



4 Channel 20Km RF/LoRa/Wi-Fi Receiver

Features

- RF and Wi-Fi RF Receiver
- Smartphone App control (Local only or From anywhere)
- RF Operating Range:
 - Upto 2Km (FM)
 - Upto 20Km (LoRa)
- 4 Relay Changeover Contacts
- Each Output Rated 1KW
- Easy-Connect Push-Terminals
- Outputs can operate in: Momentary, Latch, Timed, Mood
- Wi-Fi Supports 802.11b/g/n
- Power Supply either:
 - 12-32Vdc/ac or 110 or 230Vac
- Signal Strength LED Indication
- Learns up to 128 Transmitters
- Transmits Acknowledge signal back to Transmitter / App
- IP68 Waterproof Enclosure
- Local Output Switch Option
- Snubber Network for each Relay



Intended Use

- Lighting
- Motors, Pumps

Description

Ready to deploy, this Wireless Switching Control Receiver is designed for industrial applications. Housed in a rugged IP68 enclosure, it has 4 changeover relay outputs. IT can be RF Controlled or App controlled. Using its internal AI features it can determine the Dusk/Dawn time at its location and automatically switch event outputs

Modes of Operation

This Receiver can operate from a Radio transmitter, Smartphone App, or self trigger from an internal Preset Event timer.

FSK (FM): Direct Radio Control from any RF Solutions FM RF Transmitter at the same operating frequency.

LoRa (FHSS): Long Range Spread Spectrum. Range is extended upto 20Km (line of sight) and is compatible with all other RF Solutions LoRa Transmitters at the same operating frequency.

Wi-Fi: Connects to Wi-Fi to enable a Smartphone/Device to control the Relay outputs from RloT CONTROL Apps.

Wi-Fi Event: Can be programmed to automatically operate outputs to user preset events

Preset Time Events	Dusk Events	Dawn Events
Time ON to Time OFF	Dusk to Dawn	Dawn to Dusk
On for a set Time	Dusk to OFF Time	Dawn to Off Time
	Dusk Timer	Dawn Timer

Technical specifications

Enclosure Rating: IP68
 Dimensions: 267 x 148 x 78mm (not including antenna)
 Operating Temperature: -10 to +60° Celsius.

Electrical Characteristics	Min	Typical	Max	Dimension
Supply Voltage DC	12		32	Vdc or ac
Supply Voltage AC RioT11-9R4 RioT-8R4, RioT23-9R4		110 230		Vac
Operating Frequency 868MHz Version 918MHz Version		869.500 918.000		MHz
Relay Rating @ 230Vac		5	12	A
Supply Current at Vsupply Quiescent All relays operating*		55 210		mA

Part Numbers

Part No.	Description	Supply Voltage
RloT-RX-8R4	4 Ch Receiver 868MHz and Wi-Fi	230Vac or 12-32V
RloT-RX11-9R4	4 Ch Receiver 918MHz and Wi-Fi	110Vac or 12-32V
RloT-RX23-9R4	4 Ch Receiver 918MHz and Wi-Fi	230Vac or 12-32V
RIOT-RX-4SWT	4 Switch Input (Local Relay Control)	

Product Revision Change History			
Part	ECN / Date	New Revision	Change / Fix
RIOT-RX-8R4	385 23/11/22	2	Firmware update RIOT-RX to check Wi-Fi connection. If connection lost RIOT-RX will auto Wi-Fi reconnect
RIOT-RX-8R4 RIOT-RX11-9R4 RIOT-RX23-9R4	394 27/1/25	3	<ol style="list-style-type: none">1. Terminals now Screwless2. Added connector for Direct Switch O/Ps control3. Added AI Events Function4. Addition of 918MHz versions5. 32bit encryption added in compliance with PSTI

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