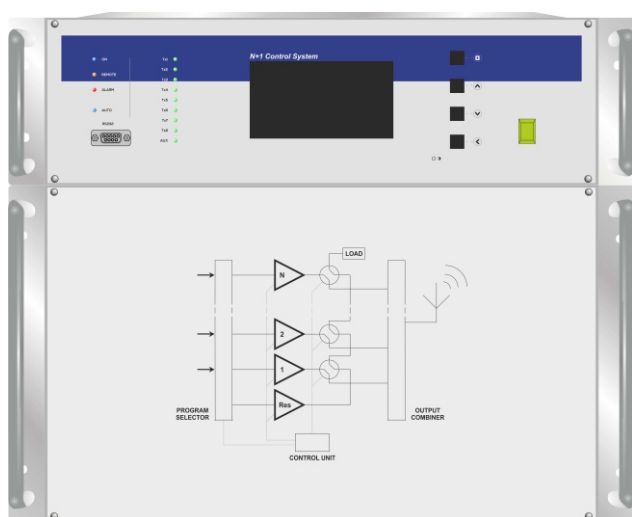




N+1 CONTROL SYSTEM

Changeover



The N+1 Control System acts as a N+1 passive reserve controller. Monitoring continuously the correct operating state of a transmitting equipment allows to detect possible failures, and automatically replacing it with a reserve transmitter if needed. In a N+1 system the reserve transmitter is shared among N transmitters. If the fault transmitters are more than one the N+1 system decide, based on a prearranged priority, which is the transmitter replaced by reserve one. The detection of the correct working status of the transmitters is made on output power reading of transmitters. The operational parameters of the system, such as OdB power level, intervention threshold, switching time of the transmitters, manual or automatic working mode, can be configured by display and keys user interface. Just the large display and a series of bicolour led allow a very quick view of the system state. The system can be remotely

controlled via serial (RS232 or RS485) or parallel connection. It is composed by two sections: the control unit and the base-band signal switch and distribution section. The former section monitors the operating status of the N+1 transmitters, checks the position of the external coaxial relays and the operation of the dummy load, if any. The second section switches the base-band signals (audio and/or video) and the RDS 19kHz pilot tone signal in case of FM transmitters (useful if there is an external encoder). The switch section is also a distribution section, so as to allow to the transmitter on dummy load to input the desired base-band signal. It is possible to switch on the transmitter on dummy load for test purpose. If squelch occurs on transmitters the N+1 switch is inhibited by a dedicated signalling. The switch on and off of transmitters is made by free contact.

Main characteristics

- Manages up to 8+1 transmitters
- Compatible with FM and TV transmitters
- Separate unit for complete program base-band distribution
- Automatic and manual mode / Customizable changeover priority
- Dummy load control / Large graphic LCD
- Bicolor status LEDs for each transmitter / Logs up to 200 events
- Intervention thresholds user adjustable
- 2 Different alarm mask time user selectable
- Self-calibration of the power reference level (OdB)
- Completely remote controllable by serial (Rs232 or Rs485) and parallel contacts
- Firmware upgradable via Rs232, without opening the unit
- Rack 19" 3U (Logic Control) + 6U (Program Selector)
- Universal power supply

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Technical characteristics

- CONTROL UNIT	
CONTROL SECTION Maximum Number of Transmitters Transmitters ON/OFF Controls Transmitter Fault Detection Coaxial Relay Control and Monitor Display LEDs	8+1 Two opening/closing free contacts Output power under a customizable threshold for a customizable time Compatible with Spinner interface (like Bn512690) 240x128 graphical LCD with LED backlight 9 bicolor LEDs for each transmitters / 4 generic LEDs (Power, Remote, Alarm, Auto)
GENERAL Remote Control Operating Temperature Maximum Relative Humidity Main Power Supply Dimensions Weight	Serial remote control (RS232 or Rs485) or parallel control (TELECONTROLS and TELEMEASURES) -10°C to +45°C 90%, non condensing 90 to 260VAC Rack 19"-3U rackmount, 405mm deep 6kg
- PROGRAM SELECTOR	
LEFT/MPX AND RIGHT/MONO MIN/OUT Connector Frequency Response Distortion S/N	XLR Female (Input), XLR Male (Output) 30Hz - 100kHz ± 0.2 dB 30Hz - 50kHz < 0.05% > 80dB
RDS INPUT AND OUTPUT Connector Frequency Response	BNC (Input and Output) 30Hz - 100kHz ± 0.2 dB
PILOT TONE INPUT AND OUTPUT Connector Frequency Response	BNC (Input and Output) Flat (Relays contact)
VIDEO INPUT AND OUTPUT Connector Frequency Response Differential Gain Differential Phase	BNC (Input and Output) 0 -Mhz < ± 0.2 dB < 1% < 1°
GENERAL Control Operating Temperature Maximum Relative Humidity Main Power Supply Dimensions Weight	Slave of CONTROL UNIT -10°C to +45°C 90%, non condensing 90 to 260VAC Rack 19"-6U rackmount, 369mm deep 9kg (in 6+1 version)

Specifications, characteristics and front panel are subject to change without notice