

TGEINHVDU KWS-X1

KWS-X1 Type C Voltage and Current Detection Monitor User Manual

Model: KWS-X1 | Brand: TGEINHVDU

1. INTRODUCTION

The KWS-X1 is a compact and precise Type C voltage and current detection monitor designed for measuring DC 4-30V and 0-12A. Featuring an HD IPS display, this power meter tester provides real-time data for various electronic components, ensuring stable performance and accurate readings. It is an essential tool for professionals and enthusiasts working with USB-C power delivery systems.

2. SAFETY INFORMATION

Please read and understand all safety instructions before using the KWS-X1 monitor. Failure to follow these instructions may result in electric shock, fire, or damage to the device or connected equipment.

- Do not disassemble or modify the device.
- Keep the device away from water, moisture, and extreme temperatures.
- Ensure proper ventilation when in use.
- Use only with compatible Type C power sources and devices within the specified voltage and current ranges (DC 4-30V, 0-12A).
- Avoid dropping or subjecting the device to strong impacts.

3. PACKAGE CONTENTS

Verify that all items are present and in good condition upon opening the package:

- KWS-X1 Type C Voltage and Current Detection Monitor
- User Manual (this document)

4. PRODUCT OVERVIEW



Figure 4.1: KWS-X1 Type C Voltage and Current Detection Monitor in operation, showing its compact design and clear IPS display. The display shows real-time voltage (10.996V), current (0.4215A), and power (4.6349W) readings, along with battery percentage (85.5%) and charging status.

The KWS-X1 monitor features a high-definition IPS display that provides clear and comprehensive data at a glance. It includes a Type C input and output port for inline measurement. The device typically has navigation buttons (e.g., OK, BACK) for cycling through display modes or settings, though specific button functions may vary based on firmware version.

Key Components:

- **Type C Input Port:** Connects to the power source (e.g., charger, power bank).
- **Type C Output Port:** Connects to the device being charged/powering (e.g., smartphone, laptop).
- **HD IPS Display:** Shows real-time voltage (V), current (A), power (W), and other relevant parameters.
- **Control Buttons:** Used for navigating menus, switching display modes, or resetting data (specific functions detailed in Operating Instructions).

5. SETUP

Setting up the KWS-X1 monitor is straightforward:

1. **Connect Power Source:** Plug the Type C male connector of the KWS-X1 into your power source (e.g., USB-C wall charger, power bank, computer's USB-C port).
2. **Connect Device:** Plug the Type C cable from your device (e.g., smartphone, tablet, laptop) into the Type C female port on the KWS-X1 monitor.
3. **Power On:** The monitor will typically power on automatically once a power source is detected and display the current readings.

Ensure all connections are secure to prevent intermittent readings or disconnections.

6. OPERATING INSTRUCTIONS

The KWS-X1 monitor is designed for ease of use, providing immediate feedback on power delivery. The IPS display shows various parameters simultaneously.

Reading Displayed Parameters:

- **Voltage (V):** Indicates the electrical potential difference.
- **Current (A):** Shows the flow rate of electric charge.
- **Power (W):** Calculated as Voltage x Current, representing the rate of energy transfer.
- **Capacity (mAh/Wh):** Accumulates the total charge/energy transferred over time (if supported by the model).
- **Temperature (C/F):** May display internal temperature or ambient temperature (if supported).
- **Charging Protocol:** Some models can detect and display the active fast charging protocol (e.g., PD, QC).

Button Functions:

While specific button functions can vary, common operations include:

- **Short Press (OK/Select):** Cycles through different display screens or confirms a selection.
- **Long Press (OK/Select):** Resets accumulated data (e.g., mAh, Wh) or enters settings menu.
- **Short Press (BACK/Navigate):** Moves back in a menu or cycles through options.
- **Long Press (BACK/Navigate):** Exits a menu or turns the display on/off.

Refer to the on-screen prompts or experiment with short/long presses to understand specific model behavior.

7. MAINTENANCE

Proper care ensures the longevity and accuracy of your KWS-X1 monitor:

- **Cleaning:** Use a soft, dry, lint-free cloth to clean the display and casing. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Handling:** Avoid dropping the device or exposing it to excessive force, which can damage internal components or the display.
- **Port Care:** Keep the Type C ports free of dust and debris. Use a soft brush or compressed air if necessary.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No display/Device not powering on	<ul style="list-style-type: none">• Loose connection• Insufficient power from source• Damaged cable or port	<ul style="list-style-type: none">• Ensure Type C connections are fully inserted.• Try a different power source or device.• Check cables for damage; try a different cable.
Inaccurate readings	<ul style="list-style-type: none">• Poor connection• Device operating outside specified range• Environmental factors	<ul style="list-style-type: none">• Reconnect the device and power source.• Ensure voltage and current are within DC 4-30V and 0-12A.• Use in a stable environment, avoid extreme temperatures.
Display frozen or unresponsive	<ul style="list-style-type: none">• Temporary software glitch• Overload/short circuit protection triggered	<ul style="list-style-type: none">• Disconnect and reconnect the device.• Ensure the connected load is within the device's current limits.

9. SPECIFICATIONS

Parameter	Value
Model	KWS-X1
Voltage Measurement Range	DC 4-30V
Current Measurement Range	0-12A
Display Type	HD IPS Display
Manufacturer	TGEINHVDU
ASIN	B0F47ZVLZC
Date First Available	April 9, 2025

10. WARRANTY AND SUPPORT

This KWS-X1 Type C Voltage and Current Detection Monitor is covered by a manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation provided with your purchase or contact the manufacturer directly.

For technical support, troubleshooting assistance, or warranty claims, please contact TGEINHVDU customer support through the retailer where the product was purchased or via the contact information provided on the manufacturer's official website.

We are committed to providing high-quality products and exceptional customer service.