

STAD0102
2 CHANNEL RF RECEIVER



2 CHANNEL RF
RECEIVER

STAD010

- Page 2 Features - Applications
- Page 3 Connection diagram - Device operation description
- Page 4 Adjustment procedure - Technical support

For getting the most benefits from this device please
read the user manual carefully.

www.pelekis.tech

Rev. 1.0 Sept 2020



Features:

Working voltage	From 12 to 14VDC
Consumption	0.12W(idle)/2W(all relays ON) at 12VDC input.
Frequency receiver range	ISM band - 380 MHz.
Frequency modulation	ASK
Receiving Sensitivity	-103 dbm. (50 Ohm Antenna Direct Input BER3/1000, 3Kbps).
LOS (Line Of Sight) range	Up to 60m.
Device ID support	Yes. Up to 256 devices.
User output channels	Up to 4.
Outputs	2 Dry contact relays (channels) NO/NC/COM pins. (7A/250VAC per NO contact typical current handling)
Operating temperature	0-60°C.
Operating humidity	10-80% .
PCB dimensions	50x75x20 mm (W x D x H).
Weight (Total)	40 grams.

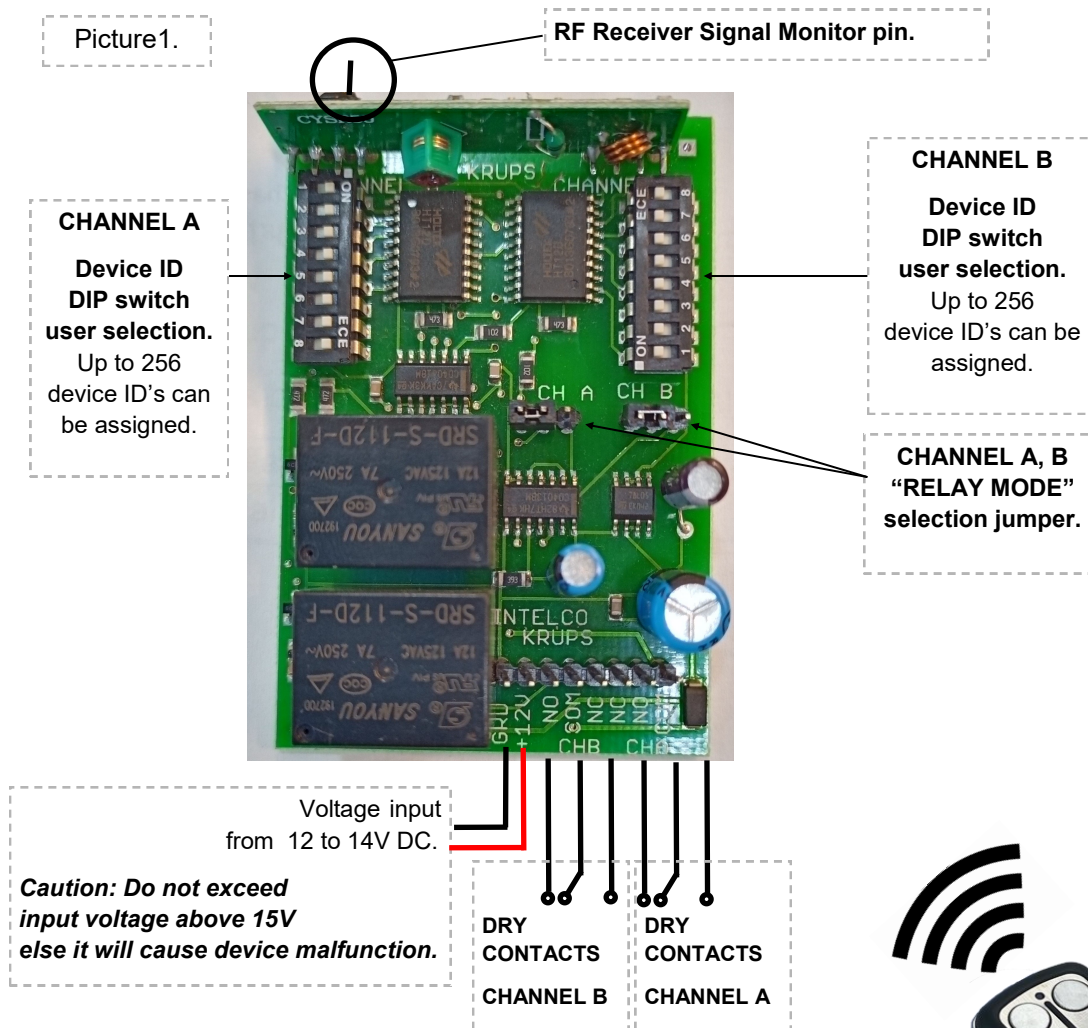
• Applications:

Used to:

- Elevator.
- Personnel access control.
- VIP access control.
- Residential building access control.
- Electronic lock.
- Usage for Professional/Personal automobile and machinery.

- Connection diagram:

A typical system connection can be seen in the diagram below.



- Device operation description

The STAD1002 device is an RF 2 channel receiver using 2 relay with “dry contacts - Normally open” as outputs (channels).

It is tuned to the ISM band at 380 MHz center frequency for RF communication with our provided 2 channel transmitter.

Each STAD1002 device has a DIP switch selection interface (see Picture 1 above), so that a device ID can be assigned accordingly and “listens” to its transmitter only (assigned the same device ID).





- **Adjustment procedure**

The STAD1002 device received signal's data strength can be adjusted for optimal reception using an oscilloscope and some trimming from the transmitter side.

WARNING: Please make sure the DIP switch ID remains the same during the adjustment on the receiver and the transmitter sides.

Adjustment Procedure Steps

1. Put oscilloscope probe ground to the power supply – (GND).
2. Place probe tip hook to the **RF Receiver Signal Monitor pin**. (Pin shown in Picture 1).
3. Put power to the receiver.
4. Press the transmitter button (Any channel).
5. Adjust the trimmer in the transmitter side so that we can measure a maximum amplitude of the received signal about 3.5Vpp.
6. Un-press transmitter button and cycle power supply in receiver.
7. Done

- **Technical support**

For technical support please contact a local office of Pelekis Electronics.

Pelekis Electronics Contact Info :

Tel. :+30 210 23 23 345

Fax :+30 210 23 86 382

email: info@pelekis.tech

Web page : www.pelekis.eu