

3/29

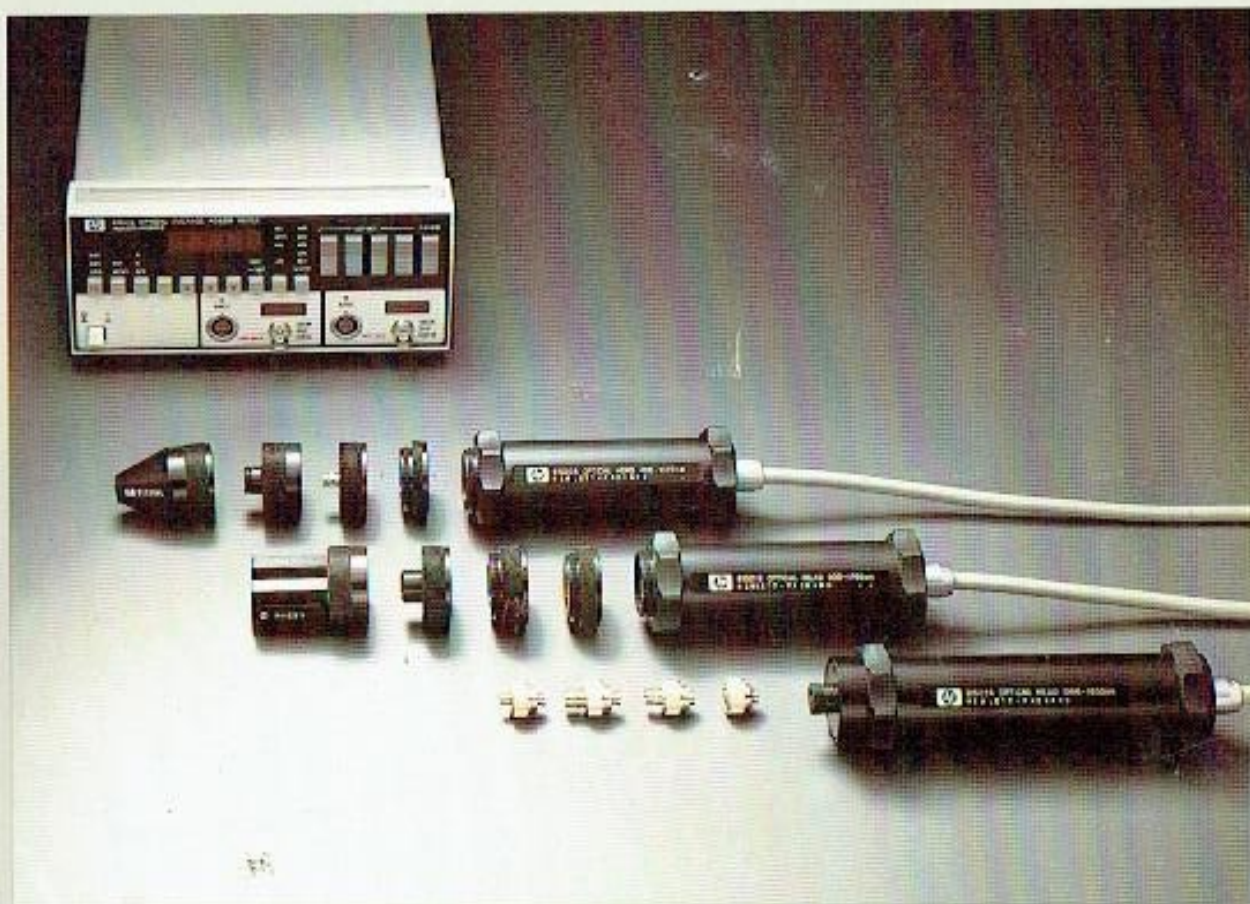
HP 81520A

HP 81521B

HP 81522A

Optical Heads

Operating Manual



**HEWLETT
PACKARD**

Operating Manual

Optical Heads

HP 81520A

HP 81521B

HP 81522A

SERIAL NUMBERS

This manual applies to instruments with serial number 2602G00101 and higher for HP 81520A and HP 81521B, and 2850G00101 and higher for HP 81522A. Any change made in instruments having serial numbers higher than the above numbers will be found in a "Manual Changes" supplement supplied with this manual. Be sure to examine the supplement for changes which apply to your instrument, and record these changes in the manual.



**HEWLETT
PACKARD**

HP Part No. 81522-90011

Printed in Federal Republic of Germany April 1989

Edition 1

Contents

1. General Information	
Introduction	1-1
Safety Considerations	1-1
Special Operating Considerations	1-2
Initial Inspection	1-2
Handling Precaution	1-3
Storage and Shipment Environment	1-3
Claims and Repackaging	1-3
Return Shipments to Hewlett-Packard	1-4
Cleaning Procedures	1-5
Fiber Connectors	1-5
Lenses and Detector Windows	1-5
Connector and Head Adapters	1-6
Connector Bushings	1-6
2. HP 81520A Optical Head	
Optical Heads Covered by this Chapter	2-1
Description	2-1
Specifications	2-2
Optical Connections	2-4
Transducer Outputs	2-5
Compensating for Lens Loss	2-6
Performance Tests	2-7
Introduction	2-7
Equipment Required	2-7
Test Record	2-8
Test Failure	2-8
Instrument's Specification	2-8

Performance Test	2-9
Accuracy and Linearity Tests	2-9
Accuracy Test	2-10
Linearity Test	2-12
Test Record 1	2-13
Test Record 2	2-14
3. HP 81521B Optical Head	
Optical Heads Covered by this Chapter	3-1
Description	3-1
Specifications	3-2
Optical Connections	3-4
Transducer Outputs	3-5
Compensating for Lens Loss	3-6
Performance Tests	3-7
Introduction	3-7
Equipment Required	3-7
Test Record	3-8
Test Failure	3-8
Instrument's Specification	3-8
Performance Test	3-9
Accuracy and Linearity Tests	3-9
Accuracy Test	3-10
Linearity Test	3-12
Test Record 1	3-13
Test Record 2	3-14
4. HP 81522A Optical Head	
Optical Heads Covered by this Chapter	4-1
Description	4-1
Specifications	4-3
Optical Connections	4-3
Transducer Outputs	4-5
Performance Tests	4-6
Introduction	4-6
Equipment Required	4-6

Test Record	4-7
Test Failure	4-7
Instrument's Specification	4-7
Performance Test	4-8
Accuracy and Linearity Tests	4-8
Accuracy Test	4-9
Linearity Test	4-11
Test Record 1	4-14
Test Record 2	4-15
A. Sales and Service Office Directory	
Information	A-1
Asia	A-1
Canada	A-1
Eastern Europe	A-2
Northern Europe	A-2
South East Europe	A-2
Middle East and Central Africa	A-3
United Kingdom	A-3
United States of America	A-3
Eastern USA	A-3
Midwestern USA	A-4
Southern USA	A-4
Western USA	A-4
Other International Areas	A-4