Henkion LT-600M

Henkion Multifunction RJ45 Network Cable Tester LT-600M User Manual

Model: LT-600M

1. Introduction

The Henkion LT-600M is a multifunction network cable tester designed for comprehensive network diagnostics. This device integrates various testing capabilities including UTP/STP cable continuity, RJ45 line fault detection, cable tracing, cable length measurement, RJ45 TDR cable testing, and a suite of network tools. Additionally, it features a digital multimeter, optical power meter (OPM), visual fault locator (VFL), PoE++ detection, PD power detection, port flashing, and NCV AC voltage detection.
This manual provides detailed instructions for the setup, operation, and maintenance of your LT-600M tester to ensure optimal performance and accurate results.

2. Product Overview and Components

The LT-600M consists of a main emitter unit with a 4-inch IPS touch screen and a remote receiver unit. The package includes essential accessories for various testing scenarios.

2.1 Main Unit (Emitter) and Remote Unit

Image: Detailed view of the Henkion LT-600M main unit (emitter) and remote unit, highlighting key ports and indicators. The main unit features a touch screen interface, Type-C charging port, Digital Multi-Meter ports, and an RJ45 Network Port. The remote unit includes an LED power indicator, UTP cable sequence indicator, sensitivity knob, and a Type-C charging port.

2.2 Packing List

Image: Contents of the Henkion LT-600M package, including the main unit, remote unit, cables, and accessories.

- 1 x Manual
- 1 x Type-C Cable
- 1 x RJ45 to BNC Connector
- 1 x Screwdriver
- 1 x Lanyard
- 1 x Tool Bag
- 1 x Host (Main Unit)
- 1 x Receiver (Remote Unit)
- 1 x BNC Alligator Clip
- 1 x RJ45 Cable
- 1 x RJ11 Cable
- 1 x Multimeter Test Cable
- 1 x Packing Box

3. Setup

3.1 Initial Battery Connection

Before first use, ensure the internal battery in the main unit is connected. Open the battery panel on the back of the device and plug in the battery connector. The device is powered by a rechargeable 3.7V 4000mAh lithium-ion battery.

3.2 Charging the Device

Image: The main unit and remote unit being charged via USB-C cables.

Both the main emitter unit and the remote receiver unit are equipped with rechargeable batteries. Use the provided Type-C cable to charge both units. Connect the Type-C cable to the charging port on each device and to a suitable USB power adapter (not included). The main unit has a 4000mAh battery, providing approximately 6 hours of working time, while the receiver has a 2000mAh battery, offering about 12 hours of working time.

4. Operating Instructions

The LT-600M offers a variety of functions accessible via its touch screen interface. Select the desired function from the main menu to begin testing.

4.1 UTP Cable Test

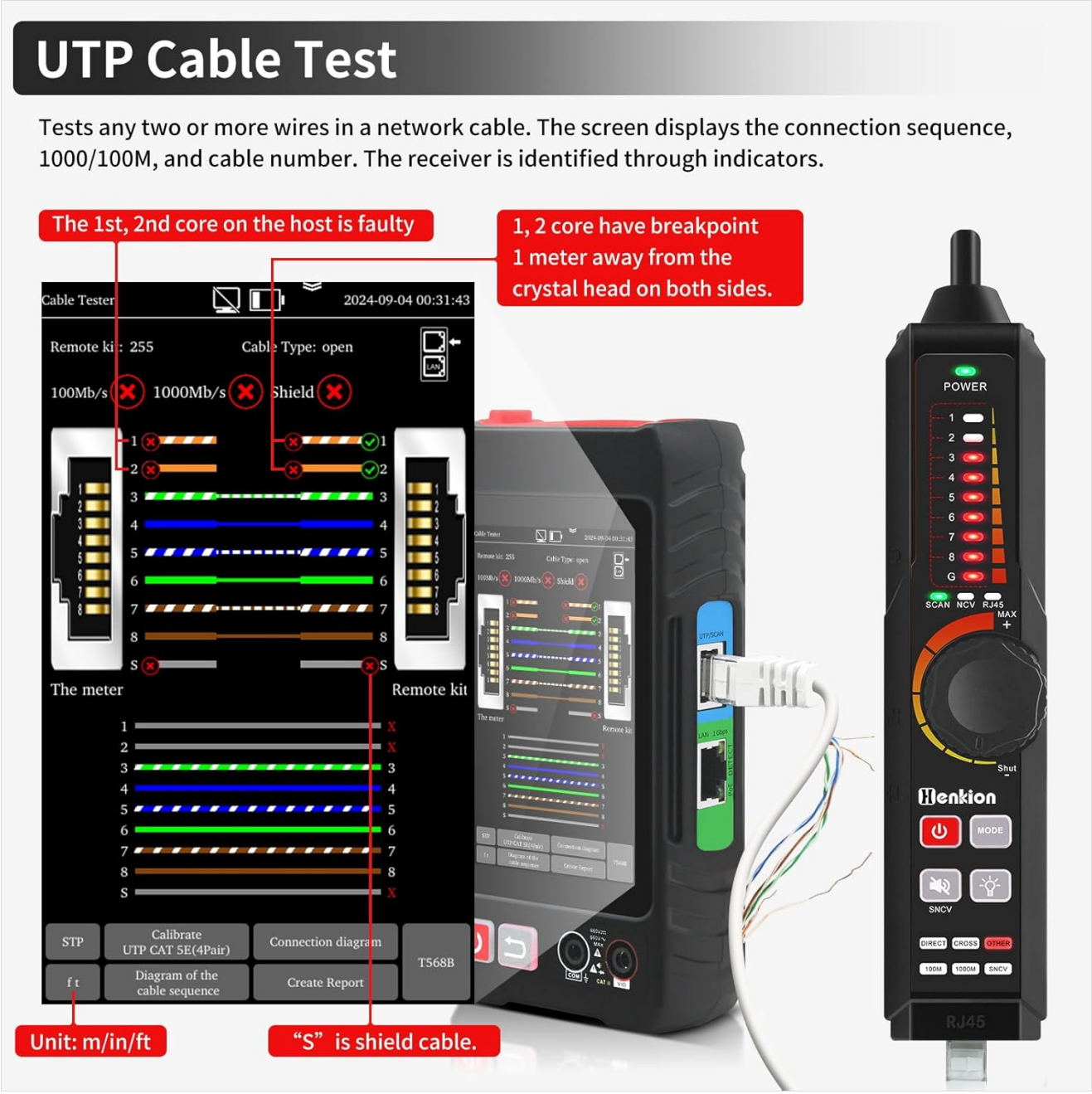

Image: The UTP Cable Test screen on the main unit showing wire sequence and fault detection, alongside the remote unit's LED indicators.

This function tests the continuity of UTP/STP/RJ45/RJ11 cables. It identifies the sequence, type, and remote kit connection. It can quickly detect near-end, mid-end, and far-end fault points in RJ45 cable connectors. The screen displays the connection sequence, speed (1000/100M), and cable number. The remote unit's indicators assist in identification.

4.2 Cable Tracer

Image: The cable tracer function in use, showing the remote unit detecting a cable among a bundle, with on-screen display of results.

The digital signal Ethernet cable tracer allows you to quickly locate a target cable (BNC, network, telephone, or other metal cables) from a bundle. It effectively rejects noise and false signals, ensuring accurate cable identification. The RJ45 tracer and UTP functions share the same interface for streamlined operation.

4.3 RJ45 TDR Cable Test & Length Measurement

Image: Screenshots of the RJ45 TDR Test and Cable Length measurement interfaces on the LT-600M.

This function tests cable pair status, length, attenuation, reflectivity, impedance, skew, and other parameters. It can measure opens in network cables up to 3000 meters with an accuracy of ±3%. Test reports can be generated.

4.4 VFL Optical Power Meter (OPM)

Image: Close-up view of the VFL (Visual Fault Locator) and OPM (Optical Power Meter) ports on the top of the main unit, with fiber optic cables connected.

The OPM is used for signal power testing and insertion loss testing of various equipment and photoelectric components. The VFL (Visual Fault Locator) helps to easily and accurately determine the position of optical fiber fault points, such as breaks, cracks, or bends.

4.5 Digital Multi-Meter (DMM)

Image: The LT-600M displaying a voltage measurement on its screen, with multimeter probes connected to an electrical panel.
The built-in intelligent digital multimeter provides auto-ranging voltage (DC/AC), resistance, and continuity measurements with isolation protection. It also supports diode and capacitance measurements. The device automatically adjusts to zero.

4.6 PoE Detect

Image: The LT-600M screen showing PoE detection results, including protocol, voltage, and power supply pins, connected to a PoE switch.

The RJ45 PoE Tester supports IEEE802.3BT/AT/AF and non-standard protocol detection. It displays the power supply voltage, power supply pins, and pin polarity. It can detect whether the power output of a PoE switch is normal and identify the pins used for power supply.

4.7 Port Flashing

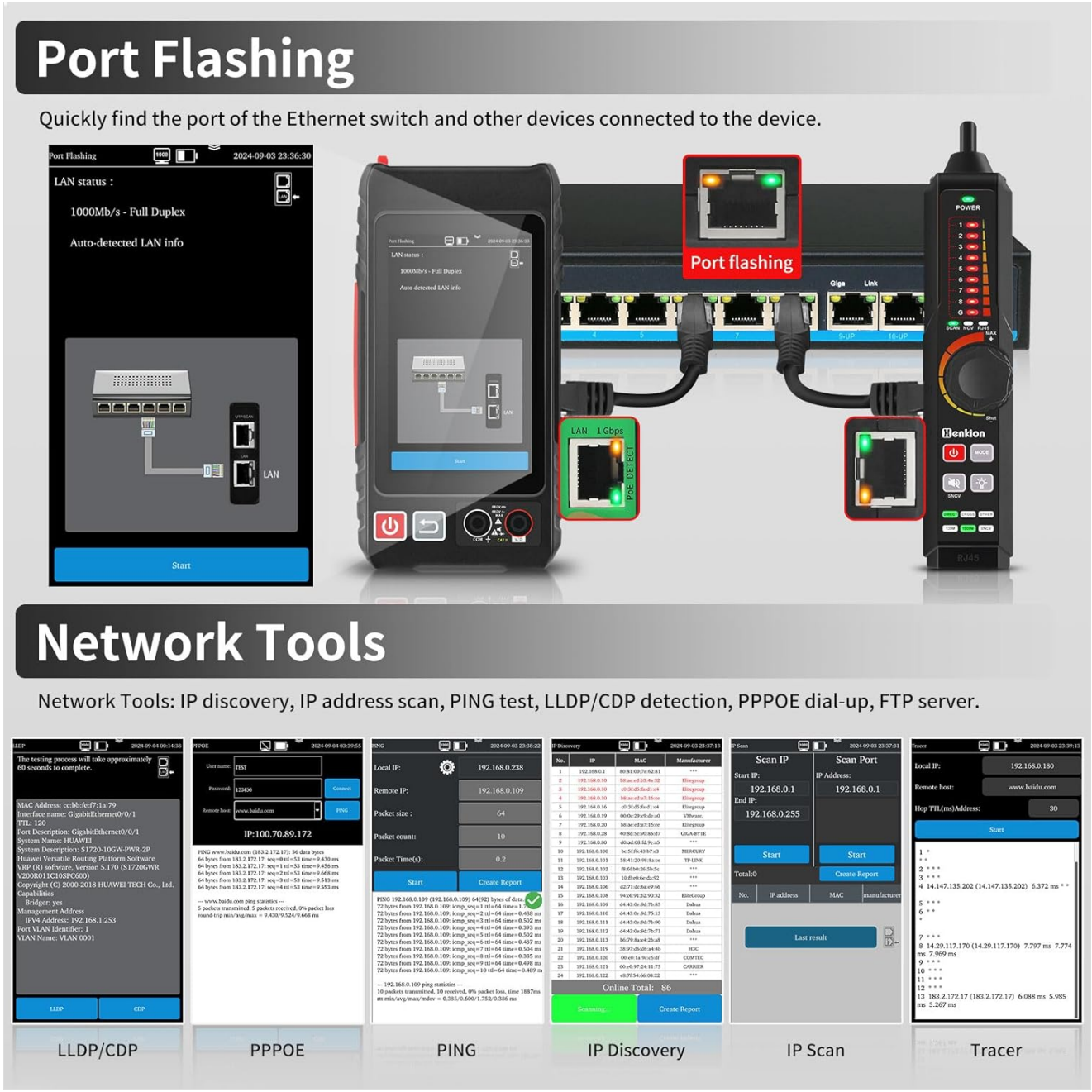

Image: The LT-600M displaying network port status and initiating port flashing on a connected Ethernet switch.

This function allows you to quickly find the port of an Ethernet switch or other connected devices by making the port's LED flash.

4.8 Network Tools

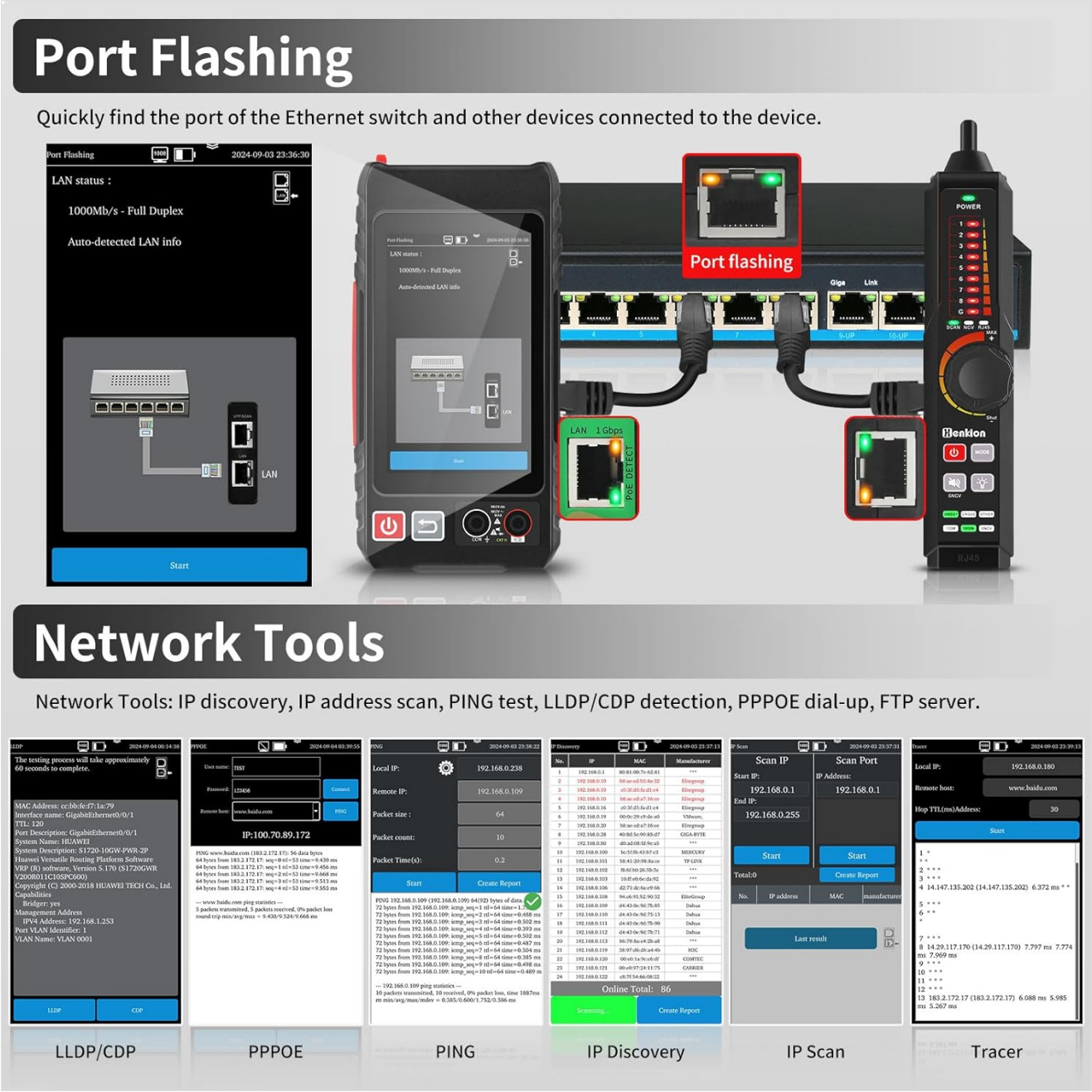

Image: Screenshots of various network tools available on the LT-600M, including LLDP/CDP, PPPOE, PING, IP Discovery, IP Scan, and Tracer.

The LT-600M includes a suite of network tools for diagnostics and management:

- **IP Discovery:** Scans the network to find active IP addresses.
- **IP Address Scan:** Performs a detailed scan of IP addresses.
- **PING Test:** Checks network connectivity and latency to a specific IP address.
- **LLDP/CDP Detection:** Detects Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol (CDP) information from connected devices.
- **PPPOE Dial-up:** Supports PPPOE dial-up functionality.
- **FTP Function:** Enables users to copy test reports and data via network FTP.

4.9 NCV AC Voltage Detect

The inductive NCV (Non-Contact Voltage) scan function provides sound and light dual alarms, supporting the distinction between live and neutral wires without direct contact.

5. Maintenance

5.1 Battery Care

To prolong battery life, ensure the device is charged regularly. Avoid fully discharging the battery frequently. Store the device in a cool, dry place when not in use for extended periods.

5.2 Cleaning

Clean the device with a soft, dry cloth. Do not use abrasive cleaners or solvents. Keep the ports free of dust and debris.

6. Troubleshooting

This section provides general troubleshooting tips. For specific issues not covered here, please refer to the support information.

- **Device not powering on:** Ensure the internal battery is connected and fully charged. Connect the device to a power source using the Type-C cable.
- **Inaccurate test results:** Verify that cables are properly connected to the correct ports. Ensure the remote unit is functioning and paired correctly for cable tests. Check for any physical damage to cables or connectors.
- **Touch screen unresponsive:** Try restarting the device. If the issue persists, ensure the screen is clean and free from moisture.

7. Specifications

Feature	Specification
Model Number	LT-600M
Applicable Cable Types	UTP/STP/RJ45/RJ11
Display	4-inch IPS Touch Screen, 800*480 resolution
Emitter Dimensions	150 x 86 x 40 mm (5.91 x 3.39 x 1.57 inch)
Emitter Net Weight	0.3 kg (0.66 lbs)
Receiver Dimensions	210 x 40 x 25 mm (8.26 x 1.57 x 0.98 inch)
Receiver Net Weight	0.13 kg (0.3 lbs)
Emitter Battery	3.7V 4000mAh Lithium-ion (approx. 6 hours working time)
Receiver Battery	3.7V 2000mAh Lithium-ion (approx. 12 hours working time)
Optical Power Meter Wavelengths	850/1300/1310/1490/1550/1625nm
Optical Power Meter Range	-70 ~ +10 dBm
VFL Type	Class 2; Power <1mW, Wavelength: 650nm
RJ45 TDR Cable Test Length	Up to 3000 meters
Cable Length Measurement Accuracy	±3%
PoE Support	IEEE802.3BT/AT/AF and non-standard protocols
Network Port	Built-in 1000M network port
Country of Origin	China

8. Warranty and Support

Henkion is committed to providing quality products and customer satisfaction. While specific warranty details are not provided in this manual, we strive to offer the best possible service. For any technical assistance, troubleshooting, or inquiries regarding your Henkion LT-600M, please contact your retailer or refer to the official Henkion support channels.