

---

## CHANGEOVER SYSTEM

### General description

The automatic N+1 changeover system RVR is composed of three devices:

- Changeover unit (SCM4LCD)
- Interconnections Box (IB)
- Stereo audio switch (SCM-AUD)

It's aimed to be incorporated in a transmission system including N (maximum 4) main transmitters and a reserve transmitter, plus the coaxial relays to perform the permutation between the transmitters and the dummy load to test the transmitter in case of fault (see Fig. 2).

The heart of the system is the SCM4LCD, while the SCM-AUD and IB are just actuators of its commands. The functions performed by the SCM4LCD are:

- Acquisition of the transmitter's status
- Control of the transmitters
- Control of the coaxial relays
- Control of the audio switch
- Automatic changeover policy implementation
- Visualization of the status of the relevant components of the system
- Setting of the parameters related to the automatic changeover policy

## Operation

Trough the SCM4LCD it is possible to set the transmitter in "Automatic" or "Manual" mode: in the first case the transmitter is managed by the changeover unit, in the second is ignored.

The control software of the SCM4LCD continuously check the operating conditions of the transmitters of the system. The current status of the system is a consequence of the configuration, the history of previous events, and the current signals from the transmitters.

A fault event detected by the SCM4LCD will thus be treated differently depending on the status of the system.

The basic automatic routine performed by the system is to cyclically check the RF Power of the transmitters and to substitute a faulty principal transmitter using the reserve transmitter. The overall flow-chart of the automatism is given in figure 1.

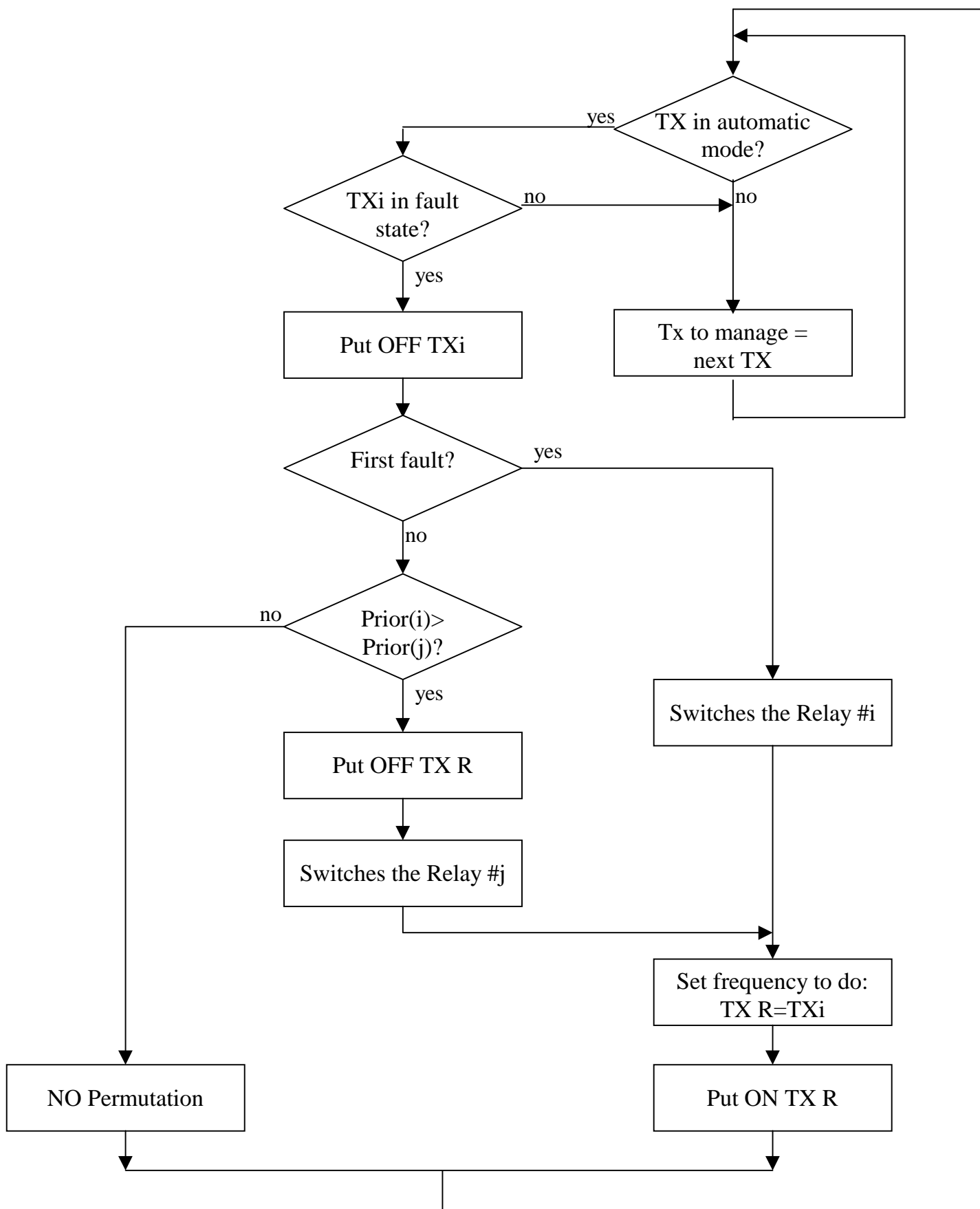


Figure 1: Automatism routine

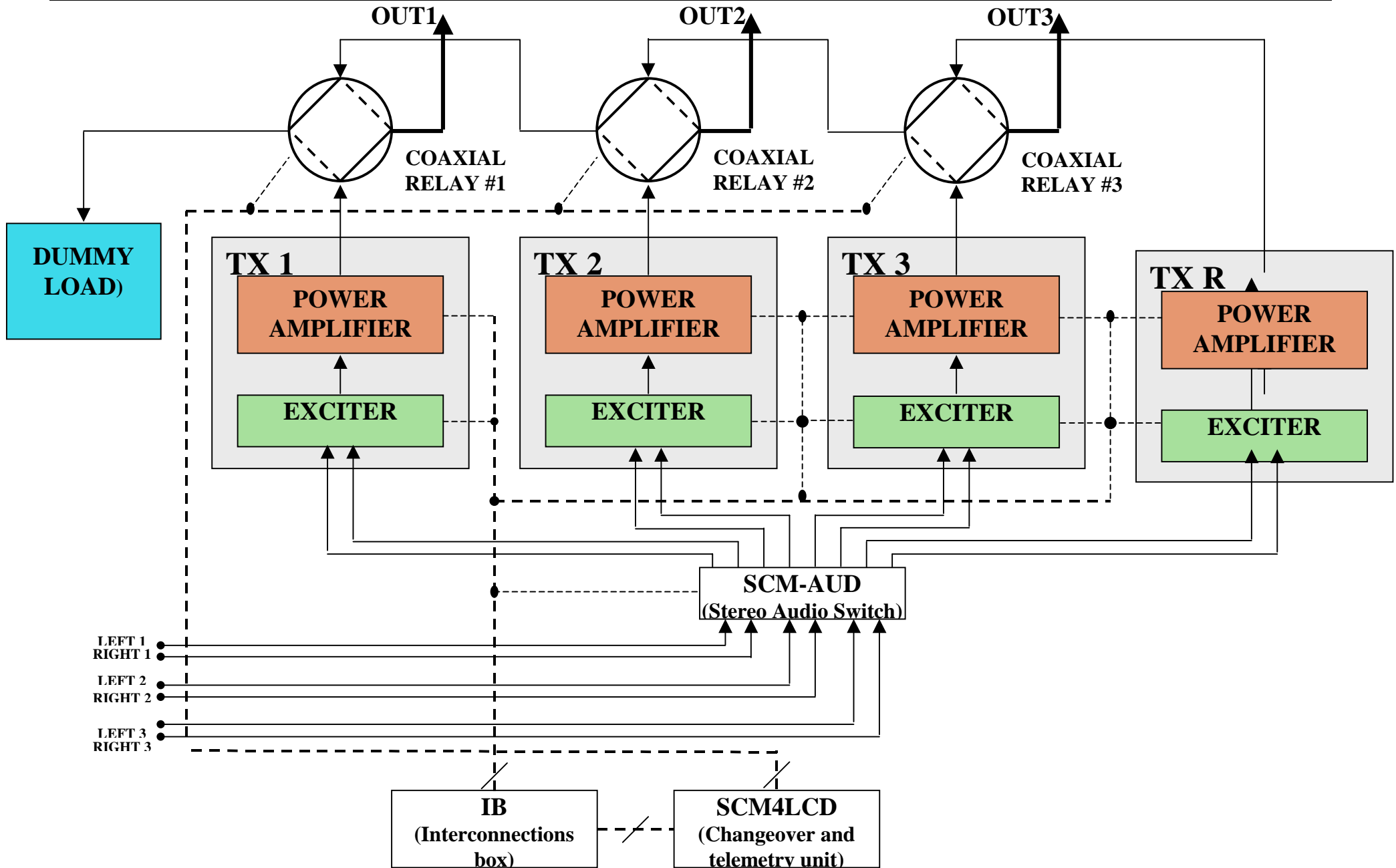
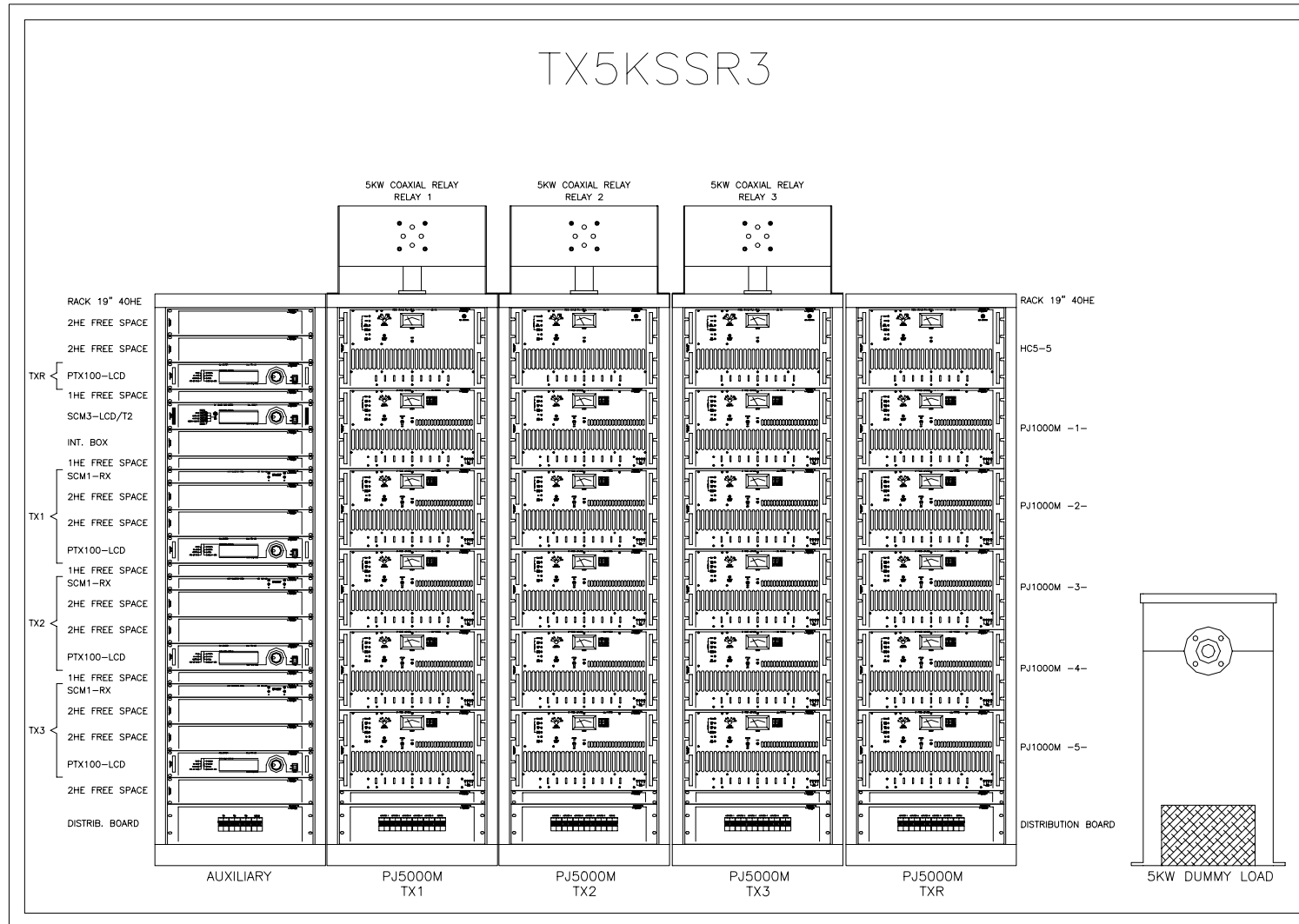


Figure 2: Block diagram of "3+1" stereo transmitter system

## EXAMPLE OF 5 KW "3+1" STEREO TRANSMITTER SYSTEM (Mod. TX5KSSR3)



REFERENCE	Q.TY	DIAM. 42mm - LENGTH	DIAM. 17mm - LENGTH
1	1	339	324
2	1	498	474
3	13	38	///
4	3	131	125
5	3	85	60
6	2	330	305
7	1	864	840
8	1	1460	1442

REFERENCE	Q.TY	DESCRIPTION
9	15	1-5/8" angle adapter for rigid line
10	20	Flange 1-5/8" + Inner
11	20	Clamp for flange

