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› Setpower RF20 12V Portable Refrigerator User Manual

Setpower RF20

Setpower RF20 12V Portable Refrigerator User Manual

Model: RF20

INTRODUCTION

The Setpower RF20 is a versatile 12V portable refrigerator designed for use in cars, trucks, RVs, SUVs, camping, and travel. It functions as both a refrigerator and a freezer, offering a wide temperature range and efficient cooling performance. This manual provides essential information for the proper setup, operation, maintenance, and troubleshooting of your RF20 unit.

WHAT'S INCLUDED

Your Setpower RF20 package includes the following components:

- 1 x Setpower RF20 Portable Refrigerator
- 1 x AC Adapter (100-240V)
- 1 x DC Cord (12/24V)
- 1 x User Manual
- 1 x Slide Mount (for installation)
- 1 x Built-in Ice Pack



Image: The Setpower RF20 portable refrigerator shown with its lid open, filled with bottles, and the separate slide mount accessory.

SETUP

Power Connection

The RF20 can be powered by either AC (household) or DC (vehicle) power sources. Ensure the power cord is securely connected to the unit and the power source.

- **AC Power (100-240V):** Use the provided AC adapter to connect the refrigerator to a standard wall outlet.
- **DC Power (12/24V):** Use the provided DC cord to connect the refrigerator to your vehicle's 12V or 24V power outlet (e.g., cigarette lighter socket).

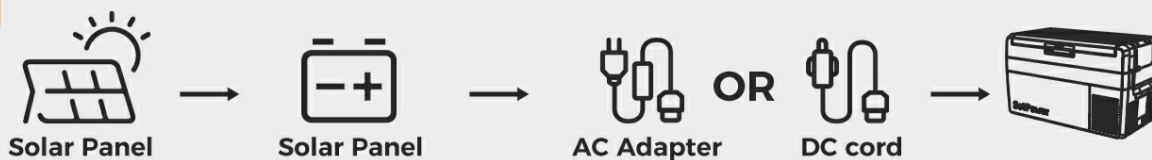
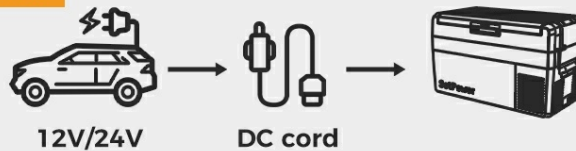
01**02****03**

Image: A diagram illustrating three power connection methods: solar panel to battery to refrigerator, home AC outlet to refrigerator, and vehicle 12V/24V DC outlet to refrigerator.

Slide Mount Installation

The included slide mount is made from premium grade heavy-duty steel with an oxide coating, ensuring durability and resistance to rust and corrosion. It provides a secure and convenient way to access your refrigerator.

- Securely fasten the slide mount to a stable surface in your vehicle or desired location using appropriate hardware (not included).
- Place the RF20 refrigerator onto the slide mount. Ensure it is properly aligned and secured by the locking mechanism.
- Utilize the fixing strap to further secure the refrigerator to the slide mount, preventing movement during transit.

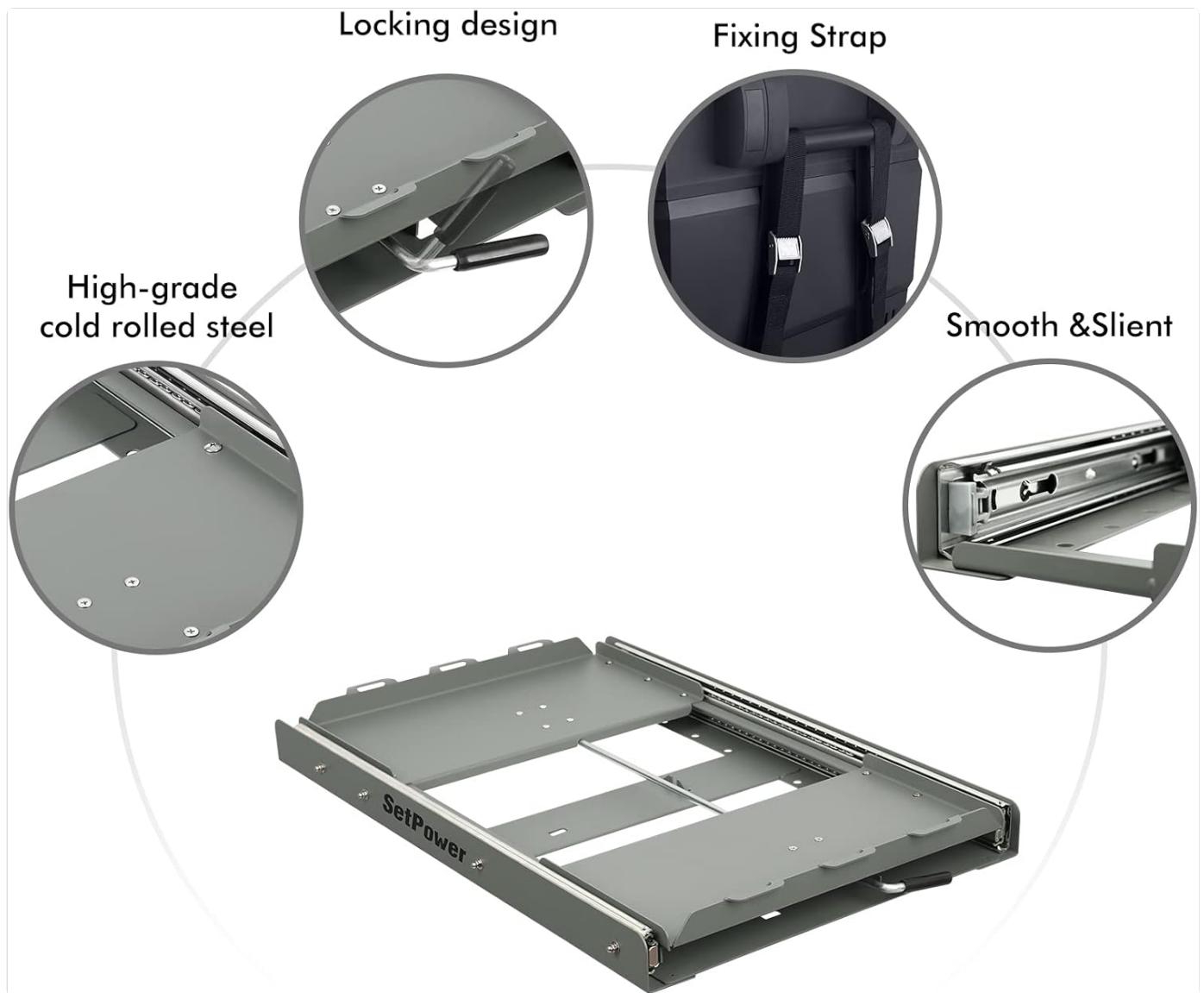


Image: A detailed graphic showcasing the features of the Setpower slide mount, including its locking design, fixing strap, smooth operation, and construction from high-grade cold rolled steel.

OPERATING INSTRUCTIONS

Control Panel and App Control

The RF20 can be controlled directly via its intuitive control panel or remotely using the dedicated smartphone app.

- **Temperature Adjustment:** Set your desired temperature within the range of 68°F to -4°F.
- **Mode Selection:** Switch between ECO energy-saving mode (28W) and MAX fast cooling mode (40W).
- **Dual Functionality:** The unit can operate as either a refrigerator (32°F to 68°F) or a freezer (-4°F to 32°F). Adjust the temperature to select the desired function.



ECO
MODE

≤28w
Energy Saving

Less than 1 kWh/day 

MAX
MODE

≤40w
Fast Cooling

Less than 1 kWh/day 

*Data based on 77°F ambient temperature and empty box conditions

Image: A close-up of the Setpower RF20's control panel, illustrating the ECO and MAX modes with their respective power consumption (28W and 40W) and energy efficiency.

as Refrigerator or Freezer



32°F~68°F



Vegetable



Fruit



Beverage



Dairy



Lunch



Egg



-4°F~32°F



Ice Cream



Seafood



Meat



Fish



Bakery



Pizza

Image: The Setpower RF20 interior showing items stored as a refrigerator (vegetables, fruits, beverages) and as a freezer (ice cream, seafood, meat), demonstrating its dual functionality.

Fast Cooling

The RF20 is capable of rapid cooling, reaching 32°F from 68°F in approximately 15 minutes. This allows for quick chilling of contents.

Self-developed Compressor



40°
Anti-tilt



Energy
Saving



Low
Noise

Image: A graph illustrating the rapid cooling performance of the Setpower RF20, showing it reaches 32°F in 15 minutes and -4°F in 45 minutes from an initial temperature of 68°F.

3-Level Battery Protection

The RF20 features a 3-level battery protection system to prevent your vehicle's battery from draining. This function is active when using 12V/24V DC power.

	High Mode	Medium Mode	Low Mode
12V DC Cut Out	11.1V	10.4V	9.6V
12V DC Cut In	12.4V	11.7V	10.9V
24V DC Cut Out	24.3V	22.8V	21.3V
24V DC Cut In	25.7V	24.2V	22.7V

Note: The factory default voltage protection level is set to High mode. For example, in High mode, the input voltage must be higher than

12.5V to turn on the refrigerator. If it is lower than 11.3V, the refrigerator will automatically turn itself off.



3-LEVEL Battery Protections

Voltage		High Mode	Medium Mode	Low Mode
12V DC	Cut Out	11.1V	10.4V	9.6V
	Cut In	12.4V	11.7V	10.9V
24V DC	Cut Out	24.3V	22.8V	21.3V
	Cut In	25.7V	24.2V	22.7V

- The battery protection mode works when you use 12V / 24V DC power supply, such as a battery station.
 - For example: When setting to H Mode, the input voltage must be higher than 12.5V to turn on the refrigerator. (otherwise, the E1 code will be thrown out) If it is lower than 11.3V, the refrigerator will automatically turn itself off.
- *The factory default voltage protection level is set to H mode.

Image: A visual representation of the 3-level battery protection system for the Setpower RF20, showing cut-out and cut-in voltages for 12V and 24V DC power in High, Medium, and Low modes.

Anti-Shake Design

The RF20 is designed to withstand movement and vibrations. It features four holes on both sides that can be used to fix the unit to your vehicle with ropes (not included). This ensures stable operation even during off-road travel at angles up to 40°.

Anti-shake Design

4 Holes of the both sides can be fixed to the car with ropes. Even at 40° off-road, SetPower Car Fridge can use normally.

* The ropes are not included.



Image: A demonstration of the Setpower RF20's anti-shake design, showing it securely placed in a vehicle and operating normally even at a 40-degree tilt.

2-Way Door

The RF20 features a reversible door that can be opened from either side, providing flexible access to your contents depending on your setup and preference.

2-Way Door

Open from either side by reversible door

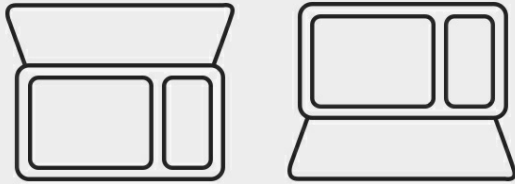


Image: A visual explanation of the Setpower RF20's 2-way door, showing how the lid can be opened from either the left or right side for convenient access.

KEY FEATURES

50 Hours Cooling Backup

The RF20 is equipped with an exclusive built-in ice pack that ensures your food and beverages remain cool for up to 50 hours, even during unexpected power outages. The ice pack also serves as a convenient divider for organizing contents.

Cool even at Car Fridge Power outage

Built-in Ice Pack



*Data based on 77°F, Completely frozen ice pack with empty box conditions.

Image: The Setpower RF20 with its lid open, highlighting the built-in ice pack and a clock icon indicating '50 Hours Keep Cool Up To', emphasizing its extended cooling capability during power outages.

Energy-Efficient Performance

Powered by the Smartele self-developed compressor, the RF20 operates with high energy efficiency. It consumes less than 1 kWh per day, helping to save energy and reduce costs while maintaining optimal cooling performance.



Image: An internal view of the Setpower RF20, showcasing the Smartele self-developed compressor and highlighting features such as 40° anti-tilt, energy saving, and low noise operation.

21 Quart Capacity

The RF20 offers a generous 21-quart capacity, providing ample space for your food and beverages. It can hold approximately 31 cans of 355ml cola, 17 bottles of 550ml water, or 8 bottles of 750ml wine, along with other items like a 1-gallon milk jug.

RUST RESISTANCE

Made of premium grade heavy-duty steel with oxide coated which has rust and corrosion resistance.

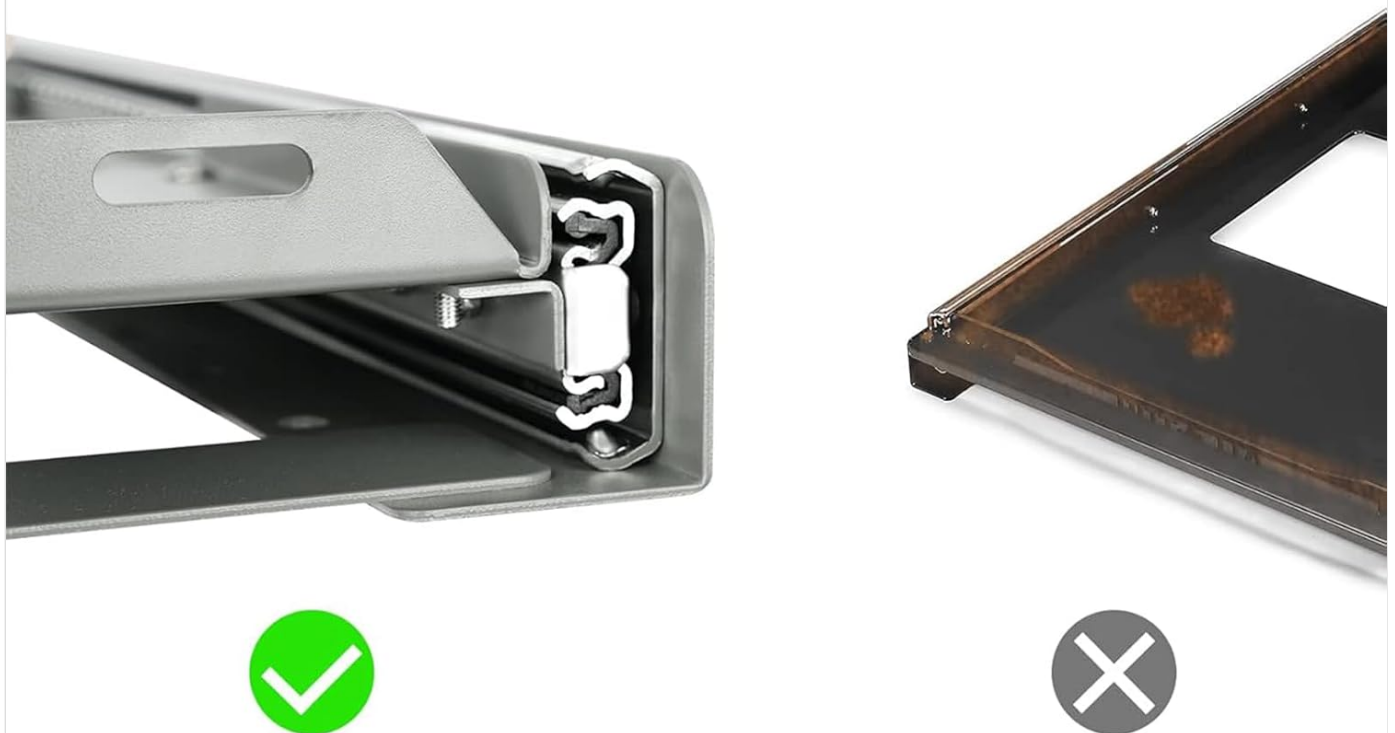


Image: An illustration detailing the 21-quart capacity of the Setpower RF20, showing its internal dimensions and examples of how many common beverage containers it can hold.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Setpower RF20 portable refrigerator.

- **Cleaning:** Clean the interior and exterior of the refrigerator regularly with a damp cloth and mild detergent. Avoid abrasive cleaners or solvents.
- **Defrosting:** If ice builds up inside, unplug the unit and allow the ice to melt naturally. Wipe away any excess water.
- **Ventilation:** Ensure that the ventilation grilles are clear of obstructions to allow for proper airflow and efficient cooling.
- **Storage:** When not in use for extended periods, ensure the unit is clean and dry. Store it in a cool, dry place with the lid slightly ajar to prevent odors.

TROUBLESHOOTING

If you encounter issues with your Setpower RF20, refer to the following common troubleshooting steps:

- **Unit Not Turning On:** Check power connections (AC/DC). Ensure the power source is active. Verify the battery protection setting is not cutting off power due to low voltage.
- **Insufficient Cooling:** Ensure the lid is properly closed. Check for obstructions around the ventilation grilles. Verify the temperature setting is appropriate for desired cooling.
- **Unusual Noises:** A slight humming sound from the compressor is normal. If loud or unusual noises occur, ensure the unit is on a stable, level surface.
- **Error Codes:** Refer to the specific error code displayed on the control panel and consult the full user manual for detailed explanations and solutions.

For persistent issues or technical support, please contact Setpower customer service.

SPECIFICATIONS

Attribute	Detail
Brand Name	Setpower
Model	RF20
Capacity	21 Quart
Power Input	12V/24V DC, 100-240V AC
Temperature Range	68°F to -4°F (20°C to -20°C)
Power Consumption (ECO)	28W
Power Consumption (MAX)	40W
Compressor	Smartelee Self-developed
Cooling Backup	Up to 50 hours (with built-in ice pack)
ASIN	B0F48KHKS1
Date First Available	April 9, 2025

WARRANTY AND SUPPORT

Setpower is committed to providing reliable products and excellent customer service.

- **Compressor Warranty:** The Smartelee compressor is covered by 3 years of one-on-one technical support.
- **General Warranty:** All other components of the RF20 are covered by 1 year of maintenance coverage.
- **Customer Service:** For any inquiries, technical assistance, or warranty claims, please contact Setpower customer service.

Professional Team



3 Years
Warrenty



24 Hours
Customer Service

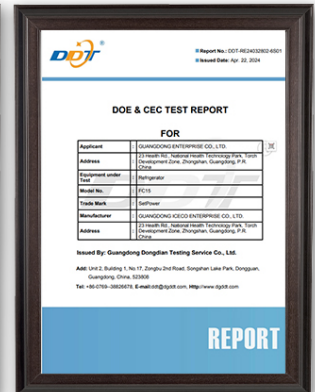


Image: A graphic highlighting Setpower's professional team, 3-year warranty, and 24-hour customer service, alongside certifications and reports.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

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