

InnovAction

“Technology meets Creativity”

FM STEREO EXCITER POP 30



FEATURES

- HIGH PERFORMANCE AT **LOW COST**
- NOMINAL RF POWER **30W**
- VERY LOW SIGNAL NOISE **TYP. 80 dB**
- HIGH STEREO PERFORMANCE **TYP. 65 Db**
- EXTREMELY LOW DISTORTION: **THD, IMD & TIM TYP. 0,05%**
- COMPLETELY **BROADBAND**
- HIGH SPECTRAL PURITY **> -100 dBc SPURIOUS, > - 75 dBc HARMONICS**
- OUTPUT INTERFACE, **DB9**
- VERY COMPACT CABINET **1 UNIT RACK 19”**
- AC MAINS **90-260 VAC** EXTEND RANGE
- **CCIR & FCC COMPLIANT**

OPTIONS

- RDS/RBDS CODER PROGRAMMABLE WITH PC
- STEREO CODER
- FCC LPFM CODE STATION
- OIRT AND JPN VERSION

FM STEREO EXCITER POP 30

GENERAL

Power Output: 30 W adjustable from front panel.

RF Output Impedance: 50 ohm.

RF Output Connector: “N” type.

Monitor RF: -54 dBc, BNC connector

VSWR: 1.5:1 Maximum with automatic fold-back at higher VSWR

Frequency Range: 87.5 ÷ 108.00 MHz, on request 66 ÷ 74 MHz (OIRT), 76 ÷ 90 MHz (JPN) Programmable in 10 KHz steps.

Frequency Stability: ±1 ppm from -5 to 45°C.

Frequency Control: Synthesizer μ processor control.

Type of Modulation: Direct frequency modulation of carrier frequency.

Lock in Time: Typ. 4 second.

Off Lock Attenuation: ≥ -60 dBc.

Modulation Capability: ±150 KHz.

Modulation Mode: Mono, Stereo, Multiplex, Aux.

Preemphasis: Flat/50/75 μ s selectable internal jumper.

Asynchronous AM S/N Ratio: -80 dB below reference carrier with 100% AM modulation @ 400 Hz, without FM modulation.

Synchronous AM S/N Ratio: -65 dB below reference carrier with 100% AM modulation @ 400 Hz with FM modulation ±75 KHz @ 400 Hz.

RF Harmonics: Exceeds EBU/CCIR/FCC requirements.

RF Spurious: Exceeds EBU/CCIR/FCC requirements.

MONAURAL OPERATION

Audio Input Impedance: 600 ohm balanced, 10 Kohms unbalanced.

Audio Input Level: -3 to +9 dBm.

Input Connector: XLR female.

Audio Frequency Response: ±0.1 dB, 30 Hz to 15 KHz.

Total Harmonic Distortion + Noise: 0.05% @ 400 Hz

Intermodulation Distortion: 0.05%, 1 KHz/1.3 KHz, 1:1 ratio

Transient Intermodulation Distortion: 0.05%, 2.96KHz square wave and 14 KHz sine wave.

Distortion: 0.05%, 2.96KHz square wave and 14 KHz sine wave.

FM S/N Ratio: -82 dB RMS detector, -80 dB below ±75 KHz deviation, 50 μ s deemphasis, weighted.

MULTIPLEX OPERATION

Composite Input Impedance: 1.2 Kohm unbalanced.

Composite Input Level: -3 to +6 dBm

Input Connector: BNC female.

Composite Amplitude Response: ±0.2 dB, 30 Hz to 100 KHz.

Total Harmonic Distortion + Noise: 0.05% @ 400 Hz

Intermodulation Distortion: 0.05%, 1 KHz/1.3 KHz, 1:1 ratio

Transient Intermodulation Distortion: 0.05%, 2.96 KHz square wave and 14 KHz sine wave.

FM S/N Ratio: -83 dB RMS detector, -80 dB below ±75 KHz deviation, 50 μ s deemphasis, weighted.

STEREO OPERATION

Audio Input Impedance: 600 ohm balanced, 10 Kohm unbalanced.

Audio Input Level: -3 to +9 dBm.

Input Connector: XLR female.

Audio Frequency Response: ±0.1 dB, 30 Hz to 15 KHz.

Total Harmonic Distortion + Noise: 0.05% @ 400 Hz

Intermodulation Distortion: 0.05%, 1 KHz/1.3 KHz, 1:1 ratio

Transient Intermodulation Distortion: 0.05%, 2.96 KHz square wave and 14 KHz sine wave.

FM S/N Ratio: -73 dB RMS detector, -71 dB below ±75 KHz deviation, 50 μ s deemphasis, weighted.

Stereo Separation: 30÷80 Hz ≥ -50 dB, 80Hz±15 KHz ≥ -60 dB (Typ. 65 dB).

Crosstalk attenuation: Main to Sub -50 dB 30 Hz to 15 KHz (typ. -55 dB 100 Hz to 8 KHz).

38 KHz Suppression: ≥ -65 dB (typ. -80 dB).

Pilot Frequency: 19 KHz ± 1 Hz

Output Pilot: 1 Vpp., BNC female

Audio Filter Attenuation: ≥ -44 dB @ 19 KHz, > -27 dB 20 KHz to 100 KHz.

Modes: Stereo, Mono

AUX OPERATION

Input Impedance: 3 Kohm.

Input Level: -3 to +6 dBm.

Frequency Response: ±0.2 dB, 40 KHz to 100 KHz.

Input Connector: BNC female.

Most AUX, performance parameters are determined primarily by the generator used.

AUXILIARY CONNECTIONS

DB9: female connector back panel for remote connections.

OPTIONS

Stereo coder

RDS/RBDS Coder programmable via PC.

FCC LPFM code station

OIRT or JPN version.

ELECTRICAL

AC Input Power: 90÷260 VAC 50/60 HZ single phase.

AC Apparent Power Consumption: 70 VA @ 30W.

Active power Consumption: 60W @ 30W.

Cooling: Forced air with internal long life brushless ball bearing fan.

Acoustic noise: < -56 dBa @ 1 meter.

ENVIRONMENTAL

Operating temperature: -5°C to +45°C.

Guaranteed performance temperature: 0°C to +40°C.

Max Operating Altitude: 2000 mt.

Relative Humidity Range: 0 to 90%.

PHYSICAL DIMENSION

Mounting: Standard 19" chassis 1 U rack.

Size: 485 mm. W x 385 mm. D x 44 mm. H.

Weight: ~ 4,0 Kg.

Features and specifications subject to change without notice