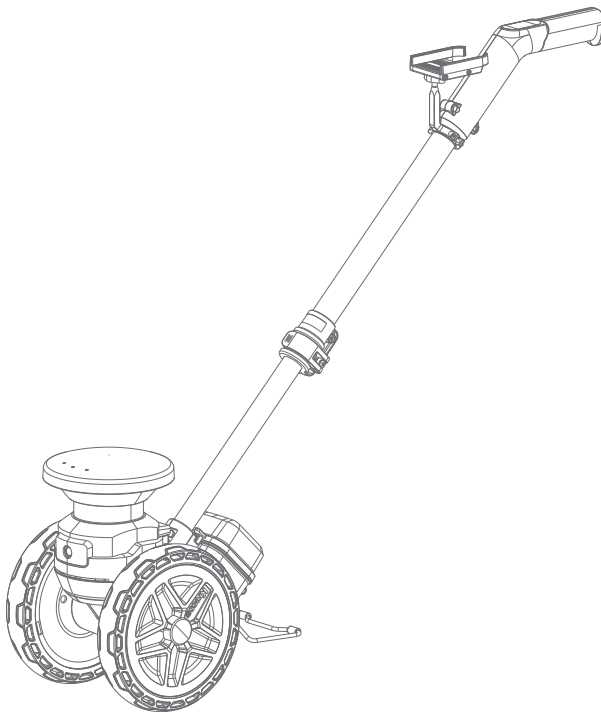


Kress



Mapping Cart manual



Mapping Cart SN Code



To match the app account with the mapping cart, please scan the SN code.

Users can view the electronic instructions at <https://www.kress.com/en/>.

Product safety General Safety Warnings

⚠ WARNING: Read all safety warnings and all instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

Carefully read the instructions for the safe operation of the machine.

Save all warnings and instructions for future reference.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Additional safety warning for your mapping cart

1. The normal temperature range for charging the battery is 0-40°C.
2. Do not expose the appliance or battery to excessive temperatures.
3. Wear non-slip shoes when using the mapping car. Watch your step to avoid slipping and falling.
4. Store indoors.
5. Remove the battery pack if you will not use it for long time.
6. Remove the battery pack before maintenance, cleaning or check.
7. Rechargeable batteries are to be removed from the appliance before being charged.
8. Different types of batteries or new and used batteries are not to be mixed.
9. Exhausted batteries are to be removed from the appliance and disposed of safely.
10. If the appliance is to be stored unused for a long period, the batteries should be removed.
11. Do not use non-rechargeable

- batteries in place of rechargeable batteries.
12. Do not use modified or damaged batteries.
 13. **WARNING:** Use only with KAC20 battery charger or additional battery chargers listed in Operator's Manual.

Maintenance

- 1) **Have your equipment serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the equipment is maintained.

Safety Warnings for battery pack

- a) **Do not dismantle, open or shred cells or battery pack.**
- b) **Do not short-circuit a battery pack. Do not store battery packs haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by conductive materials.** When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- c) **Do not expose battery pack to heat or fire. Avoid storage in direct sunlight.**
- d) **Do not subject battery pack to mechanical shock.**
- e) **In the event of battery leaking, do not allow the liquid to come into contact with the skin or eyes. If contact has been made, wash the affected area with copious amounts of water and seek medical advice.**
- f) **Keep battery pack clean and dry.**
- g) **Wipe the battery pack terminals with a clean dry cloth if they become dirty.**
- h) **Battery pack needs to be charged before use. Always refer to this instruction and use the correct charging procedure.**
- i) **Do not maintain battery pack on charge when not in use.**
- j) **After extended periods of storage, it may be necessary to charge and discharge the battery pack several times to obtain maximum performance.**
- k) **Recharge only with the charger specified by Kress. Do not use any charger other than that specifically provided for use with the equipment.**
- l) **Do not use any battery pack which is not designed for use with the equipment.**
- m) **Keep battery pack out of the reach of children.**
- n) **Retain the original product literature for future**

reference.

- o) Remove the battery from the equipment when not in use.**
- p) Dispose of properly.**
- q) Do not mix cells of different manufacture, capacity, size or type within a device.**
- r) Keep the battery away from microwaves and high pressure.**
- s) Warning! Do not use non-rechargeable batteries.**

User manual requirements for wireless product

- a) Operation of this device is subject to the following two conditions:
 - (1) This device may not cause harmful interference, and
 - (2) this device must accept any interference received, including interference that may cause undesired operation.
- b) Caution: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- c) NOTE: This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that

interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For mobile device

- a) To satisfy EMC & RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation
- b) To ensure compliance, operations at closer than this distance is not recommended

Symbols



Warning



Read the operator's manual.



Waste electrical products must not be disposed of with household waste. Please recycle where facilities exist. Check with your local authorities or retailer for recycling advice.



Li-Ion



Li-Ion

Li-Ion battery. This product has been marked with a symbol relating to 'separate collection' for all battery packs and battery pack. It will then be recycled or dismantled in order to reduce the impact on the environment. Battery packs can be hazardous for the environment and for human health since they contain hazardous substances.



Do not burn.



Batteries may enter water cycle if disposed improperly, which can be hazardous for ecosystem. Do not dispose of waste batteries as unsorted municipal waste.



Plus; positive polarity



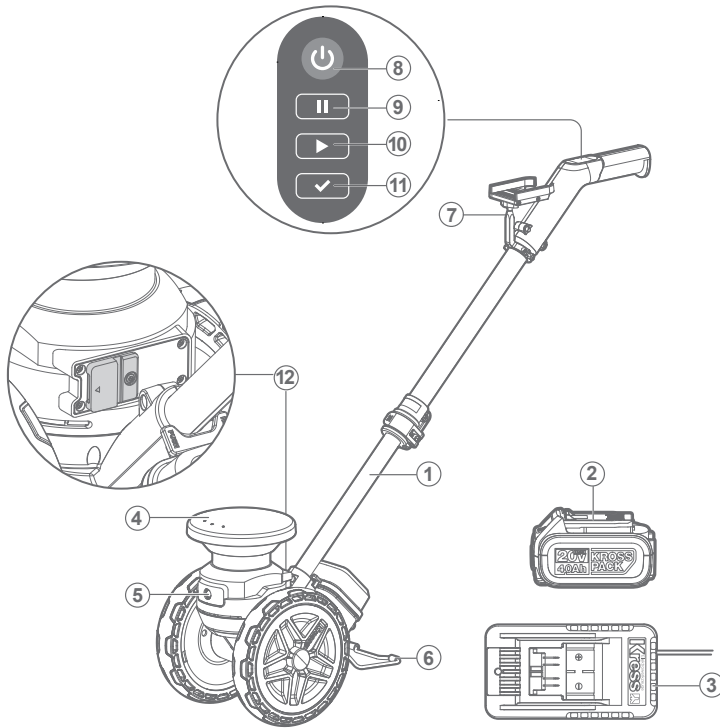
Minus; negative polarity



RCM marking

ABN: Australian Business Number. By this number, business information such as entity type, status, business location etc. can be found at website <http://abr.business.gov.au>. ABN of Positec Australia Pty Limited is 14 101 682 357

Component list




- | | |
|---------------------|------------------------|
| 1. Telescopic stick | 7. Mobile phone holder |
| 2. Battery pack | 8. Power button |
| 3. Battery charger | 9. Pause button |
| 4. RTK module | 10. Start button |
| 5. Front camera | 11. Done button |
| 6. Supporting leg | 12. USB port |

Not all the accessories illustrated or described are included in standard delivery.

We recommend that you purchase your accessories listed in the above list from the same store that sold you the machinery. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

Technical data

Rated voltage	20 V  Max.*
Battery type	Lithium-ion
Battery model	KAB34
Charging time (approx.)	125 mins
Charger model	KAC20
Charger rating	Input: 100-240 V~50/60 Hz, 50 W, Output: 20 V, 2.0 A
Machinery weight	5.36 kg
App	Y
Frequency bands for bluetooth	2400-2483.5 MHz
Maximum transmitted power for bluetooth	8 dBm
Frequency bands for Wi-Fi	2400-2483.5 MHz
Maximum transmitted power for Wi-Fi	20 dBm
Waterproof level	IPX 5

* Voltage measured at no load. Initial battery voltage reaches maximum of 20 volts. Nominal voltage is 18 volts.

Technical data for 4G

Band	Tx(Mhz)	Rx(Mhz)	RF Output Power (Max)
GSM900(B8)	880-915	925-960	33dBm
DCS1800(B3)	1710-1785	1805-1880	30dBm
WCDMA B1	1920-1980	2110-2170	24dBm
WCDMA B8	880-915	925-960	24dBm
WCDMA Band V	824-849	869-894	24dBm
LTE-FDD B1	1920-1980	2110-2170	23dBm
LTE-FDD B3	1710-1785	1805-1880	23dBm
LTE-FDD B7	2500-2570	2620-2690	23dBm
LTE-FDD B8	880-915	925-960	23dBm
LTE-FDD B20	832-862	791-821	23dBm
LTE-FDD B28	703-748	758-803	23dBm
LTE-TDD B38	2570-2620	2570-2620	23dBm
LTE-TDD B40	2300-2400	2300-2400	23dBm
LTE Band 3	1710-1785	1805-1880	23dBm
LTE Band 41	2535-2675	2535-2675	23dBm

Technical data for 4G-GNSS

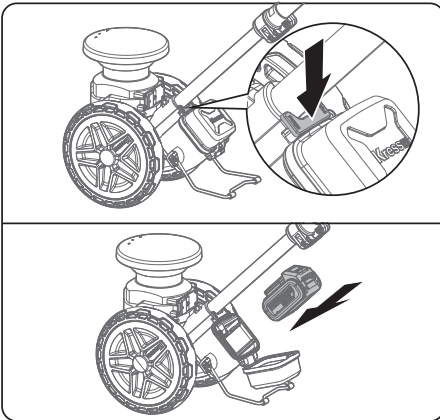
Global Navigation SatelliteSystem (GNSS)	GPS / GLONASS / BDS / Galileo / SBAS
Nominal Frequency	1559-1610 MHz 1215-1300 MHz 1164-1215 MHz

Install or remove the battery pack

Press the red button to open the battery pack cover, insert or remove the battery pack, and then close the cover.

NOTE: Before inserting the battery pack, it is necessary to check whether it is fully charged. If not, it needs to be fully charged first.

WARNING: Please keep hands dry when inserting or removing battery pack.




For detailed steps and precautions for mapping, please check the content on Kress dealer portal.

RTK Module LED Status Indicator Table

Color & System Status	Light Behavior	📍 Positioning LED	🔌 Power LED	📶 4G Network LED
Green (Normal Operation)	Solid (Work Ready)	Positioning available	1. System normal, no issues 2. Firmware upgrade successful (OTA/USB) 3. Log export completed	Network connected
	Flashing (Connecting)	Acquiring positioning	Robot mapping in progress	Network connecting / Reconnecting

Red (Error / Not Working)	Solid (Fault Detected)	Positioning unavailable	System Fault: 1. Memory anomaly 2. Positioning module init failure 3. Battery temperature anomaly	Network disconnected / Unavailable
	Flashing (Low Battery)	/	Battery low, recharge required	/
Blue (Upgrade / Log Export)	Solid	/	Applink connecting	/
	Flashing	/	1. OTA update triggered 2. Positioning module upgrading 3. Reading logs in progress	/
Yellow (Mapping Paused)	Flashing	/	Saving map...	/
	Solid	/	Mapping paused	/

Environmental Protection

 Waste electrical products must not be disposed of with household waste. Please recycle where facilities exist. Check with your local authorities or retailer for recycling advice.

For battery tools:

Details regarding safe disposal of used batteries

At the end of the life of the appliance, remove the battery pack safely before disposing of the appliance. Do not throw batteries away or throw them in the normal trash can. Also do not dispose of the battery with the machine. Remove the used battery pack from the appliance and dispose of it at the nearest or convenient dedicated recycling facility. If in doubt, consult your local environmental protection department. Batteries may enter water cycle if disposed improperly, which can be hazardous for ecosystem. Do not dispose of waste batteries as unsorted municipal waste.

Kress 

www.kress-robotik.com

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