CIRCUIT DESIGN, INC.

2.4 GHz Telecommand Unit

KST2.4S, KSR2.4 2.4 GHz

The KST2.4S and KSR2.4 are telecommand units that allow the transmission and reception of upto 6 switching signals in the 2.4 GHz band.

The CRC-16 error detection achieving a Hamming distance of 6 allowing for reliable switching signal transmission. Frequency hopping minimises interference from other radio systems on the 2.4 GHz band. There is no need to manage any channels and multiple operation in the same area is possible. In addition, communication with separate NK-2.4Y telecommand radio module is possible.

Both KST2.4S and KSR2.4 display a LINK LED allowing the user to monitor communication status.

The units have a wide operating voltage range of 6 to 24 V.

Features

- 6 inputs (KST2.4S) / 6 outputs (KSR2.4)
- 3 output operation modes (One-shot, Toggle, Momentary)
- 1:1 communication with KST2.4S and KSR2.4
- Includes a wiring harness to allow easy interface to user equipment.
- FCC and ARIB conformity RF module (NK-2.4Y) included.

Applications

- Remote control applications
- Start / Stop control for motor operated equipment
- Monitor and alarm system with threshold level control for sensors

General

Parameter	Specification
Applicable standard	FCC Part 15 / ARIB STD-T66 (NK-2.4Y included)
Communication method	Half duplex (for ACK purposes only)
Communication range	100 m (Line of sight)
Communication mode	1:1 (Input mode: Output mode)
Frequency	2403 to 2479 MHz (Frequency Hopping)
RF output power	< 1.6 mW
Communication bit rate	250 kbps
Hamming distance	6
Input / Output response	30 to 60 ms
RF connector	RP-SMA (Nominal 50 ohm)
Operating temperature	-20 to +60 C
Supply voltage	6 to 24 V
Dimensions	55 x 45 x 12.5 mm
Weight	26 g

KST2.4S
Input Unit

Parameter	Specification
Number of Input / Output	Input 6, Link output 1
Input circuit	Input ON voltage : DC 6 to 35 V
Supply current	30 mA max

KSR2.4
Output Unit

Parameter	Specification
Number of output	Output 6, Link output 1
Output relay	DC 35 V, 200 mA max
Supply current	80 mA max (All output ON, No load)

Specifications are subject to change without prior notice

CIRCUIT DESIGN, INC.
https://www.circuitdesign.jp
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Sales Division
7557-1 Hotaka, Azumino, Nagano 399-8303, Japan
Tel:+81-(0)263-82-1024 Fax:+81-(0)263-82-1016