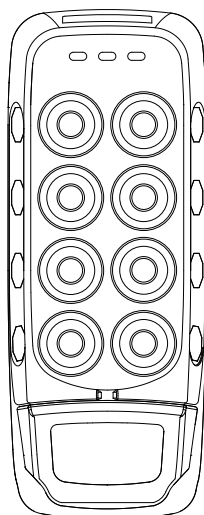


User Manual

Remote Control

IKORE B Transmitter



Revision history

Table of revisions

Date	Changed	Rev
May 2021	Battery information updated, technical information corrected	0201
January 2019	Rebranded to Danfoss Power Solutions	0101

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Safety instructions

IKORE B General Safety

The following safety instructions must be read carefully to install and use the product properly, and to keep it in perfect working condition, and to reduce the risk of misuse.

- Strictly adhere to the installation instructions contained in this document.
- Make sure that professional and competent personnel carry out the installation.
- Ensure that all site and prevailing safety regulations are fully respected.
- Make sure that this document is permanently available to the operator and maintenance personnel.
- Keep the transmitter out of reach of non-authorized personnel.
- Remove the transmission key when the set is not in use.
- Check each working day the STOP button and other safety measures. When in doubt, press the STOP button.
- Whenever several sets have been installed, make sure the transmitter is the right one. Identify the machine controlled on the label for this purpose on the transmitter or by using the display (in case it has one).
- Service the equipment periodically.
- When carrying out repairs, use spare parts supplied by Danfoss only.

Warning

Potential damage to the operator or the product. Do not use this product on machines in potentially explosive atmospheres unless the model is ATEX/RATEX certified to work in such conditions.

IKORE B Safety Warnings

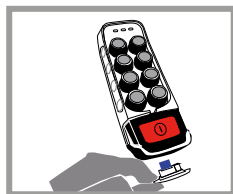
Potential damage to operator and product.

Follow the guidelines below to reduce risk of injury to the operator and the product.

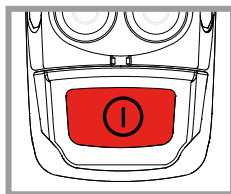
- Use the device with the manufacturer's battery and battery charger (if applicable).
- Only allow qualified personnel to operate the equipment.
- Always set the STOP button in the off position when not in use.
- Always press STOP before plugging in tether cable (if applicable).
- Remove the Tether connection on the transmitter First (if applicable).
- Do not operate product when visibility is limited.
- Make sure product is compatible with the machine.
- Avoid knocking or dropping the product.
- Do not use the product if a failure is detected.

Changes or modifications not approved by Danfoss can void the user's authority to operate this product.

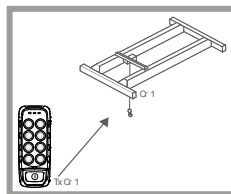
Quick reference precautions



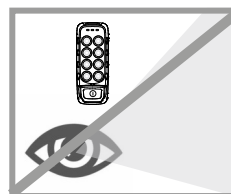
Remove the EEPROM in order to disable the transmitter



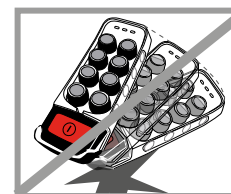
When in doubt, press the STOP button



Make sure the transmitter works with the machine to be handled



Do not use the set when visibility is limited



Avoid knocking or dropping the set

Safety instructions

FCC rules

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

Changes or modifications not expressly approved by the manufacturer can void the user's authority to operate the equipment.

To comply with FCC RF exposure compliance requirements, this device and its antenna must not be collocated with, or operating in conjunction with, any other antenna or transmitter, may not cause harmful interference, and must accept any interference received, including interference that may cause undesired operation.

The limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warning

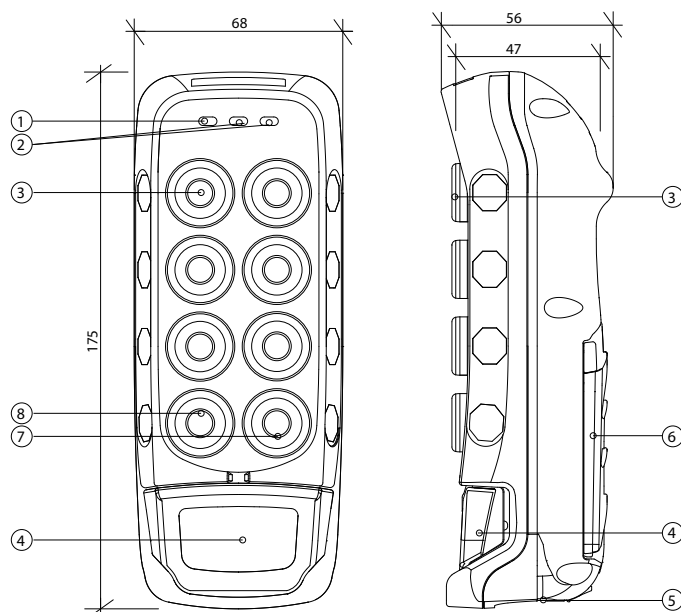
Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage, et
 2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
-

Technical description

IKORE dimensions and identification

Dimensions in mm

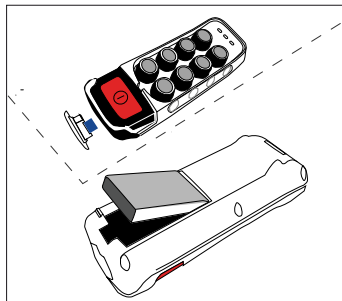


1. Status LEDs
2. Hoist selection LEDs
3. Maneuver push buttons
4. STOP button
5. External and extractable EEPROM module
6. Rechargeable Li-Ion batteries BT11K
7. START push button
8. Hoist selection push button

Technical description

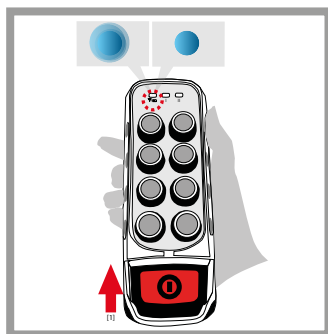
IKORE startup

1. Insert the EEPROM and fully charged rechargeable BT11K battery.



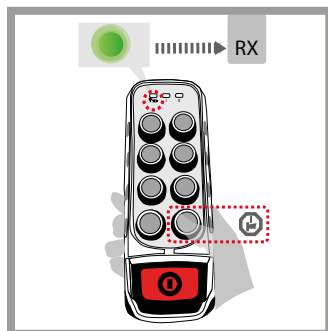
2. Push and pull out the STOP button.

The status LED will blink in blue until it reaches the stand-by mode and then it will turn into a fixed blue.



3. Press the start button.

The LED will blink green until the transmitter is linked with the receiver.



When the receiver confirms the link, the status LED will turn to a fixed green and the system is now fully operational.

When the system controls two hoists, there will be a push button for the selection of individual or joint control. I and II LEDs will show their selection.

Technical description

IKORE B detailed description

Technical data

Description	Value
Stop function	Cat. 3-Plc EN12849-1 and SIL 3 IEC 61508 / IEC 62061
Ingress Protection rating	IP65/NEMA4
Anti-condensation system	N/A
Frequency band	2405MHz to 2475MHz 20dBm/100mW
Main mechanisms (maximum)	Push button (7) + START+ STOP
Range (Normal Conditions)	100m
Auxiliary mechanisms	N/A
Removable EEPROM	External
Battery model	BT11K
Battery life	8hr (100% duty cycle)
Operating temperature range	-20 °C to 70 °C (-4 °F to 158 °F)
Storage Temperature Range (24h)	-25°C to 75°C (-13°F to 167°F)
Storage Temperature Range (long periods)	-25°C to 55°C (-13°F to 131°F)
Relative Humidity	max. 95% without condensation
Weight (with battery)	315 grams
Dimensions LxWxH mm	174.5x68x56
Harness	Hand strap/shoulder strap
Display	N/A
Cable connector	N/A
Range limiter	N/A
Associated receivers	R11

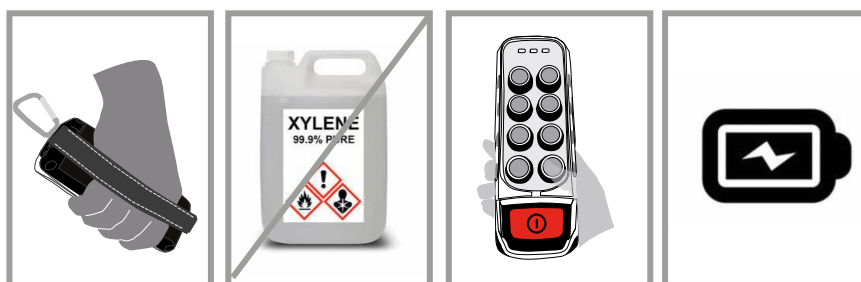
Maintenance

IKORE B maintenance tips

This product is designed for use in an industrial environment that may shorten the product's lifespan. Use these tips to maximize the lifespan of the product.

- Use the hook/belt provided with the transmitter to prevent the transmitter from falling
- Do not clean the transmitter with solvents or pressurized water; use a damp cloth or soft brush for cleaning
- If the push buttons show signs of deterioration, contact the Authorized Technical Service for repair
- Check if the battery contacts are correct, otherwise replace them.
- Ensure that the product is supplied with AAA alkaline batteries or has a rechargeable battery
- Be sure to recharge or replace battery regularly

Maintenance tips quick reference



Troubleshooting 2.4GHz

Color and frequency	Pulse frequency	Description	Action
Blue fast pulses		Starting the system; establishing communications with radio and EEPROM	Wait
Blue continuous		Stand-by mode. Set up system, waiting user's action	Press START to enter operation mode
Green fast pulses		Attempting to link with the receiver and waiting its answer	Wait
Green continuous		Working	Operate
Green slow pulses		Latency; no action has been taken for some time	Press START to return to operation mode
Red slow pulses		EEPROM module missing or corrupt	Check EEPROM and reprogram if necessary
Red double pulses		Radio error; radio communications error	Replace transmitter
Red continuous		General hardware failure	Replace transmitter
Orange slow pulses		Critical battery signal	Replace batteries with charged ones
Orange double pulses		Activated maneuver	Release maneuver

Charger and battery

Charger and battery



Disposal note:

This symbol on the product indicates that it may not be disposed of as household waste. It must be handed over to the applicable take-back scheme for the recycling of electrical equipment.

- Dispose of the product through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

BC70K and BT11K specifications

BC70K battery charger

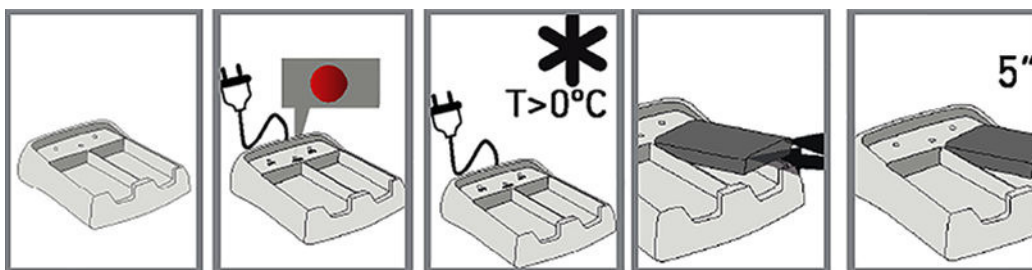
Specification	Value
AC power supply	110 – 230 V, 50/60 Hz, $\pm 10\%$, automatic switching
DC power supply, nominal	12 – 24 V

BT11K battery

Specification	Value
Voltage	3.7 V
Capacity	1130 mAh Li-Ion
Charging temperature	0°C to 45°C
Discharge temperature	-20°C to 60°C
Charging mode	Fast (<2.5 h) and intelligent
Weight	23 g

BC70K Battery Charger Set-up

The battery charger has two charging compartments that can simultaneously charge two BT11K batteries. Use the information below to set up the BC70K battery charger.



1. Connect the charger to a power source using the cable provided.
The red LED will switch on if the charger is properly connected.
2. Place the batteries in the charger.
3. Optional: If charging two batteries, wait at least five seconds before inserting the second battery into the compartment.

Warning

Possible damage to battery.

Be sure to charge batteries in environments with temperatures over 0°C.

Charger and battery

BC70K Charger LEDs Status

The BC70K charger has a LED for each compartment (**BAT 1** and **BAT 2**) and a common indicator (**POWER**).

LED color / frequency	Description
Green LED / pulsing (BAT 1, BAT 2)	The battery is being charged
Green LED / continuous (BAT 1, BAT 2)	The battery is completely charged
Red LED / pulsing or continuous (BAT 1, BAT 2)	The battery charger fault
Red LED / continuous (POWER)	The charger is properly connected to power source

Battery Charging Recommendations

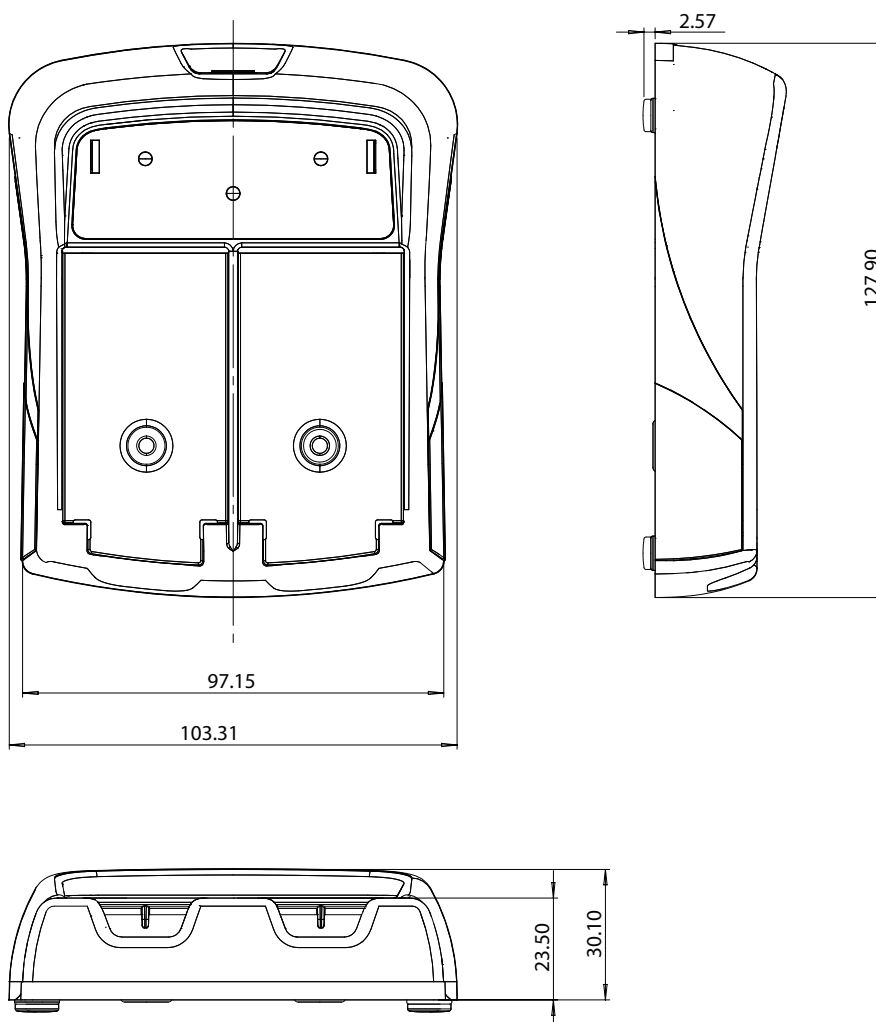
The battery lifespan is estimated to 500 recharging cycles and is largely dependent on the conditions of use. To maximize the lifespan of the batteries and battery charger, follow these recommendations:

- Do not recharge the battery until it is completely flat, as shown with red LED slow pulse on the transmitter
- Always charge the batteries at temperatures between 0° and 45°C (the batteries will not become fully charged at temperatures exceeding 45°C)
- Do not leave the battery charger or batteries in a direct sunlight
- Charge batteries at least once every six months
- Avoid short circuits between the battery contacts; do not carry charged batteries in toolboxes or next to other metal objects (keys, coins, etc.)
- Always keep contacts clean
- Caution! Risk of Explosion if Battery is Replaced by an incorrect type. Non Danfoss Battery use may void warranty

Charger and battery

BC70K Battery Charger Dimensions

Dimensions (mm)



Products we offer:

- Cartridge valves
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Gear motors
- Gear pumps
- Hydraulic integrated circuits (HICs)
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software
- PLUS+1® software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

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