

SST-30-50-100 LCD/S

Exciters



FEATURES

RF CHARACTERISTICS

- | | |
|----------------------------|---|
| 1.- Power | 30W for SST-30, 50W for SST-50, 100W for SST-100 , adj. from front panel |
| 2. - RF output impedance | 50 ohms unbalanced, VSWR less than 1.5:1 |
| 3. Frequency range | 88 to 108MHz in 10kHz/steps w/ seven presets that can be stored and recalled from front panel, rear contacts, or via USB connection |
| 4. Frequency control | Synthesizer microprocessor controlled |
| 5. Lock in Time | From power on to any programmed frequency: typically 4sec. |
| 6. Off lock attenuation | >75 dBc (typical - 80dB) |
| 7. Type of modulation | F3E/F8Edirect FM at the carrier frequency. |
| 8. Modulation mode | Mono, Stereo, Multiplex, SCA, RDS, AUX (input selected by front panel) |
| 9. Frequency deviation | $\pm 75\text{kHz}=100\%$ ($\pm 150\text{kHz}$ capability) |
| 10. Reference | TCXO=12.8MHz |
| 11. Variation of fq. | $\leq 1\text{kHz/year}$ (internal TCXO) |
| 12. Short term stability | ± 1 ppm from -5 to +45 °C, can e synchronized on to 1,2,2.5,5 and 10MHz self select external reference, optional (OPT 01) |
| 13. Instantaneous BW | >20 MHz |
| 14. RF harmonics | Exceeds EBU/CCIR/FCC requirements > -70dBc |
| 15. RF spurious | Exceeds EBU/CCIR/FCC requirements <-100dBc @ $\pm 1\text{MHz}$ min. out of carrier (typical -110dB) |
| 16. Preemphasis | Flat/50/75 μs selectable via front panel |
| 17. Pre-emphasis precision | Nominal 1% (typical 0,4%) |



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TECHNICAL SPECIFICATIONS

PHYSICAL & ELECTRICAL

Dimensions	Standard 19" chassis/1 U rack
Cabinet	385mm deep by 485 mm wide, 44 mm height
Weight	Approx. 4.5kg.
Finish	Stainless steel cabinet
Power supply	110/220V single phase AC (+10/-15%) 50-60Hz/± 5%
External DC Battery Type	External 2 x 12 to 14V Gel Lead Acid Type Batteries (not included)
Measurable Power Consumption @ Full Power & nominal voltage	SST-30: approx. 110W; SST-50: approx. 160W; SST-100: approx 240W
Human interface input device	Rotary encoder with pushbutton
Display	Green-Yellow back panel, LCD - 2 raw 16 characters
Acoustic Noise	<56 dBA L3q 3 min @ 1 m
Cooling	Forced air, with internal long life brush-less ball bearing fan

STEREO OPERATION

18. Audio response	±0.15 dB da 20 Hz to 15 kHz (+0/-2%)
19. Audio filter attenuation	>55 dB @ 19kHz, >45dB 19 to 100kHz
20. Common mode rejection	20Hz to 15 kHz>45dB
21. Stereo separation	30-80Hz>53dB (typ.56), 80Hz-15kHz >60dB (typ.70)
22. Crosstalk attenuation (M/S)	>40dB 30Hz to 15 kHz (typ. 55dB/100Hz to 8kHz)
23. Spurious products	>53kHz >50dB
24. 38kHz suppression	>70dB (Typ -85dB)
25. Subcarrier frequency	38kHz ± 2Hz
25. Subcarrier generation	Internal crystal
27. Pilot frequency	19kHz ± 1Hz
28. Phase difference	19/38kHz 0° ±2° adjustable
29. THD+N on encoded channels	<0.03% 30Hz TO 15 kHz (typ-74dB) Measured with a 1KHz and 1.3 KHz tones, 1:1 ratio, at FM 75kHz<0.03%. Typ. IMD D2<-83dB D3<-88dB
30. IMD	
31. TIM (DIM30)	<0.03%(square/sinus) Typ.<-77dB
32. Nominal pilot deviation	±7 kHz

ENVIRONMENTAL

Storage temperature	-20°C TO + 60°C
Operating temperature	- 5 °C TO + 45°C
Guaranteed performance temp.	0°C TO + 40°C
Relative humidity (non condensing)	90%MA
Max operating altitude	2000 mt
Max extraneous field strength	≤10 Vm;≤ 4 A/m



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