WalkLAB Digital Lux meter HL9040

Operations Manual

INTRODUCTION

Your purchase of this WalkLAB Digital Lux meter marks a step forward for you into the field of precision measurement. Although this meter is a complex and delicate instruments, its ruggedness will allow many years of use, if proper operating techniques are observed and practiced.

Please read the following instructions carefully and always keep this manual within easy reach.

1. FEATURES:

- Microcontroller array LSI-circuit provides a high reliability and durable performance.
- Precise and easy readout, high accuracy measurements.
- Wide range of light measurements up to 50,000 Lux
- Low battery indicator provides early warning of weak battery level.
- Automatic zero adjustment.
- Large and easy to read low power LCD display.
- Compact, light-weight and easy to operate.
- Separate light sensor allow user to make measurement at optimum position.

2. ELECTRICAL SPECIFICATION

RANGE	RESOLUTION	ACCURACY
2,000 Lux	1 Lux	_
20,000 Lux	10 Lux	±5%
50,000 Lux	100 Lux	J

Notes:

Accuracy tested by a standard parallel to a light tungsten lamp of 2,854° K temperature.

3. FRONT PANEL DESCRIPTION



4. GENERAL SPECIFICATION

Display - 3 ½ digit Liquid Crystal Display

Ranges - 0 to 50,000 Lux at 3 ranges

Zero adjustment - Automatic adjustment

Sampling time - 0.4 seconds

Sensor Probe - Selenium Photovoltaic cell

Battery type - DC 9Volt (1604 or equivalent)

Battyer consumption - Approximately 2mA

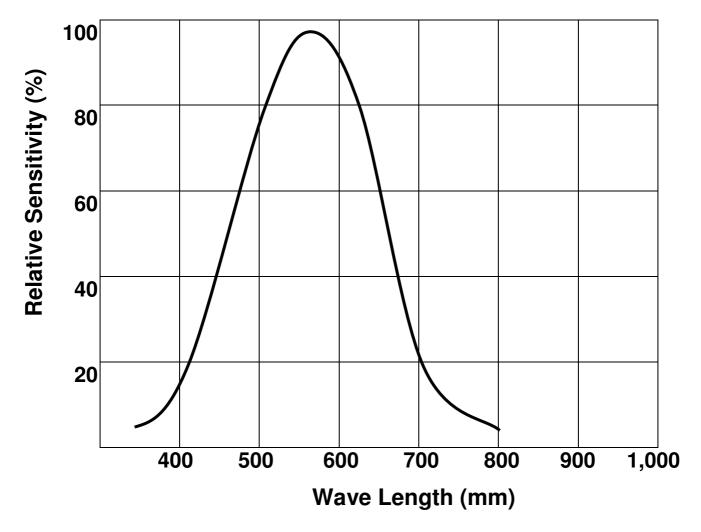
Operating Temperature - 0 to 50°C (32 to 122°F)

Operating Humidity - 80% RH maximum

Size - 108 x 73 x 23mm

Weight - 150gm including battery

5. SPECTRUM FOR LIGHT SENSOR:



6. CORRECTION FACTOR:

Mercury Lamp	x 1.1
Fluorescent Lamp	x 1.0
Incandescent Lamp	x 1.0
Daylight	x 1.0

7. MEASURING CONSIDERATIONS:

As the Lux meter is highly accurate and sensitive, its photo sensor has special features for curve in low display reading area. Therefore, if display indicates one or more leading zeros, user should shift the Range Switch to the next lower range scale to improve resolution.

User should switch to higher range when display shows "1".

Example:

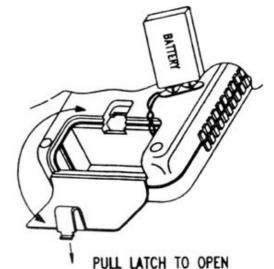
Range Switch position: x1 (left) x10 (middle) x100 (right)

Display shows: 645 077 007

Interpret reading as: 645 lux 770 lux 700 lux

8. REPLACEMENT OF BATTERY

- 1. When the left corner of LCD display shows the LOBAT symbol, it indicates a normal battery output of less than 6.5 to 7.5 volts. It is necessary to replace the battery. However, measurement may still be made for few hours after the symbol appears before the instrument becomes inaccurate.
- 2. Pull the latch of the battery cover at the rear bottom as shown.
- 3. Detach the battery from the battery clip and replace with a new DC 9 volts battery (1604 or equivalent). Ensure the correct polarity is connected to the battery clip.
- 4. Close the cover.



			GUIDE TC		AL LIGHT	GENERAL LIGHTING (reference only)	ence only)					
Location	Lux 3,000 2,0	2,000	1,000		750 5	500 300	0 200	150	100	50	20	
		Sewing	Sewing of medium-colored fabrics show case & picture	n-colored f & picture	abrics	Reading writing painting	Living room Bed room store room	moo moo	Stair way, corridor	corridor		
Home		Sewing fabl Hobby cra	Sewing of dark fabrics Hobby craft on fine details	Prolong Reading study, work activities	Reading work ities	Casual Reading Grooming, Kitchen Laundry area, Child's play room	Reading Kitchen rarea, ay room					
School		Drafting Labor	Drafting Room Laboratory	O	Class Room Library	_	Ind Audit	Indoor Gymnasium Iditorium, Wash roo	Indoor Gymnasium Auditorium, Wash room	E E	Emergency stair way	
Factory	Electronics Assembly Work	Assembly	Typesetting Print Shop Inspection work	etting Shop on work	Visual Work at production line	Vork at ion line	Packing Work	Work	Exit door Entrance door passage		Emergency stairs way Loading work	
Office		Drafting	Clerical work	work	Co Re	Conference room Reception area	a sa		Corridor Stair way			
Retail Shop	Show Window	٠, ٣	Show case Packing table	a)	Elevator	Display Stand	Œ	Front Desk		Corridor Stair way		
Restaurant		Show	Show case	iΩ	Kitchen Dinning room	u	Entrance Wash room	nce nce	Corridor Stair way	dor way		
Barber / Beauty Saloon		Hair D Mak Hair Dr	Hair Dyeing Make-up Hair Dressing	_ 工 <u>業</u>	shaving Hair wasing Hair Dressing	_ 6						

CERTIFICATION OF CALIBRATION

Trans Instruments (S) Pte. Ltd. certifies this product underwent calibration in accordance with Trans Instruments product manufacturing standards and work procedures and the result of inspection or testing for calibration meets the product specifications.

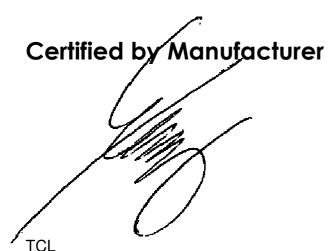
Product: WalkLAB Digital Lux meter

Range: 0 to 50,000 Lux

Accuracy: ± 5% of full scale

Calibration points: 770Lux, 6,000Lux, 39,000 Lux

Instrument that was used for the calibration was calibrated by Yokogawa Meters & Instruments Corporation or equivalent calibration institution in accordance to the National Standards (JIS C1609) under the environmental temperature of 23°C and Humidity of 45%.



WARRANTY

Trans Instruments (Singapore) Pte. Ltd., warranties this product for a period of 12 months from date of purchase against all defects in material and workmanship.

This warranty does not apply to the abuse or misuse of the instrument. If repairs or adjustments are required, please return the defective product freight prepaid. Instrument within warranty will be repaired at no charge.

Make sure that the product is properly packed and insured against possible damage or loss in shipment.

Purchase invoice **MUST** be accompanied in returned product or else warranty is considered void.

Please obtain authorization from Trans Instruments (Singapore) Pte Ltd. Directly or through your local sales representatives prior to returning the product.

Trans Instruments staff can be contacted at the following email address or through our web-page contacts:

sales@transinstruments.com
http://www.transinstruments.com

TRANS INSTRUMENTS

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