DV-SW1-05

IQRF
Wirelessly Controlled Relay

User's Guide

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Description

DV-SW1-05 is a remotely controlled relay device based on the IQRF wireless technology.

It is a generic eqipment with fixed hardware. User specific functionality is completely ensured by the user application written for internal RF transceiver module.

DV-SW1-05 is supplied from mains and has an internal antenna.

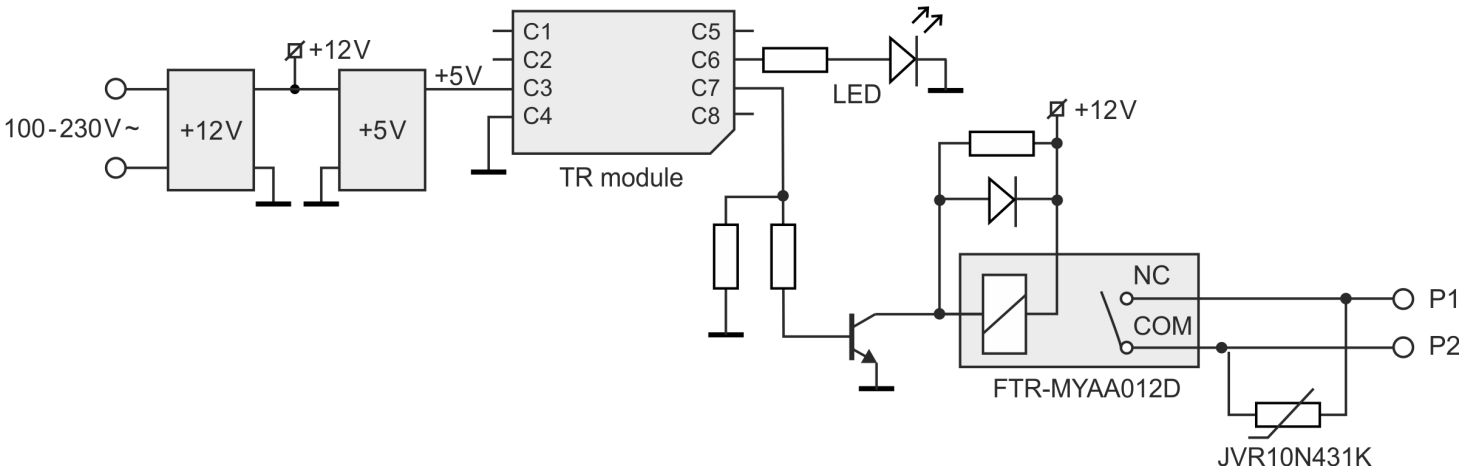
Applications

- Remotely controlled switch
- For arbitrary use
- Can be controlled by IQRF remote controllers

Key features

- Supplied directly from mains
- Fully user programmable
- One single pole 3A contact relay
- Internal antenna
- LED indication

Simplified block schematics



Electrical specifications	*(**typical** values unless otherwise stated)*
Power supply	100 - 240 V AC, 50-60 Hz, 0.2 A max.
Relay switch	230 V AC or 30 V DC, 3 A max.
Frequency band	868 MHz or 916 MHz (SW selectable)
Antenna	PCB built-in the TR module
Temperature range	0 °C to +70 °C
Dimensions	70 x 60 x 25 mm
Weight	46 g

Absolute maximum ratings

Stresses above those values may cause permanent damage to the device. Exposure to maximum rating conditions for extended periods may affect device reliability.

Storage temperature	-50 °C to +100 °C

Hardware

TR module	TR-52BA
Relay	FTR-MY-AA012D (Fujitsu)
Contact protection	Varistor JVR10N431K, clamping voltage 275 V AC or 350 V DC

Operation

- LED is switched on by log. 1 on the C6 pin of TR module.
- Relay contact is closed by log. 1 on the C7 pin of TR module.

Software

The DV-SW1-05 demo example works with examples for remote controllers RC03 or RC04. The DV-SW1-05 receives commands and switches the relay on if the "S1" packet is received and off if the "S2" packet is received. The LED indicates that the relay contact is closed.

Typical application

The TR module should be uploaded out of the DV-SW1-05 case in an external programmer. Wireless upload (RFPGM) is also possible. To enable this, the user must ensure a way to switch the TR in RFPGM mode, e.g. by the `enableRFPGM()` function (the TR is delivered with this option disabled).

Caution

It is not allowed to operate the device with the case opened.

Product information

Pack list

- DV-SW1-05 IQRF wirelessly controlled relay, TR-52BA inside, with DV-SW1-05 demo uploaded
- Flash card Demo program and product documentation

Ordering information

- DV-SW1-05 IQRF wirelessly controlled relay

Document history

- 120511 First release

Sales and Service

Corporate office

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Partners and distribution

Please visit www.iqrf.org/partners

Quality management

ISO 9001 : 2009 certified

Complies with ETSI directives EN 30279 V.1.2.1:99, ETS 30683:97, ETSI EN 301489-1:00, ETSI EN 300220-1:00, ETSI EN 300390-2V.1.1.1:00

Complies with FCC directives FCC CFR, Title 47, Part 15, Section 15.209, FCC CFR, Title 47, Part 15, Section 15.249

Complies with Directive 2002/95/EC (RoHS)

Trademarks

Legal

On-line support: support@iqrf.org

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