Haze Meter

Model: LS155B
User Manual V1.02

Please read this manual carefully before using and reserve it for reference.

I Product Introduction

This instrument is a multifunctional haze meter featuring a full-spectrum LED light source and a spectral sensor design. It is designed to measure haze, transmittance, and other optical parameters of various diffuse transmission materials, such as milky white, foggy, and frosted surfaces, as well as a wide range of transparent and semi-transparent regular transmission materials. The instrument is equipped with a 7-inch color display and a capacitive touchscreen, providing an exceptional user experience.

Standards for the product

JJF 1303-2011 Calibration Specification for Hazemeter

GBT 2410-2008 Determination of the luminous transmittance and haze of transparent plastics

GB/T 3978-2008 Standard illuminants and geometric conditions

ASTM D1003-21 Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics

ISO 13468-1:2019 Plastics - Determination of the total luminous transmittance of transparent materials - Part 1: Single-beam instrument

ISO 13468-2:2021 Plastics - Determination of the total luminous transmittance of transparent materials - Part 2: Double-beam instrument

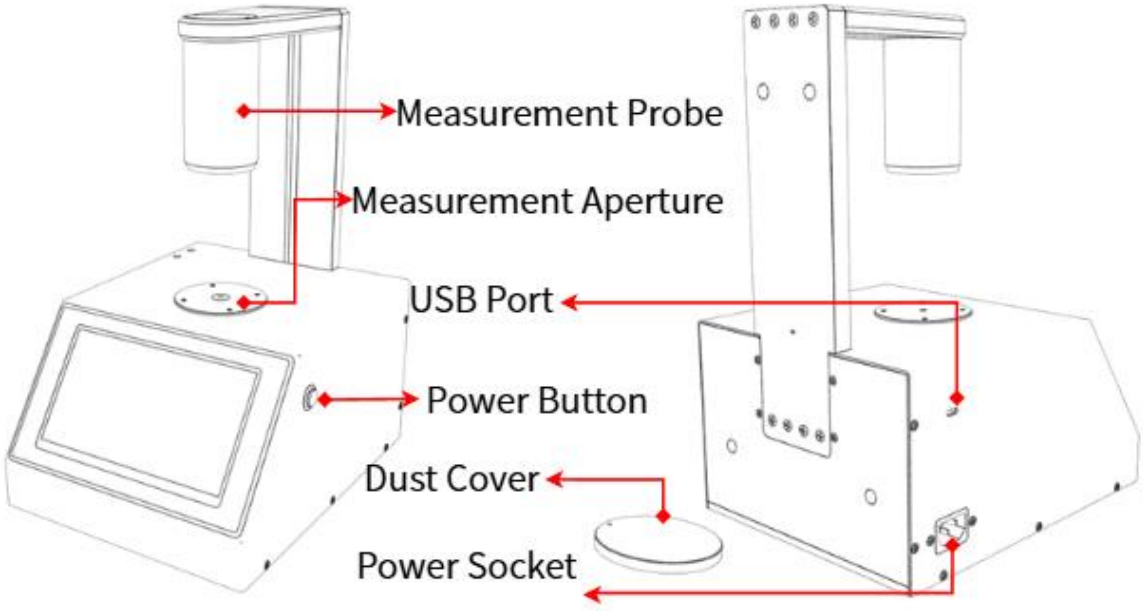
II Parameters

Illumination geometry	D/0°
Illumination light source	Full spectrum LED light source
Spectral Range	400-700nm
Spectral Interval	10nm
Measuring aperture	5mm/14mm/25mm
Measurement conditions	Light source D65, field of view 10°; Light source A, field of view 2°; Light source C, field of view 2°
Measuring time	About 3s
Measuring parameter	Haze, Transmittance, Clarity
Transmittance resolution	0.01%
Transmittance accuracy	±2%, ±1% typical
Transmittance repeatability	≤0.03 (Standard deviation of 30 measurements at 3-second intervals on a standard haze plate with transmittance ~80% and

	haze ~30, after preheating calibration)
Haze/Clarity resolution	0.01%
Haze/Clarity accuracy	Better than ±2%
Haze/Clarity repeatability	≤0.03 (Standard deviation of 30 measurements at 3-second intervals on a standard haze plate with transmittance ~80% and haze ~30, after preheating calibration)
Display	7-inch 1024*600 dot matrix IPS color screen
Language	Simplified Chinese, English
Data transmission	USB (Type-C)
Operating temperature range	0~45℃, 0~85%RH (no condensation)
Storage temperature range	-25~55℃, 0~85%RH (no condensation)
Size	21.1cm×26.4cm×36.0cm(LWH)
Weight	5.3kg
Supply Voltage	AC100~277V 50/60HZ
Operating Current	0.4A
Operating Power Consumption	80W

III Operation

1. Instrument structure

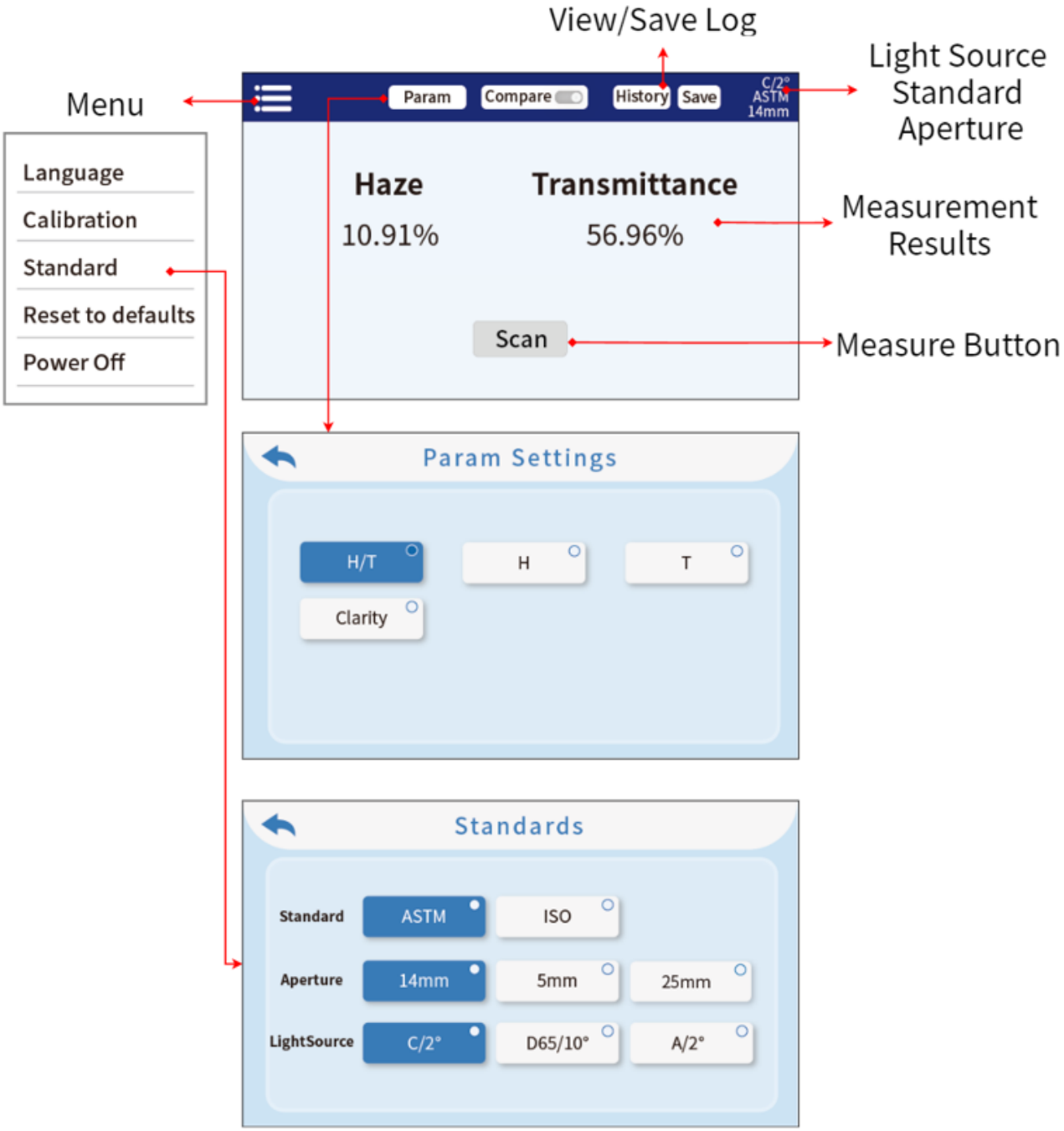


2. Calibration

When the device is powered on, the user can follow the calibration animation prompts to perform the calibration process.

3. Measurement

The default measurement parameter of the instrument is "Haze/Transmittance". Users can click the "Param" at the top of the screen or the "Param Setting" in menu bar to enter the setting interface to select the parameters to be measured (H/T, H, T, Clarity).


View/Save Log
Menu
Light Source
Standard
Aperture
Language
Calibration
Standard
Reset to defaults
Power Off
Param
Compare
History
Save
C/2°
ASTM
14mm
Haze
Transmittance
10.91%
56.96%
Measurement
Results
Scan
Measure Button
Param Settings
H/T
H
T
Clarity
Standards
Standard
ASTM
ISO
Aperture
14mm
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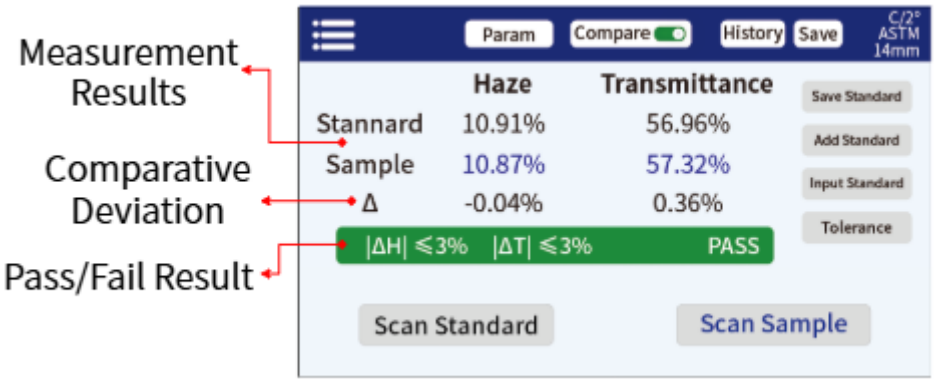
LightSource
C/2°
D65/10°
A/2°



Compare measurement interface

4. Menu bar

In the measurement interface, click the " " icon on the upper left corner to pop up the menu bar, with the following options: Language, Calibration, Standard, Reset to defaults and Power off.

IV PC Software

You can use the PC software to connect the computer via USB. The software has functions of compare measurement, reading compare record, export compare data to Excel, qualified number, unqualified number, total number statistics, report generation and printing, etc.

V Precaution

1. When the instrument has not been used for a long time, it is recommended to perform calibration before using.
2. Please ensure that the sample is evenly colored with a flat and clean surface, otherwise it will affect the measurement accuracy.
3. Avoid liquids entering the instrument through the measurement aperture, as this will damage the instrument and affect measurement accuracy and operational safety.
4. When the instrument is not in use, put on the dust cover to prevent dust from entering or prolonged humidity, which may affect the measurement accuracy.
5. It’s recommended to calibrate the instrument once each year. And we offer calibration service.
6. When measuring the haze, transmittance and clarity, in order to measure more accurately, it is necessary to fill pure water into the cuvette to calibrate it before measurement; at the end of the

measurement, it is necessary to remove the test object to recalibrate again.

7. Modify the standard settings (standard, measurement aperture, measurement conditions) parameters of the instrument, need to recalibrate.

8. For failed calibration, the possible reasons are as below:
   - The dust cover has not been removed or the test holes are covered with samples;
   - Tested in a bright light environment;
   - The attenuation of the light source leads to failure of normal use and it needs to be returned to the factory for inspection and repair.

VI Packing List

No.	Description	Quantity	Unit
1	Haze Meter	1	Set
2	USB cable	1	pcs
3	Power cable	1	pcs
4	aperture cover	3	pcs
5	Screwdrivers	1	pcs
6	User manual	1	pcs

VII Service

1. The colorimeter has one-year warranty. If the meter works abnormally, please send the whole instrument to our company for maintenance.

2. Provide users with spare parts and lifelong maintenance services.

3. Provide the users with the gauge calibration service.

4. Free technical support for long term.

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