

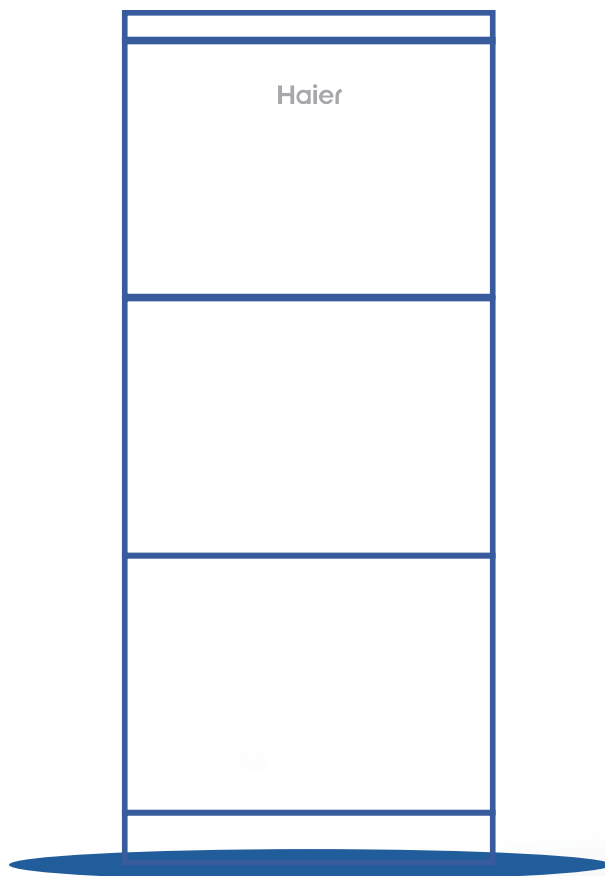
-Tower HV

HOME OWNER USER MANUAL

Models: HAH3P-4/5/6/8/10/12/15KB1/HU9 | Battery: HBHS-4.8KB1/LPP

For Homeowners Only

This manual does not include installation or electrical instructions.



1. Welcome and Purpose

Thank you for choosing the Haier E-Tower HV energy storage system. This manual is designed to help you understand your system, know what to expect, and use the Haier Energy app with confidence.

This manual is for:

- Homeowners who have had the system installed by a certified installer.
- Users of the Haier Energy app.
- Anyone who wants to monitor and get the most from their home energy system.

This manual is NOT for:

- Installers or electricians — please refer to the separate Installer Manual.
- Technical configuration or electrical wiring — these are performed by your installer only.

Key Principle

Your system works automatically. Most of the time, you do not need to do anything.

This manual helps you understand what is happening and when to ask for help.

2. How Your Energy System Works

Your Haier E-Tower HV is a complete home energy system made up of three components working together: a solar inverter, one or more battery packs, and a connection to the electricity grid.

2.1 Solar Energy During the Day

When the sun is shining, your solar panels generate electricity. The system automatically decides how to use it, following this priority order if set in Self-Use Mode:

- 1 Power your home - appliances, lights, and heating run directly from solar.
- 2 Charge the battery - surplus solar energy is stored for use later in the day.
- 3 Export to the grid - any remaining energy is sent to the electricity network (if permitted by your tariff).

2.2 Battery Usage

The battery stores energy and releases it when needed.

The battery charges when:

- Solar panels produce more energy than your home uses.
- Your tariff makes it cost-effective to charge from the grid (in TOU or AI Mode).

The battery discharges when:

- The sun is not shining (evening, night, cloudy days).
- Your home needs more power than the solar panels can provide.

Why the battery is sometimes not fully charged:

- The system may be in Self-Use mode, keeping space available to absorb afternoon solar production.
- A protective reserve may be kept for emergencies (configured by your installer).
- In AI Mode, the system chooses the most cost-effective time to charge.

This is normal

A battery that is not 100% full is not a fault - the system is optimising for you.

Battery capacity: 4.8 kWh per pack (usable: 4.56 kWh).

2.3 Grid Interaction

Your home remains connected to the electricity grid at all times. This is by design:

- The grid provides backup power when solar and battery are not sufficient.
- Surplus solar energy can be exported to the grid (if your tariff allows it).
- The grid ensures stable voltage and frequency for your appliances.

Import = your home is drawing electricity from the grid.

Export = your system is sending electricity to the grid.

3. What Is Normal - and What Is Not

The table below describes common situations you may notice. Most are completely normal - the system is working as intended.

Situation	Status	Explanation
Battery is not fully charged	Normal	Normal. The system optimises charging based on solar, tariffs and usage patterns.
Battery not charging during the day	Normal	Normal. The battery may already be full, or solar is being used directly by the home.
Grid is used at night	Normal	Normal. Solar is unavailable at night - the grid supplements the battery.
Grid used even when battery is not empty	Normal	Normal. The system may be keeping a EPS reserve, or running in a specific mode.
Battery level drops quickly	Normal	Normal on high-consumption days (heating, AC, cooking). Managed automatically.
Some energy exported to the grid	Normal	Normal. Surplus solar is sent to the grid when the battery is full.
Zero solar production in the evening	Normal	Normal. Solar production stops when the sun sets.
Soft clicking or fan noise from inverter	Normal	Normal. The cooling fan activates during high output.
Red LED on the inverter	Action needed	A system fault has been detected. Contact your installer or Haier Energy support.
COM indicator light is off	Check	Possible communication issue. Check your Wi-Fi/Ethernet is working. Contact support if it persists.
No data in the app for over 24 hours	Check	May indicate a connection issue. Check Wi-Fi/Ethernet connection. Contact support if unresolved.

When in doubt, contact support

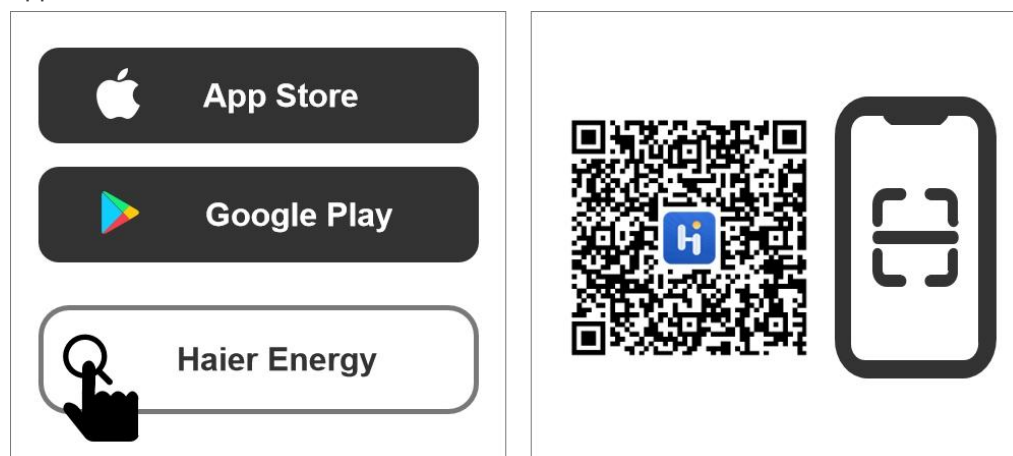
Email: service.haier-energy@haier-europe.com

Website: <https://eur.haier-energy.com/>

Always have your system serial number ready.

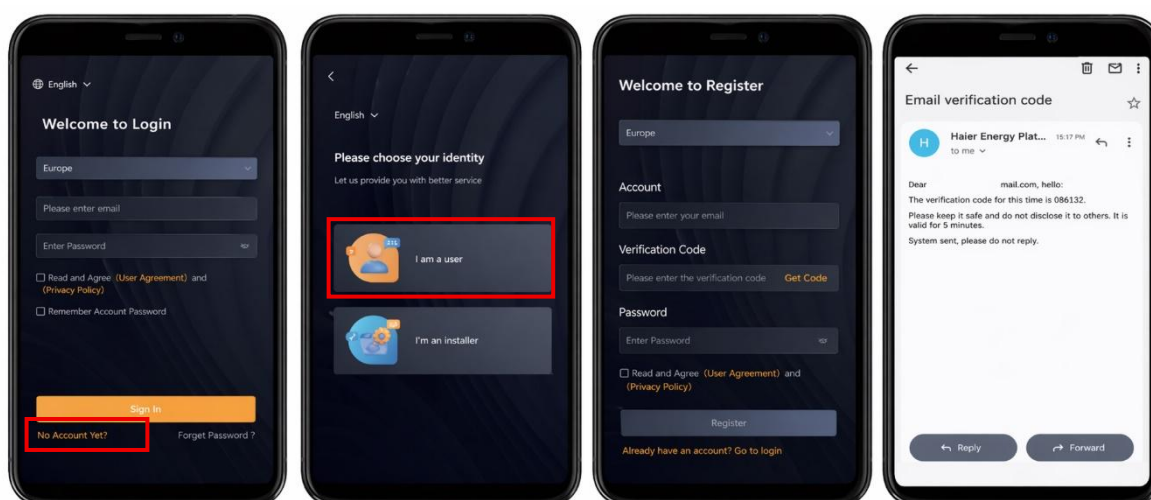
4. The Haier Energy App

The Haier Energy app (available for iOS and Android) lets you monitor and manage your system from your smartphone. Download it by scanning the QR code on your inverter, or by searching "Haier Energy" in your app store.



4.1 Register To The App

- Go to the app and Tap "No account yet"
- Select "I'm a user"
- Enter the email of your preference and register
- Check your mailbox to get the verification code
- Enter the verification code and set your password
- Enjoy the app



4.2 What You Can See

- Real-time solar production (kW).
- Battery charge level (% and estimated kWh).
- Current home energy consumption.
- Grid import and export - live and historical.
- Daily energy totals: solar yield, grid imported/exported, battery charged/discharged.



4.3 What You Can Change

- Working mode: Self-Use (default) or TOU (Time of Use).
- Battery charging and discharging time slots (in TOU mode).
- Electricity tariff settings for dynamic pricing / AI Mode.
- Backup reserve level - the minimum battery % kept for emergencies.

Note on settings

Some settings (grid parameters, system configuration) are reserved for your installer.

If you cannot find a setting in the app, it may require professional access.

4.4 What Happens Automatically

- The system continuously optimizes solar use, battery charging, and grid interaction.
- In AI Mode, the system adjusts to dynamic electricity tariffs automatically - no action needed from you.
- Software updates are applied remotely. You do not need to do anything.

Once your installer has set up the system, it operates automatically. You only need to monitor it and adjust preferences if you wish.

4.5 What Your Installer Controls

- Initial system configuration, grid codes, and connection settings.
- Delivery of the system to your app account.
- Hardware changes, resets, and fault diagnosis.

5. AI Mode and Dynamic Tariffs

AI Mode is an optional feature that allows the system to automatically adjust charging and discharging based on real-time electricity prices. When electricity is cheap, the battery charges. When prices rise, the battery powers your home - saving you money.

5.1 What It Does

- Monitors electricity prices automatically.
- Charges the battery when prices are low (off-peak hours).
- Discharges the battery when prices are high.
- Shows estimated savings and energy flows in the app.

5.2 How to Enable It

- Open the Haier Energy app and go to the Device page.
- Find "AI Mode" in the middle of the screen.
- Tap "Start Using" and then "Switch On".
- Optionally: set your electricity price manually, or let the app fetch market prices automatically.



Once enabled

No further manual actions are required.

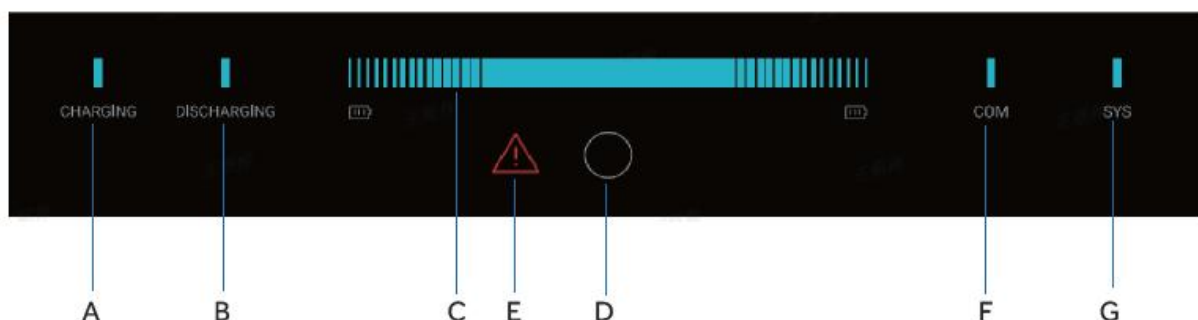
The system manages everything automatically.

You can monitor savings and energy flows in the app at any time.

To return to manual mode: turn off AI Mode first, then select your preferred working mode.

6. LED Indicators - What They Mean and What to Do

The inverter has a small display panel with LED indicators on the front. Here is what each one means and whether you need to take any action.



LED	What it means	What you should do
Charging (A)	Battery is charging from solar or the grid.	No action needed. This is normal.
Discharging (B)	Battery is supplying power to your home or discharging to the grid	No action needed. This is normal.
Battery LEDs (C)	Show the battery charge level (SOC).	No action needed. Monitor as desired.
Tap to wake (D)	Push to activate or deactivate the LEDs	No action needed.
Battery warning Light (E)	Light on: Normal; Light off: Communication is lost	In case is Off, do not attempt to fix it yourself. Contact your installer or Haier Energy support.
COM light (F)	Indicates whether the inverter has or not Network communication	In case is off, check your Wi-Fi router or Ethernet connection. Restart if needed. Contact support if unresolved.
SYS light (G)	System Operation indicator light	Turn red: System has a fault, contact your installer or Haier Energy support immediately. Flashing blue: System has an alarm, run normally

LED Indicator	No	SOC	Description
LEDs show the SOC status	1		$SOC \leq 10\%$
	2		$10\% < SOC \leq 30\%$
	3		$30\% < SOC \leq 50\%$
	4		$50\% < SOC \leq 60\%$
	5		$60\% < SOC \leq 90\%$
	6		$90\% < SOC \leq 100\%$

Important - never attempt repairs yourself

Never open the inverter or battery housing - high voltage inside.

Never disconnect any cables or connectors.

If you see a red LED or SYS light off, contact your installer or support.

Do not reset hardware components unless explicitly instructed by a professional.

7. Safety Information for Homeowners

Your energy storage system operates at high voltages. It has been installed and configured by a certified professional. As a homeowner, you do not need to carry out any technical work on the system.

7.1 What You Must NOT Do

- Do NOT open the inverter housing or battery packs - there is high voltage inside.
- Do NOT disconnect or reconnect any cables or connectors.
- Do NOT attempt to reset the system hardware unless instructed by your installer.
- Do NOT touch the inverter housing during operation - the surface can reach 75 °C.
- Do NOT install or store the system near flammable materials or in areas of high humidity.
- Do NOT clean with wet cloths or cleaning products - use only a soft dry cloth.
- Keep children away from the inverter and battery packs at all times.

7.2 Emergency Situations

Fire near the system:

- Evacuate immediately. Do not use water on battery fires.
- If safe to do so before leaving, disconnect the battery circuit breaker.
- If the battery itself is on fire: evacuate everyone and call the fire department. Do not try to extinguish it yourself.
- If the fire has not yet reached the battery, a CO2 or FM-200 extinguisher may be used.

Flooding or water damage:

- Do not touch the system or any cables if any part is submerged.
- Stay clear and call your installer or emergency services.

- Do not restart a flooded system - contact your service engineer first.

Prolonged power outage:

- The system automatically switches to backup mode and supplies power to critical loads (if configured).
- Battery switch-over time is less than 20 milliseconds - most appliances are not affected.
- When the battery is depleted, backup power stops until solar resumes or the grid returns.

7.3 Who to Call

Situation	Who to contact
Fire	Fire department (emergency number), then your installer.
Flood or water damage	Your installer. Do not attempt to restart the system.
Red LED or system fault	Your installer or Haier Energy support.
App or connectivity issues	Haier Energy support: service.haier-energy@haier-europe.com

8. Maintenance and System Lifecycle

Good news: your Haier E-Tower HV requires very little maintenance. There are no moving parts to service and no regular technician visits needed under normal conditions.

8.1 What You Should Do

- Visual check every 6 months: look for dust on the heatsink (rear of the inverter). Clear blockages gently with a dry cloth.
- Keep the area around the system clear - do not store items directly against the inverter or battery packs.
- Check the app periodically to confirm the system is producing and reporting data as expected.

8.2 What Happens Automatically

- The system self-monitors for faults and alerts you via the app if attention is needed.
- Battery management (cell balancing, temperature protection) is handled internally.

8.3 Long-Term Expectations

Battery technology (LFP - Lithium Iron Phosphate):

- LFP batteries are among the most stable and long-lasting available for home energy storage.
- Over many years, usable capacity may decrease slightly - this is expected and normal.

Warranty:

- Inverter: 10-year standard warranty.
- Battery: 10-year standard warranty.
- For warranty claims, contact your installer or Haier Energy support.

Cleaning reminder

Never use water, wet cloths, or chemical products on the system.

Wait at least 30 minutes after shutdown before cleaning - the heatsink can be hot.

Use only a soft, dry cloth.

9. Support, Warranty and Contacts

9.1 Before Contacting Support - Quick Checks

- Is the system connected to Wi-Fi /Ethernet and is your router working?
- Is there a visible LED fault indicator? (See Section 6)
- Is the situation listed in Section 3 as normal?

9.2 Information to Have Ready

- System serial number (printed on the inverter label or visible in the app).
- Description of the issue and when it started.
- Which LED indicators are on or off.
- Screenshots from the Haier Energy app if available.

9.3 Contact Channels

Channel	Details
Email (after-sales)	service.haier-energy@haier-europe.com
Website	https://eur.haier-energy.com/
Your installer	Contact details provided at time of installation.

9.4 Installer vs. Haier Energy Support

Contact your installer for:

- Hardware issues, wiring changes, or physical faults.
- Changes to system configuration or settings.
- Warranty claims that require an on-site visit.

Contact Haier Energy support for:

- App access or account issues.
- Questions about how the system works.
- Software or connectivity faults you cannot resolve yourself.

Thank you for choosing Haier E-Tower HV.

Your system is designed to work for you - quietly, automatically, and efficiently.



QR CODE

Haier Energy Technology Co., Ltd.
www.haier-energy.com