI-1358 kits.

Introduction

With the SCXI-1357/1358 kit, you can connect your NI-DMM to an SCXI-1127 module. You can also use the SCXI-1357/1358 to create a chassis-wide high-voltage backplane.

The SCXI-1357 kit consists of the following components:

- Two 8-position high-voltage analog bus (HVAB) plugs
- One 2-slot HVAB backplane adapter
- Two 1-slot HVAB backplane adapters
- SH9MD-9MD cable
- HV8-BAN4 cable (not in multichassis kit)
- HV8-HV8 cable (in multichassis kit only)

The SCXI-1358 kit consists of the following components:

- Three 8-position high-voltage analog bus (HVAB) plugs
- One 8-slot HVAB backplane adapter
- One 2-slot HVAB backplane adapter
- Two 1-slot HVAB backplane adapters
- SH9MD-9MD cable
- HV8-BAN4 cable (not in multichassis kit)
- HV8-HV8 cable (in multichassis kit only)

If you ordered only the SCXI-1357/1358 backplane, you will have the HVAB plugs and the backplane adapters, but no cables.

Use the HVAB plugs to interconnect the HVAB signals of the HVAB backplane adapters. The HVAB backplane adapters, when installed and

interconnected, form a chassis-wide high-voltage bus. You can connect an NI-DMM to this HVAB using the HV8-BAN4 cable, and connect the digital communication signals from the NI-DMM to the AUX IN connector with the SH9MD-9MD cable. Use the HV8-HV8 cable in multichassis configurations to extend the high-voltage analog bus to the next chassis. Consult the *SCXI-1127 User Manual* for information on how to install the SCXI-1357/1358 for your particular application.

Conventions Used in this Guide

The following conventions are used in this guide:



This icon to the left of bold italicized text denotes a caution, which advises you of precautions to take to avoid injury, data loss, or a system crash.

bold italic

Bold italic text denotes a caution.

italic

Italic text denotes variables, emphasis, a cross reference, or an introduction to a key concept.

Safety Information

The following cautions contain important safety information concerning hazardous voltages.



Cautions *Equipment described in this document must be used in an Installation Category II environment per IEC 60664. This category requires local level mains-connected installation.*

DO NOT OPERATE THE KIT IN AN EXPLOSIVE ATMOSPHERE OR WHERE THERE MAY BE FLAMMABLE GASES OR FUMES.

SHOCK HAZARD—This kit should only be installed by qualified personnel aware of the dangers involved. Disconnect all power before removing the adapter. If signal wires are connected to the backplane, module, or terminal block, dangerous voltages may exist even when the equipment is turned off. Before you remove any installed terminal block or module, disconnect the AC power line or any high-voltage sources, ($\geq 30 V_{rms}$ and $42.4 V_{peak}$ or 60 VDC), that may be connected to any terminal block or module.

DO NOT OPERATE DAMAGED EQUIPMENT. The safety-protection features built into this adapter can be impaired if the adapter becomes damaged in any way. If it is damaged, do not use it until service-trained personnel can check its safety. If necessary, return the adapter to National Instruments for service and repair to ensure that its safety is not compromised.

The adapter must be used in a UL listed SCXI chassis.

DO NOT SUBSTITUTE PARTS OR MODIFY EQUIPMENT. Because of the danger of introducing additional hazards, do not install unauthorized parts or modify the adapter. Return the adapter to National Instruments for service and repair to ensure that its safety features are not compromised.

Connections, including power signals to ground and vice versa, that exceed any of the maximum signal ratings on the SCXI-1357/1358 can damage any or all of the modules connected to the SCXI chassis, the host computer, and the SCXI-1357/1358 kit. National Instruments is NOT LIABLE FOR ANY DAMAGES OR INJURIES resulting from incorrect signal connections.

When installing the high-voltage analog backplane adapter, the screws used to attach the backplane to the chassis must be present in the locations shown in Figure 1.

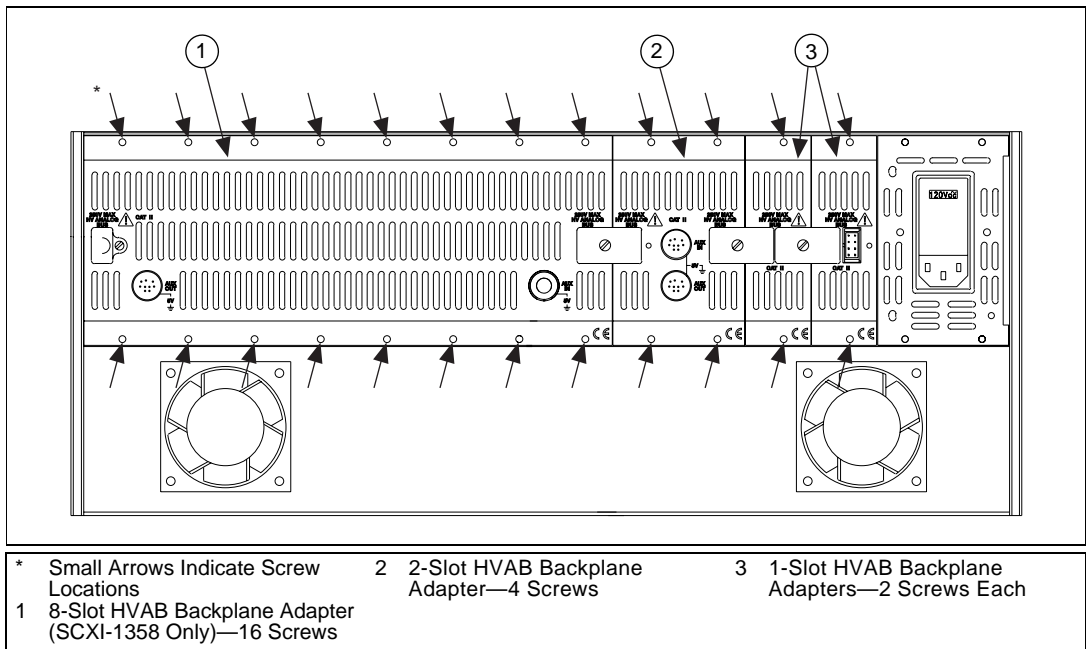


Figure 1. HVAB Adapter Screw Locations

Cleaning Instructions

Before cleaning any of the components of your SCXI-1357/1358 kit, remove all power signals from the backplane and power off the SCXI chassis. Use a soft, nonmetallic brush to remove dust from the components of your SCXI-1357/1358. Remove other contaminants with deionized water and a stiff, nonmetallic brush. Be sure that all components are completely clean and dry before returning them to service.

Specifications

Maximum Voltage

Terminal to earth250 V_{rms} or VDC
Terminal to terminal250 V_{rms} or VDC

Environment

Operating temperature0 to 50 °C
Storage temperature-20 to 70 °C
Relative humidity10% to 90% noncondensing

Safety

Designed in accordance with IEC 61010-1, UL 3111-1, and CAN/CSA C22 No. 1010.1 for electrical measuring and test equipment
Approved at altitudes up to 2000 m
Indoor use only
Installation Category II
Pollution Degree 2

Support Information

Internet Support

E-mail: support@natinst.com

FTP Site: <ftp.natinst.com>

Web Address: <http://www.natinst.com>

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BBS United Kingdom: 01635 551422

BBS France: 01 48 65 15 59

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