

## Automatic Changeover Unit (1+1)



&gt; SCS 500

## Description

The SCS 500 performs the switching between two transmitters or transposers in a 1+1 Driver configuration and in a 1+1 with reserve configuration.

SCS 500 change-over detects the presence of the IF or RF signal and in case of absence of the primary signal to switch on the spare one and vice-versa.

The SCS 500 used in transmitter applications switches the Audio/Video signals and IF/RF from one driver to the other one. Some of them, as indicated in the previous table, use an internal coaxial bi-stable and motorized relays (SPINNER or RADIALL) depending on the output power. Some others drive an external high power coaxial, bi-stable and motorized Relays.

The SCS 500 used in transposer applications switches the RF signal from one driver to the other one. Also in this case, some of them, as indicated in the previous table, use an internal coaxial bi-stable and motorized relays (SPINNER or RADIALL) depending on the output power. Some others drive an external high power coaxial, bi-stable and motorized Relays. The SCS 500 front panel of the transmitter application have two audio inputs: 1 main and 1 spare; four video inputs (video + SDI or ASI): main and spare; one audio output; two video outputs (video + SDI or ASI). Few configurations have a graphic panel (with led) that show the relays status.

The SCS 500 front panel of the transposer application have two RF (N connector) output to the drivers and one input for the signal coming from the antenna. Few configurations have a graphic panel (with led) that show the relays status.

If SCS 500 unit is used with Screen Service Series transmitters and transposers a direct interconnection is made by means of DB25 connectors on the back panels of the equipment. This connection carries alarm and control signals and allows "safety" function to switch-down the transmitters during the switching. If the unit is used with equipment of different brands it is possible to switch-down the driver or the modulator using the two SMA connector located on the rear panel.

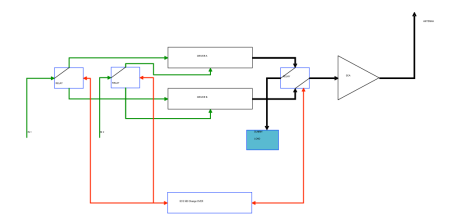
The SCS 500 is designed with a modular approach in a 19" , 2U standard RACK and the modularity refers to the plug-in units equipped with coaxial relays both for TRANSPOSERS and TRANSMITTERS.

The SCS 500 is equipped with two power supplies and a battery. So it can manages the alarms (via SNMP) also in case of failures.

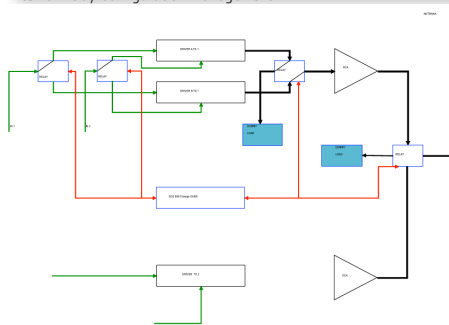
## Main Features

The SCS 500 Change Over Unit is designed especially for TV Broadcasting Transmitters, Transposers and Repeaters, operating in 1+1 arrangements. Based on a modular concept, the SCS 500 is capable to handle multi standard both in Digital and Analog. The equipment is based on high performance relays architecture to have a spare function to prevent a total system collapse. This security risk management function will help to eliminate single point failure conditions, thus preventing possible disastrous events granting an higher system MTBF.

- Double power supply;
- Single pole, double trough (double depending on configuration);
- Double pole, double trough;
- Transmitter and Transposer managing capabilities;
- Local and Remote Full Control;
- Analog and Digital management



Internal Relay Configuration Management

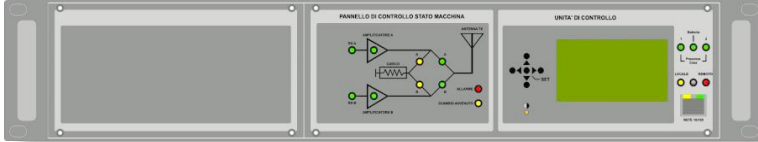


Internal + external Relay Configuration Management

## Models and Options

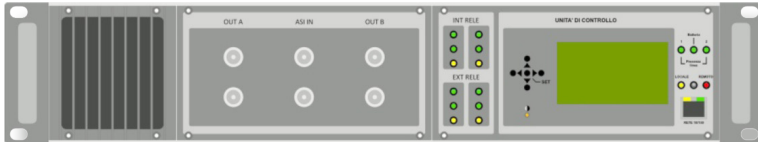
### SCS 500

Automatic changeover for transmitter applications with an integrated 1 ways relays. (on request A/V, ASI switching)



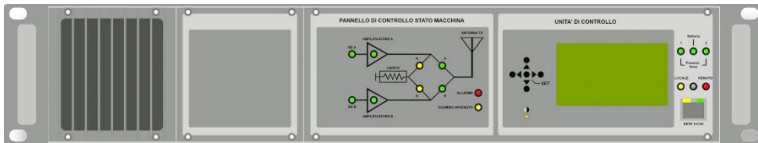
### SCS 500M

Automatic changeover for transmitter applications with an integrated 2 ways relays, dummy load and fan.



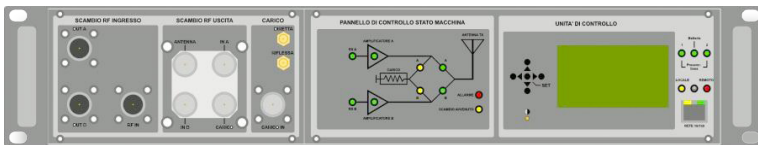
### SCS 500RO (X)

Automatic changeover with graphic panel for transmitter applications suitable only for external relays use. Support all kind relays (input solenoid drive, motor drive) Interlock.



### SCS 500RF

Automatic changeover with graphic panel for transposer applications with an integrated 2 ways relays . Like M model with Input/ Output RF Front side



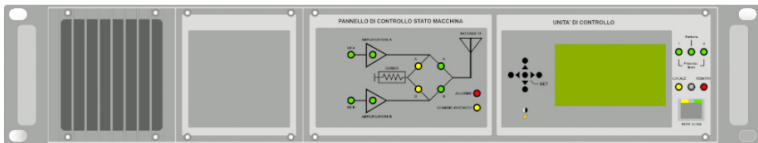
### SCS 510MS (500MS)

Automatic changeover with graphic panel for transmitter applications with an integrated 2 ways relays, dummy load and fan and input RF splitter.



### SCS 500MR

Automatic changeover with graphic panel for transmitter applications with an integrated 2 ways relays, dummy load and fan.



**SCS 500NM:** Automatic changeover for transmitter applications suitable only for external relays use. Support all kind relays (input solenoid drive, motor drive) Interlock.



**SCS 50012VB:** Automatic changeover for transmitter applications with an integrated 1 ways relays. Power supply 12V



TECHNICAL SPECIFICATIONS	
System Capability	1+1 MAIN & RESERVE
Control Remote	USB front panel
	RS 232 rear panel
	RS 485 rear panel
	GbE front panel
	Parallel rear panel
Control local	Push button front panel
Management	Automatic / Manual
Visualization Status Remote	Applet java
Visualization Status Local	Display / led
Main Supply	AC, double 90 to 264 VAC - DC, single 24 VDC
Power Consumption	< 10 W
Dimension	19", 2U RACK STANDARD, 450 mm D
Weight	5 Kg
Handling RF Power TX	65 W RMS (higher with external relays)
Handling RF Power RX	1 W RMS
Connector TX OUT	N FEMALE
Connector RX IN	N FEMALE (RT version)
Connector ASI IN	BNC FEMALE (TX version)
Impedance	50 Ohm (RF) - 75 Ohm (ASI) - 75 Ohm (Analog Video)
Return Loss	<1.2 :1