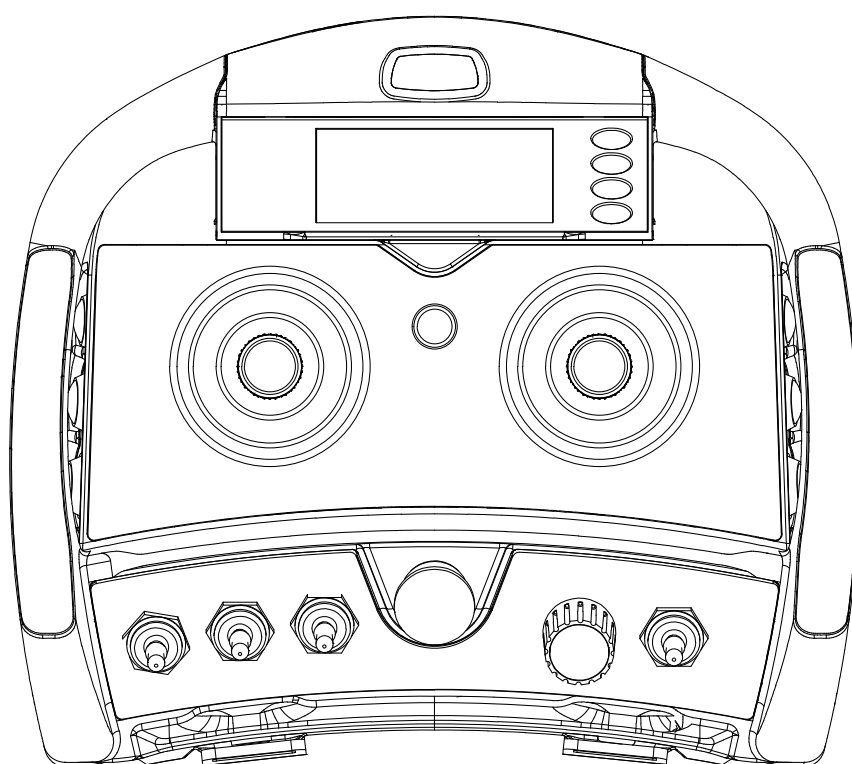




**IKUSI**  
velatia

smartexperience



# IK 3

## USER's MANUAL

# 01- SAFETY INSTRUCTIONS



These instructions must be read carefully in order to install and use the set properly and to keep it in perfect working condition and to reduce the risks of misuse.

**Do not use this set on machines in potentially explosive atmospheres, except the models certified ATEX/RATEX to work in that conditions.**

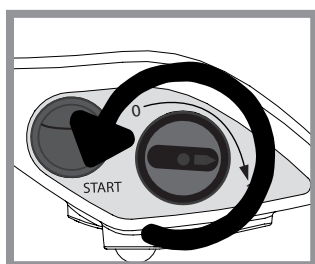
- a) Strictly adhere to the instructions for installation contained in this manual.
- b) Make sure that professional and competent personnel carry out the installation.
- c) Ensure that all site and prevailing safety regulations are fully respected.
- d) Make sure that this manual is permanently available to the operator and maintenance personnel.
- e) Keep the transmitter out of reach of unauthorised personnel.
- f) Remove the transmission key when the set is not in use.
- g) On starting each working day, check to make sure that the STOP button and other safety measures are working.
- h) When in doubt, press the STOP button.
- i) Whenever several sets have been installed, make sure the transmitter you are going to use 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).
- j) Service the equipment periodically.
- k) When carrying out repairs, only use spare parts supplied by IKUSI dealers.

## WARNING

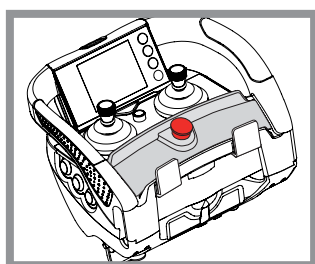
- The devices must be used with the manufacturers' battery and battery charger.
- The equipment must be operated by qualified personnel.
- After use, never leave the equipment ON (one or several transmitters). Always set the contact key and the STOP button to switch off position of the equipment to avoid accidentally to activate manoeuvres – specially in crane maintenance purposes-.
- Do not use the set when visibility is limited.
- Avoid knocking or dropping the set.
- Do not use the set if failure is detected.

## REMEMBER

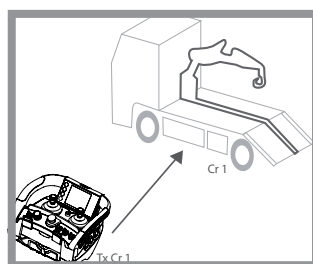
Changes or modifications not expressly approved by IKUSI could void the user's authority to operate this equipment.



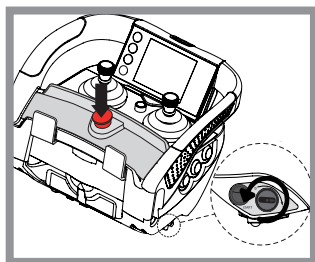
Remove the transmission key only when the set is not in use or to deny the access



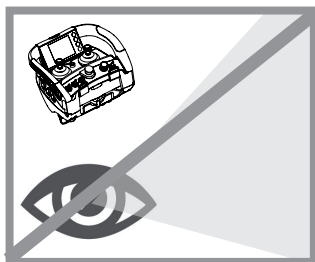
When in doubt, press the STOP button



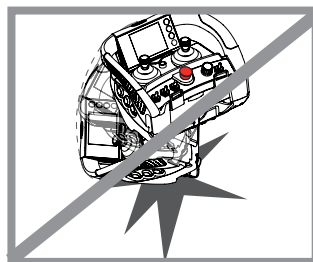
Make sure the transmitter works with the machine to be handled



After use set the contact key and the STOP button

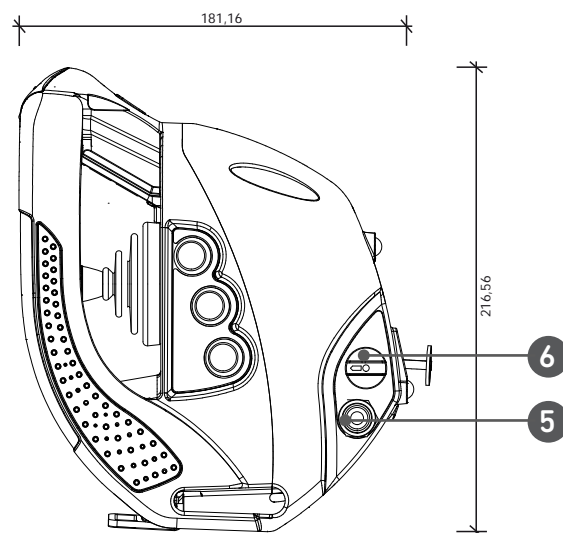
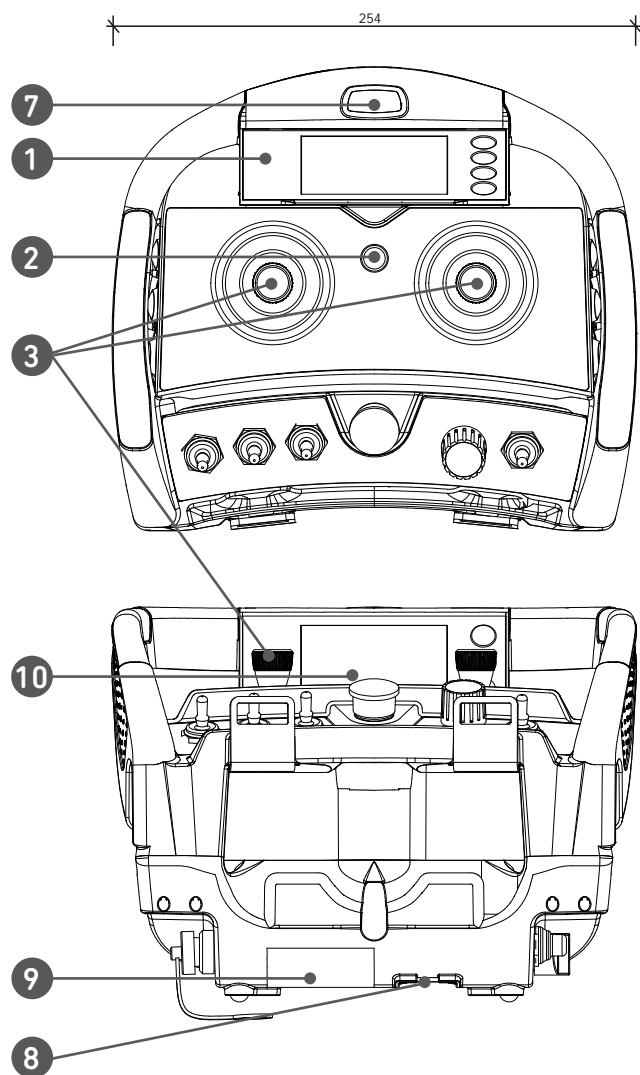


Do not use the set when visibility is limited



Avoid knocking or dropping the set

## 02- TECHNICAL DESCRIPTION

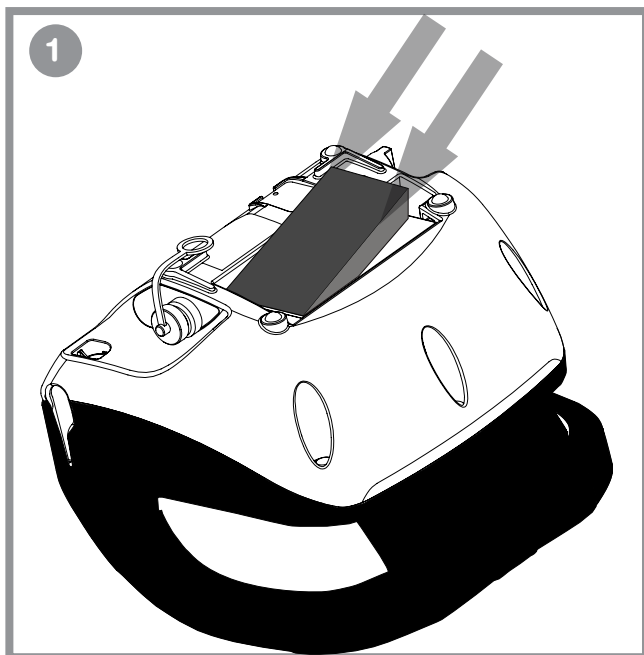


- 1.- Label for crane identification
- 2.- LED
- 3.- Manoeuvre elements
- 4.- Contact key
- 5.- Start Pushbutton
- 6.- STOP button

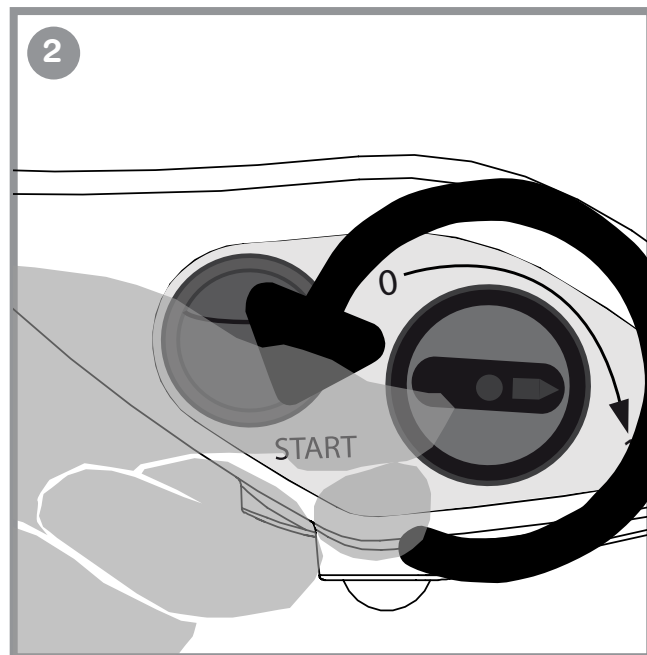
- 7.- Option: Range Limiter
- 8.- External and extractable EP70 EEPROM module
- 9.- Battery
- 10.- 3,5" TFT Display
- 11.- Lateral pushbuttons

## 03- START UP

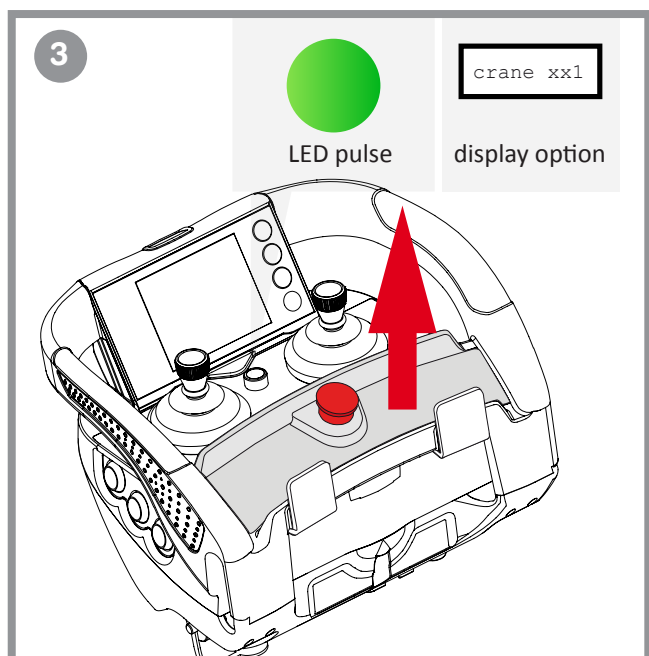
In order to turn the transmitter ON (OPERATION mode), please follow the next steps:



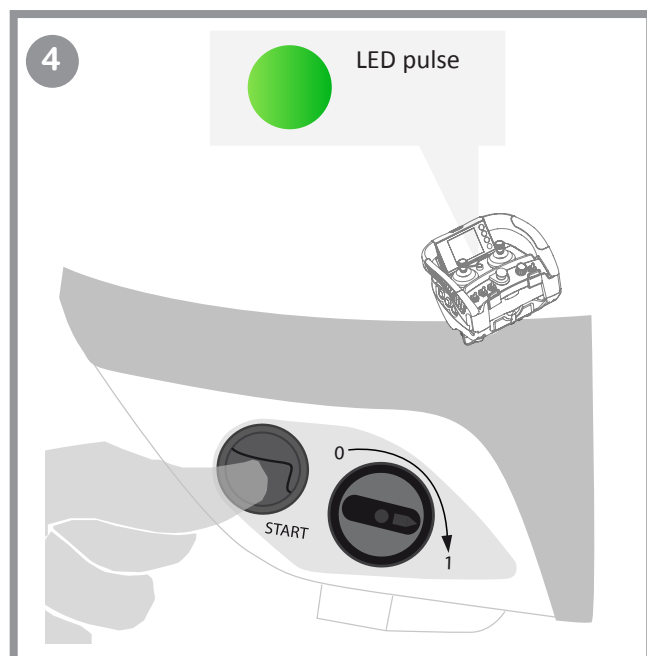
1- Place a charged battery in the transmitter. The charge must be done following the instructions of the Battery Chargers' Manual.



2. Turn the contact key to the position I. It is not necessary to take off the next times you want to start up the equipment, only for denying the access to the transmitter.



3. Push and pull out the STOP button. LED will flash orange-green pulse. If the transmitter has LCD, it displays the identification of the machine, as well as the battery level, if it has been pre-programmed.



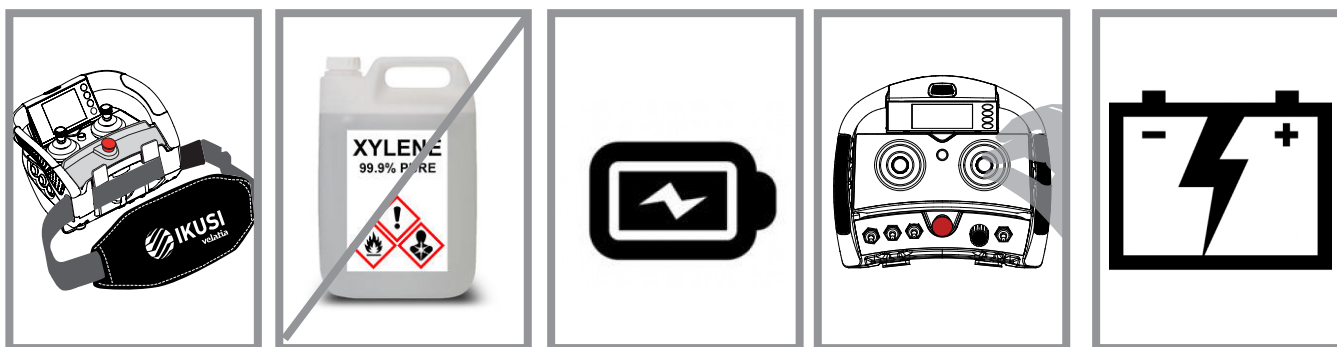
4- Press the start button. The green LED should now light indicating that the transmitter is transmitting. Once the Tx is connected, press on any of the transmitter's manoeuvre buttons and its corresponding relay will be activated. Check to make sure all the other manoeuvres work in a coherent way with the expected movements.

## 04- MAINTENANCE

### RECOMMENDATIONS

This equipment is designed for use in an industrial environment. However, we recommend you follow the instructions below to extend the life span of your remote control set:

- Use the belt provided with the transmitter to prevent the transmitter from falling.
- Do not clean the transmitter with solvents or pressurised water. Use a damp cloth or soft brush.
- Use and recharge the battery regularly.
- Check the pushbuttons. In case they show signs of deterioration, please contact the Authorized Technical Service.
- Check if the battery contacts are correct. Otherwise, replace them.



## 05- TROUBLESHOOTING

The transmitter has status monitoring LED's, which help to identify irregularities. The most common signals are contained in the tables below:

LED COLOUR / FREQUENCY (SOUND)	PULSE FREQUENCY	MEANING	ACTION
Green / Continuous (No sound)		The transmitter works properly. OPERATION mode OK	OK
Green / Pulses (No sound)		STANDBY mode. If transmitter is 4 minutes ON and no action has been taken.	Push START to return to the OPERATION mode
Red / Slow pulses (Beep)		Battery low signal. In 5 minutes you need to change bat.	Replace Battery with a Fully charged one.
Red/ Fast pulses (Beep)		EEPROM module missing or corrupt.	Check EEPROM module or reprogram if necessary.
Red / Double pulses (Beep)		A manoeuvre is activated at transmitter start-up process. HW Damage if no order is active.	Release manoeuvre or replace transmitter if necessary
Red / Continuous (Beep)		Transmitter's general failure. HW damage	Replace Transmitter

# 06- CHARGER AND BATTERY

## TECHNICAL SPECS

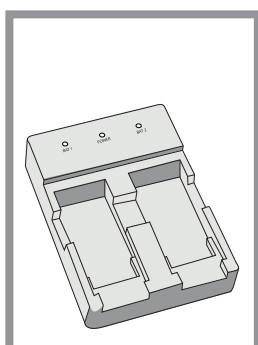
### CB70

<b>AC Power Supply</b>	230 Vca +/- 10%, 50
<i>Optional</i>	115 Vca, 60 Hz
<b>DC Power Supply</b>	from 10,5 V to 35 V

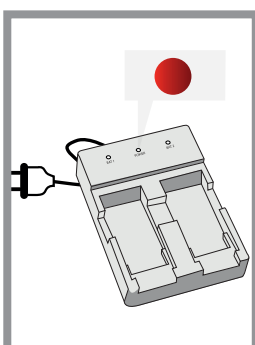
### BT24IK

<b>Voltage</b>	4,8 V
<b>Capacity</b>	2400 mAh NiMH
<b>Charging temperature</b>	From 0° to 45°C
<b>Discharge temperature</b>	From -20° to 50°C
<b>Autonomy</b>	From 12 to 18 h (use at 50%)
<b>Charging mode</b>	Fast (<2h) and intelligent
<b>Weight</b>	156,3 g

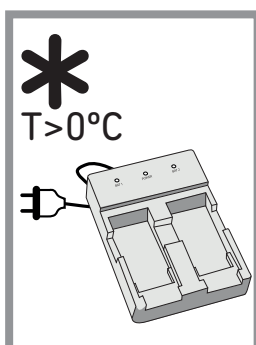
## SETTING UP



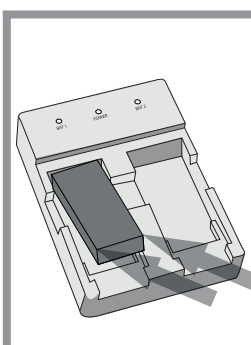
The battery charger has two charging compartments that can simultaneously charge two batteries.



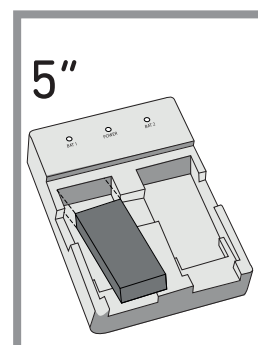
Connect the charger to the mains using the power source and cable supplied; The red LED will switch.



When installing the battery charger, bear in mind batteries must be charged at temperatures over 0°C.



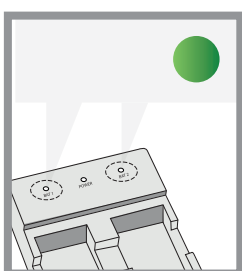
Place the batteries in the charger.



Wait about 5 seconds between the consecutive insertions of batteries in their locations.

## STATUS LEDs

Each battery location has a green indicator associated:



- Green LED blinking:** battery excessively unloaded.
- Green LED permanently lighting:** normal charging operation mode
- Green LED switched OFF:** battery charging process has finished.

## RECOMMENDATIONS

The battery charger has two charging compartments that can simultaneously charge two batteries. Connect the charger to the mains using the power source and cable supplied; The red LED will switch.

- Do not recharge the battery until it is completely flat. The transmitter indicates this moment.
- Always charge the batteries at temperatures between 0° and 45°C (the batteries will not become fully charged at temperatures exceeding 45°C). Remember that the charger must not be left in direct sunlight.
- Charge the 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.
- Never leave batteries in direct sunlight.

MECHANICAL SPECS:

