# **LF** CARNOTFLEET

## **Product Instruction Manual**

# **CF1-1**



## Be sure to read the user manual before using the product to ensure safe and convenient usage.

This product is a vehicle-mounted device used only as a container for transporting medicine. Do not use this product for unintended purposes such as commercial, laboratory, industrial, or household use.

## Recommended safe-use period - 2 years

If you use the product after the recommended safe-use period has passed without first consulting the supplier, Carnotfleet, then safety accidents may occur due to natural product deterioration or changes in the use-environment.

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## **What You Need to Know for Safety**

#### **Read Before Use**

Be sure to carefully check the following section "Safety Symbols and Meanings" to prevent unexpected hazardous situations. The section is divided into "Warning" and "Caution".

## **Safety Symbols and Meanings**



#### WARNING

This safety symbol is intended to call attention to items and operations that may cause danger. Read the section with this symbol carefully and follow the instructions to avoid hazardous situations.



## **CAUTION**

Violation of instructions may result in minor injury or damage to the product.



## WARNING

The following may result in injury or death due to cuts, fire, and/or physical shock.

## When Using the Product

- Do not leave coffee or beverages around or place them on top of the unit. If liquid is spilled, then
  excessive current may flow through the battery due to the exposure to moisture. This may cause product
  failure.
- Please refrain from smoking when in an enclosed space with the unit. If embers flow into the battery, then there is an increased risk of fire or product failure.



## **CAUTION**

Do not disassemble the rack arbitrarily. Injuries from fans or scratches from sharp parts may occur, and
improper disassembly of the product may also result in damage or product failure. Disassembly of the
product must be performed by a trained repair engineer. Any disassembly by unauthorized staff is
strictly prohibited and the user is held responsible for any damages caused.

## **Intended Use and Purpose**



## WARNING

Please carefully read and follow the guidelines below. Failure to follow the guidelines may result in increased product degradation or decreased performance, which may cause spoilage of temperature-sensitive items.

#### Storage and Use

- Do not leave a unit that is installed in a vehicle unattended for a prolonged period of time during the summer. Doing so may cause damage to the battery. In cases of extended periods of unit operation during hot weather, be sure to turn on the air conditioning in the vehicle and park the vehicle in a cool area with shade. If the temperature inside the vehicle exceeds 40 degrees Celsius, battery consumption will increase. And, if the temperature inside the vehicle exceeds 60 degrees Celsius, there is increased risk of damage to the battery.
- Do not store unused batteries in an enclosed space in which the ambient temperature is below -20 degrees Celsius or above 60 degrees Celsius. Doing so may lead to battery failure.
- Do not store the box and/or battery in a place that is exposed to rain or moisture.
- Do not store unused batteries, chargers, and/or units in a place that has humidity levels exceeding 70% and/or is exposed to direct sunlight. It is recommended to store these items in a place where temperature and humidity are controlled for. The recommended temperature range for storage is between 10 and 40 degrees Celsius.
- Do not leave fabric, clothes, or other items around the unit as they may block the vents. Doing so may
  result in increased battery consumption or poor temperature stability.
- Do not store unsealed drinks or other consumable liquids that may be spilled other than those specified in this manual.
- When storing chargers, do not stack multiple chargers on top of each other. Doing so may cause blockage
  to the intake and exhaust vents that allow the chargers to cool and may result in degradation or
  malfunction.
- When storing unused batteries for more than a week, always be sure to store them after charging is complete. Always check the state of charge when using a battery that has been left unattended for more than a week.
- Be careful to not get the unit wet as battery consumption increases if water or rain seeps inside the unit.
- Be sure to keep the unit door closed at all times, when possible. Leaving the unit door open for prolonged periods of time will increase the time it takes for temperature to stabilize inside the unit.

## **Using the App**

## How to Install the App

Download the Android app to use Carnotfleet CF1-1. Currently, only the Android version is being serviced. The iOS version will be serviced at a later time.

- 1 Run 'Google Play Store' on your smart phone.
- 2 Search for 'Carnotfleet' in the search bar.
- Follow the instructions to install the Carnotfleet app.



## **App Screen Description**

#### **Notice**

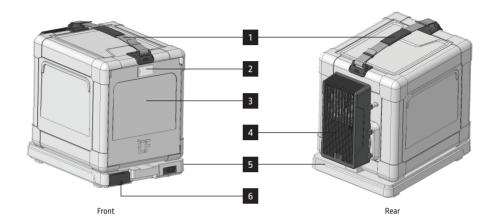
- You can check updates related to the unit on the notification screen.
- On the notification screen, you can also check to see if there are issues with the unit, reminders, or suggested precautions for you to take to prevent issues before they occur.
- For additional information, please refer to the "Mobile Notifications" section on page 12.

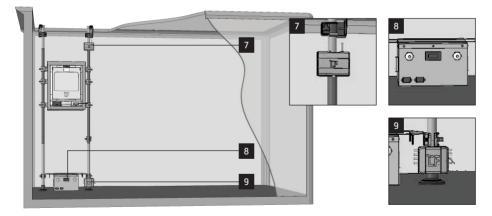
#### **Delivery-related Control (Monitoring)**

- Under the regulations, it is mandatory to check the temperature inside the box.
- Information on temperature and humidity of each box can be checked on the 'Monitoring' screen of the Carnotfleet app.
- For delivery, the monitoring screen must be shown to the customer to check the temperature.

## **Product Components**

## **Unit and Rack System**





Rack System

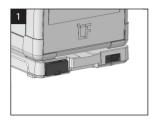
- 1 Carrying Handle
- 4 Cooling Module
- 7 Repeater

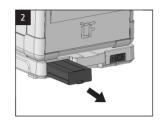
- 2 Label Case
- 5 Secondary Case
- 8 Main Battery

- 3 Unit Door
- 6 Auxiliary Battery
- 9 Power Divider

## **Removing and Exchanging the Battery**

#### **Auxiliary Battery Replacement and Removal**

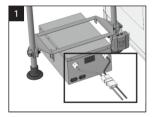




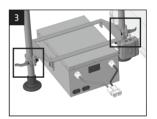


- 1 The spare battery is located on the left side of the auxiliary case under the unit.
- 2 Press the clip under the spare battery to separate it from the unit.
- The auxiliary battery is detached from the box by pulling it forward . Conversely, slide the spare battery in until the clip clicks into place and it attaches.

## **Replacing and Removing the Main Battery**









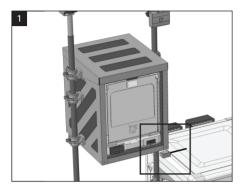


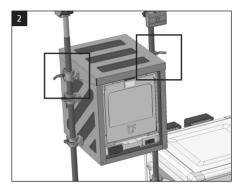


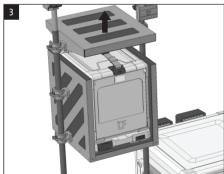
- 1 2 Disconnect the main battery from the connector.
- Release both locks by unfastening the clips on both sides.
- 4 Separate the panel from the main battery by pulling it upwards and then fasten both locks.
- 5 Remove the main battery from the rack system.

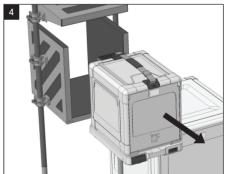
## **Removing and Exchanging the Battery**

## **Unit Exchange and Detachment**





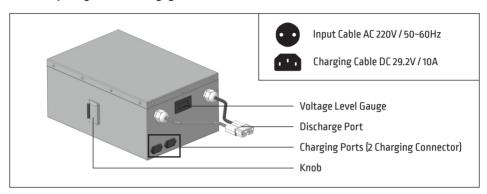




- 1 Separate the main power connector.
- 2 Loosen the lock on both sides of the fixing rack cover.
- After separating the fixing rack cover upward, lock both sides.
- 4 Detach the box from the fixing rack.

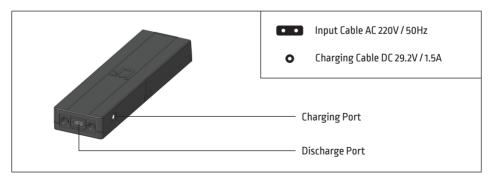
## **Charging the Battery**

## **Main Battery Configuration and Charging**



- Connect the charging cable to the charging port to charge.
- During initial charging, the voltage number on the LED display is shown as lower than 29.2 and the current number on the display is shown as 10.
- As charging progresses, the voltage number on the LED display gradually increases and the current number on the display decreases.
- When the battery is fully charged, the voltage number on the LED display should be 29.2 and the current number on the display should be 0.
- It takes roughly 10 hours to fully charge 8 units simultaneously using the main battery.

#### **Auxiliary Battery Configuration and Charging**



- Connect the charging cable to the charging port to charge.
- For the first charge, the LED indicator will light up in red. When charging is complete, the color of the LED indicator will change to green.
- It takes roughly 2 hours and 30 minutes to fully charge a single unit using the auxiliary battery.

## **Check Before Departure**

- Make sure the battery is installed and properly functioning.
- Check the battery condition and replace the battery if it is not charged.
- Set the power switch to ON.
- Run the app.
- Make sure the unit is properly functioning and the network connection is stable.
- Check to see if there are any notification texts sent from the server or unit, and also check on whether there are any additional factors that may adversely affect transportation.
- Make sure the unit door is securely closed and that no items are placed on top of the unit.
- Make sure that no items are blocking the back of the unit to ensure proper ventilation during transport.

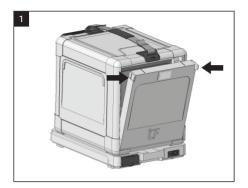
## **Check During Delivery**

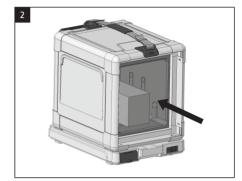
- Periodically check if the network connection is stable and if the battery level is sufficient.
- If the battery power is low, we recommend completing all remaining deliveries within an hour. Charge the battery immediately after returning to the charging hub. The power will automatically turn off if battery power is completely depleted.
- If a notification regarding a faulty and/or proper usage diagnosis is received, check and follow the instructions to fix the issue.
- Be careful to not get the unit wet on rainy or snowy days.
- When moving the unit, be sure that the unit is level and balanced. Do not place the unit on its sides, on an uneven surface, or upside down.

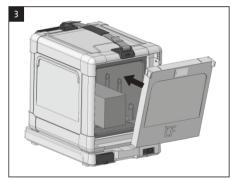
## **Requirements for Delivery of Medications**

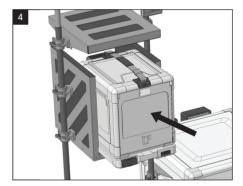
- When opening the unit door for loading or unloading medications or for other purposes, be sure to minimize the opening time. Securely close the unit door after.
- Do not leave medications inside of the unit unattended for prolonged periods of time.
- Do not leave the unit under direct sunlight. Battery consumption will increase.

## **Loading Medications**









- 1 Open the unit door by simultaneously pressing both clips on the sides of the top of the unit door.
- 2 Place the medication inside of the unit.
- 3 Close the unit door and check to see that it is secure.
- 4 Place the unit into the rack system and check to see that it is securely connected.

#### **Mobile Notifications**

To prevent product failure or misuse and keep the unit properly maintained, always be sure to follow the diagnoses and guidance provided via mobile notifications.

#### Caution

Risk of temperature deviation. Please check if the unit is closed properly.

- If there are any danger signs of temperature excursions, you will be notified via the mobile app.
- Follow the instructions in the message below to check whether the door is open or closed.

#### Alert

The main battery was low so it is switched to an aux battery.

- When the battery level is low, you will receive a notification on the app.
- Please check the battery status according to the instructions in the notification message.

Alarms can be received based on user patterns or environments such as seasons. Periodically check your e-mail on the web to ensure that your product is always in the best condition.

#### **Notification**

The weather is hot. Ventilate and turn on the air conditioner before departure.

#### **Notification**

It's going to rain today. When moving the box outside the vehicle, be careful not to get it wet in the rain.

- Based on the conditions of the external environment, recommendations will be delivered as notification messages through the mobile app.
- Always stay aware and take precautions when operating the vehicle.

## **Standard Guide for Service**

## **Service Policy**

Carnotfleet (hereinafter the 'Supplier') warrants its products against defects in materials and workmanship under normal use and specified service. The warranty does not cover natural wear and tear over the life of the product, accidents, abuse, misuse, negligence, or damage caused by failure to follow proper operating procedures or failure to properly maintain the product as described in the product user manual.

It is the user's responsibility to regularly maintain the product in accordance with the guidelines outlined in the manual and to use the product only for its intended purpose.

## **Coverage Policy**

- 1. The supplier:
  - 1.1 Will arrange for repair or replacement of defective units and/or components free of charge for only the recommended use-period of 2 years from the rental date.
  - 1.2 Reserves the right to replace defective parts and/or components of the unit with parts or components of similar quality and grade if identical parts or components are not readily available.
- 2. To claim the warranty, the user must:
  - 2.1 Contact the supplier first.
  - 2.2 Ship defective products to the supplier for inspection, including inspection for manufacturing defects, or provide evidence of the defect by attaching a record of the date and time of the defect along with related files and documentation, if applicable.
    - 2.2.1 Claims listed must be either filed directly to the supplier by post, or sent to the email address listed on the supplier's claim form with all required fields completely filled out.
- 3. Responsibility for claims under warranty
  - 3.1 Supplier is only responsible for repairing or replacing goods in accordance with clause 2.
  - 3.2 Any additional work that must be completed outside of the stated defects in clause 2 is the user's responsibility. Additional work includes, but is not limited to, any and all costs associated with the repair of any product fitted with a product or parts repaired by a third party in respect of a defect without the prior approval of the supplier.
  - 3.3 In the case that the product or components are determined to be non-defective upon inspection, the user is responsible for paying the inspection fee and related freight charges.

## **Standard Guide for Service**

#### 4. Limited warranty

- 4.1 EXCEPT AS REQUIRED BY LAW, SUPPLIER MAKES NO WARRANTIES OR REPRESENTATIONS OTHER THAN STATED IN THIS WARRANTY DOCUMENT.
- 4.2 Supplier is not liable under this warranty for:
  - 4.2.1 Injuries to any person, property, loss of sales, loss of profits, loss of business or goodwill.
  - 4.2.2 Shipping or other costs that are the responsibility of the customer.
  - 4.2.3 Damage to or defect in goods due to improper transportation, storage or other misuse, negligence or accident.
  - 4.2.4 Any defects resulting from installation not in accordance with the Supplier's instructions and applicable laws or regulations.
- 4.3 This warranty applies only to the user and is non-transferable if the product is sold by the user during the warranty period.

#### 5. Out of warranty

- 5.1 This warranty does not apply if:
  - 5.1.1 The product is improperly modified or repaired, or if the product is defective due to the user's failure to properly install, mount, maintain, service or use the product in accordance with the specifications and instructions provided by the supplier.
  - 5.1.2 The supplier is unable to determine any defects in the goods after testing and/or inspection.
  - 5.1.3 The product is used for any purpose other than for which it was designed.
  - 5.1.4 The product has been subjected to any abnormal temperature, pressure, stress, load or similar abnormal conditions.
  - 5.1.5 The user or non-approved installer has used non-approved parts and accessories on the product or has not used recommended parts and accessories.
  - 5.1.6 Any defects such as viruses or bugs are caused by incorrect installation of software.
  - 5.1.7 The product is defective due to abuse, misuse, negligence or accidents.

#### 6. Legal rights

- 6.1 BENEFITS PROVIDED TO THE USER UNDER THIS WARRANTY SHALL BE SUBJECT TO OTHER RIGHTS AND REMEDIES UNDER LAWS RELATED TO THE PRODUCT.
- 6.2 The supplier will attempt to determine how and why the product is defective by asking a few diagnosis questions and talking the user through a few simple tests, investigations, evaluations, and analyses.
- 6.3 The supplier will analyze/predict its own data and strive to provide the best possible solution while preserving flexibility in its approach to reach a resolution.

# **Appendix**

## **Product Specification Sheet**

Category	Description	Remarks
Material	External: ABS	2.5 mm
	Internal: EPP/VIP	33 mm/10 mm
Size	346 x 535 x 460 mm	WxDxH
Volume	17 <i>l</i>	Internal Volume
Main Battery Capacity/Weight	24V, 100A, 21kg	10 hrs charging, 8 hrs usage
Auxiliary battery Capacity/Weight	24V, 3.2A, 0.8kg	2 hr 30 mins charging, 1 hr usage
Temperature Sensor Measurement Range	-40 ~ 125℃	
Charger	Main: 24V, 10A	
	Auxiliary: 24V, 1.5A	
Communication	WIFI Method	
Data Server	AWS	
App Service	Android, iOS	Development in progress (for iOS)

# **LF** CARNOTFLEET

#### Carnotfleet

4F, 19-15, Gangnam-daero 95-gil, Seocho-gu, Seoul, Republic of Korea

T. 02. 6352. 1001 F. 02. 6352. 1002 Details can also be found on the homepage.

www.carnotfleet.com