

Yanmis CH2810A

Yanmis CH2810A Generator Battery Charger User Manual

Model: CH2810A | For 12V/24V Batteries

1. INTRODUCTION

This manual provides essential instructions for the safe and efficient operation of your Yanmis CH2810A Generator Battery Charger. This device is designed to charge 12V and 24V batteries, particularly fully sealed solid wide temperature batteries, ensuring reliable power for your generator. Please read this manual thoroughly before installation and use.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury or damage to the charger or battery.

- Ensure proper ventilation during charging.
- Do not expose the charger to rain or excessive moisture.
- Avoid short-circuiting the output terminals.
- Disconnect power before making or breaking connections to the battery.
- This charger is designed for 12V and 24V batteries only. Do not attempt to charge other battery types.
- The system is designed to prevent electrical impulse sparks. However, always exercise caution.

3. KEY FEATURES

The Yanmis CH2810A Battery Charger offers the following features:

- **Wide Compatibility:** Suitable for various 12V and 24V batteries, including fully sealed solid wide temperature batteries.
- **Broad Input Voltage Range:** Operates with AC 80-275V input and 20-600Hz frequency, allowing

charging even at low engine speeds.

- **Direct Generator Power Charging:** Can be powered directly by a generator, eliminating the need for a separate charger.
- **Engine Start Capability:** Allows the engine to be started while the battery is being charged by the grid.
- **Automatic Charging:** Features constant current and voltage charging, transitioning to trickle current and automatically stopping when the battery is full.
- **Spark-Free Operation:** Designed to prevent sparks from electrical impulses.
- **Uninterrupted Power:** Will not interrupt the electrical system when connected online.

4. TECHNICAL SPECIFICATIONS

Parameter	Value
Product Model	CH2810A
Input Voltage	80-275VAC
Output Voltage	12V/24VDC
Frequency	20-600Hz
Charging Mode	Floating
Current Rating	10 Amps
Working Temperature	-40~50°C
Storage Temperature	-20~60°C
Item Weight	9.2 ounces (approx. 260g)

5. SETUP AND INSTALLATION

Before installation, ensure the charger is placed in a well-ventilated area, away from flammable materials and direct sunlight.

5.1 Component Identification

Refer to the image below for identification of the charger's input and output terminals.



Image 1: Front view of the Yanmis CH2810A Battery Charger, highlighting the AC input terminals (L, N), DC output terminals (+, -), and the CHARGELAMP indicator. The model number CH2810, battery voltage 12V/24V, and current 10A are also visible.



Generator Battery Charger
Suitable for both 12V and 24V lead-acid batteries

Image 2: Angled view of the Yanmis CH2810A Battery Charger, illustrating its compact design and the integrated mounting brackets on the sides for secure installation. The input/output terminals are visible on the front.

5.2 Wiring Connections

1. AC Input Connection:

Connect the AC power source (80-275VAC, 20-600Hz) to the "AC INPUT" terminals labeled **L** and **N**. Ensure the power source is off before connecting.

2. DC Output Connection:

Connect the positive (+) terminal of the battery to the "DC OUTPUT" terminal labeled **+** on the charger. Connect the negative (-) terminal of the battery to the "DC OUTPUT" terminal labeled **-** on the charger.

Ensure correct polarity to prevent damage to the charger or battery.

3. Mounting:

Secure the charger using the integrated mounting brackets. Ensure it is firmly attached to a stable surface.

6. OPERATING INSTRUCTIONS

Once the charger is correctly installed and wired, follow these steps for operation:

1. Power On:

After all connections are secure, switch on the AC power supply to the charger.

2. Charging Process:

The charger will automatically detect the battery voltage (12V or 24V) and begin charging. The "CHARGELAMP" indicator will illuminate to show that charging is in progress.



Image 3: The Yanmis CH2810A Battery Charger with the CHARGELAMP indicator visible, signifying active charging.

3. Automatic Shut-off:

The charger employs a constant current and voltage charging method. As the battery approaches full charge, the charger will automatically switch to a trickle current mode and then cease charging once the battery is fully charged. The CHARGELAMP may change status or turn off, depending on the charge state.

4. Engine Start During Charging:

This charger allows for the engine to be started even while the battery is connected and being charged by the grid power.

7. MAINTENANCE

The Yanmis CH2810A Battery Charger is designed for minimal maintenance.

- **Cleaning:** Periodically wipe the exterior of the charger with a dry, soft cloth. Do not use liquid cleaners or solvents.
- **Connections:** Regularly check all wiring connections to ensure they are secure and free from corrosion.
- **Ventilation:** Ensure that the ventilation slots on the charger are not obstructed to prevent overheating.
- **Storage:** If storing the charger for an extended period, disconnect it from both AC power and the battery, and store it in a cool, dry place within the specified storage temperature range (-20~60°C).

8. TROUBLESHOOTING

If you encounter issues with your Yanmis CH2810A Battery Charger, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Charger not turning on / No CHARGELAMP indication	No AC input power; Loose AC connection; Faulty power source.	Check AC power supply and connections. Ensure the power outlet is functional.
Battery not charging	Loose DC connections; Incorrect polarity; Battery deeply discharged or faulty.	Verify DC connections and polarity. Test the battery condition.
Charger gets excessively hot	Poor ventilation; Overload.	Ensure adequate airflow around the charger. Check if the battery capacity is within the charger's limits.

If the problem persists after attempting these solutions, please contact Yanmis customer support for further assistance.

9. WARRANTY AND SUPPORT

Specific warranty details for the Yanmis CH2810A Battery Charger may vary by region and retailer. Please refer to the warranty information provided at the time of purchase or contact your seller for details. For technical support or inquiries, please contact Yanmis customer service through their official website or the contact information provided with your product packaging.