

Introduction

This instruction sheet contains information regarding the Keithley Instruments Series 3700 wiring terminal blocks, as well as handling and installation instructions.

WARNING *The following information is intended for qualified service personnel. Do not make module connections unless qualified to do so. To prevent electric shock that could result in serious injury or death, observe the following safety precautions:*

Before removing or installing a switch module in the mainframe, make sure the mainframe is turned off and disconnected from line power.

Before making or breaking connections, make sure power is removed from all external circuitry.

Do not connect signals that may exceed the maximum specifications of the model or external wiring. Specifications for each circuit board are provided in the Series 3700 User's Manual.

WARNING *All wiring must be rated for the maximum voltage in the system. For example, if 300V is applied to the backplane connector, all module wiring must be rated for 300V.*

The following figures depict a top-down view of circuit boards for Models 3720-ST, 3723-ST, 3724-ST, 3721-ST, 3730-ST, 3740-ST, 3750-ST, and 3723-ST-1:

Figure 1
Models 3720-ST, 3723-ST, 3724-ST

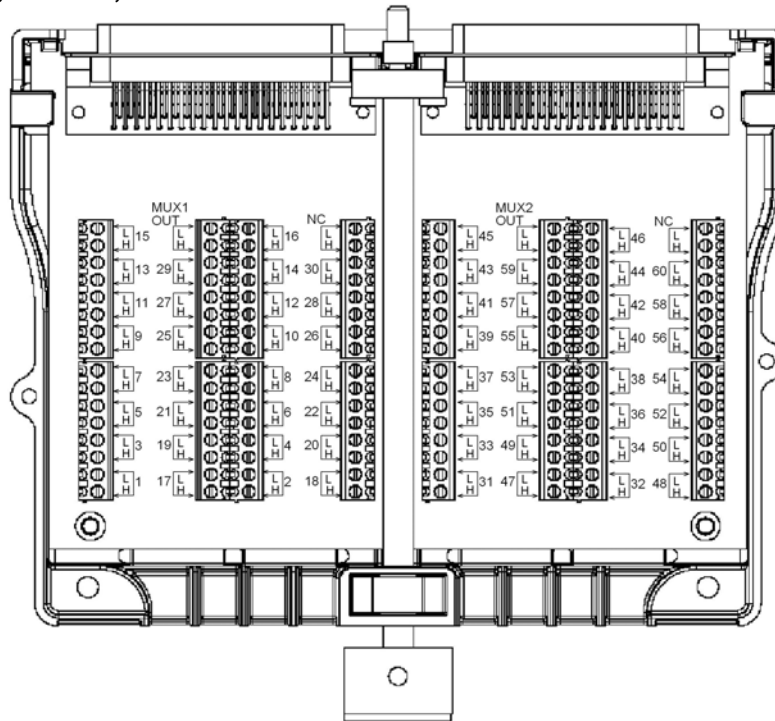


Figure 2
Model 3721-ST

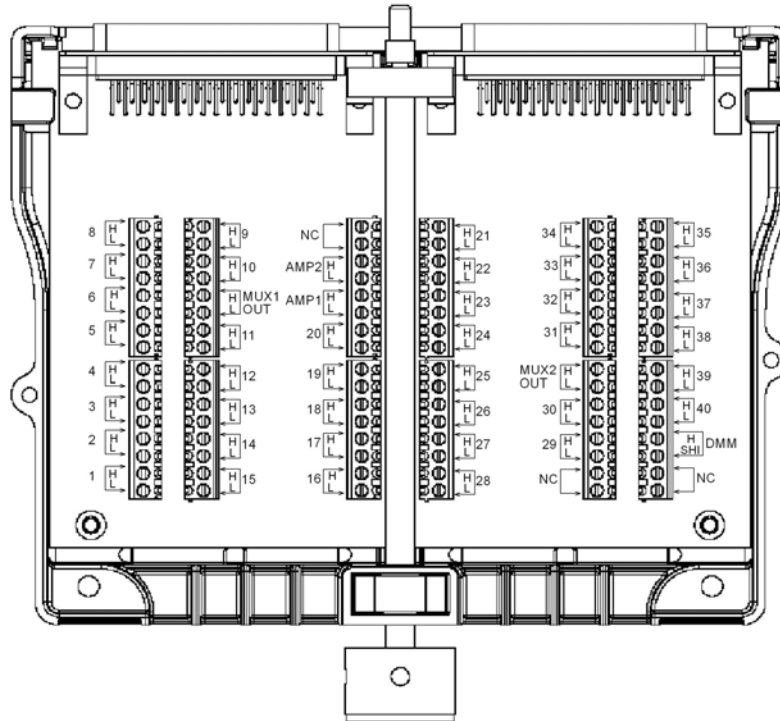


Figure 3
Models 3730-ST, 3731-ST

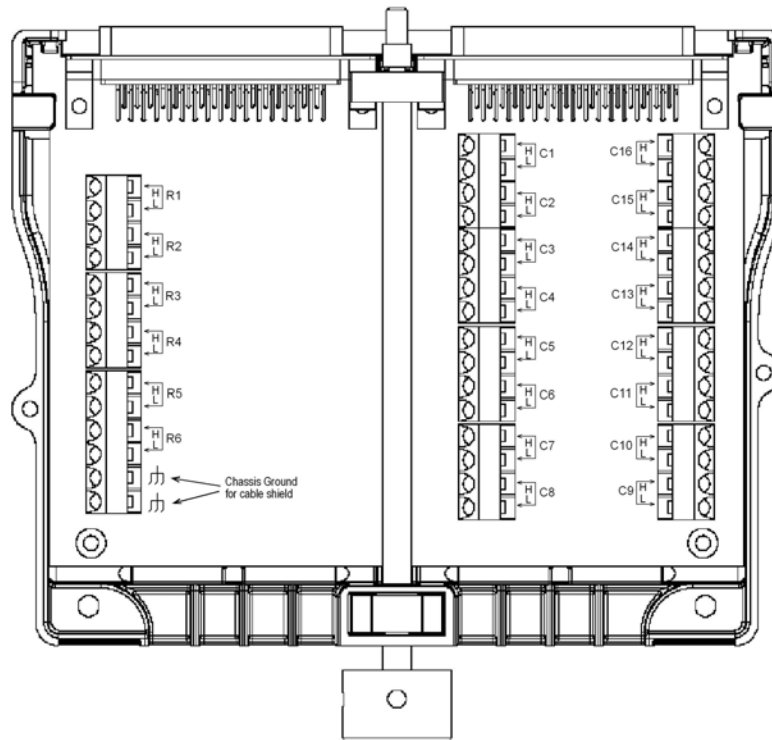


Figure 4
Model 3740-ST

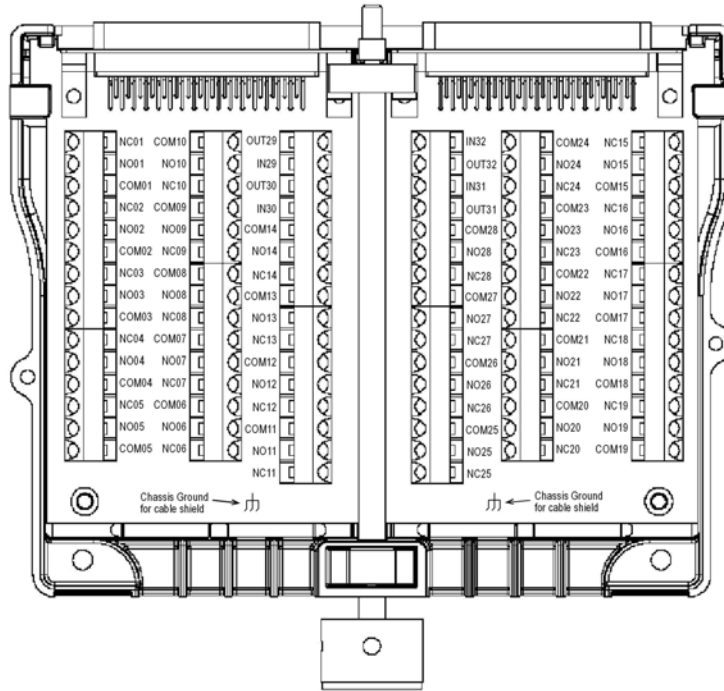
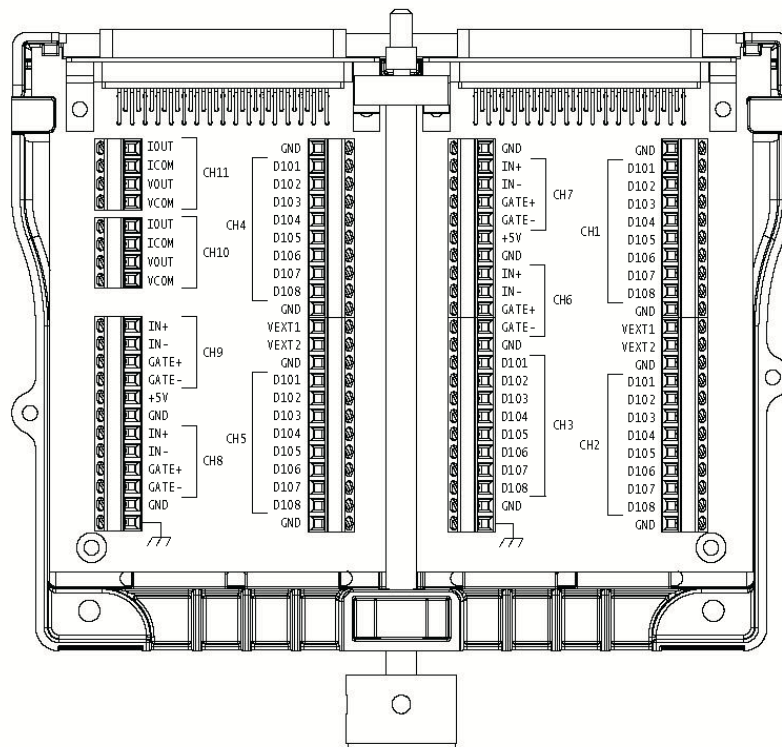


Figure 5
Model 3750-ST

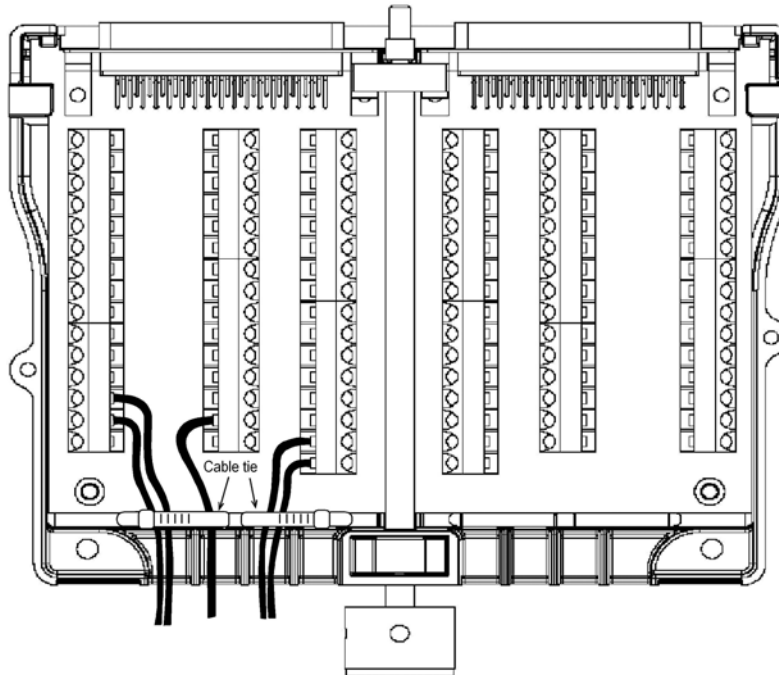


Example circuit board terminal block wiring

Please note, it is not necessary to remove a circuit board from enclosure to wire terminal blocks. Also, avoid handling circuit board surfaces and terminal blocks. Contaminants from hands may degrade the module performance.

Figure 7 gives an example of how to wire a terminal block, and where to use cable ties, for cable strain relief.

Figure 7
Example of routing and securing cables with ties



Installation and removal instructions

Figures 8, 9, and 10 show how to install the top cover on a circuit board and how to install a module to the Model 3706 Multimeter / Data Acquisition System.

Please note, when removing a module from the Model 3706 that the reverse order should be accomplished. For example, start with figure 10 and follow the instructions in reverse.

WARNING Before operating the switch card module with a screw terminal accessory card, verify that the card is properly installed and the mounting screws are tightly fastened. If the mounting screws are not properly connected, an electrical shock hazard may be present.

Figure 8
Installation of top cover

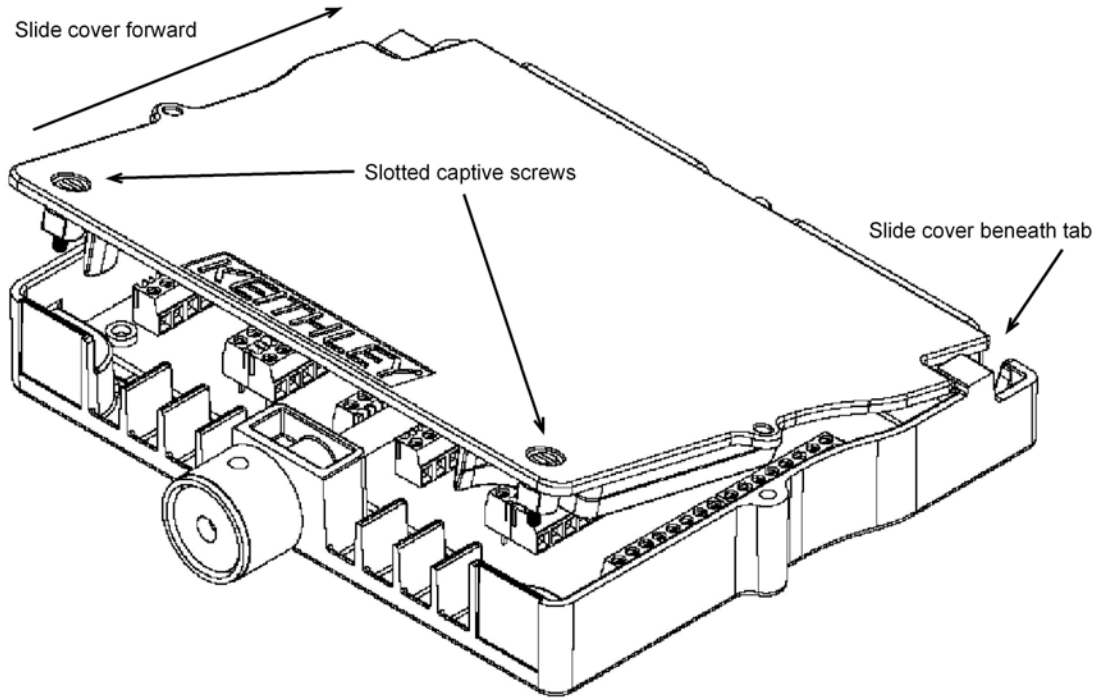


Figure 9
Securing mounting screws

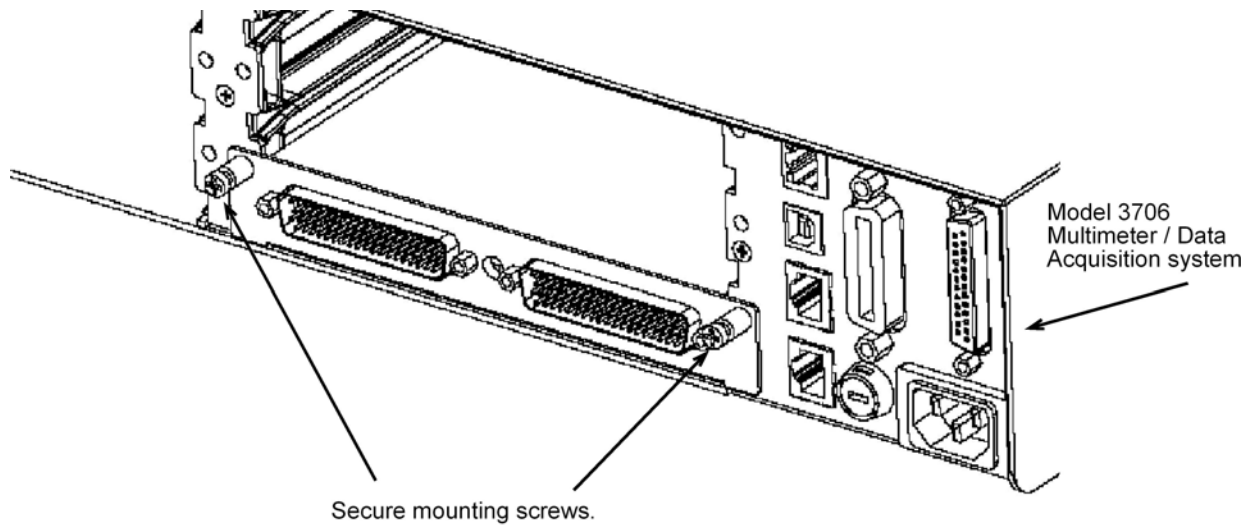
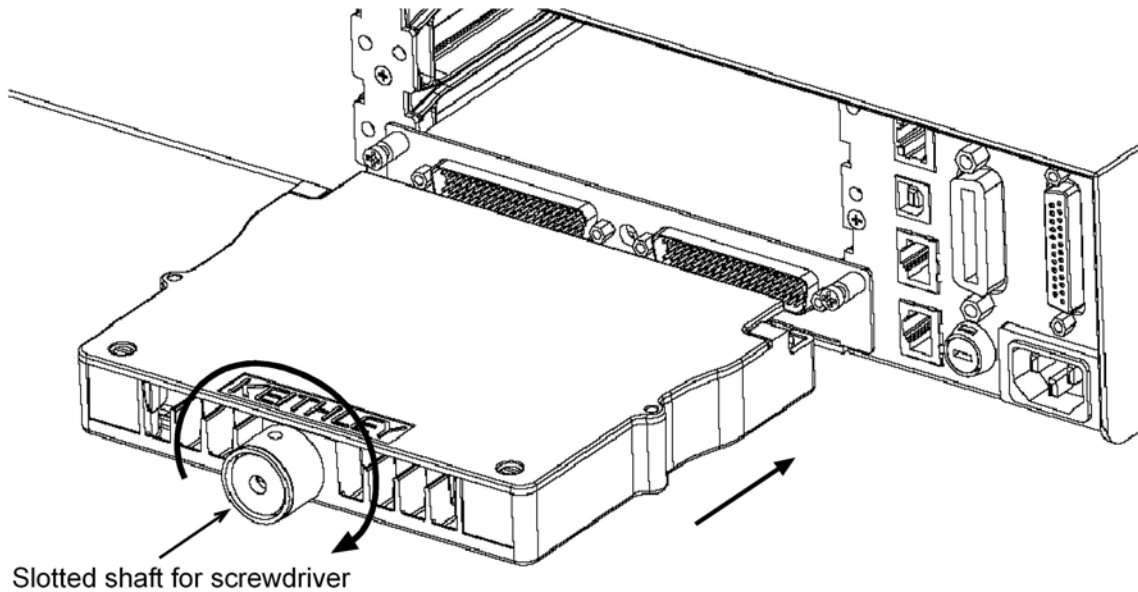


Figure 10
Circuit board installation to Model 3706



Align the shaft and D-connector with hole and connectors on rear panel. Turn the knob clockwise until the circuit board is engaged. A slotted screwdriver may be used for tightening.

CAUTION DO NOT OVER-TIGHTEN! Over-tightening will damage the module.

The terminal support bracket found in the Model 4288-10 rack mount kit should be used when more than two Series 3700 modules are used in a rack mount installation. For information on the rack mount kit, please refer to Keithley Instruments documentation titled "Model 3706 Rack Mount Kit," part number PA-953.