KEYRON

User Manual

K-PD-20
Power Bank

Dear Customer,

Thank you for choosing our products.

We are pleased to offer you products and devices designed and manufactured to the highest standards of quality, functionality, and design. Before using the product, please read this manual carefully. It contains important information regarding your safety, as well as recommendations for the proper use and care of the product. Please keep this manual in a safe place and use it as a reference guide during future operation of the product.

Intended Use

The power bank is designed for charging portable devices, including when access to a power outlet is unavailable.

Safety Precautions

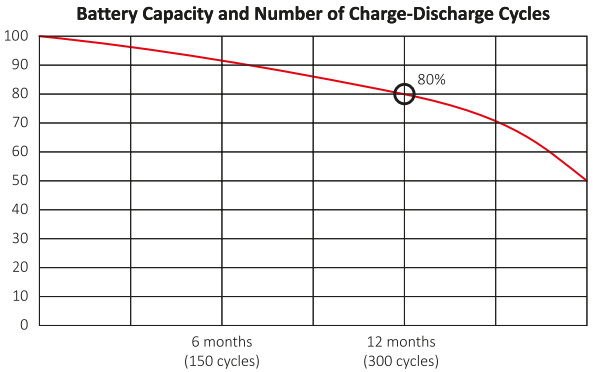
- Fully charge the device before first use. Always disconnect it from the power supply after it is fully charged.
- Use only a compatible power adapter and charging cable for the power bank, as using an incorrectly matched power adapter, cable, or charging attachments may damage it, as well as the mobile devices connected to it.
- Always charge the device in a well-ventilated room. Do not store it at excessively high or low temperatures.
- Do not submerge the device in water or use it in the immediate vicinity of water sources.
- Do not dry the device using any appliances or heat sources, such as hair dryers or microwave ovens. Do not heat the device and keep it away from direct sunlight.
- Protect the device from drops, impacts, and shaking. Rough handling may damage internal contacts and circuit boards.
- Store the device in a dry, well-ventilated place.
- This device is not intended for use by children or persons with reduced physical, sensory, or mental capabilities, unless they are supervised by a person responsible for their safety.
- Do not expose the device and the cable to fire or other sources of intense heat.
- Unauthorized modifications or repairs may damage the device and pose a risk to your health.
- Comply with local regulations and do not use the device in places where it is prohibited (e.g., during airplane takeoff and landing, near medical equipment, etc., as it may cause interference).
- Do not use the device after a drop or if there is visible damage. Contact a service center.
- Improper use of the device may lead to damage to the built-in battery and void your right to free warranty service.
- When using a power adapter, ensure that it matches the device's technical specifications, complies with all safety standards, and has a CCC certificate.
- After first use, or if the device is not used for a long time, charge it fully. Optimal device performance is achieved only after 2–3 full charge and discharge cycles.
- The operating temperature range for this product is from 0 °C to +35 °C (operation in conditions exceeding +35 °C or below 0 °C is not recommended).
- This device is not intended for commercial use.

Rechargeable Battery Guidelines (Li-pol/Li-ion)

Dear Customer, please note that this device uses a lithium-based rechargeable battery as its power source. Please carefully read the information below to help extend the life of your battery and prevent undesirable consequences during its operation.

Battery Capacity and Charge-Discharge Cycles

During prolonged storage and use, the rechargeable battery (hereinafter referred to as «the battery») tends to lose its charge and capacity. After 300 charge-discharge cycles (approximately one year of device use), the battery capacity may decrease to 80% of its nominal value. After 400 charge-discharge cycles, the battery capacity may decrease to 60% of its nominal capacity. Partial capacity reduction within these limits and time frames is natural battery wear and is not considered a defect.



Natural Battery Wear

The battery loses charge even when stored separately from the device. The self-discharge rate is approximately 5% per month. Due to their design, rechargeable batteries have a limited service life and gradually degrade regardless of whether they are in use. This degradation accelerates at higher temperatures and when the charge level deviates from the «optimal» storage level, which is generally considered to be 40%. In other words, if the battery is not in use, it is advisable to keep the charge level between 40% and 50%.

Use Only the Original Charger

The battery's charge and discharge capability is controlled by its built-in Battery Management System (BMS). Forced «fast charging» modes using external chargers for Li-ion batteries are strictly not recommended, as charge and discharge currents are limited. Li-ion batteries do not have a so-called «memory effect». You can start charging or discharging the battery from any charge level.

Most devices have charge and discharge limits—the controller may prevent the battery charging if, for example, the charge is already above 90%. It will also prevent the battery from fully discharging, protecting the cells from damage. Even if the device is powered from the mains, the Li-ion battery should undergo a full charge/discharge cycle at least once a month (until the «low battery» warning appears). Never let the battery discharge completely. A Li-ion battery degrades quickly if stored in a discharged state for a prolonged period. If this happens, charge it immediately. If the battery remains in a discharged state for two weeks or more, irreversible capacity loss occurs in the cells, which will ultimately lead to battery failure.

Observe the Temperature Requirements

Batteries must be stored in a charged state at temperatures between +15 ˚C and +35 ˚C with normal humidity. Batteries do not perform well during prolonged operation in very high (above +40 ˚C) or very low (below -10 ˚C) ambient temperatures. Do not leave the battery in direct sunlight.

Do Not Disassemble, Burn, or Use Damaged Batteries

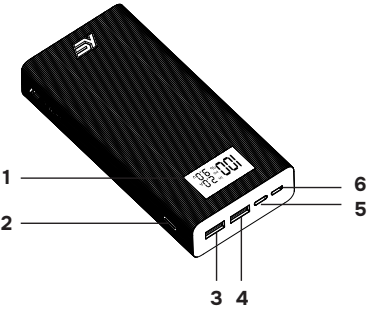
Under no circumstances should you attempt to disassemble the battery or charge its individual cells. For repair or maintenance, please contact an authorized service center.

Puncturing or crushing the cells can cause an internal short circuit, leading to fire and explosion. Melting of lithium due to high temperatures can also cause an explosion. If the seal is broken, water or condensed atmospheric moisture can enter the cell, potentially triggering a reaction that releases hydrogen and causes a fire. You can check the current battery status using the battery indicator, which is available on almost all devices (please check its location and operation method at the time of purchase).

CAUTION

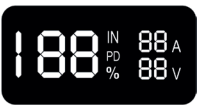
- Be careful — damaged batteries may release harmful substances.
- If the battery is replaceable (removable), and you discover problems with its performance, contact a service center (see the warranty period in the warranty information). If the battery is built-in (an integral part of the device), the warranty applies to the device itself. You should also contact a service center. The sooner a malfunctioning battery is taken in for repair, the better the chances of restoring it at minimal cost.
- Battery operating time depends on many other factors, and the actual operating time may differ from the stated value.
- Rechargeable batteries have a limited number of charge cycles and may eventually need replacement (see the limited warranty conditions for the battery in the warranty information). Battery operating time depends on the usage mode and settings.

Device Diagram



1. LCD display.
2. Power button.
3. USB Type-A 1 port.
4. USB Type-A 2 port.
5. USB Type-C port.
6. Micro-USB port.

Device Display



Power bank charging from a power source

The «IN» input port indicator flashes, and the display shows the current, voltage, and power bank charge percentage.

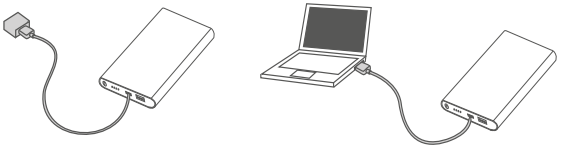
Charging devices from the power bank

The «OUT» output port indicator is lit, and the display shows the current, voltage, and power bank charge percentage.

Operating Instructions

Power Bank Charging

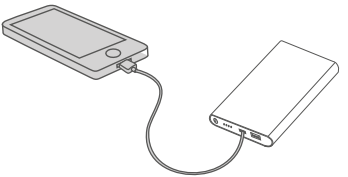
Insert the Micro-USB connector into the corresponding power bank port, then connect the USB connector of the cable to a power adapter or a PC USB port.



CAUTION! To avoid the risk of damaging the built-in lithium-polymer battery, charge the device at least once every three months.

Charging Mobile Devices from the Power Bank

Insert the cable's USB connector into the corresponding port on the power bank, and connect the other end of the cable to the port on your device.



Note: The power bank features a pass-through charging function, allowing you to charge the power bank and the devices connected to it simultaneously.

Cleaning and Maintenance

Clean the surface of the device with a dry or slightly damp soft cloth.

Specifications

- Model: K-PD-20.
- Trademark: KEYRON.
- Battery: Lithium-polymer.
- Charge indicator: LCD display.
- Battery capacity: 20,000 mAh.
- Maximum output power: 22.5 W.
- Rated power supply (input):
  - Micro-USB (max.): 5 V ⎓ 2 A, 9 V ⎓ 2 A.
  - USB Type-C (max.): 5 V ⎓ 3 A, 9 V ⎓ 2 A.
- Rated power supply (output):
  - USB Type-C (max.): 5 V ⎓ 3 A, 9 V ⎓ 2.22 A, 12 V ⎓ 1.67 A.
  - USB Type-A (22.5 W max.): 5 V ⎓ 3 A, 9 V ⎓ 2 A, 10 V ⎓ 2.25 A, 12 V ⎓ 1.5 A.
- Total output parameters (USB Type-C + USB Type-A): 5 V ⎓ 3 A.
- Included cable:
  - Current capacity: 3 A.
  - Length: 30 cm.
- Dimensions: 143 × 68 × 27.5 mm.
- Weight: 420 ± 15 g.
- Color: Dark gray.

Package Contents

- Power bank.
- Charging cable.
- User manual.

Rules and Conditions for Installation, Storage, Transportation, Sale (Distribution), and Disposal

- The device does not require installation or permanent mounting.
- The device must be stored in its original packaging, on heated premises, both at the manufacturer's and at the consumer's sites. The ambient temperature should be between +5 °C and +40 °C, and the relative humidity should not exceed 80% (non-condensing). The storage area must be free from aggressive contaminants (e.g., acid or alkali vapors) that could cause corrosion.
- The device must be transported under dry conditions.
- The device requires careful handling. Protect it from exposure to dust, dirt, impact, moisture, fire, and other hazards.
- Sale or distribution of the device must be carried out in accordance with local legislation.
- Upon expiration of the device's service life, it must not be disposed of with unsorted household waste. Instead, it must be taken to an authorized collection point for electrical and electronic equipment for subsequent recycling and disposal in accordance with federal or local legislation. By ensuring proper disposal of this product, you help conserve natural resources and prevent potential harm to the environment and human health that may result from improper handling. For more detailed information about collection and disposal points for this product, please contact your local municipal authorities or your household waste disposal service.
- If a device malfunction is detected, immediately contact an authorized service center or dispose of the device.

Warranty Information

The manufacturer guarantees the device will function properly throughout the warranty period and be free from defects in materials and assembly. The warranty period commences on the date of purchase and applies to new products only. Warranty service includes free repair or replacement of defective parts that fail during the warranty period, provided the failure is not caused by consumer misuse and the product is operated in accordance with the user manual. Repairs or part replacements shall be performed at authorized service centers.

Warranty Period: 24 months

Service Life: 24 months

For the up-to-date list of authorized service centers, please visit:

https://www.dns-shop.ru/service-center/

Additional Information

Manufacturer: Guangdong Foxsky Technology Co.,Ltd.
No.11 Factory Building, 1-5 Floors, 101-105, No.10 Factory Building, 1-5 Floors, 101-105, (Liandong U-Valley) 252 Hexi Road, Sanhe Village, Tonghu Town, Zhongkai High tech Zone, Huizhou City, China.

Made in China.

The product meets the requirements of the applicable GOST standards of the Russian Federation.

Product specifications, information and appearance are subject to change without prior notice, for quality improvement of our products.

Production date (mm.yyyy): _____ v.1



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stylish solutions from KEYRON