

RC Remote Control Operating and Maintenance Manual



CHAPTER 1: CUSTOMER INFORMATION

THANK YOU FOR PURCHASING AN INDUSTRIAL CONTROL PRODUCT

Read all instructions and warnings carefully before mounting, installing and configuring the products.



These instructions have been published by INDUSTRIAL CONTROL and are not subject to any guarantee. The instructions may be withdrawn or revised by INDUSTRIAL CONTROL at any time and without further notice.

Corrections and additions will be added to the latest version of the instructions. Always download the installation instructions from our website, www.incontrol-co.com, for the latest available version. Keep the safety instructions for future reference.

IMPORTANT! These instructions are intended for end users.

They can be printed and handed to end users. The installation instructions containing information about the installation and configuration of the radio remote control unit on the machine are not intended to be passed on to the end user. Only such information that is needed to operate the machine correctly by radio remote control may be passed on to the end user. INDUSTRIAL CONTROL RC remote controls are often built into wider applications. Always refer to the applicable local regulations for installation and safety requirements relating to cranes, hoists or other material handling and/or lifting equipment's using INDUSTRIAL CONTROL products, e.g.: n applicable local and industrial standards and requirements, n applicable occupational health and safety regulations, n applicable safety rules and procedures for the factory where the equipment is being used, n user and safety manuals or instructions of the manufacturer of the equipment where INDUSTRIAL CONTROL RC remote control systems are installed.

INDUSTRIAL CONTROL instructions do not include or address the specific instructions and safety warnings of the end product manufacturer. For battery precautions, see "Battery precautions" on page 10.

INDUSTRIAL CONTROL products are covered by a guarantee/warranty against material, construction or manufacturing faults, see § "GUARANTEE, SERVICE, REPAIRS AND MAINTENANCE" on page 11

www.incontrol-co.com

Info@incontrol-co.com

ABOUT SYSTEMS

The RC & MC product range is composed of transmitters and receivers intended for use together as a system in complex control applications as an industrial firefighting remote control.

ABOUT THIS DOCUMENT

Every care has been taken in the preparation of this manual. Please inform INDUSTRIAL CONTROL of any inaccuracies or omissions. These End user instructions cover general safety issues, main technical specifications, standard installation, operating instructions, general troubleshooting, battery information and regulatory information. Images shown in this document are for illustrative purposes only.

Term and symbol definitions

The capitalized terms and symbol used herein shall have the following meaning:

- **WARNING!** indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- **CAUTION!** indicates a hazardous situation which, if not avoided, will result in minor or moderate injury.
- **IMPORTANT!** is used for information that requires special consideration.
- **NOTE!** is used to address practices not related to physical injury.



This symbol is used to call attention to safety messages that would be assigned the signal words "WARNING" or "CAUTION".

WARNINGS & RESTRICTIONS

Carefully read through the following safety instructions before proceeding with the installation, configuration, operation or maintenance of the product. Failure to follow these warnings could result in serious injury and property damage.

RC & MC products must not be operated without having read and understood the End User instructions, the specific technical documentation (when provided), and having received the appropriate training. The purchaser of this RC product has been instructed how to handle the system safely.

Operation



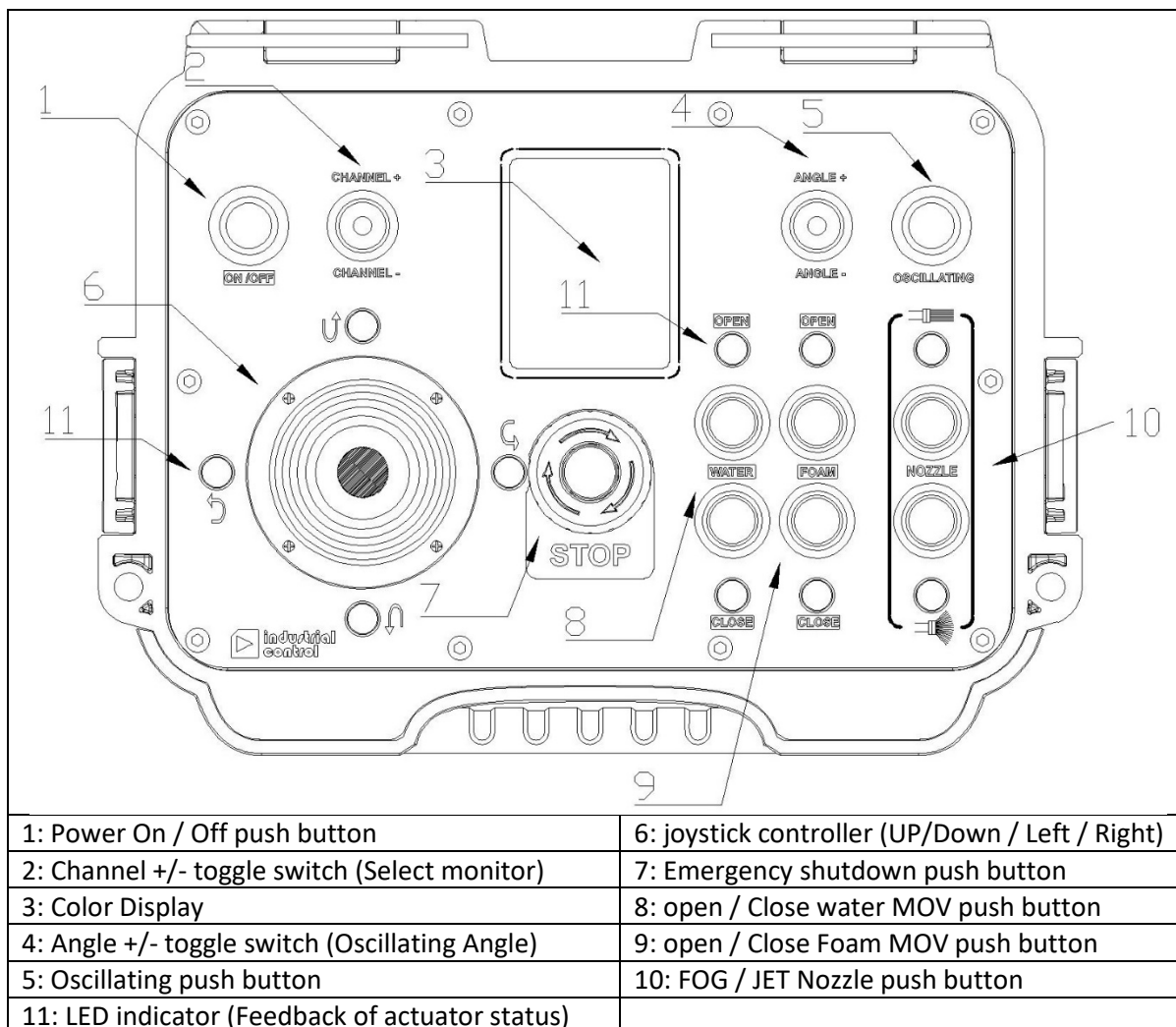
- This radio system should not be used in areas where there is a risk of explosion.
- Only qualified personnel should be permitted to access the transmitter and operate the equipment.
- Always follow operating and maintenance instructions as well as all applicable safety procedures and requirements.
- Do not open the receiver encapsulation unless you are qualified.
- You must satisfy the age requirements in your country for operating the equipment.
- It is strictly prohibited to operate the equipment under the influence of drugs, alcohol and/or medications.
- Always test the transmitter stop button before operating it. Press the stop button then twist and pull it out. This test should be done on each shift, without a load.
- Never use a transmitter if the stop button is mechanically damaged. Contact your supervisor/representative for service immediately.
- Never let the transmitter unattended.

Maintenance

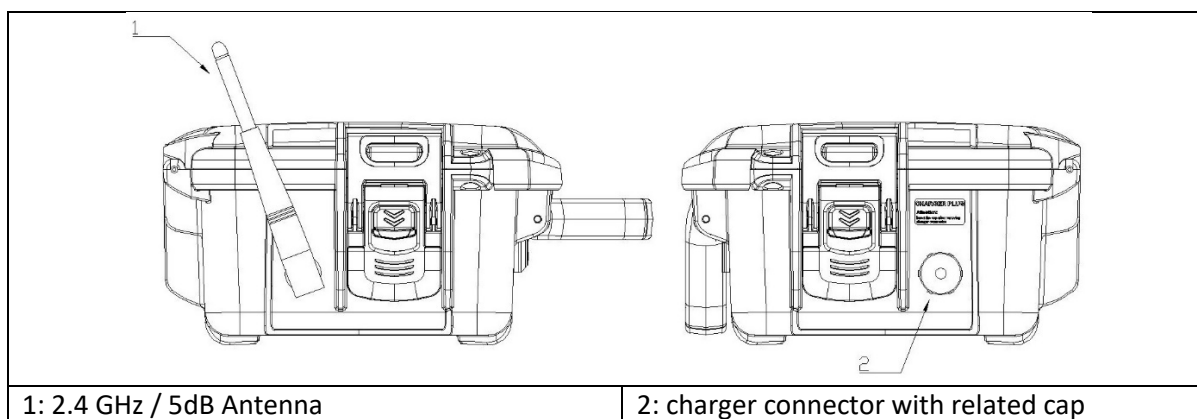
- Keep the safety instructions for future reference. Always download the End user instructions from our website for the latest available version.
- Always contact your representative for service and maintenance work on the product.
- If error messages are shown, it is very important to find out what caused them. Contact your representative for help.
- The functionality of the stop button should be tested at least after every 200 hours' use. Test the stop button by pressing it and pulling it out.
- If the stop button is mechanically damaged, do not use the transmitter. Contact your representative for service immediately.
- Keep the product in a clean, dry place.
- Keep contacts and antennas clean.
- Wipe off dust using a clean, slightly damp cloth.
- Never use cleaning solutions or high-pressure water.
- Check the transmitter housing for damages. If you use the transmitter although the housing is damaged, moisture can cause serious damage to the electronics.
- Before maintenance intervention on any remote controlled equipment:
 - A- always remove all electrical power from the equipment.
 - B- always follow lockout procedures.

CHAPTER 2: PRODUCT DESCRIPTION

TRANSMITTER FRONT

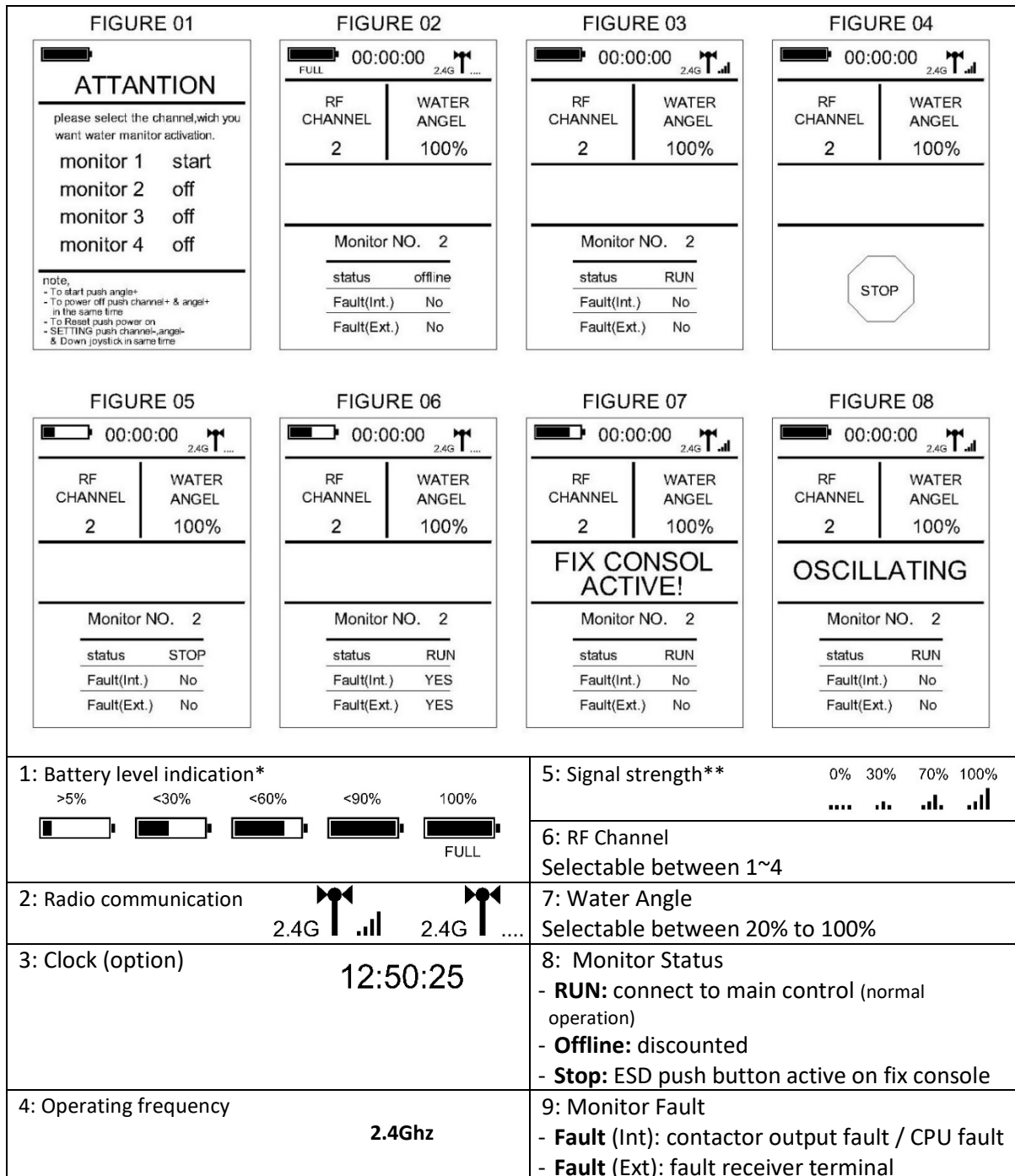


TRANSMITTER SIDE



TRANSMITTER DISPLAY

The transmitter display is intended for receiving and visualizing feedback information from the system as well as for basic configuration. The first row shows factory default information.



*Approximate values with a new, fully charged battery.

** Active in special version

CHAPTER 3: OPERATION

To control a receiver, the transmitter must be registered and logged in to the receiver. If another transmitter is already logged in to the receiver, it must be logged out before a different transmitter can be logged in. If no transmitter is logged in to a receiver, any registered transmitter will automatically log in when sending radio signals to the receiver. The transmitter will remain logged in until it is manually logged out.

NOTES!

- More than one transmitter can be registered in the receiver, but only one transmitter can be logged in at a time. (by factory setting is applicable for transmitter)
- Up to 4 No. MC receiver can be register in one RC transmitter

START THE TRANSMITTER (RC portable remote control)

IMPORTANT! To be able to control a receiver with the transmitter, the transmitter must be registered in the receiver.

If no receiver is registered, the display will show [Offline] after the stop button has been pulled out.

NOTE! By default, all the receivers & transmitter register by factory.

- 1- Make sure that the stop button is pressed.
- 2- Press the [POWER ON] button. transmitter starts the lamp test. after lamp test the selection receivers (monitors) appear on the display [figure No.01].
- 3- Select a receiver (monitor). Move CH +/- toggle switch to step between the registered receivers. Move UP Angle+/- toggle switch to select the requested receiver. Once a receiver has been selected.
- 4- Pull out stop button. the status on the display shows [RUN]. if the transmitter be registered in the receiver & LED indicator status will light if active on main controller.
- 5- Move CH +/- toggle switch up /down to step between the registered receivers. If no receiver is registered, the display will show [STATUS: offline].
- 6- In this case the LED indicator on Fix console [POWER ON] button stays on/off each 1 sec.

If not successfully completed, the display will show [offline & disconnect].

If no button press our joystick move is established within 30 seconds, the transmitter goes to standby.

If stop button push in operation condition, the LED indicator on RC transmitter goes off & STOP logo appear on display [figure No.04].

START THE FIX console (MC receiver located on Fix console)

IMPORTANT! To be able to control a receiver with the transmitter, the transmitter must be registered in the receiver.

NOTE! By default, all the receivers & transmitter register by factory.

- 1- Make sure that the stop button is pressed.
- 2- Press the [POWER ON] button. Fix console starts the lamp test. In this case the LED indicator on Fix console [POWER ON] button stays on.
- 3- Pull out stop button. The monitor ready for operation

In this case the Fix console never goes to standby.

If stop button push in operation condition, the LED indicator on RC transmitter goes off & STOP appear on display [figure No.04].

Disable & Enable RC transmitter when the fix console activation

When the fix console running the LED indicator on Fix console [POWER ON] button stays on. In this case if you pressed [POWER ON] button on transmitter and select relevant monitor on display appear "FIX CONSOLE ACTEVATED" [figure No.07].

To enable RC transmitter, press one time the [POWER ON] button on fix console. In this case the LED indicator on Fix console [POWER ON] button stays on/off each 1 sec.

SWITCH THE TRANSMITTER OFF

NOTE! When the transmitter is switched off, it remains logged in to the receiver(s). To logout, see § "Logout" on page 09

Press the stop button. The display shows [Stopping]. The transmitter switches off. All relays/contactors deactivate inside fix console.

To switch off the fix console with RC transmitter push [CH +] & [Angle +] together. the fix console goes off and the RC transmitter goes to standby mode. press [POWER ON] button to off the remote control.

LOGOUT

A transmitter already logged in to the receiver has to be logged out before any other transmitter can be logged in.

NOTE! If a transmitter has been lost or seriously damaged, use the replace procedure whenever possible. It is possible to log out a transmitter directly from the receiver, however this is not recommended. Contact your representative for assistance.

NOTE! Logout can only be performed when the transmitter is on and a radio link with one or more receivers has been established. The receiver must be powered-up for the logout procedure to be successful.

SWITCH CHANNEL

For radio systems operating on frequency band 2.4GHz, it is possible to switch channels.

To switch frequency bank on radio systems operating on frequency band 2.4Ghz MHz, contact your representative for assistance.

AUTOMATIC SHUTDOWN

Automatic shutdown helps prolong battery capacity by automatically switching the transmitter off after a preset period of inactivity.
the preset period on RC transmitter is 30 Min.

OSCILLATING MODE

Certain fire hazards require the cooling of large hazard areas using water application. Similarly, it may be required to apply foam over a large area in some situations, instead of specific point application. This can be achieved by using oscillating monitors, as the monitor oscillates in the horizontal plane, providing coverage to a large area instead of a specific location. Oscillating Foam/ Water remote Monitors use electro mechanical means to oscillate the monitor in a preset or selectable angle. The power for movement can be an external power source. These are also recommended where unmanned operation is necessary in view of severe fire hazards. it can be turned on remotely by Press the [Oscillating] button on RC remote control or Fix console. On the fix console the monitor Oscillating 100% of calibration angle but on the RC remote control can be select percent of angle by push up / down [Angle +/-] toggle switch.

NOTE!

When the Oscillating mode is activated, no function can be controlled.
For Deactivate oscillating mode push [Oscillating] button.

CHAPTER 4: BATTERY GUIDE

BATTERY PRECAUTIONS

Carefully read through the following safety instructions and warnings before using, charging or disposing of the batteries.

Batteries contain flammable substances such as lithium or other organic solvents, which may result in overheating, rupture or combustion. Failure to read and follow the below instructions may result in fire, personal injury and damage to property if charged or used improperly.



Handling and storage

- Risk of explosion if battery is replaced with a battery of an incorrect type.
- Do not short circuit, disassemble, deform or heat batteries.
- Never attempt to charge a visibly damaged or frozen battery.
- Do not use or charge the battery if it appears to be leaking, deformed or damaged in any way.
- Do not solder directly onto batteries.
- Do not leave the battery in the charger once it is fully charged.
- Store in a cool location. Keep batteries away from direct sunlight, high temperature, and high humidity.
- Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels hot, changes color, changes shape, or appears abnormal in any other way.
- Keep batteries out of reach of small children. Should a child swallow a battery, consult a physician immediately.



Disposal

When discarding batteries, insulate the + and - terminals of batteries with insulating/ masking tape.

- Do not place multiple batteries in the same plastic bag.
- Do not incinerate or dispose of batteries in fire.
- Do not place used batteries in the household waste. Dispose of used batteries in accordance with the applicable regulations and legal requirements.
- Batteries that have been disposed of incorrectly may short circuit, causing them to become hot, burst or ignite.



BATTERY INFORMATION

Type of battery	Replaceable, rechargeable lithium-ion battery
Operating time	Approximately 8 h with continuous usage*
Charger**	charger unit, 8.2~8.4 V DC, (2.5A)
Charging time	Approximately 4 hours with an empty battery
Charging temperature	0...+45 °C / +32...+113 °F

* When the battery capacity reaches approximately 5 %, display [Figure 05].

**Must be purchased separately.

CHARGE THE BATTERY

- 1- When the battery capacity reaches approximately 5 %, display [Figure 05].
- 2- When the battery is fully charged, display [Figure 02].
- 3- Remove the charger connector & insert the charger cap.

CHAPTER 5: GUARANTEE, SERVICE, REPAIRS AND MAINTENANCE

INDUSTRIAL CONTROL products are covered by a guarantee/warranty against material, construction and manufacturing faults. During the guarantee/warranty period, INDUSTRIAL CONTROL may replace the product or faulty parts. Work under guarantee/warranty must be carried out by INDUSTRIAL CONTROL or by an authorized service center specified by INDUSTRIAL CONTROL.

The following are not covered by the guarantee/warranty:

- 1- Faults resulting from normal wear and tear.
- 2- Parts of a consumable nature.
- 3- Products that have been subject to unauthorized modifications.
- 4- Faults resulting from incorrect installation and use.
- 5- Damp and water damage.

Maintenance:

- 1- Repairs and maintenance must be carried out by qualified personnel.
- 2- Only use spare parts from INDUSTRIAL CONTROL.
- 3- Contact your representative for service or any other assistance.
- 4- Keep the product in a clean, dry place.
- 5- Keep contacts and antennas clean.
- 6- Wipe off dust using a slightly damp, clean cloth.

NOTE! Never use cleaning solutions or high-pressure washer.

CHAPTER 6: TECHNECAL DATA

Wireless remote-control size / protection	L:188mm W:124mm H: 97mm IP54(lid open) IP67(Lid close)
Frequency Band / receiver sensitivity	2.4GHz / -98dBm
Area classification	Safe area
Operating Temperature	-10 to 60°C
Transmitter Power	li-polymer 7.4 Vdc battery
Reaction Time	< 0.1 Sec
Wireless remote control Battery life	Min 8 hours in continues operation
Wireless remote-control LCD	Yes
Wireless remote control operation & indicator	Left / Right – Up / Down joystick Water actuator valve open/close Foam actuator valve open / close Oscillating mode pushbutton On/off switch FOG/JET
Distance	Visual distance 500 meter in open area with 5dB antenna
Wireless remote-control accessories	Charger, 2.4Ghz antenna (5dB) & user manual

Joystick directions

RC transmitters have two 2-axis with spring-to-center joysticks. Depending on the model, the joysticks allow for a 2 or 4 graduated steps or steeples control.

FREQUENCY BAND 2.4GHz

For radio systems operating on frequency band 2.4 GHz, the frequency band is divided into 11 channels (channel 1-11). Once the channel has been selected on the transmitter, the receiver will automatically detect and switch to the same channel.

