

INXING TF-100

INXING TF-100 5-Pin Electric Scooter LCD Instrument and Throttle Controller User Manual

Model: TF-100

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your INXING TF-100 5-Pin Electric Scooter LCD Instrument and Throttle Controller. Please read this manual thoroughly before use to ensure proper function and safety.

2. PRODUCT OVERVIEW

The INXING TF-100 is a multifunction LCD display and intelligent control unit designed for electric scooters. It features a clear display for real-time information and an integrated throttle controller. The unit is waterproof and utilizes a 5-pin connector with Protocol 2 communication.



Figure 2.1: The INXING TF-100 Electric Scooter LCD Instrument and Throttle Controller, showing the display, mode and power buttons, and finger hook accelerator.

Key Features:

- **Multifunction LCD Display:** Shows speed, mileage, battery voltage, and remaining power.
- **Integrated Throttle Controller:** Finger hook accelerator for easy operation.
- **Voltage Compatibility:** Default 60V, adjustable to 36V, 48V, 52V via P03 setting.
- **Waterproof Design:** Equipped with a 5-pin connector for stable operation in humid conditions.
- **Safety Functions:** Includes electronic brake assistance and low voltage protection.
- **Communication Protocol:** Protocol 2 compatible.

3. SETUP AND INSTALLATION

The TF-100 unit is designed for straightforward installation on compatible electric scooters. Ensure your scooter's controller supports Protocol 2 for proper communication.

Included Components:

- 1 x TF-100 Electric Scooter Throttle (with waterproof cable)
- 1 x Extension Cable (cord length 55 inches) with SM terminal plug
- 1 x Wrench
- Screws for mounting



Figure 3.1: All components included with the TF-100 unit, showing the main throttle assembly, extension cable, and small connectors.

Installation Steps:

1. **Mount the TF-100 Unit:** Securely attach the TF-100 instrument to your scooter's handlebar using the provided screws and wrench. Ensure it is positioned for comfortable access to the throttle and display.

2. **Connect the 5-Pin Cable:** Connect the 5-pin waterproof cable from the TF-100 unit to the corresponding port on your electric scooter's controller. If necessary, use the provided extension cable.
3. **Verify Connections:** Double-check all connections to ensure they are secure and properly seated.



Figure 3.2: Example of the TF-100 unit installed on an electric scooter handlebar.

4. OPERATING INSTRUCTIONS

The TF-100 instrument provides intuitive controls and a clear display for monitoring your scooter's performance.

Power On/Off:

- **Power On:** Press and hold the **Power button** (red button with power symbol) to turn on the display.
- **Power Off:** Press and hold the **Power button** again to turn off the display.



Figure 4.1: Close-up view of the Power and Mode buttons on the TF-100 unit.

LCD Display Functions:

The LCD display provides real-time information:

- **Speed:** Current riding speed.
- **Mileage:** Displays single trip mileage (TRIP) and cumulative mileage.
- **Battery Voltage:** Current battery voltage.
- **Residual Power:** Graphical representation of remaining battery power.
- **Gear:** Current gear setting.

Function Key (MODE) Operation:

- **Short Press:** Briefly press the **MODE button** to cycle through different display contents, such as time, single mileage, and cumulative mileage.

- **Long Press:** Press and hold the **MODE** button to clear the single trip mileage (TRIP) data.

Voltage Setting (P03 Parameter):

The TF-100 unit defaults to 60V. If your scooter requires a different voltage, follow these steps to adjust the P03 parameter:

1. Ensure the unit is powered on.
2. Access the settings menu (specific method may vary, often involves a combination of button presses, refer to your scooter's main controller manual if needed).
3. Navigate to the P03 parameter.
4. Adjust the value to your desired voltage: 36V, 48V, 52V, or 60V.
5. Save the setting and exit the menu.

Important: Setting an incorrect voltage can damage your scooter's electrical system. Always confirm the correct voltage for your scooter before making adjustments.

5. MAINTENANCE

The INXING TF-100 is designed for durability and is waterproof, requiring minimal maintenance.

- **Cleaning:** Wipe the display and unit exterior with a soft, damp cloth. Avoid abrasive cleaners or solvents.
- **Connections:** Periodically check the 5-pin connector and other cables for secure connections and any signs of wear or damage.
- **Storage:** When not in use for extended periods, store the scooter and its components in a dry, cool place.

6. TROUBLESHOOTING

If you encounter issues with your TF-100 unit, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Display does not power on.	Loose connection, no power from scooter, faulty unit.	Check all cable connections. Ensure scooter battery is charged. If problem persists, contact support.
Incorrect speed or mileage displayed.	Incorrect wheel diameter setting (P parameter), sensor issue.	Refer to your scooter's main controller manual for P parameter settings. Check speed sensor connection.
Throttle not responding.	Loose connection, communication protocol mismatch, faulty throttle.	Verify 5-pin connection. Ensure your scooter's controller supports Protocol 2.
Battery level inaccurate.	Incorrect voltage setting (P03 parameter).	Adjust P03 parameter to match your scooter's battery voltage (36V, 48V, 52V, 60V).

If you are unable to resolve an issue using the troubleshooting guide, please contact customer support for further assistance.

7. SPECIFICATIONS

Detailed technical specifications for the INXING TF-100 unit:



Figure 7.1: Physical dimensions of the TF-100 unit, showing approximate measurements.

Feature	Detail
Brand	INXING
Model Name	TF-100 (Electric scooter LCD accelerometer)
Material	ABS
Item Weight	0.2 Kilograms
Connectivity	5-Pin Connector, Protocol 2
Voltage Compatibility	36V, 48V, 52V, 60V (adjustable via P03)
Special Feature	Digital Display Screen, Waterproof
Color	Black

8. WARRANTY AND SUPPORT

Warranty Information:

The INXING TF-100 unit comes with a warranty period of **180 days** from the date of purchase. This warranty covers manufacturing defects under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or improper installation.

Customer Support:

For technical assistance, warranty claims, or any questions regarding your INXING TF-100, please contact your retailer or the INXING customer support team. Please have your purchase receipt and product model information available when contacting support.