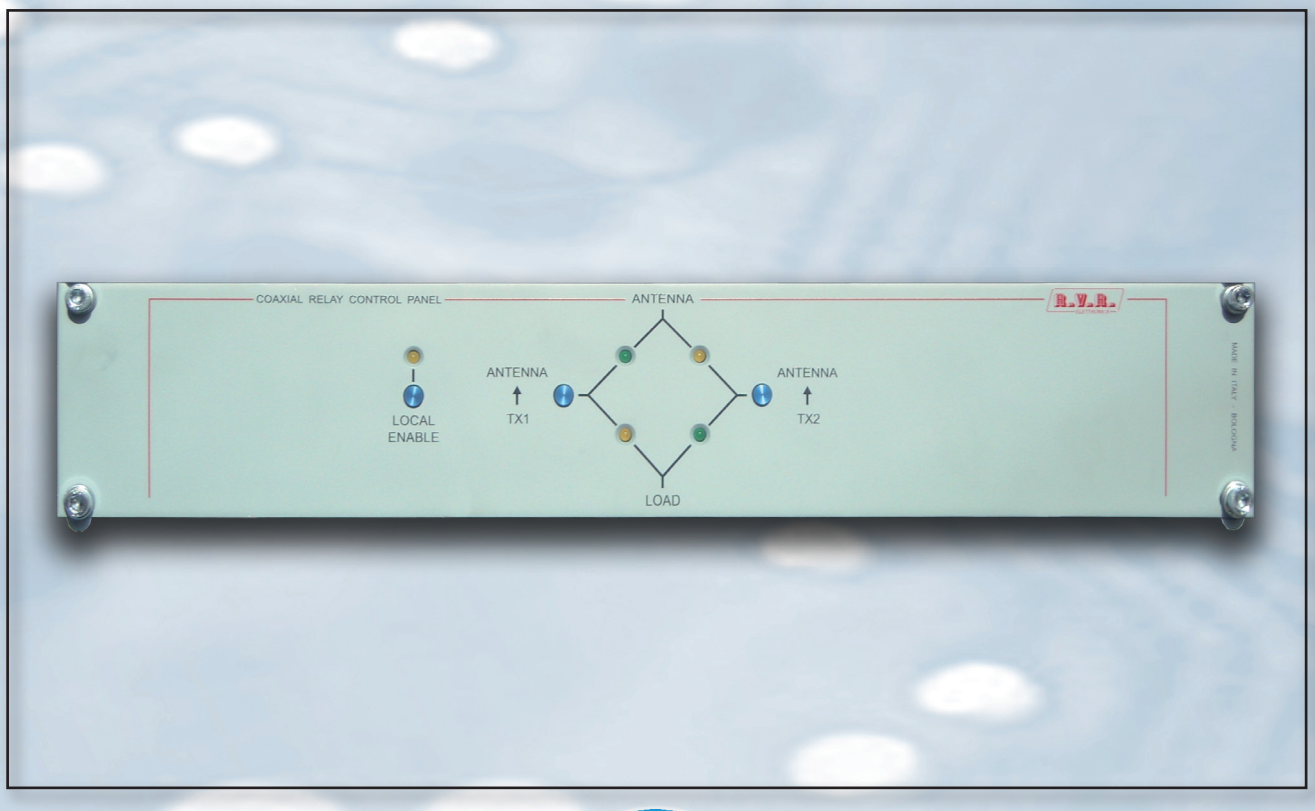
R.V.R. ELETTRONICA

SCMMAN1+1/158

USER MANUAL



BROADCAST EQUIPMENT

Manufactured by R.V.R ELETTRONICA S.p.A. Italy

CE

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Revision History

Date	Version	Reason	Editor
29/10/2012	1.0	First Version	J. H. Berti

SCMMAN1+1/158 - User Manual
Version 1.0

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Declaration of Conformity
Hereby, R.V.R. Elettronica SpA, declares that this FM transmitter is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

CE

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IMPORTANT

The symbol of lightning inside a triangle placed on the product, evidences the operations for which is necessary gave it full attention to avoid risk of electric shocks.

The symbol of exclamation mark inside a triangle placed on the product, informs the user about the presence of instructions inside the manual that accompanies the equipment, important for the efficacy and the maintenance (repairs).

1. Preliminary Instructions

• General Warnings

This equipment should only be operated, installed and maintained by "trained" or "qualified" personnel who are familiar with risks involved in working on electric and electronic circuits. "Trained" means personnel who have technical knowledge of equipment operation and who are responsible for their own safety and that of other unqualified personnel placed under their supervision when working on the equipment.
"Qualified" means personnel who are trained in and experienced with equipment operation and who are responsible for their own safety and that of other unqualified personnel placed under their supervision when working on the equipment.

WARNING: Residual voltage may be present inside the equipment even when the ON/OFF switch is set to Off. Before servicing the equipment, disconnect the power cord or switch off the main power panel and make sure the safety earth connection is connected. Some service situations may require inspecting the equipment with live circuits. Only trained and qualified personnel may work on the equipment live and shall be assisted by a trained person who shall keep ready to disconnect power supply at need.

R.V.R. Elettronica S.p.A. shall not be liable for injury to persons or damage to property resulting from improper use or operation by trained/untrained and qualified/unqualified persons.

WARNING: The equipment is not water resistant. Any water entering the enclosure might impair proper operation. To prevent the risk of electrical shock or fire, do not expose this equipment to rain, dripping or moisture.

Please observe local codes and fire prevention rules when installing and operating this equipment.

WARNING: This equipment contains exposed live parts involving an electrical shock hazard. Always disconnect power supply before removing any covers or other parts of the equipment.

Ventilation slits and holes are provided to ensure reliable operation and prevent overheating; do not obstruct or cover these slits. Do not obstruct the ventilation slits under any circumstances. The product must not be incorporated in a rack unless adequate ventilation is provided or the manufacturer's instructions are followed closely.

WARNING: This equipment can radiate radiofrequency energy and, if not installed in compliance with manual instructions and applicable regulations, may cause interference with radio communications.

WARNING: This equipment is fitted with earth connections both in the power cord and for the chassis. Make sure both are properly connected.

Operation of this equipment in a residential area may cause radio interference, in which case the user may be required to take adequate measures.

The specifications and data contained herein are provided for information only and are subject to changes without prior notice. **R.V.R. Elettronica S.p.A.** disclaims all warranties, express or implied.While R.V.R. Elettronica S.p.A. attempts to provide accurate information, it cannot accept responsibility or liability for any errors or inaccuracies in this manual, including the products and the software described herein. **R.V.R. Elettronica S.p.A.** reserves the right to make changes to equipment design and/or specifications and to this manual at any time without prior notice.

• Notice concerning product intended purpose and use limitations.

This product is a radio transmitter suitable for frequency-modulation audio radio broadcasting. Its operating frequencies are not harmonised in designated user countries. Before operating this equipment, user must obtain a licence to use radio spectrum from the competent authority in the designated user country. Operating frequency, transmitter power and other characteristics of the transmission system are subject to restrictions as specified in the licence.

2. Warranty

La **R.V.R. Elettronica S.p.A.** warrants this product to be free from defects in workmanship and its proper operation subject to the limitations set forth in the supplied Terms and Conditions. Please read the Terms and Conditions carefully, as purchase of the product or acceptance of the order acknowledgement imply acceptance of the Terms and Conditions. For the latest updated terms and conditions, please visit our web site at WWW.RVR.IT. The web site may be modified, removed or updated for any reason whatsoever without prior notice. The warranty will become null and void in the event the product enclosure is opened, the product is physically damaged, is repaired by unauthorised persons or is used for purposes other than its intended use, as well as in the event of improper use, unauthorised changes or neglect.
In the event a defect is found, follow this procedure:

1 Contact the seller or distributor who sold the equipment; provide a description of the problem or malfunction for the event a quick fix is available.

Sellers and Distributors can provide the necessary information to troubleshoot the most frequently encountered problems. Normally, Sellers and Distributors can offer a faster repair service than the Manufacturer would. Please note that Sellers can pinpoint problems due to wrong installation.

2 If your Seller cannot help you, contact **R.V.R. Elettronica S.p.A.** and describe the problem; if our staff deems it appropriate, you will receive an authorisation to return the equipment along with suitable instructions;

3 When you have received the authorisation, you may return the unit. Pack the unit carefully before shipment; use the original packaging whenever possible and seal the package perfectly. The customer bears all risks of loss (i.e., R.V.R. shall not be liable for loss or damage) until the package reaches the R.V.R. factory. For this reason, we recommend insuring the goods for their full value. Returns must be sent on a C.I.F. basis (PREPAID) to the address stated on the authorisation as specified by the R.V.R. Service Manager.

Units returned without a return authorisation may be rejected and sent back to the sender.

4 Be sure to include a detailed report mentioning all problems you have found and copy of your original invoice (to show when the warranty period began) with the shipment.

Please send spare and warranty replacement parts orders to the address provided below. Make sure to specify equipment model and serial number, as well as part description and quantity.

R.V.R. Elettronica S.p.A.
Via del Fonditore, 2/2c
40138 BOLOGNA ITALY
Tel. +39 051 6010506

3. First Aid

All personnel engaged in equipment installation, operation and maintenance must be familiar with first aid procedures and routines.

3.1 Electric shock treatment

3.1.1 If the victim is unconscious

Follow the first aid procedures outlined below.

- Lay the victim down on his/her back on a firm surface.
- the neck and tilt the head backwards to free the airway system (**Figure 1**).

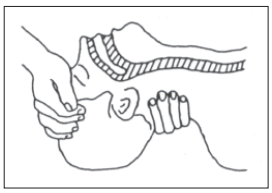


Figure 1

- If needed, open the victim's mouth and check for breathing.
- If there is no breathing, start artificial respiration without delay (**Figure 2**) as follows: tilt the head backwards, pinch the nostrils, seal your mouth around the victim's mouth and give four fast rescue breaths.

Figure 2

- Check for heartbeat (**Figure 3**); if there is no heartbeat, begin chest compressions immediately (**Figure 4**) placing your hands in the centre of the victim's chest (**Figure 5**).

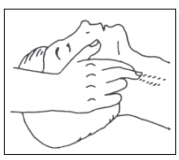


Figure 3

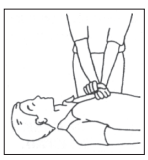


Figure 4

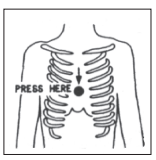


Figure 5

- One rescuer: give 2 quick rescue breaths after each 15 compressions.
- Two rescuers: one rescue breath after each 5 compressions.
- Do not stop chest compressions while giving artificial breathing.
- Call for medical help as soon as possible.

3.1.2 If the victim is conscious

- Cover victim with a blanket.
- Try to reassure the victim.
- Loosen the victim's clothing and have him/her lie down.
- Call for medical help as soon as possible.

3.2 Treatment of electric burns

3.2.1 Large burns and broken skin

- Cover affected area with a clean cloth or linen.
- Do not break any blisters that have formed; remove any clothing or fabric that is stuck to the skin; apply adequate ointment.
- Administer adequate treatment for the type of accident.
- Get the victim to a hospital as quickly as possible.
- Elevate arms and legs if injured.

If medical help is not available within an hour, the victim is conscious and is not retching, administer a solution of table salt and baking soda (one teaspoon of table salt to half teaspoon of baking soda every 250 ml of water).

Have the victim slowly drink half a glass of solution for four times during a period of 15 minutes.

Stop at the first sign of retching.

Do not administer alcoholic beverages.

3.2.2 Minor burns

- Apply cold (not ice cold) strips of gauze or dress wound with clean cloth.
- Do not break any blisters that have formed; remove any clothing or fabric that is stuck to the skin; apply adequate ointment.
- If needed, have the victim change into clean, dry clothing.
- Administer adequate treatment for the type of accident.
- Get the victim to a hospital as quickly as possible.
- Elevate arms and legs if injured.

4. General Description

The **SCMMAN1+1/158** is a **coaxial relay control panel** manufactured by **R.V.R. Elettronica SpA**.

The **SCMMAN1+1/158** is designed to being contained into a 19” rack box of 2HE.

4.1 Unpacking

The package contains:

- 1 **SCMMAN1+1/158**
- 1 User Manual

The following accessories are also available from Your R.V.R. Dealer:

- **Accessories, spare parts and cables**

4.2 Features

The **SCMMAN1+1/158** is an user interface that allows to select which transmitter (transmitter 1 or transmitter 2) is connected to antenna or to the dummy load.

4.3 Frontal Panel Description

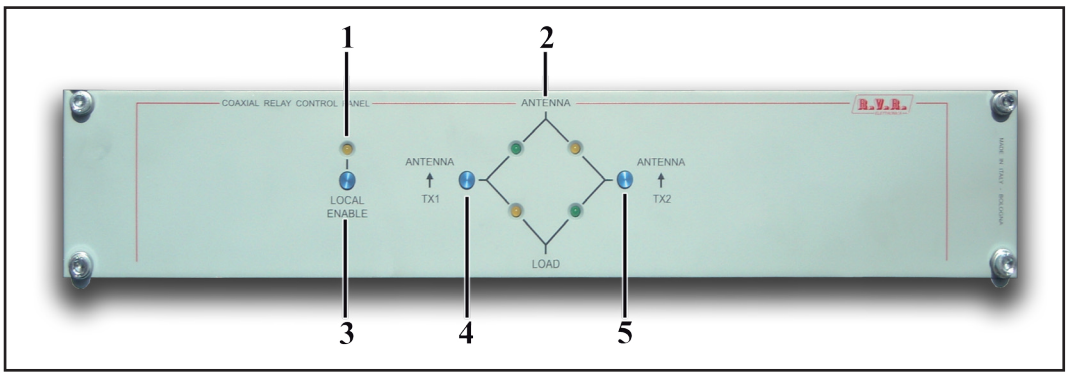


Figure 4.1

[1]	LOCAL	Yellow LED - Turns on when the LOCAL ENABLE button is pressed.
[2]	SYNOPTIC	Yellow and Green LED - Turns on to identify the connection of transmitter 1 and 2 with respect to antenna and load.
[3]	LOCAL ENABLE	Hold the following button, and press one of the others button, to perform a manual switching between the transmission on antenna, or to load, of transmitter 1 or transmitter 2.
[4]	TX1 --> ANTENNA	Holding “LOCAL ENABLE” button, press this button to switching the transmission of transmitter 1 on antenna and transmitter 2 on load.
[5]	TX2 --> ANTENNA	Holding “LOCAL ENABLE” button, press this button to switching the transmission of transmitter 2 on antenna and transmitter 1 on load.

4.4 Rear Panel Description

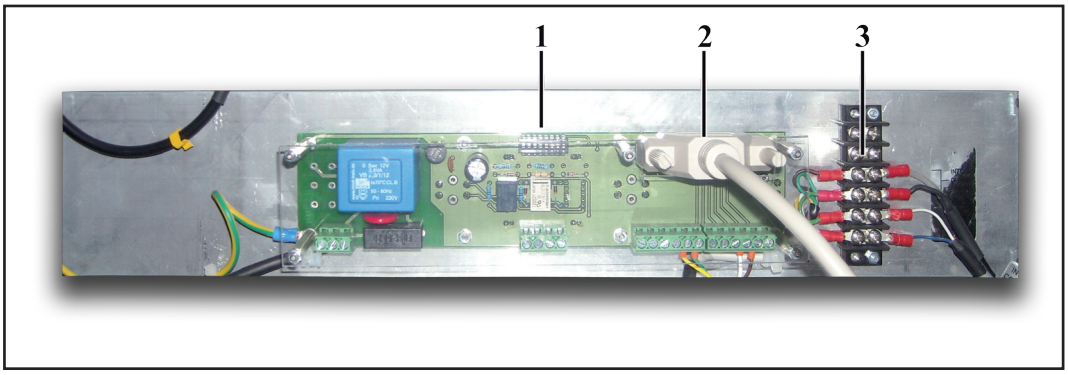


Figure 4.2

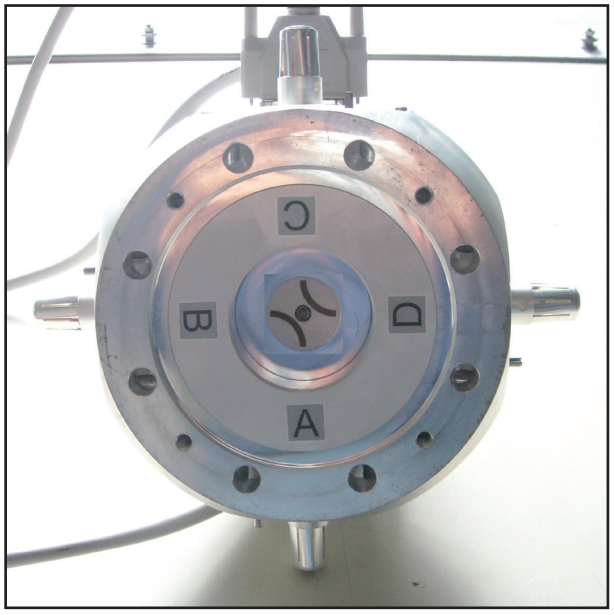
[1] DIP-SWITCH Dip-switch to change the working mode of coaxial relay.
[2] COAXIAL RELAY COMMAND
DB25 Male, coaxial relay command connector.
[3] TERMINAL BOARD Pinouts for the connection of interlock signals related to coaxial relay and dummy load.

4.5 Operation

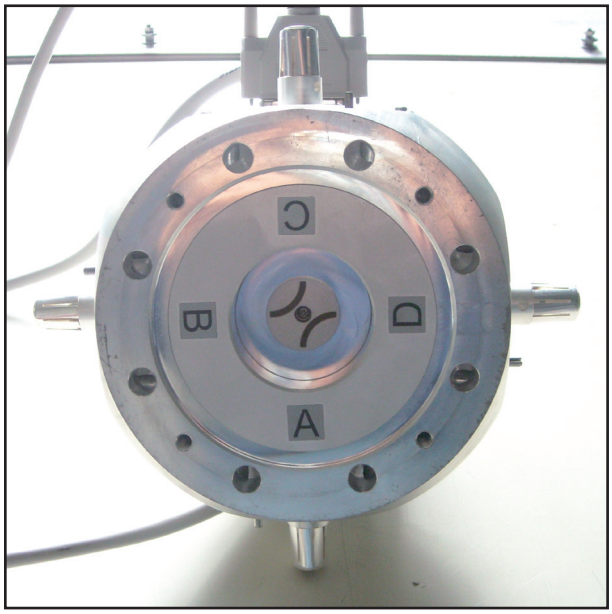
Thanks to **SCMMAN1+1/158** you can perform a manual switching between the transmission on antenna, or to load, of transmitter 1 or transmitter 2 by holding the LOCAL ENABLE button and meanwhile pressing TX1 --> ANTENNA or TX2 --> ANTENNA button.

The **SCMMAN1+1/158** can control an external coaxial relay that can assume the following positions:

- Coaxial relay, A-B position;

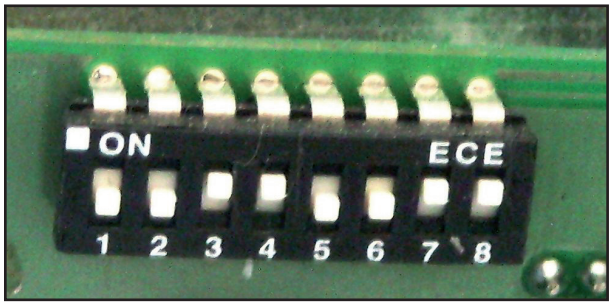


- Coaxial relay, A-D position;

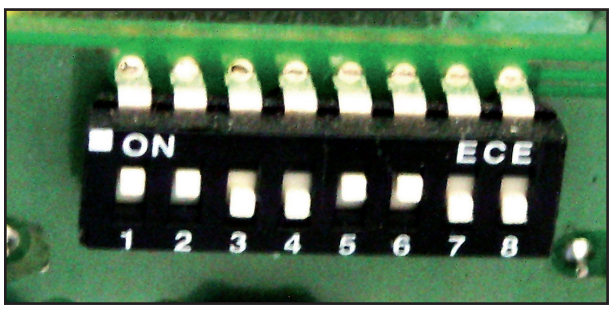


In order to change the working mode of coaxial relay, it is possible to operate directly on the dip-switch place in the rear of **SCMMAN1+1/158**; keeping in mind that the port A of coaxial relay is ever the output of RF signal:

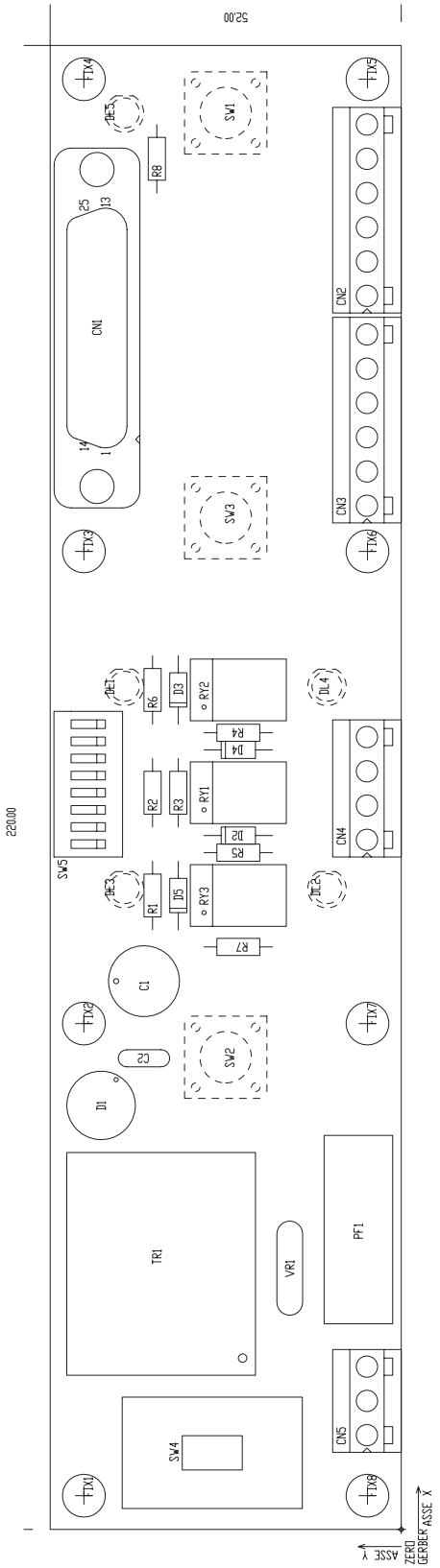
- Dip-switch **1-2-5-6 OFF** and **3-4-7-8 ON**; enabled A-B position, that connected port B to antenna and port D to dummy load;

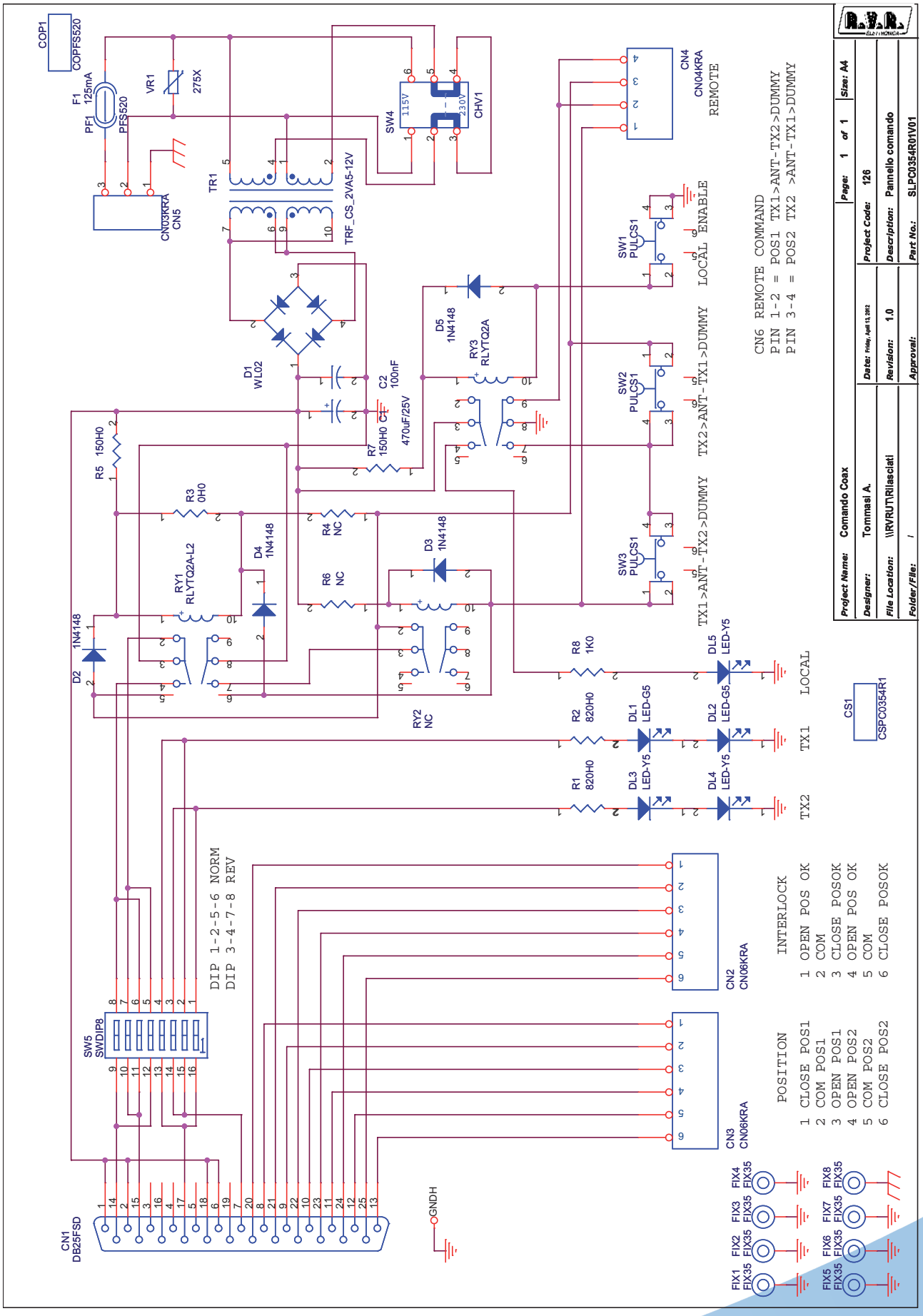


- Dip-switch **1-2-5-6 ON** and **3-4-7-8 OFF**; enabled A-D position, that connected port D to antenna and port B to dummy load;



4.6 Schematics




CN6 REMOTE COMMAND
PIN 1-2 = POS1 TX1>ANT-TX2>DUMMY
PIN 3-4 = POS2 TX2 >ANT-TX1>DUMMY
TX1>ANT-TX2>DUMMY
TX2>ANT-TX1>DUMMY
LOCAL ENABLE
REMOTE
DIP 1-2-5-6 NORM
DIP 3-4-7-8 REV
POSITION
1 CLOSE POS1
2 COM POS1
3 OPEN POS1
4 OPEN POS2
5 COM POS2
6 CLOSE POS2
INTERLOCK
1 OPEN POS OK
2 COM
3 CLOSE POSOK
4 OPEN POS OK
5 COM
6 CLOSE POSOK
TX2
TX1
LOCAL
Project Name: Comando Coax
Designer: Tommasi A.
File Location: \\RVR\TR\Rilasciati
Folder/File: /
Page: 1 of 1
Date: Friday, April 13, 2012
Revision: 1.0
Approval:
Project Code: 126
Description: Pannello comando
Part No.: SLPC0354R01V01
Size: A4

Pannello comando Relay Revised: Friday, April 13, 2012
SLPC0354R01V01 Revision: 1.0
A. Tommasi
Comando Relay Coax
126

Item	Quantity	Reference	Part	Description	Code	
1	1	CN1	DB25FSD	Connettore DB25 femm. cs	CNTDB25FCSD	
2	2	CN2,CN3	CN06KRA	Conn. tipo KRA a 6 poli	MORSKRA6	
3	1	CN4	CN04KRA	Conn. tipo KRA a 4 poli	MORSKRA4	
4	1	CN5	CN03KRA	Conn. tipo KRA a 3 poli	MORSKRA3	
5	1	CS1	CSPC0354R1	Circuito stampato	CSPC0354R1	
6	1	C1	470uF/35V	Cond. Elettr. Dia 10 P5.08	CEA477MC350V	
7	1	C2	100nF	Cond. ceramico p 5mm	CKM104KC600P	
8	2	DL1,DL2	LED-G5	LED Verde dia. 5mm	LEDV05	
9	3	DL3,DL4,DL5	LED-Y5	LED Giallo dia. 5mm	LEDG05	
10	1	D1	WL02	Ponte diodi tondi W	PNRWL02	
11	4	D2,D3,D4,D5	1N4148	Diodo in vetro DO35	DIS1N4148	
12	8	FIX1,FIX2,FIX3,FIX4,FIX5, FIX6,FIX7,FIX8	FIX35	Foro fissaggio 3.5mm		
13	1	PF1	PFS520	Portafusibile 5x20	PFS5X20CS	
14	1	RY1	RLYTQ2A-L2	Rele' TQ2	RLS2V12V05AM	
15	1	RY2	NC	Rele' TQ2		
16	1	RY3	RLYTQ2A	Rele' TQ2	RLD2V12V05AM	
17	2	R1,R2	820H0	Res. 1/4W 1%	RSM1/4F0820H	
18	1	R3	0H0	Res. 1/4W 1%	RSC1/4J0000H	
19	2	R4,R6	NC	Res. 1/4W 1%		
20	2	R5,R7	150H0	Res. 1/4W 1%	RSM1/4F0150H	
21	1	R8	1K0	Res. 1/4W 1%	RSM1/4F0001K	
22	3	SW1,SW2,SW3	PULCS1	Pulsante cs	PLC1V1M000M	
23	1	SW4	NC	Cambio tens. CS C&K MS		
24	1	SW5	SWDIP8	Dip switch 8 vie	DSW8VO	
25	1	TR1	TRF_CS_2VA8-12V	Trasf. da CS 1,5 VA	TRFPCBVB2,8-1-12	RS 732-0389
26	1	VR1	275X	Varistor dia. 14mm	MOV250V20	
27	1	COP1	COPFS520	Coperchio portafusibile 5x20	COPPFS5X20CS	
28	1	F1	125mA	Fusibile ritardato 125mA	FUS5X20DL,125	RS 541-2919

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