

Setpower RF20

Setpower RF20 Portable Refrigerator User Manual

Model: RF20

Brand: Setpower

PRODUCT OVERVIEW

The Setpower RF20 is a versatile 21-quart portable refrigerator and freezer designed for vehicles, camping, road trips, and other outdoor activities. It features a self-developed Smartele compressor for efficient cooling, low power consumption, and a unique built-in ice pack for extended cooling retention.



Image: The Setpower RF20 portable refrigerator, showcasing its compact design and internal capacity filled with various beverages. A smartphone in the foreground demonstrates the mobile application control.

SETUP

Unpacking and Initial Inspection

Carefully remove the refrigerator from its packaging. Inspect the unit for any signs of damage. Ensure all included accessories are present: one AC adapter (100/240V), one DC cord (12/24V), and the user manual.

Power Connection

The RF20 can be powered by both AC (household) and DC (vehicle) power sources.

- **AC Power:** Connect the AC adapter to a standard 100-240V wall outlet and then to the refrigerator's AC input port.
- **DC Power:** Connect the DC cord to your vehicle's 12V/24V cigarette lighter socket and then to the refrigerator's DC input port.

Multi Ways to Power

Note: Please check the size before purchasing.



Image: Illustration detailing the various power input methods for the Setpower RF20, including solar panel, AC adapter for home use, and DC cable for vehicle use.

Placement and Ventilation

Place the refrigerator on a flat, stable surface. Ensure adequate ventilation around the unit, especially the compressor area, to prevent overheating. The compact design allows for placement in various vehicles such as SUVs, trucks, RVs, campers, vans, and boats.

Video: Demonstrates the compact size of the Setpower RF25 (similar to RF20) and its perfect fit in a Tesla Model Y trunk, highlighting space-saving capabilities.

Video: This video illustrates the compact size of the Setpower RF25 (similar to RF20) and how it can be conveniently placed in a vehicle's trunk, specifically a Tesla Model Y, to save space.

OPERATING

Control Panel and Temperature Adjustment

The RF20 features an intuitive control panel for easy operation.

- **Power Button:** Press to turn the unit on or off.
- **Temperature Adjustment:** Use the '+' and '-' buttons to set the desired temperature. The temperature range is from 68°F (20°C) down to -4°F (-20°C).
- **Mode Selection:** Switch between ECO (energy-saving) and MAX (fast cooling) modes. ECO mode consumes only 28W, while MAX mode uses 40W.



Image: This graphic explains the power consumption of the Setpower RF20 in both ECO mode (energy saving, ≤28W) and MAX mode (fast cooling, ≤40W), highlighting its energy efficiency.

Fast Cooling Performance

With Smartele refrigeration technology, the RF20 can cool from 77°F (25°C) to 32°F (0°C) in approximately 15 minutes, and from 77°F (25°C) to -4°F (-20°C) in about 45 minutes.



Image: A visual representation of the rapid cooling capabilities of the Setpower RF20, demonstrating its ability to reach 32°F in 15 minutes and -4°F in 45 minutes from an initial temperature of 77°F.

Refrigerator and Freezer Functionality

The Setpower RF20 can function as both a portable refrigerator (32°F to 68°F) and a freezer (-4°F to 32°F), allowing you to store a variety of items from vegetables and drinks to ice cream and meat.

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 interior of the Setpower RF20 is shown, demonstrating its capacity to hold both refrigerated items like fruits and vegetables, and frozen items such as ice cream and meat, highlighting its versatile temperature range.

App Control

For more convenient operation, you can control the RF20 remotely using a dedicated smartphone application.

- **Download:** Scan the QR code on the unit or refer to the user manual to download the app.
- **Pairing:** Follow the in-app instructions to pair your smartphone with the refrigerator via Bluetooth.
- **Functions:** Control temperature, switch modes (ON/OFF, Freezing, MAX, ECO), and monitor the unit's status directly from your phone.



APP Control

Note:

Download the app referring to the user manual. Controlling, setting, checking the temps / status all from your phone.

Image: A smartphone screen displays the Setpower app, illustrating how users can remotely control the refrigerator's temperature and settings, including switching between modes.

Video: Demonstrates how to use the Setpower mobile application to control the 12V refrigerator, including temperature adjustments and mode changes.

Video: This video provides a comprehensive guide on utilizing the Setpower mobile application to manage the 12V refrigerator's settings, such as temperature and operational modes.

Video: A quick tutorial on how to connect and use the Setpower app for remote control of the portable refrigerator, showing the interface and basic functions.

Video: This video demonstrates the process of connecting to and operating the Setpower portable refrigerator via its dedicated mobile application, showcasing key features and controls.

Built-in Ice Pack and Divider

The RF20 includes an exclusive built-in ice pack that can keep contents cool for up to 50 hours even during a power outage. This ice pack also functions as a removable divider, allowing you to separate different types of items like vegetables and drinks.

Cool even at Car Fridge Power outage



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

Image: The Setpower RF20 is depicted with its built-in ice pack, emphasizing its capability to maintain coolness for up to 50 hours, even without continuous power.

Video: Demonstrates how to use the built-in ice box (ice pack) in the Setpower portable refrigerator, including filling it with water and using it as a partition.

Video: This video illustrates the functionality of the Setpower portable refrigerator's built-in ice box, showing how to fill it with water and utilize it as a convenient internal partition.

Video: Explains the 50-hour backup cooling design of the RF20/25 models, emphasizing the role of the ice pack in maintaining temperature during power interruptions.

Video: This video details the 50-hour backup cooling feature of the RF20/25 models, highlighting how the integrated ice pack helps sustain internal temperatures during power outages.

Battery Protection

The refrigerator features 3-level battery protection (High, Medium, Low) to prevent your vehicle's battery from draining completely. This ensures your vehicle can start even after extended use of the refrigerator. The factory default voltage protection level is set to High mode.

Battery Protection Levels

Mode	12V DC Cut Out	12V DC Cut In	24V DC Cut Out	24V DC Cut In
High	11.1V	12.4V	24.3V	25.7V

Mode	12V DC Cut Out	12V DC Cut In	24V DC Cut Out	24V DC Cut In
Medium	10.4V	11.7V	22.8V	24.2V
Low	9.6V	10.9V	21.3V	22.7V

Note: The battery protection mode works when using 12V/24V DC power supply. 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.

MAINTENANCE

Cleaning

Regularly clean the interior and exterior of the refrigerator with a damp cloth and mild detergent. Avoid abrasive cleaners or solvents. Ensure the unit is unplugged before cleaning.

Defrosting

The RF20 features an automatic defrost system. However, if excessive ice buildup occurs, manually defrost the unit by turning it off and leaving the lid open until the ice melts. Drain any water and wipe dry before restarting.

Storage

When storing the refrigerator for extended periods, ensure it is clean, dry, and the lid is slightly ajar to prevent odors and mold growth. Store in a cool, dry place.

TROUBLESHOOTING

If you encounter issues with your Setpower RF20, refer to the following common problems and solutions:

- **Unit Not Turning On:** Check power connections (AC/DC). Ensure the power source is active. Verify battery protection settings are not cutting off power (refer to Battery Protection table).
- **Insufficient Cooling:** Ensure proper ventilation around the unit. Check that the lid is securely closed. Verify temperature settings are appropriate for desired cooling.
- **Error Codes:** If an "E1" code appears, it indicates low input voltage. Adjust battery protection settings or connect to a higher voltage source. Consult the full user manual for other error codes.
- **Unusual Noise:** Some operational noise from the compressor is normal. If noise is excessive or unusual, ensure the unit is on a stable surface and not vibrating against other objects.

SPECIFICATIONS

Feature	Detail
Brand	Setpower
Model	RF20
Capacity	21 Quarts (20 Liters)
Item Weight	22.1 lbs (10 kg)
Product Dimensions	24.3"D x 13.1"W x 11.9"H (61.7cm x 33.3cm x 30.2cm)
Voltage	12 Volts (DC), 100-240V (AC)
Defrost System	Automatic
Special Features	50H Backup Cooling, Energy Efficient, App Control, Anti-Shake, Low Noise
Included Components	1 x Setpower RF20 Car Refrigerator, 1*AC Adapter, 1*DC Cable

Video: Provides a visual overview of the different sizes in the Setpower RF series (RF20, RF25, RF30), showcasing their dimensions and capacities.

Video: This video presents the various models within the Setpower RF series, including RF20, RF25, and RF30, illustrating their respective sizes and capacities for comparison.

WARRANTY AND SUPPORT

Setpower provides comprehensive support for your RF20 portable refrigerator:



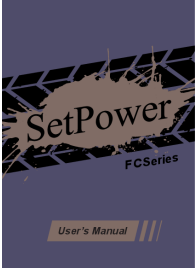


- **Compressor Warranty:** 3 years of technical support on the compressor.
- **Parts Maintenance:** 1 year of maintenance on all other parts.
- **Customer Support:** ONE-ON-ONE friendly technical support is available. For assistance, please refer to the contact information in your included user manual or visit the official Setpower website.

Related Documents - RF20



[SetPower AJ Series Portable Refrigerator User Manual](#)

Comprehensive user manual for the SetPower AJ Series portable refrigerators and freezers (AJ30, AJ40, AJ50), covering safety, operation, installation, maintenance, troubleshooting, and warranty information.

	<p>SetPower TC65/TC75 Portable Fridge Freezer User Manual</p> <p>Comprehensive user manual for SetPower TC65 and TC75 portable fridge freezers, covering safety instructions, specifications, operation, troubleshooting, and warranty information.</p>
	<p>SetPower RV45S Portable Fridge Freezer User Manual - Operation, Safety, and Warranty</p> <p>Comprehensive user manual for the SetPower RV45S portable fridge freezer. Covers safety information, data sheet, description, installation, operation, maintenance, troubleshooting, and warranty details for 12/24V DC and 110-240V AC use.</p>
	<p>SetPower FC Series Portable Fridge Freezer User Manual</p> <p>This user manual provides comprehensive instructions for operating and maintaining the SetPower FC Series portable fridge freezers, including models FC12 and FC20. It covers safety information, technical specifications, operational guidance, troubleshooting, and warranty details.</p>
	<p>SetPower RF20/25 User Manual</p> <p>User manual for the SetPower RF20 and RF25 portable refrigerators/freezers, covering safety instructions, specifications, operation, troubleshooting, maintenance, and warranty information.</p>
	<p>SetPower RV65D Portable Refrigerator/Freezer User Manual</p> <p>Comprehensive user manual for the SetPower RV65D portable refrigerator and freezer, covering safety information, operation, maintenance, troubleshooting, and warranty details.</p>