

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.

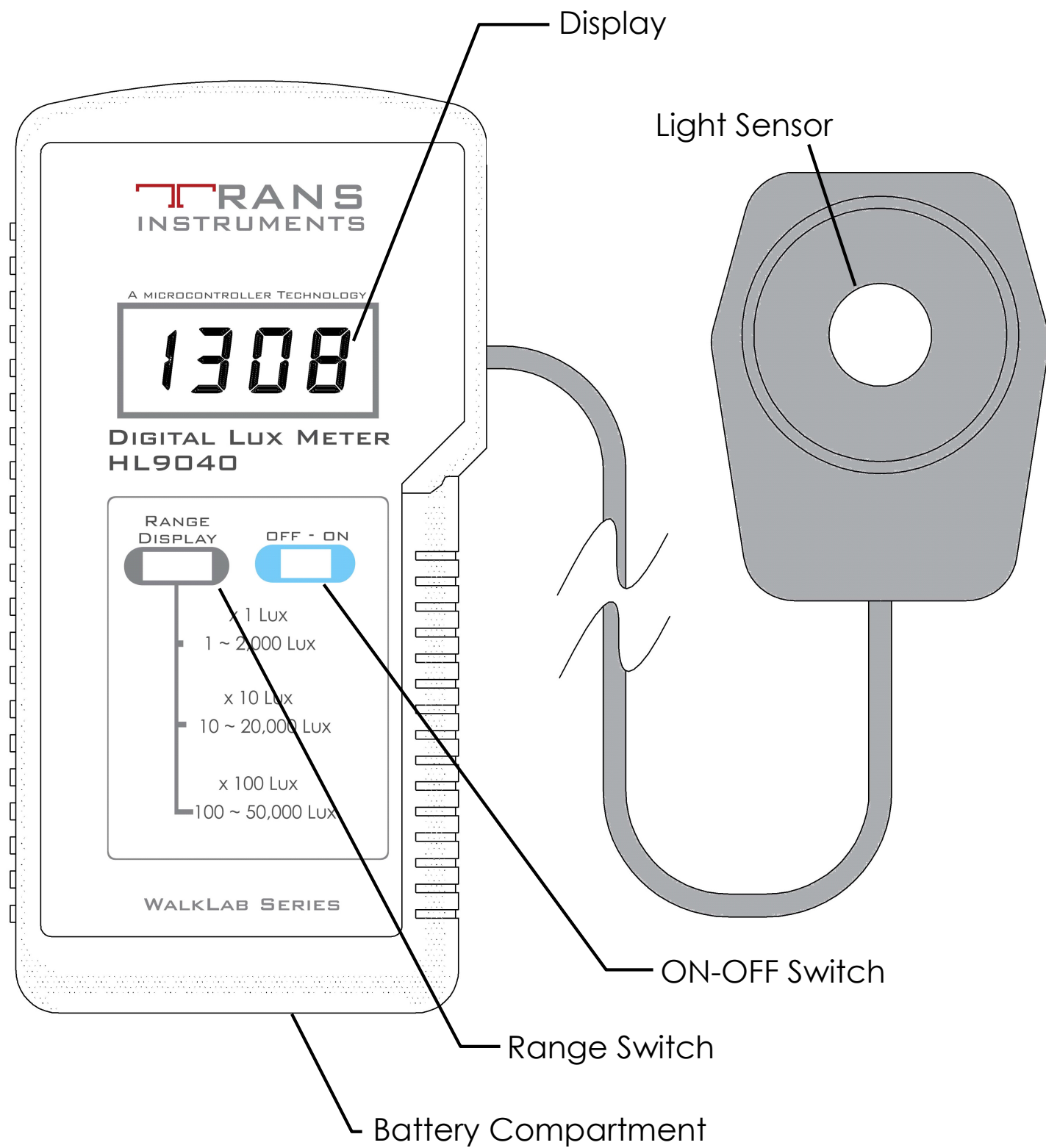
2. ELECTRICAL SPECIFICATION

<u>RANGE</u>	<u>RESOLUTION</u>	<u>ACCURACY</u>
2,000 Lux	1 Lux	} ±5%
20,000 Lux	10 Lux	
50,000 Lux	100 Lux	

Notes:

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

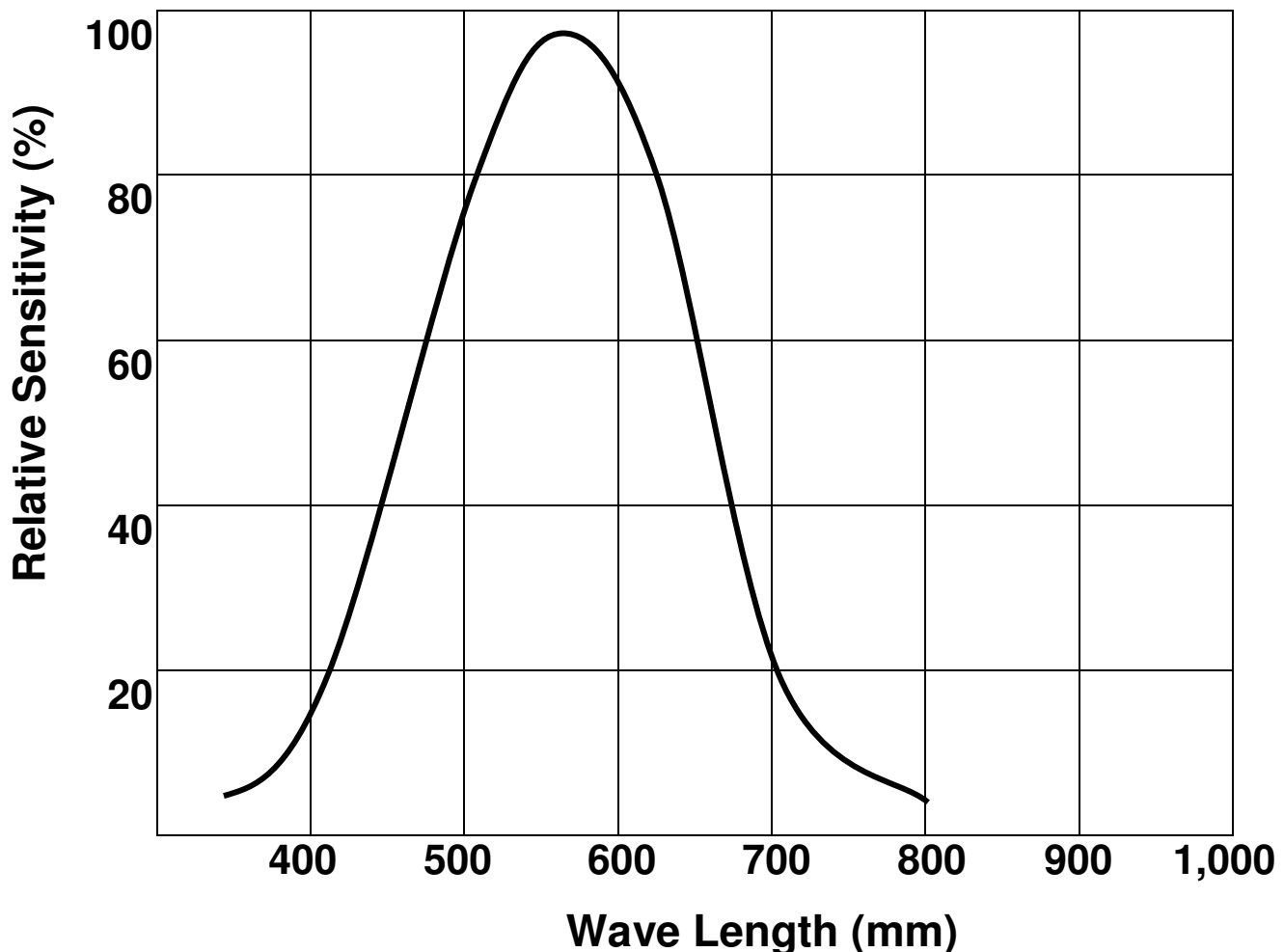
3. FRONT PANEL DESCRIPTION



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.

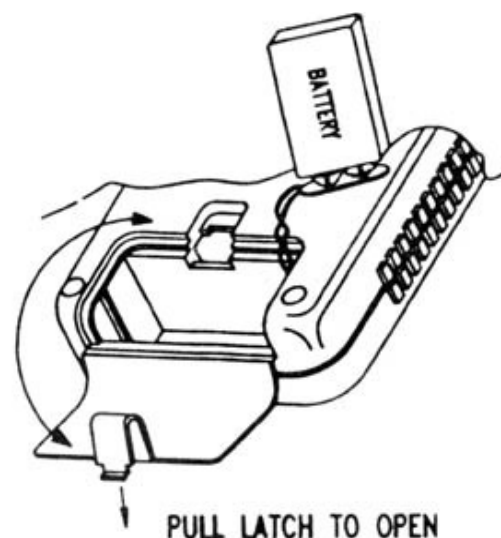
User should switch to higher range when display shows “1”.

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.



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: $\pm 5\%$ 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%.

Certified by Manufacturer

A stylized, handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the left.

TCL

WARRANTY

Trans Instruments (Singapore) Pte. Ltd., warrants 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

(Singapore) Pte Ltd

email: sales@transinstruments.com

Website: www.transinstruments.com

ISO9001 Certified Firm