

KGKGK HP320

KGKGK HP320 Portable Spectrometer User Manual

Model: HP320

1. INTRODUCTION

This manual provides essential instructions for the safe and effective operation of your KGKGK HP320 Portable Spectrometer. The HP320 is a handheld spectral analyzer designed for measuring spectral illuminance and color temperature within the 380-780nm wavelength range. It features a highly sensitive CCD sensor for accurate metering and a user-friendly interface for ease of use.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Wavelength Range:** 380-780nm for comprehensive spectral analysis.
- **High-Sensitivity CCD Sensor:** Ensures accurate and fast response for precise measurements.
- **8GB Internal Storage:** Ample memory to record numerous color difference values and measurement data.
- **Ergonomic Design:** Small, lightweight, and designed for comfortable handheld operation.
- **HD IPS Capacitive Screen:** Humanized interface with natural color eye protection for clear data display.
- **Power Saving Sleep Mode:** Automatic screen turn-off after 5 minutes of inactivity, with adjustable settings.
- **Multi-language Support:** English and Chinese language options.

2.2 Device Components

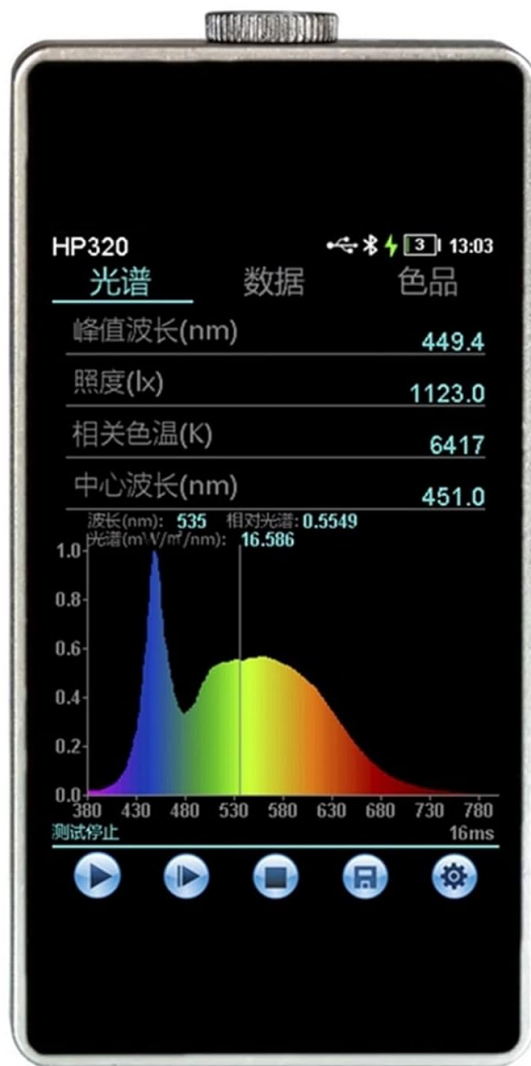


Image 1: Front view of the HP320 Portable Spectrometer, showing the display interface with spectral data, peak wavelength, illuminance (lx), correlated color temperature (K), and central wavelength. The screen also shows navigation icons at the bottom.



Image 2: Angled view of the HP320 device, highlighting its compact size and the protective film on the screen. A control knob is visible on the side.



Image 3: Side view of the HP320, showing the screen with a protective film labeled "FRONT" and a control knob on the right side.



Image 4: Top-down angled view of the HP320, showing the screen with its protective film and the overall sleek design.



Image 5: Rear view of the HP320, displaying the model number "HP320" and a serial number. A USB-C charging port is visible on the right side.

3. SETUP

1. **Unpacking:** Carefully remove the HP320 spectrometer from its packaging. Verify that all components listed in the package contents are present.
2. **Initial Charge:** Before first use, connect the device to a power source using the provided USB cable and a compatible charger. Allow the device to fully charge. The charging port is located on the side/rear of the device (refer to Image 5).
3. **Power On/Off:** Locate the power button (often integrated with a control knob or a separate button). Press and hold to power on or off the device.
4. **Language Selection:** Upon initial startup, you may be prompted to select a language. Choose between English and Chinese as desired. This setting can typically be changed later in the system settings.
5. **Screen Protector:** If a protective film is present on the screen (as shown in Images 2, 3, 4), gently peel it off from the corner to ensure optimal display clarity.

4. OPERATING INSTRUCTIONS

4.1 Basic Measurement

1. **Power On:** Press and hold the power button until the display illuminates.
2. **Navigate Menu:** Use the control knob or touch screen (if applicable) to navigate through the main menu options, such as " " (Spectrum), " " (Data), and " " (Colorimetry).
3. **Select Measurement Mode:** Choose the desired measurement mode (e.g., Spectral Illuminance, Color Temperature).
4. **Position Sensor:** Point the device's sensor aperture towards the light source or area to be measured. Ensure no obstructions are blocking the sensor.
5. **Initiate Measurement:** Press the designated measurement button or select the " " (Test) option on the screen. The device will perform the measurement and display the results.
6. **Review Data:** The display will show various parameters such as peak wavelength, illuminance (lx), correlated color temperature (K), and central wavelength, along with a spectral distribution graph (refer to Image 1).
7. **Save Data:** If desired, use the on-screen options to save the measurement data to the internal 8GB storage.

4.2 System Settings

Access the system settings menu (often represented by a gear icon) to configure various parameters:

- **Language:** Change the display language between English and Chinese.
- **Screen Saver Time:** Adjust the duration before the device enters sleep mode (default is 5 minutes).
- **Brightness:** Modify screen brightness for optimal viewing.
- **Date and Time:** Set the current date and time.
- **Calibration:** Refer to specific instructions within the device's menu for any user-performable calibration procedures.

5. MAINTENANCE

- **Cleaning:** Use a soft, dry, lint-free cloth to clean the device's exterior. For the screen, use a specialized screen cleaning solution and cloth. Avoid abrasive materials or harsh chemicals.
- **Sensor Care:** Keep the sensor aperture clean and free from dust or debris. Do not touch the sensor directly.
- **Storage:** Store the spectrometer in a cool, dry place, away from direct sunlight, extreme temperatures, and high humidity.
- **Battery Care:** To prolong battery life, avoid fully discharging the device frequently. Charge the device regularly, even if not in use for extended periods.
- **Software Updates:** Check the manufacturer's website periodically for any available firmware or software updates for your device model.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low or depleted battery.	Connect the device to a charger and allow it to charge for at least 30 minutes before attempting to power on again.
Screen is unresponsive or frozen.	Software glitch.	Perform a soft reset by pressing and holding the power button for 10-15 seconds until the device restarts.

Problem	Possible Cause	Solution
Inaccurate readings.	Dirty sensor, incorrect measurement mode, or environmental factors.	Clean the sensor aperture. Ensure the correct measurement mode is selected. Avoid measuring in unstable lighting conditions. Consider recalibration if available.
Device enters sleep mode too quickly.	Screen saver time is set too short.	Adjust the "Screen Saver Time" setting in the system menu.

7. SPECIFICATIONS

- **Model:** HP320
- **Wavelength Range:** 380-780nm
- **Sensor Type:** CCD
- **Internal Storage:** 8GB
- **Display:** HD IPS Capacitive Screen
- **Language System:** English, Chinese (switchable)
- **Power Saving:** Automatic sleep mode after 5 minutes of inactivity (adjustable).
- **Approximate Dimensions:** 1.18 x 0.79 x 0.39 inches
- **Approximate Weight:** 1.1 Pounds
- **Manufacturer:** KGKGK
- **Item Model Number:** 1005006338136522

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official KGKGK website. Keep your purchase receipt as proof of purchase for warranty claims.

Return Policy: This product typically includes a 30-day return/replacement policy from the date of purchase. Please check with your retailer for specific terms and conditions.