

Wireless Remote Control and Command - 6 Channels

BZC-N-6CH-RX/BZC-N-6CH-TX

General Description

The system includes a transmitter and a receiver units and it's intended to transfer remote command using wireless communication. The activation of one of the dry contact inputs on the transmitting side will immediately activate the corresponding relay (dry contact output) at the receiver's side. The system allows great flexibility and control capabilities up to 1,000 meters and it's designated for implementations within the fields of industrial control, agriculture or any implementation requiring remote control without the ability to use cables.

Features

- 6 Channels of Remote Control
- Expandable up to 24 Channels by selecting 4 Different frequencies
- Variations of Multi Receivers with One Transmitter
- 4 modes of Operation (optional)
- Advanced noise filtering and RF disturbances mode
- 433 MHz frequency (Free ISM Band)
- IP66 Rate Enclosure
- 6 digital inputs
- 6 relay outputs
- Customization to exact needs

Principle of Operation

The transmitter unit includes 6 input channels which can be connected to any Dry Contact output (such as a relay). Upon receiving the input the Transmitter send Command to the Remote Receiver unit which activates the relevant relay output which then can be connected to any unit having Dry Contact input. Each Transmitter is paired with a Receiver to secure the communication and the system allows the use of Multi Receivers with a Single Transmitter.



Main Specifications - Common specifications

Item	Specification	Remarks
Frequency channels	434.075 / 433.920 / 434.600 / 434.700 MHz	Selected with DIP switches
Communication method	One-way communication	
Modulation	Sub-carrier MSK	
Bit rate	1,200 bps	
Operating temperature range	-20 to +60 °C	
Communication range	1 km	Average for line of sight at 25 °C

Transmitter

Item	Specification	Remarks
Transmission output	10 mW or less	
Operating voltage	12 V	Maximum rating: DC 14.5 V
Current consumption	Transmitting: 70mA (6 inputs on) Standby: 8mA	
Input ports	SW1 to SW6 (6 inputs)	Negative logic (active Low)
Frequency	You can set four different frequency channels via DIP switch	
Antenna	Lead antenna Antenna length: Approx. 175 mm (quarter-wave)	
External dimensions	80 x160 x 56 mm	Not including projecting parts and the antenna

Receiver

Item	Specification	Remarks
Receive sensitivity	-120 dBm (BER = 1×10^{-2})	
Operating voltage	12 V	Maximum rating: DC 14.5 V
Current consumption	Standby (6 outputs off): 27 mA During output (6 outputs on): 140 mA	
Output ports	SW1 to SW6 (6 outputs) 6 Relays 30 VDC/2A, 125VAC/0.6A	
Output control modes	Continuous, (one-shot, toggle, switching are optional)	
Frequency	You can set four different frequency channels via DIP switch	
Antenna	Lead antenna Antenna length: Approx. 175 mm (quarter wave)	
External dimensions	80 x 160 x 56 mm	Not including projecting parts, connectors and antenna