

65150-M

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REGULATED SPECTRAL LINE POWER SUPPLY MODEL 65150

Please read these instructions completely before operating this equipment. If there are any questions or problems regarding the use of this equipment, please contact: ORIEL INSTRUMENTS - or - the representative from whom this equipment was purchased.

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I. INTRODUCTION

The wide selection of Oriel interchangeable metal vapor and rare gas lamps produce intense line spectra in the UV, VIS, and NIR. The Oriel 65150 Regulated AC Power Supply has been designed to power these lamps, with line voltage changes having a minimal impact on the lamp output. The 65150 maintains a stable lamp output for increased accuracy of radiometric measurements.

II. SPECIFICATIONS

Input	115 volts at 2 amps or 208 - 240 volts at 1 amp, 50/60 Hz
Output Current	1.0 Amps \pm 3%
Regulation	\pm 1% change in light output for \pm 10% change in line voltage
Operating Voltage	10 to 60 volts
Lamp Starting Voltage	220 volts

III. INSTRUMENT OPERATION

Plug the lamp cable into the connector, which is located at the rear of the power supply, and connect the line cord to the 115 volt line. Switch the power on via the toggle switch on the front panel of the power supply.

If line voltage and frequency parameters need to be changed, see the circuit description and schematic that follows. Plug in the line cord and switch on power using the toggle switch on the front panel.

The output connector is a Bryant 7596-ER (mating connector Bryant 7594-NP or equivalent). The two AC (outer) connections go to pins 2 (jumped to 3) and 7 (jumped to 8) on the lamp. The AC line ground (center pin) goes to the lamp mount chassis.

IV. CIRCUIT DESCRIPTION

Included with this manual is the 6515-2-1001 Schematic Diagram of the Spectral Lamp Power Supply.

The power supply has been designed around a ferro-resonant transformer (T1) which is self-regulating. The primary of T1 may be connected to run on either 115 VAC or 220 VAC by connecting the terminals. 50 Hz or 60 Hz operation is obtained by switching the tap on the secondary as indicated.

V. TROUBLESHOOTING

<u>PROBLEM</u>	<u>SOLUTION</u>
No power out:	
Circuit breaker	Reset
T1 Primary open	Replace T1
T1 Secondary open	Replace T1
L1 open	Replace L1
S2 starter defective	Replace S2
Poor regulation:	
C1 open	Replace C1
L2 shorted or open	Replace L2

VI. DRAWINGS

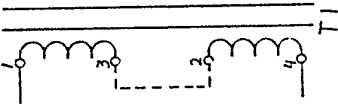
Included with this manual is:

6515-2-1001 Schematic Diagram, Spectral Lamp Power Supply.

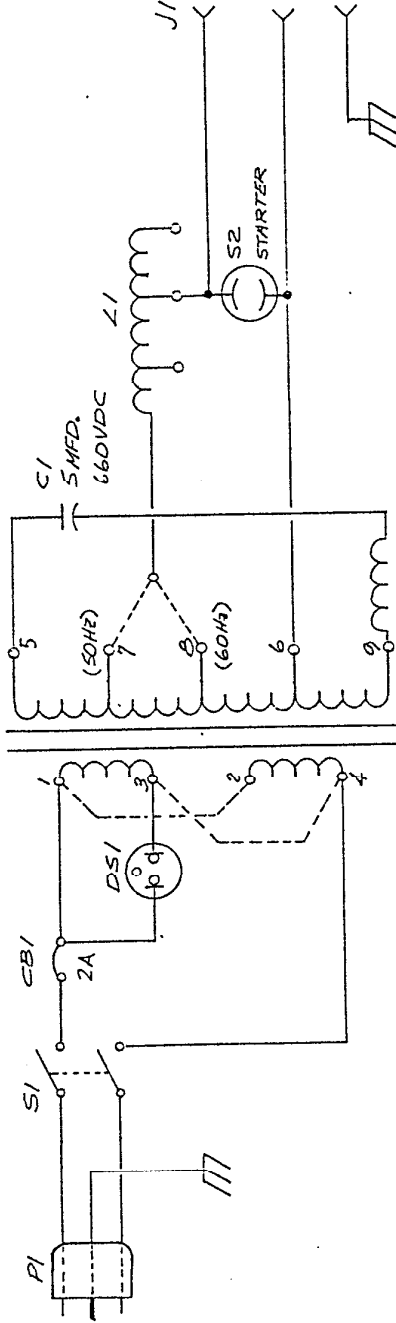
6515-1001

REV	DESCRIPTION	DATE	BY
A	CHG. 1 WAS 6520-2-1001	8-28-79	SD
B	ADDED L2, C1 WAS 6MFD.	1-14-80	CJ
C	ADDED DIAGRAM OF 220V CONNECTION	11-7-80	RLS

220 V CONNECTION



115V CONNECTION



MATERIAL	DATE DRAWN	ORIEL CORPORATION
	12-4-78	STAMFORD, CONNECTICUT
FINISH	DRAWN BY	TITLE
	W. J. Kelly	SCHEMATIC DIAGRAM
DO NOT SCALE DRAWING	CHECKED	SPECTRAL LAMP POWER
✓ SURFACES TO BE _____ RMS	W. J. Kelly	SUPPLY
UNLESS OTHERWISE SPECIFIED		DRAWING NO.
DIMENSIONS ARE IN INCHES		6515-2-1001
FRACTIONS 2 PLACE 3 PLACE ANGLES		
2- MAX. DIMS TO BE 005" MAX. RADIUS		
3- DIMS TO BE DIMENSIONED TO BE 02X45° SCALE		
4- CHAMFERS NOT DIMENSIONED TO BE 02X45° SCALE		
5- ANY 2 DIMS CONCENTRIC WITHIN 008 YIP		

WARRANTY AND RETURNS

WARRANTY

Oriel Instruments warrants that all goods described in this manual (except consumables such as lamps, bulbs, filters, ellipses, etc.) shall be free from defects in material and workmanship. Such defects must become apparent within the following period:

1. All products described here, except spare and repaired parts: one (1) year or 3000 hours of operation, whichever comes first, after delivery of the goods to buyer.
2. Spare parts: ninety (90) days after delivery of goods to buyer.
3. Repaired items: ninety (90) days after delivery of goods to buyer.

Oriel Instruments' liability under this warranty is limited to the adjustment, repair and/or replacement of the defective part(s). During the above listed warranty period, Oriel Instruments shall provide all materials to accomplish the repaired adjustment, repair or replacement. Oriel Instruments shall provide the labor required during the above listed warranty period to adjust, repair and/or replace the defective goods at no cost to the buyer ONLY IF the defective goods are returned, freight prepaid, to an Oriel Instruments designated facility.

Oriel Instruments shall be relieved of all obligations and liability under this warranty if:

1. The user operates the device with any accessory, equipment or part not specifically approved or manufactured or specified by Oriel Instruments unless buyer furnishes reasonable evidence that such installations were not a cause of the defect.
2. The goods are not operated or maintained in accordance with Oriel's instructions and specifications.
3. The goods have been repaired, altered or modified by other than Oriel authorized personnel.
4. Buyer does not return the defective goods, freight prepaid, to an Oriel repair facility within the applicable warranty period.

IT IS EXPRESSLY AGREED THAT THIS WARRANTY SHALL REPLACE ALL WARRANTIES OF FITNESS AND MERCHANTABILITY. BUYER HEREBY WAIVES ALL OTHER WARRANTIES, GUARANTIES, CONDITIONS OR LIABILITIES, EXPRESSED OR IMPLIED, ARISING BY LAW OR OTHERWISE, WHETHER OR NOT OCCASIONED BY ORIEL'S NEGLIGENCE.

This warranty shall not be extended, altered or varied except by a written document signed by both parties. If any portion of this agreement is invalidated, the remainder of the agreement shall remain in full force and effect.

CONSEQUENTIAL DAMAGES -

Oriel Instruments shall not be responsible for consequential damages resulting from misfunctions or malfunctions of the goods described in this manual. Oriel's total responsibility is limited to repairing or replacing the malfunctioning or malfunctioning goods under the terms and conditions of the above described warranty.

INSURANCE -

Persons receiving goods for demonstrations, demo loan, temporary use or in any manner in which title is not transferred from Oriel, shall assume full responsibility for any and all damage to the goods while they are in their care, custody and control. If damage occurs which is unrelated to the proper and warranted use and performance of the goods, then the recipient of the goods accepts full responsibility for restoring the goods to their condition upon original delivery, and for assuming all costs and charges.

RETURNS

Before returning equipment to Oriel for repair, please call the Customer Service Department at (203) 377-8282. Have your purchase order number available before calling Oriel. The Customer Service Representative will give you a Return Material Authorization number (RMA). Having an RMA will shorten the time required for the repair, because it ensures that your equipment will be properly processed. Write the RMA on the returned equipment's box. Equipment returned without a RMA may be rejected by the Oriel Receiving Department. Equipment returned under warranty will be returned with no charge for the repair or shipping. Oriel will notify you of the cost of repairs not covered by warranty before starting out of warranty repairs.

Please return equipment in the original (or equivalent) packaging. You will be responsible for damage incurred from inadequate packaging, if the original packaging is not used.

Include the cables, connector caps and antistatic materials sent and/or used with the equipment, so that Oriel can verify correct operation of these accessories.