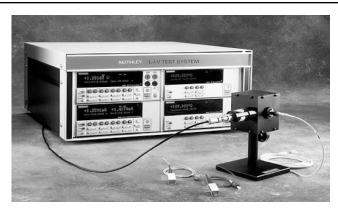


Fax to: (440) 498-2980



Keithley's L-I-V (light-current-voltage) Test System is designed to determine the charateristics of Laser Diode Modules. The L-I-V Test System combines the measurement capabilities required to test these modules with tight temperature control over the device under test in an integrated instrument package. The L-I-V Test System is configured from proven Keithley instrumentation; the basic configuration can be easily modified to add new measurement functions or to allow for new connections.

This configuration and ordering guide is intended as an aid in the customization of the L-I-V Test System. This guide will walk you through all aspects of the test system, ensuring critical components and required accessories are identified. To use this guide, simply step through each section in the equipment list. The configuration guide will assist you in the selection of laser drivers, temperature controllers, optical and electrical measurement equipment, and accessories necessary for your specific application. The diagram at the end of the guide is intended as a reference for typical configurations. Once the configuration guide is completed, it can be used to place an order for the system with your sales contact.

☐ Budgetary Quote ☐	Quote	☐ Purchase Order No.:					
COMPANY NAME:							
Bill to Address:			USER NAME:				
City, State/Province:			Address:				
Zip/Postal Code:			City, State/Province:				
Country:			Zip/Postal Code:				
Buyer Name:			Country:				
Phone:	Fax:		Phone:	Fax:			
E-Mail:			E-Mail:				
SHIP TO:							
Address:			Truck Carrier Preference:				
City, State, Zip:						Office	Use Only
Country:			Sales Representative:				
Phone:	Fax:		MO:	Rev 1	Rev 2	Rev 3	Rev 4
E-Mail:			Sales Order No.:	•			





QUI	PMEN	NT LIST			
: Lase	er Drive	r Selection			
A - 1	l: Choo	se the type	and quantity of Laser D	rivers to control the laser	
	Qty.	Model	<b>Catalog Description</b>	<b>Usage Description</b>	<b>Extended Pric</b>
		*2420	3A SourceMeter®	High Accuracy Laser Driver	
		2440	5A SourceMeter®	High Power Laser Driver	
		2400	Digital SourceMeter®	General Laser Driver	
		2420-C	3A SourceMeter®	Includes Contact Check Option	
		2440-C	5A SourceMeter®	Includes Contact Check Option	
		2400-C	Digital SourceMeter®	Includes Contact Check Option	
A - 2	2: Selec	t a Commu	nication Cable (Qty. sho	uld total number from A-1)	
		7007-05	GPIB Cable - 0.5m	Interconnection Cable	
		7007-1	GPIB Cable - 1m	Connection to Host Computer	
		*7007-2	GPIB Cable - 2m	Connection to Host Computer	
		7007-4	GPIB Cable - 4m	Connection to Host Computer	
A - 3	3: Selec	t a Cable or	Adapter to connect the	DUT (Optional)	
		CA-18-1	Dual banana plug cable	1.2 meters (Qty. 2 typical)	
		BG-18	Banana to Coaxial Adapter	(Qty 2 typical)	
		7754-3	BNC to Alligator Cable	3 ft length	
		7051-5	BNC Coaxial Cable	5 ft length	
		7051-10	BNC Coaxial Cable	10 ft length	
				TOTAL LASER DRIVER	
: Tem	peratur	e Control S	Selection		
B - 1	l: Choo	se a TEC co	ontroller for the internal	TEC module in the DUT	
		2510	TEC Controller	Precision Temperature Control	
			TEC Controller w/Auto Includes Autotuning fu	otune unctionality for PID calculation	
B - 2	2: Choos	e a TEC coi	ntroller for the external f	nxture TEC Module (Optional)	
		*2510	TEC Controller	Precision Temperature Control	
		* 2510-AT	TEC Controller w/Auto	•	
				unctionality for PID calculation	



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B - 3: Select a Com	municati	ion Cable (Qty. should t	total number from B-1 & B-2 Combined)	
70	007-05	GPIB Cable	0.5m Interconnection Cable between Equipment	
*70	007-1	GPIB Cable - 1m	Connection to Host Computer	
70	007-2	GPIB Cable - 2m	Connection to Host Computer	
70	007-4	GPIB Cable - 4m	Connection to Host Computer	
B - 4: Select a C	able to c	connect the DUT or Fixt	ture (Optional)	
2	510-CAB	TEC Controller Cable C	Cable attached to 2510 connector	
B - 5: Is the Tem	nperatur	e Controlled Device a R	esistive Heater?	
29	510-RH	Resistive Heater Contr	ol Adapter. Use with Resistive Heater	
			TOTAL TEMPERATURE CONTROL	
C: Optical/Elec	trical Mo	easurement Selection		
C - 1: Choose th	ne type a	nd quantity of measure	ement instruments	
*2:	500	Dual Photo Diode Meter	Dual Channel to combine Optical and Electrical Measurements	
6	517A	Electrometer	Single Channel for Electrical Measurements Only	
C - 2: Select a C	ommun	ication Cable (Qty. shou	uld total number from C-1)	
*70	007-05	GPIB Cable - 0.5m	Interconnection Cable between Equipment	
70	007-1	GPIB Cable - 1m	Connection to Host Computer	
70	007-2	GPIB Cable - 2m	Connection to Host Computer	
70	007-4	GPIB Cable - 4m	Connection to Host Computer	
C - 3: Electrical	Measure	ements - Select a Cable	to connect the photodiodes (Optional)	
70	078-TRX	-1	3-lug Triax cables - 1ft	
70	078-TRX	-3	3-lug Triax cables - 3ft	
70	078-TRX	-5	3-lug Triax cables - 5ft	
*70	078-TRX	-10	3-lug Triax cables - 10ft	
70	078-TRX	-12	3-lug Triax cables - 12ft	
70	078-TRX	-20	3-lug Triax cables - 20ft	
2:	37-ALG-	2	2m Cable - 3-slot Triax to Alligator Clip	





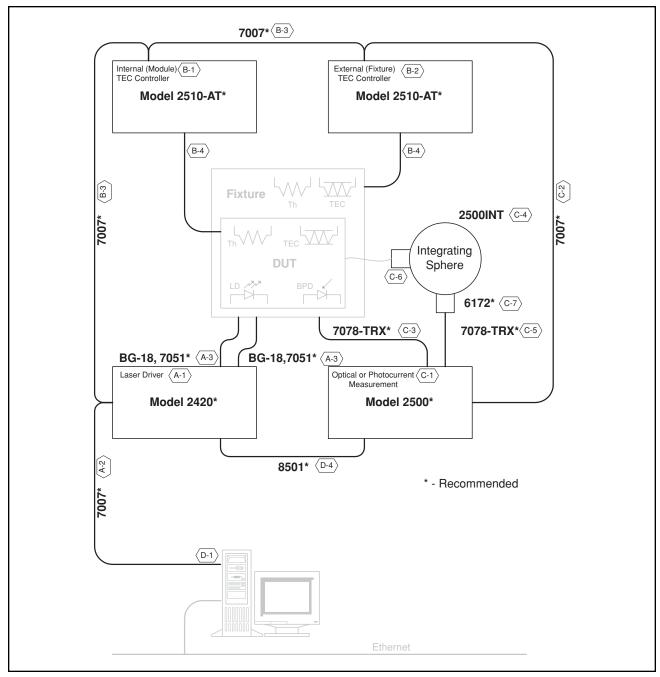
C - 4: Optical Measurem	ents - Select an Integrating Sphere	
2500INT-2-Si	2" Integrating Sphere, 2-0.5" Ports - Silicon Detector	
2500INT-2-Ge	2" Integrating Sphere, 2-0.5" Ports - Germanium Detector	
2500INT-2-IGA	C 2" Integrating Sphere, 2-0.5" Ports - Cooled InGaAs Detector	
C - 5: Optical Measurem	ents - Select a Cable to connect the Sphere to the 2500	
7078-TRX-1	3-lug Triax cables - 1ft	
7078-TRX-3	3-lug Triax cables - 3ft	
*7078-TRX-5	3-lug Triax cables - 5ft	
7078-TRX-10	3-lug Triax cables - 10ft	
7078-TRX-12	3-lug Triax cables - 12ft	
7078-TRX-20	3-lug Triax cables - 20ft	
C - 6: Optical Measurem	ents - Select a Fiber Connector for the Sphere	
2500INT-FC/PC	FC/PC Connector for 2500INT	
2500INT-SMA	SMA Connector for 2500INT	
C - 7: Optical Measurem	ents - A Sphere requires the following adapter	
* 6172	2-slot male to 3-lug female triax adapter	
	TOTAL MEASUREMENT SECTION	
D: Accessories Selection		
D - 1: Select an Interface	Card for the host computer	
KPCI-488	GPIB Interface Card - PCI	
KPCMCIA-GPII	3 GPIB Interface Card - PCMCIA	
D - 2: Select the Equipme	ent Rack Size if desired (Optional)	
8000	Equipment Rack, 28in High, Holds Qty. 10 - 1/2 Rack Instruments	
8000-10	Equipment Rack, 10in High, Holds Qty. 4 - 1/2 Rack Instruments	
8000-14A	Equipment Rack, 14in High, Holds Qty. 6 - 1/2 Rack Instruments	
8000-17A	Equipment Rack, 17.5in High, Holds Qty. 8 - 1/2 Rack Instruments	



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4288-1	Rack Mounting Kit - Single Unit Mount one instrument and one blank cover
4288-2	Rack Mounting Kit - Dual Unit Mount two instruments
D - 4: Select the Trigger Link	Equipment required (Refer to App Note 2217 for Trigger Link Details)
* 8501-1	Trigger Link Cable - 1m
8501-2	Trigger Link Cable - 2m
D - 5: Select the Demo Appli	ication Software
* LIVCD-950-01A	L-I-V QuickStart CD. Includes sample application source code for typical L-I-V system to aid in application development. Includes Visual Basic, Labview, TestPoint, LabWindows/CVI
D - 6: Add any additional ac	cessories from the catalog required
	<u> </u>
	TOTAL ACCESSORIES
	GRAND TOTAL OF SYSTEM COMPONENTS
NOTES	GRAND TOTAL OF STSTEM COMPONENTS
<ul> <li>Recommended equ</li> <li>Items listed are for</li> <li>Resulting order mu</li> </ul>	nipment for typical L-I-V System components that are used as a system. st have individual line for each item. s are not included, but can be quoted on a custom basis.





System Block Diagram

Specifications are subject to change without notice.

All other trademarks and trade names are the property of their respective companies.



Keithley Instruments, Inc.

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