

# User manual for 4-button Remote Control (RC4)



English manual revision: 2219  
Firmware: BJ5000EX 1.2152-BL3

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## What is RC4

RC4 is a small remote control or keypad for BJ5000EX machines (from now on called “machine”) and is meant to be placed to where the fisherman works with line and hooks to quickly access the most important buttons if the machine is out of reach.

RC4 is equipped with the push buttons ZERO, AUTO, STOP and UP and will relay any key press or key release (from now on called button commands) to corresponding machine. This makes it possible to adjust the “Zeropoint”, start/stop the motor, or restart machine into Automatic mode while staying close to the area of “action” (where fishes, hooks and the lines are) rather than close to the machine, if it’s placed too far away.

When corresponding machine receives the command from RC4 it is treated as if a push button is pressed on a local keyboard, with a few minor differences, see chapter

## Security exceptions.

RC4 also got 4 LED’s where two of them (for Catch and Running mode) will show status of the assigned machine. The remaining two LED (Power and Network) shows RC4’s status for Power supply voltage and Network activity.

RC4 can only be “paired” to ONE machine at a time. Pairing is easy to change. In the network totally 18 BJ5000EX machines with each of them paired RC4 can be used. Totally 36 units. The bigger 12-button remote control (RC12) counts as a machine in the network.

## Installation.

**Mechanically:** RC4 has mounting holes on both right and left side under the covering lids. Open them up and use screws that fits the holes and the material behind the RC4 box. There is no need to open the box itself. RC4 can be used outdoor, or indoor. Under the right lid is also the power switch.

**Electrical:** RC4 comes with 7 meters power supply cable. Connect Blue to battery minus, and Red to Battery plus. The Brown and White cables are the network cables and must be connected to the Brown and White cables of all the other machines, RC12 and RC4 in the network. Don’t connect Brown and White to anything else.

## The first startup

When power up the Green LED should light, showing that power supply is present. The Blue LED for network should slowly be flashing as factory default. This indicates that there is no machine in the network assigned to this RC4. RC4 is ready to automatically assign to the first machine that sends a push button command in the network. If the BLUE got solid light, it's already assigned to a machine.

The firmware (software) in the RC4 and RC12 are exactly the same as in the EX machine. Because of this the firmware can run into two modes, as a RC4 or a EX machine/RC12. However, starting in wrong mode will not work for the unit, but will not harm it either. If a EX machine is started in RC4 mode the display is totally black with no text. If a RC4 starts runs in machine mode the keyboard LED is not working, and all 4 LED's for Network, Catch and Running mode will rapidly flash or look like they glow.

Changing mode. If the unit starts in wrong mode of some reason, it's very simple to switch back. For changing to RC4 mode Press and hold AUTO button and then press and hold UP button until only the green LED is lit. For enter machine/RC12 mode press and hold AUTO button and then also press and hold STOP button. When mode is changed all the LED's are lit and the the Yellow LED flashes very fast. Release the buttons.

## Security exceptions

As security the UP button command won't start the motor if LINE OUT (on the assigned machine) is at surface or above. All commands are also ignored when a machine display shows any of the Group pictures. This is meant to be a way for a fisherman to make sure the machine is not started remotely by another user when working with hooks and lines.

A fast press on UP button will send motor START command. But when holding it pressed a few more tenth of a second, the button will also send STOP command when released.

The STOP button in similar way sends STOP command when pressed. But holding it pressed a few more tenth of a second will send DOWN command for letting the fishing line go down. When the button is released, it will also send STOP command again so that the line stops.

## Start using the RC4

Before the RC4 can be used it has to be "connected" or assigned to a machine in the software. This is done in 3 steps.

1. Startup and prepare the RC4 to receive commands.
2. Enable the RC4 in the master EX machine.
3. On machine RC4 shall be assigned to, send a command.

So let's go through the 3 steps in details on the next page.

### **1. Startup and prepare the RC4 to receive commands.**

- 1.1. Power it up. Green LED indicates power supply is ok.
- 1.2. If the Yellow power LED lights solid, continue below. Else jump to **Troubleshoot**.
- 1.3. If the Blue LED for network is slowly flashing, continue below. Else jump to **Troubleshoot**.

### **2. Enable the RC4 in the master EX machine.**

- 2.1. Goto the machine that is set up as master in the network.
- 2.2. From LINE OUT display hold Enter button until "SET Group" picture shows. This means continue holding it down even when the first "Group" picture shows. If it does not show jump to **Troubleshoot**, else continue.
- 2.3. Jump between the Groups A, B and C with Prog button and select the group where the machine which you want to assign the RC4 is located in.
- 2.4. Locate which of the 6 ID shown in the group is the machine you want to assign the RC4 to.
- 2.5. Locate the corresponding button 1-6 below the display that matches the machine and press it. The status can change from OFF, ON or ONRK. Make sure ONRK is selected. This tells the master machine that the machine also now has a RC or old (RK=Remote Keyboard)
- 2.6. Now the Master machine starts to communicate with the new RC4. But RC4 will not answer yet.

### **3. On machine RC4 shall be assigned to, send a command.**

- 3.1. Startup the machine that the RC4 will be assigned to.
- 3.2. Make sure this machine already works in the network. If not, jump to **Troubleshoot**.
- 3.3. From LINE OUT display hold Enter button until Group picture shows. If it does not show jump to **Troubleshoot**, else continue.
- 3.4. Make sure at least one machine in the showed Group is selected (dark background), it does not matter which.
- 3.5. Press STOP button. This sends a STOP push button command in the network, and it should be picked up by the listening RC4.
- 3.6. If the Blue LED on RC4 now light with solid steady light, it's a success, else try again from previous step (Pressing STOP button) once or twice more. If still no success, jump to **Troubleshoot**. If the blue led is still slowly flashing on RC4 it has not received any push button command.

### **4. Changing assigned machine**

- 4.1. If the RC4 is wanted to be assigned with another machine first erase the assigned machine ID that is stored in RC4's memory by holding Zero button for 3 seconds. Now the blue led should flash slowly and ready for step 2 and 3 above again.

# Frontpanel

## Red LED: Catch status.

- *Blinking: Catch is detected for assigned machine.*
- *No light: No catch detection yet.*
- *At startup: LED slowly flashes between 1-6 times and corresponds to the Network Address Settings of the machine it's paired to.*

## Blue LED: Network status.

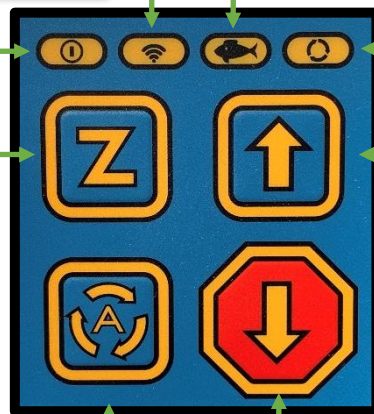
- *Blinking: Not assigned to a machine.*
- *Solid light: Assigned to a machine.*

## Green LED: Power supply

- *Solid light: Power supply ok.*
- *No light: No power connected to keyboard, or internal failure.*

## Yellow LED: Mode

- *Solid light: Assigned machine is in Automatic mode.*
- *No light: Machine is in Manual mode*
- *At startup: LED slowly flashes between 1-6 times and corresponds to the Network Group Settings of the machine it's paired to.*



## ZERO button

- *Short press: will clear "Line out" (000) on assigned machine.*
- *Hold for 3 seconds: Resets the Keyboard. Assigned machine is erased out of memory.*

## UP button

- *Short press: Will start the motor on assigned machine. Note that the motor will continue be running when button is released. To stop motor press STOP button below.*
- *Hold for 3 seconds while AUTO is pressed: Enters RC4 mode.*

## AUTO button

- *Short press: will place assigned machine in Automatic mode.*
- *Hold for 3 seconds: Sends the firmware to a receiver in single mode.*

## STOP button

- *Short press: Will stop motor in assigned machine and place it in Manual mode.*
- *Hold: Releases the wheel on machine while pressed.*
- *Hold for 3 seconds while AUTO is pressed: Enters BJ5000EX mode.*

## Show firmware version.

*To check the firmware version in a RC4 press and hold Auto button while RED and YELLOW LED indicates Network information. Blue LED will then flash once. Then the RED LED will flash the number of first diggit in the version number, then the second and so on, with the Blue LED spacing them appart.*

*Example showing firmware 2153: Start with Blue, 2 x Red, Blue, 1 x Red, Blue, 5 x Red, Blue, 3 x Red, Ends with Blue.*

## Troubleshoot.

- GREEN LED. This is the power supply Led and should always light solid.
  - It does not light at all.
    - No power comes to the RC4 on the power cables.
    - Internal Cables not in place, or damaged.
    - Power Switch button is off, or damaged.
    - Internal FUSE blown. (Must be replaced by Belitronic)
    - Damaged electronic unit. (Might be only damaged LED, else working unit)
  - It works but got low intensity. Probably internal problem, damaged unit.
  - It looks like it flashing rapidly, in a glowing way. Jump to **Unit setup**.
  
- BLUE LED. Network status. (First make sure GREEN LED above works)
  - Led does not light at all. This is not a normal condition, LED or unit must be damaged. A RESET might correct the problem. Hold RESET button 3 seconds.
  - Led flashes slow. Shows that the RC4 is not assigned with any machine.
  - Led looks like it flashing rapidly, in a glowing way. Jump to **Unit setup**.
  
- RED LED. Catch led that indicates that assigned machine is detecting catch. First make sure that both GREEN and BLUE led above works.
  - If the RC4 works when sending commands but the LED never lights up when machine detects catch the RED LED is damaged.
  - Led looks like it flashing rapidly, in a glowing way. Jump to **Unit setup**.
  
- YELLOW LED. Mode led (First make sure GREEN and BLUE led above works)
  - If led never lights but machine responds to commands..
  - If the machine is changing modes (Automatic/Manual) the led is damaged.
  - If machine does not change mode, the machine might be blocking commands when showing group picture.
  - If led looks like it flashing rapidly, in a glowing way. Jump to **Unit setup**.
  
- KEYBOARD LED. If there is no light in keyboard, might be...
  - RC4 is in wrong machine mode. See chapter **Changing assigned machine** on page 5 step 4 to switch mode.
  - Damaged electronic unit.
  - When mode is changed all the LEDs are lit and the the Yellow LED flashes very fast. Release the buttons.