

## Zhurui PR10-D FR16A

# Zhurui PR10-D FR16A Power Recorder Plug Wattmeter User Manual

Model: PR10-D FR16A

## 1. INTRODUCTION

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This manual provides detailed instructions for the safe and efficient operation of your Zhurui PR10-D FR16A Power Recorder Plug Wattmeter. Please read this manual thoroughly before use and retain it for future reference. This device is designed to measure and record the power consumption of electrical appliances, offering features such as historical data logging, customizable timers, and alarm functions.

## 2. PRODUCT OVERVIEW

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The Zhurui PR10-D FR16A is a versatile power monitoring device that plugs directly into a wall socket. It features a clear display for real-time data and various utility functions.



Figure 2.1: Front view of the Zhurui PR10-D Power Recorder, showing the display and power outlet.

### Key Features:

- Automatic historical data recording, viewable as lists or graphs, retained for up to 30 years.
- Configurable charge rates with up to 4 decimal places, supporting 8 secondary billing periods for peak consumption.
- 9 timers, including 2 advanced timers for specific on/off scheduling (non-repeated, daily, workday, weekend) and 7 general timers for daily period control.
- Alarm function for voltage, current, power, or temperature exceeding set limits.
- Output protection function to cut power when voltage, current, power, or temperature exceeds protection values.

# VOUS AIDER À ENREGISTRER LES DONNÉES DE CONSOMMATION D'ÉLECTRICITÉ CHAQUE JOUR.



Figure 2.2: Display illustrating the 8 test functions (Power, Voltage, Current, PF, Frequency, Consumption, Cost, Time) and utility functions (9 Languages, 23 Currencies, 9 Timers, Historical Record, Peak/Off-peak Pricing, Alarm Function, Output Protection Function).

## 3. SETUP

1. **Unpacking:** Carefully remove the power recorder from its packaging.
2. **Initial Power-On:** Plug the device into a standard wall outlet. The display should illuminate.
3. **Language Selection:** Upon first use or after a reset, you may be prompted to select a language. Use the navigation buttons (usually Up/Down arrows) to select your preferred language and press OK.



Figure 3.1: Language selection interface, showing options for Chinese, English, Spanish, German, French, Italian, Russian, Japanese, and Korean.

- Date and Time Setting:** Access the settings menu to set the correct date and time. This is crucial for accurate historical data logging and timer functions.
- Cost Rate Configuration:** If you wish to monitor electricity costs, configure your electricity rates in the settings. The device supports up to 4 decimal places for rates and 8 secondary billing periods for peak/off-peak pricing.

## 4. OPERATING INSTRUCTIONS

### 4.1 Basic Measurement

- Plug the appliance you wish to monitor into the Zhurui PR10-D.
- The display will show real-time measurements including:
  - Voltage (V)
  - Current (A)
  - Power (W)
  - Power Factor (PF)

- Frequency (Hz)
- Total Consumption (kWh)
- Total Cost (if configured)
- Elapsed Time

3. Use the navigation buttons to cycle through different display modes or access detailed information.

## 4.2 Data Recording and Analysis

The device automatically records historical data. This data can be reviewed in various formats:

- **Monthly Graph:** Displays daily consumption over a month.
- **Monthly List:** Provides a daily breakdown of consumption and cost for a month.
- **Yearly Graph:** Shows monthly consumption over a year.
- **Yearly List:** Lists monthly consumption and cost for a year.

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# PR10

## Enregistreur de puissance

FR

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Figure 4.1: Examples of historical data display, including monthly graphs, monthly lists, yearly graphs, and yearly lists of power consumption and cost.

## 4.3 Timer Functions

The PR10-D features 9 timers for automated control of connected appliances.

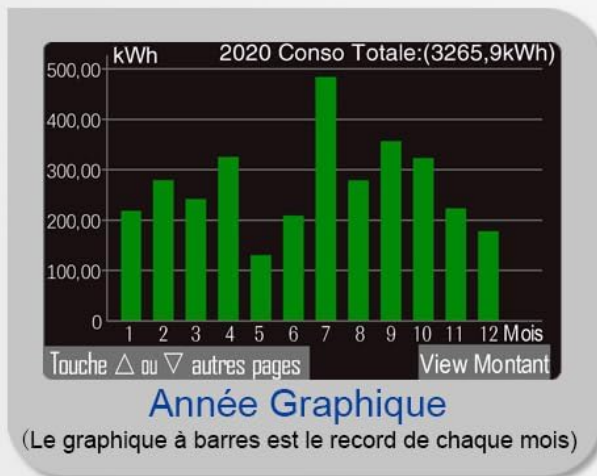
- **Advanced Timers (2):** These allow for precise scheduling of power on/off events based on specific dates, daily, workday, or weekend cycles.
- **General Timers (7):** These timers can be configured to turn power on or off within a specific time period of a single day.



Problem	Possible Cause	Solution
Readings are inaccurate or zero.	Appliance not drawing power, or incorrect settings.	Ensure the connected appliance is turned on and functioning. Check if the device is in the correct measurement mode.
Historical data is lost after unplugging.	Internal battery (CR2032) is depleted.	The internal battery needs to be replaced. Contact support for assistance.
Timer function not working.	Incorrect timer settings or incorrect date/time.	Verify timer settings and ensure the device's date and time are accurate.

## DOSSIERS D'HISTOIRE

Il enregistre les données de puissance chaque jour, y compris la consommation d'électricité et la facture. Les utilisateurs peuvent voir les enregistrements d'historique à partir du graphique de l'année, de la liste de l'année, du graphique du mois et de la liste du mois dans la page «Enregistrements historiques».



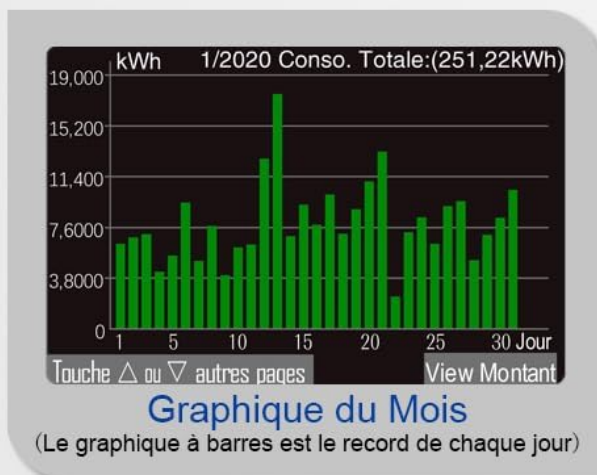
**2020 Conso. Total: (3265,9kWh)**

Mois	Conso. (kWh)	Montant (€)
1/2020	220,562	149,98
2/2020	279,214	189,87
3/2020	251,223	170,83
4/2020	323,258	219,82
5/2020	133,220	90,59
6/2020	211,568	143,87
7/2020	490,210	333,34
8/2020	278,337	189,27

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### Liste des Années

(La liste est le record de chaque mois)



**1/2020 Conso. Totale: (251,22kWh)**

Jour	Conso. (kWh)	Montant (€)
1/1/2020	6,65617	4,53
2/1/2020	6,92242	4,71
3/1/2020	7,22670	4,91
4/1/2020	4,56423	3,10
5/1/2020	5,70529	3,88
6/1/2020	9,50882	6,47
7/1/2020	5,32494	3,62
8/1/2020	7,79723	5,30

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### Liste des Mois

(La liste est le record de chaque jour)

Figure 5.1: On-screen display of detailed product parameters, including brand, model, accuracy, voltage, power, energy, cost, timer ranges, and physical dimensions.



## 8 FONCTIONS DE TEST

- Puissance
- Voltage
- Courant
- FP
- Fréquence
- Conso.
- Montant
- Temps

## FONCTION D'UTILITÉ

- 9 Langues
- 23 Monnaies
- 9 Minuterie
- Record historique
- Prix pic-vallée
- Fonction d'alarme
- Fonction de protection de sortie

Figure 5.2: Side view of the Zhurui PR10-D, illustrating its physical dimensions (Length: 125mm, Width: 79mm, Height: 57mm, Pin length: 19mm).

## 6. MAINTENANCE

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Replacement:** The internal CR2032 battery retains settings and historical data. If the device loses settings when unplugged, the battery may need replacement. This should ideally be performed by a qualified technician.
- **Disassembly:** Do not attempt to open or repair the device yourself. There are no user-serviceable parts inside. Unauthorized disassembly voids the warranty and may pose electrical hazards.



Figure 6.1: Back view of the PR10-D, showing the product label with warnings against disassembly to prevent electric shock.

## 7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	No power from the wall outlet.	Check the wall outlet with another appliance. Ensure the device is fully plugged in.
Display is blank or unreadable.	Power issue or display malfunction.	Ensure power is supplied. If problem persists, contact support.
Readings are inaccurate or zero.	Appliance not drawing power, or incorrect settings.	Ensure the connected appliance is turned on and functioning. Check if the device is in the correct measurement mode.

Problem	Possible Cause	Solution
Historical data is lost after unplugging.	Internal battery (CR2032) is depleted.	The internal battery needs to be replaced. Contact support for assistance.
Timer function not working.	Incorrect timer settings or incorrect date/time.	Verify timer settings and ensure the device's date and time are accurate.

## 8. WARRANTY AND SUPPORT

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For warranty information, please refer to the documentation provided with your purchase or contact your retailer.

**Manufacturer:** Zhurui Technology CO.,LTD.

**Spare Parts Availability:** Information unavailable.

If you encounter any issues not covered in the troubleshooting section or require further assistance, please contact Zhurui customer support.