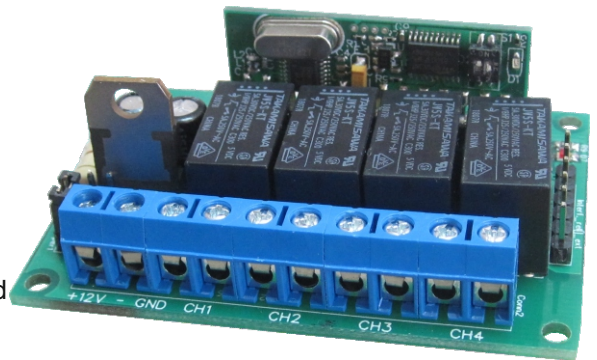


Receiver Unit 433,92MHz 4 channels Relay Output

RC-RHCS-4CHB is a 4-channel receiver unit operating at a frequency of 433.92MHz with ASK / OOK modulation. It is equipped with a superheterodyne radio module. It can be used with all the remote controls that use the RT1530 and EV1527 decoding (Learning Code). Or it can be used with remote controls with Keeloq HCS encoders programmed with RadioControlli code. For more information you can consult the datasheet of the module denominated **RC-RHCS-4CH**.



Power Supply

The board operates at 12 volts. The "Jumper 1" can be used to switch the power supply on and off. As soon as the card is powered up, the green LED "LED Power" lights up.

Compatible remote controls

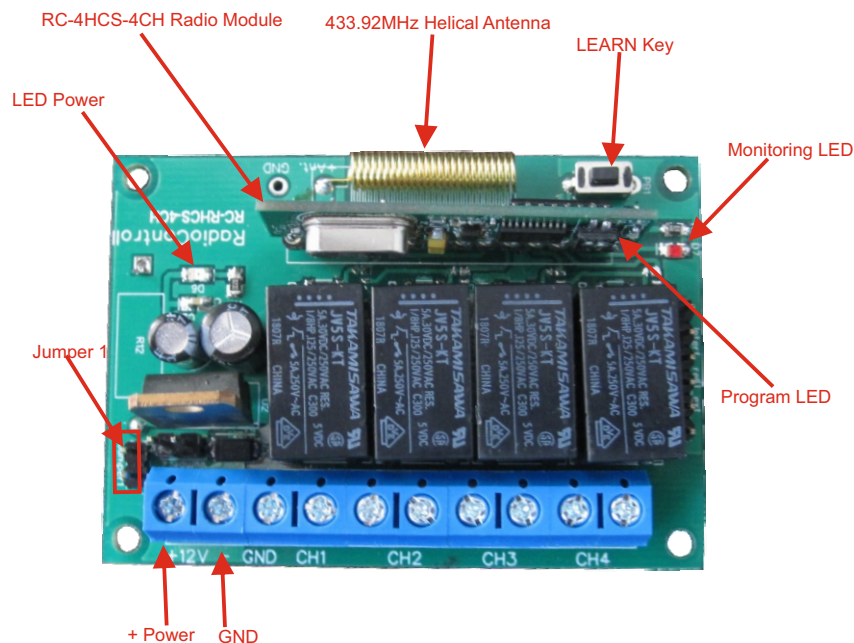
The board can be used with the RCTV-01 series RadioControlli remote controls and with all the remote controls based on the RT1530 and EV1527 encoders. It can also be used with Keeloq HCS remote controls programmed with RadioControlli manufacture code.

Operating mode

The 4 on-board relays can operate monostable or bistable mode, depending on the needs.

Default configuration:

- Remote controls with encoder EV1527
- Monostable mode operation

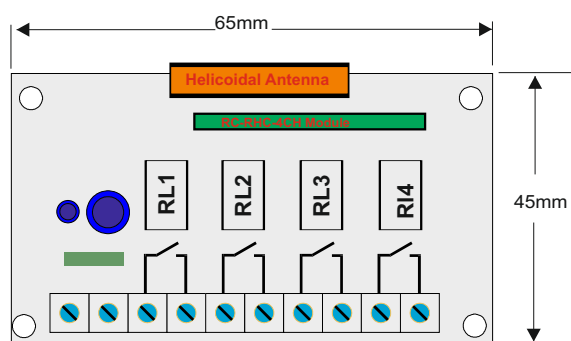


Technical Characteristic

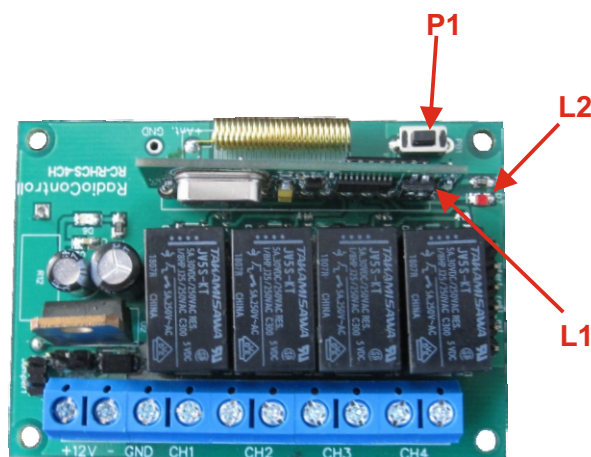
Characteristic		MIN	TYP	MAX	UNIT
V _{cc}	Power Supply	10	12	15	Vdc
I _s	Current Consumption (standby mode)		20		mA
I _s	Current MAX (*)			160	mA
F	Frequency		433.92		MHz
D	Relay Contact Current			5 A / 30 Volt DC	
S	RF Sensitivity		108		dBm
B	3dB Bandwith		600		KHz
TE	Operating Temperature Range	-25		+80	°C

(*) 4 active relays simultaneously

Mechanical Dimensions



Hole size = 3mm
Max height = 21mm



Compatible Remote Controls



RCTV-01

EV1527 Encoder



RCTV-02

HCS Keeloq Encoder

Learning Procedure :

- 1) Push LEARN button about 1 sec.
 - 2) The Red LED 1 keep lighting, press any button of remote for learning
 - 3) Red LED 1 flash once, means learning success
 - 4) Repeat the step for more remotes learning.
 - 5) To end the learning procedure, press the P1 key again.
- It is possible repeat this procedure up to 20 transmitters.

Erasing Memory Procedure :

- 1) Push LEARN button about 3 sec.
- 2) The Red LED flash 3 times, means all learned remotes was deleted.

Operation :

Pressing the button on the remote control, the corresponding relay will be activated. Each activation is monitored with the lighting of the L2 led.

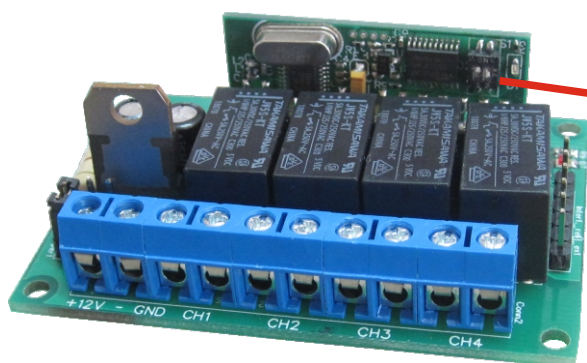
Warnings

In the case of housing the board inside a metal container, it's necessary to mount another type of antenna.

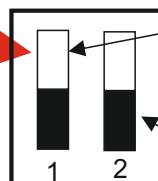
Functionality Configuration

The configuration operations must be carried out when the board is not powered.

It's necessary to operate on the dip-switch on the radio module.



Dip Switch



Dip Switch N.1

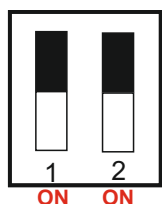
Determines if the system work with RT1530/EV1527 encoding or HCS encoding

Dip Switch N.2

Determines the modality of the work :

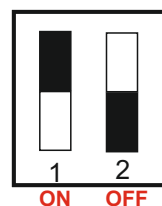
- Monostable mode
- Bistable mode

Possible configurations :



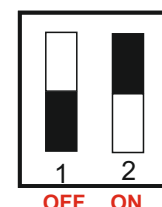
The system work with **RT1530** Encoding and **EV1527** Encoding

The modality is : **BISTABLE** (the receiver activates the output and remains active as long as it receives frames from one of the stored remote controls).



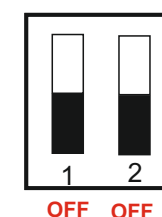
The system work with **RT1530** Encoding and **EV1527** Encoding.

The modality is : **MONOSTABLE** (the receiver change the status of the output at each pressure on the remote controls).



The system work with **HCS300** Encoding

The modality is : **BISTABLE** (the receiver activates the output and remains active as long as it receives frames from one of the stored remote controls).



The system work with **HCS300** Encoding

The modality is : **MONOSTABLE** (the receiver change the status of the output at each pressure on the remote controls).

ZONE	REV	DESCRIPTION	DATE	APPROVED
	01	RC-RHCS-4CH Receiver Board	22/05/2018	