



Test Solutions Rack Mount Test Equipment

Equipment Guide

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1 INTRODUCTION

Thank you for choosing Mini-Circuits custom test equipment to meet your needs! The purpose of this User's Manual is to instruct you on basic installation and setup of your equipment, to advise you on general precautions to be taken when installing and handling the equipment, and to provide instruction on installing and using the control software for this unit.

We're here to support you every step of the way. For technical support and assistance, please find the following points of contact for your convenience:

Chi Man Shum
Phone: +1 201 647-1615
Email: chiman@minicircuits.com

Lee Whiting
+44 1252 832 620
Email: Lee@uk.minicircuits.com

WARNING:

Opening and tampering with this equipment by persons unauthorized by Mini-Circuits will void the limited warranty. Please contact testsolutions@minicircuits.com for instructions on service before opening the unit housing.



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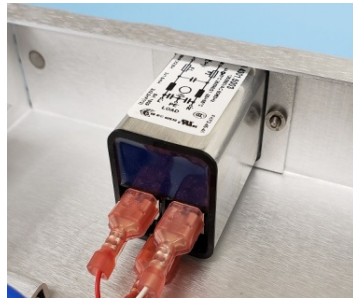
2 WARNINGS

2.1 Safety Hazards

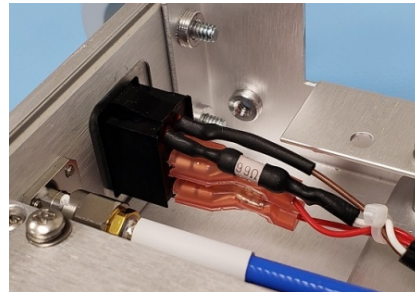


Electrical Danger

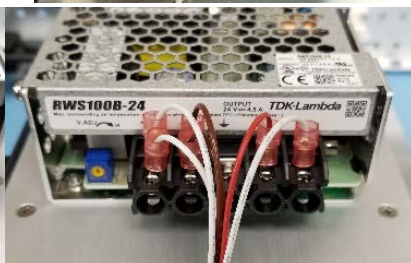
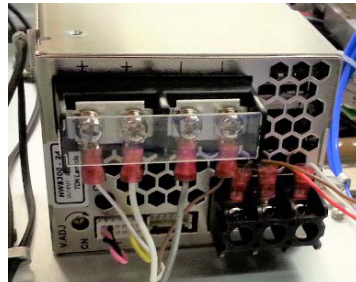
This equipment may contain live 110/220V contacts and should be used and handled only by qualified professionals. When performing any activity in and around the box, user must exercise extreme caution to avoid touching any parts where live voltage may be present to prevent injury or death due to electrical shock.



AC Power Entry



On/Off Switch



Power supplies shown for reference. Your equipment contains one of the above.

Figure 1: Live 110 / 220V contacts inside the equipment.



Heavy Object

The equipment may be heavy and requires caution to prevent damage to the equipment and ensure user safety. Follow safe lifting protocols and use any necessary lifting aids to prevent muscle strain or back injury. The unit must be supported in rack structure by securely fastened side rails or shelving to avoid potentially damaging the equipment. Refer to label on box for the weight of your specific unit.

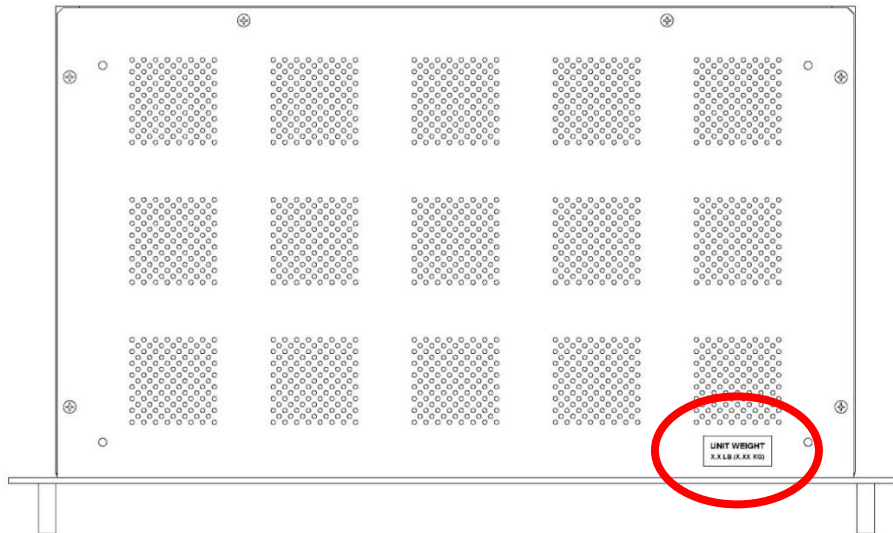


Figure 2: Unit weight marked on the exterior of the top panel.



High Speed Fan Blades

Some equipment may contain cooling fans with rotating blades that can cause serious injury or cut. Remove any loose articles before working inside the unit case to avoid getting caught in moving machinery.



Figure 2: Fan blades inside the equipment case

2.2 Additional Precautions

⚠ Air Flow: The box must be mounted by customer to maintain minimum 1U (1.75") free air space above and below each box with unobstructed access to room ambient airflow for proper operation.

⚠ Electrostatic Discharge: Any person operating this equipment must have Electrostatic Discharge (ESD) protection to prevent damage to any components.

⚠ Opening & Tampering: This equipment is designed to be serviced only by professional electrical technicians. Case openings by any person other than qualified personnel authorized by Mini-Circuits or customer will void any and all terms of the Limited Warranty.¹

3 UNPACKING

Refer to datasheet for a list of all accessories included with your equipment.

3.1 Unpacking Process



Step 1: The equipment is shipped in a large package, pictured above.



Step 2: Open the inner package and remove any excess packing material to expose the unit.



Step 3: Remove the equipment from the package along with the protective foam inserts. Set it down onto a secure surface.

NOTE

Be sure to keep the packing material in case you need to return the unit to Mini-Circuits for servicing

¹ Although top and bottom panels create intended accessibility, it is important that caution be taken when connecting or disconnecting any electrical or RF connection; moving, removing, or replacing any wires, cables, connections, switches, or other components within the boxes to avoid potentially damaging or dislodging any other cables or connections.



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4 LAYOUT AND INSTALLATION

4.1 Rack Mounting

The box should be fastened to rack support structure through the slotted rack mounting holes on the front panel of each box.



Figure 3a: 4x slotted mounting holes on front panel of units in measuring 1U - 5U in height.

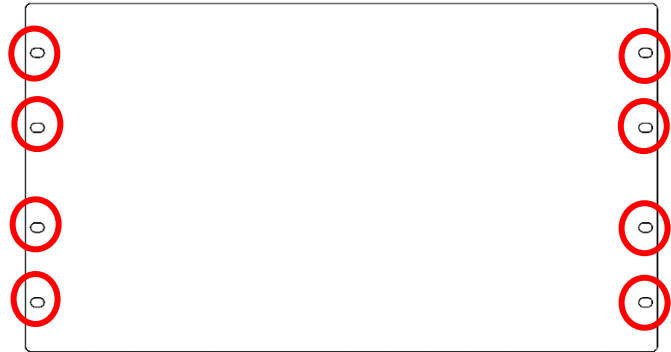


Figure 3b: 8x slotted mounting holes on front panel of units measuring 6U-8U in height.

Figure 1: Slotted rack mounting holes in front panel of your equipment.



Box must be mounted to maintain minimum of 1U (1.75") clearance above top panel and below bottom panel with unobstructed access to room ambient airflow for proper operation.



Additionally, **due to weight, box must be supported by means other than the front panel.** This can be facilitated by side rails or by a shelf, sufficiently secured to a standard, high grade, 19-inch equipment rack.

4.2 Rear Panel Safety Blocks

Units of 2U height and greater come supplied with four rear-panel safety blocks to prevent impact to delicate equipment. These must be installed by the customer on the rear panel of the product before use. Failure to install safety blocks may result in damage to the product.



Figure 4: Safety Blocks come in a clearly labeled plastic bag



Figure 5: Install using a Phillips head screwdriver



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4.3 Rear Panel Grounding Stud

The rear panel of the unit is constructed with a #10-32 x 1/2" long grounding stud to ground the box.



Figure 6: Rear Panel Grounding Stud

5 RETURN MATERIAL AUTHORIZATION (RMA) PROCEDURE

If you have received this unit by mistake or wish to return it for evaluation, please reach out to the support contacts listed on page 4. For your convenience, you may also contact our Sales Department at (718) 934-4500 / sales@minicircuits.com or your local Mini-Circuits sales representative. They will review your RMA request, and per Mini-Circuits RMA policy, issue an identification number to ensure proper handling. **All returns must be accompanied by appropriate Mini-Circuits identification and documentation to ensure proper handling.**



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