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TELEVISION
EXCITERS



PRINCIPALI CARATTERISTICHE:

- > Costruzione modulare.
- > Raffreddamento convezionale o forzato.
- > Controlli A.G.C. e A.L.C.
- > Precorrezione di linearità a 3 pendenze.
- > Eccellente figura di rumore.
- > Cambio del canale dal pannello frontale (opzionale).
- > Predisposto per OFFSET di precisione.
- > Display digitale multifunzione.
- > Circuito di "soft-start".
- > Basso consumo.
- > Circuito di "economy" in assenza di segnale d'ingresso.
- > Filtro vestigiale di tipo S.A.W.
- > Power limiter incorporato.
- > Rigenerazione dei sincronismi (SCT).
- > Limitatore automatico del livello del bianco e dei sincronismi (SCT).
- > Modulatore multi-standard (SCT).
- > Disponibile in versione stereo/dual sound.
- > Possibilità di utilizzo a portanti combinate o separate.
- > Ripetitori "digital-ready".

MAIN FEATURES

- > Modular construction.
- > Convectional or forced air cooling.
- > AGC and ALC controls.
- > 3-slope linearity precorrection.
- > Excellent noise figure.
- > Channel change from front panel (optional).
- > Pre-set for precision OFFSET.
- > Multifunction digital display.
- > Soft-start circuit.
- > Low power consumption.
- > Economy circuit in case of input signal lack.
- > SAW vestigial filter.
- > Incorporated power limiter.
- > Sync restore (SCT).
- > Automatic white level and sync limiter (SCT).
- > Multistandard modulator (SCT).
- > Available in stereo/dual sound version.
- > Possibility for use of common and separate carriers.
- > Digital-ready transposers.

CARACTERÍSTICAS PRINCIPALES:

- > Construcción modular.
- > Ventilación forzada o enfriamiento por convección.
- > Controles A.G.C. y A.L.C.
- > Precorrección de linealidad de 3 pendientes.
- > Excelente figura de ruido.
- > Cambio de canal desde el panel frontal (opcional).
- > Configurado para OFFSET de precisión.
- > Display digital multifunciones.
- > Circuito de "soft-start".
- > Bajo Consumo.
- > Circuito de "economy" en ausencia de señal de entrada.
- > Filtro vestigial de tipo S.A.W.
- > Limitador de potencia integrado.
- > Regeneración de sincronismos (SCT).
- > Limitador automático del nivel del blanco y de los sincronismos (SCT).
- > Modulador multi-estándar (SCT).
- > Disponible en versión estéreo/audio dual.
- > Posibilidad de empleo con portadoras combinadas o separadas.
- > Repetidores "digital-ready".



SCT 020U 2 W UHF TRANSMITTER

I trasmettitori e ripetitori di questa serie sono caratterizzati da un elevato rendimento e da un'eccellente linearità su tutta la banda, ottenuta grazie all'ottimizzazione dei circuiti RF. Un'elevata affidabilità viene inoltre garantita dall'utilizzo di dispositivi di raffreddamento sovradimensionati e dai circuiti di controllo gestiti da moderne tecnologie a microprocessore.

Sono utilizzati come trasmettitori o ripetitori di bassa potenza o come stadi pilota per amplificatori di potenza superiore e sono disponibili in versioni da 2 a 20 W.

L'eccellente purezza spettrale dell'oscillatore di conversione conferisce a questi apparati un ottimo rapporto segnale/rumore del segnale irradiato. L'opzione up-converter agile permette un facile e rapido cambio del canale di trasmissione dal pannello frontale. L'opzione Offset consente lo spostamento in frequenza a passi di 1 Hz (CCIR) o 0.999000999 Hz (FCC) per il funzionamento in "Offset di Precisione" o "Isofrequenza" nei vari standard televisivi.

Gli apparati sono dotati di connettore per l'ingresso di un segnale di riferimento esterno a 5 o 10 MHz e sono disponibili una serie di diverse interfacce per il monitoraggio remoto dei parametri di funzionamento.

The transmitters and transposers in this series are characterized by high performance and capability and by excellent linearity over the entire band thanks to the optimization of RF circuits. A high degree of reliability is guaranteed, moreover, by the use of oversized cooling devices and by control circuits operated by modern microprocessor technologies. These units are used as low-power transmitters or transposers or as driver stages for amplifiers of greater power and are available in 2 to 20 W versions.

The excellent spectral purity of the conversion oscillator endows these units with an excellent signal/noise ratio of the radiated signal.

The up-converter option allows easy, rapid changing of the transmission channel from the front panel. The Offset option allows frequency shifts in 1 Hz (CCIR) or 0.999000999 Hz (FCC) steps for operation in "Precision Offset" or "Isofrequency" modes in various television standards.

The units are equipped with an input connector for an external reference signal at 5 or 10 MHz. A series of different interfaces for the remote monitoring of operating parameters are available as well.



SCT 100T 10 W VHF TRANSMITTER



MODEL-SPECIFIC DATA FOR TRANSMITTERS

Model	Output band	Nominal analog output power (p.s.)
SCT 020F	VHF I	2 W
SCT 100F	VHF I	15 W
SCT 020T	VHF III	2 W
SCT 100T	VHF III	10 W
SCT 200T	VHF III	20 W
SCT 020U	UHF	2 W
SCT 050U	UHF	5 W
SCT 100U	UHF	10 W
SCT 200U	UHF	20 W

Specifications and characteristics are subject to change without notice.

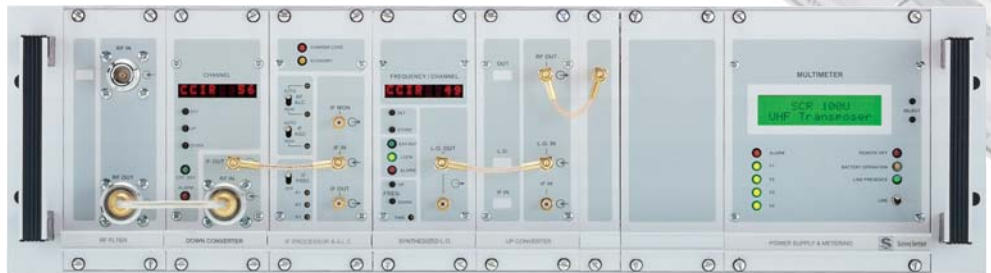
MODEL-SPECIFIC DATA FOR TRANSPOSERS AND GAP FILLERS

Model	Output band	Nominal analog output power (p.s.)	Digital output power (rms) without filter (Shoulders -40 dB @ F ₀ ± 4.3 MHz)	
			DVB-T	ATSC
SCR 020F	VHF I	2 W	0.5 W	1 W
SCR 100F	VHF I	15 W	5 W	7 W
SCR 020T	VHF III	2 W	0.5 W	1 W
SCR 100T	VHF III	10 W	3 W	4 W
SCR 200T	VHF III	20 W	5 W	7 W
SCR 020U	UHF	2 W	0.5 W	1 W
SCR 050U	UHF	5 W	1.5 W	2 W
SCR 100U	UHF	10 W	3 W	4 W
SCR 200U	UHF	20 W	5 W	7 W

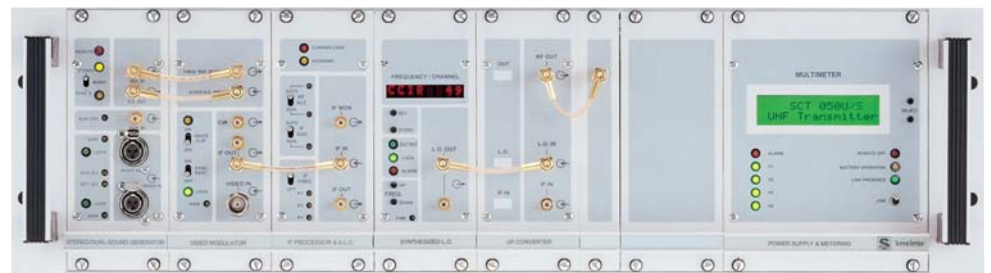
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Los transmisores y repetidores de esta serie se caracterizan por un gran rendimiento y por una excelente linealidad en toda la banda, obtenidos gracias a la optimización de los circuitos RF. Queda garantizada además una gran confiabilidad gracias al empleo de dispositivos de refrigeración sobredimensionados y circuitos de control gestionados por tecnologías con microprocesadores muy modernos.

Se utilizan como transmisores o repetidores de baja potencia o como etapas piloto para amplificadores de potencia superior y están disponibles en versiones de 2 a 20 vatios. La excelente pureza de espectro de su oscilador de conversión hace que estos aparatos presenten una relación óptima señal/ruido de la señal radiada. La opción up-convertir ágil permite un fácil y rápido cambio del canal de transmisión desde el panel frontal. La opción Offset posibilita el desplazamiento en frecuencia en paso de 1 Hz (CCIR) ó 0.999000999 Hz (FCC) para el funcionamiento en "Offset de Precisión" o "Isofrecuencia" según los distintos estándares televisivos. Los aparatos están dotados de conector para la entrada de una señal de referencia externa de 5 ó 10 MHz y existe una serie de varias interfaces para la monitorización remota de los parámetros de funcionamiento.



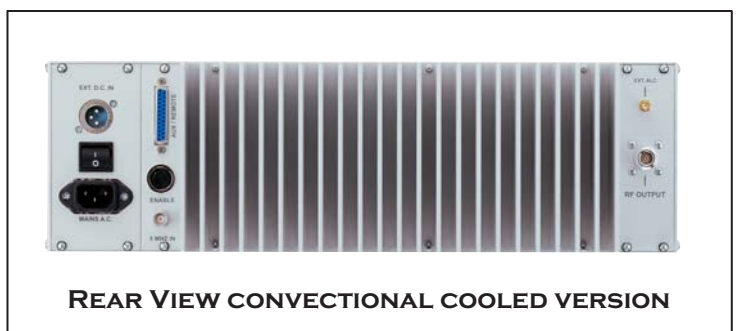
SCR 100U 10 W UHF TRANSPOSER



SCT 050U/S 5 W UHF TRANSMITTER STEREO VERSION



REAR VIEW FORCED AIR COOLED VERSION



REAR VIEW CONVECTIONAL COOLED VERSION

TELEVISION EXCITERS

TECHNICAL CHARACTERISTICS

TRANSMITTER VERSION

VIDEO PARAMETERS

Number of inputs	2 (mono version), 1 (stereo version)
Input impedance	75 Ω
Input level	1 V p.p. ± 3 dB
White / Sync level limiter	95%
2T K factor	< 1.5%
Amplitude / frequency response	± 0.5 dB (throughout the vision band)
Differential gain	< 5%
Differential phase	< 3°
Tilt (50 Hz)	< 2%
Tilt (15 kHz)	< 2%
Group delay	± 35 ns (throughout the vision band)
Vestigial side-band filter	SAW for all standards
Sync pulse compression	< 3%
S/N ratio (weighted)	> 60 dB
ICPM	< 3°
Luminance non linearity	< 4%
Field time bar tilt	< 2%
Line time bar tilt	< 2%

AUDIO PARAMETERS

Number of inputs	2
Input impedance (balanced)	600 Ω or > 5 k Ω , selectable
Input level	0 dBm ± 6 dB
Carrier level	-10 dB (adjustable)
Modulation capability	± 120 kHz
Frequency response (30 Hz to 15 kHz)	± 0.4 dB
T.H.D. (30 Hz to 15 kHz)	< 0.4%
Pre-emphasis	50 μ s or 75 μ s or flat
S/N ratio (un-weighted)	> 60 dB
Sound transmission	Dual sound coding to IRT or FM single sound and NICAM 728 (-13, -20 dB) or FM single sound
Stereo / Dual sound option	Available
Stereo separation (equivalent)	Better than -55 dB (typ.)

TRANSPOSER VERSION

Input frequency bands	VHF I, VHF III, UHF (agile)
Input impedance	50 Ω
Input matching	> 26 dB
Input level amplitude	-30 to -75 dBm
A.G.C. + A.L.C. dynamic	> 45 dB
Noise figure	< 5 dB (typ.)

GENERAL

Available standards	B, D, G, H, I, K, M, N
Colour system	PAL, NTSC, SECAM
Output connector	N female
Output impedance	50 Ω
Working class	A
Frequency stability	1 ppm (optional 1×10^{-10} /day, 3×10^{-8} /year)
External reference frequency input	5 MHz or 10 MHz
Offset steps (optional)	1 Hz (CCIR), 0.999000999 Hz (FCC)
I.M.D. at rated output power	better than -60 dBc
Harmonics (with output filter)	-60 dB or better
Spurious emissions (with output filter)	-60 dB or better
External control and monitoring interfaces	logic and analog signal outputs, enable input, RS 485 TCP/IP (optional) SNMP (optional)
Cooling	Convectional or forced air
Operating temperature	-10°C to +45°C
Maximum relative humidity	90%, non condensing
Maximum operating altitude	2500 m a.s.l. (> 2500 m on request)
Mains power supply	90 to 264 V AC, 24 V DC (24 or 48 V DC floating, optional)
Dimensions	3 RU (19" rack)

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