



BEXT

XR 30

LCD Display,
Frequency Agile
FM Exciter /
Transmitter

- Fast access to all functions & parameters via user-friendly menu display w/ pushbuttons
- Instant frequency programmability directly from software
- Proportional Auto-Foldback of output power in the event of excessive VSWR
- Main parameters available also on rear terminal board for remote control
- Adjustable power output from 0 to 30 W & soft-start from RF mute status
- Automatic power control maintaining the output at any pre-set level
- Available with built-in stereo generator
- Modular layout with plug-in, easily replaceable circuits and parts
- Direct 90 V to 260 V Auto-selecting AC Voltage system without user intervention
- Built-in 24 V DC capability
- Meets or exceeds all FCC and CCIR requirements
- Includes low pass/harmonic filter and can be used as a stand-alone transmitter

General

Rated Output Power:	0 - 30 W, adjustable, APC controlled
RF Output Connector:	"N" type female
RF Output Impedance:	50 ohm
Frequency Range:	87.5 MHz to 108 MHz
Frequency Programmability:	direct from front panel in 10 kHz increments
Frequency Stability:	better than ± 500 Hz
Modulation Type:	direct carrier frequency modulation
Spurious & Harmonic Suppression:	meets or exceeds all FCC and CCIR requirements
Asynchronous AM S/N Ratio:	70 dB below reference carrier with 100% amplitude modulation at 400 Hz without de-emphasis, no FM modulation present
Synchronous AM S/N Ratio:	55 dB or better below reference carrier with 100% amplitude modulation at 400 Hz, without de-emphasis, FM modulation = ± 75 kHz at 400 Hz less than 0.1% measured with a 3.18 kHz square wave and a 15 kHz sine wave at 100% modulation (typical 0.05%)
Transient Intermodulation Distortion:	90 to 260 V, 50 or 60 Hz, single phase, auto sensing, auto adjusting approx. 120 W
AC Power Requirement:	24 VDC, approx. 4.5A
AC Power Consumption:	BNC, -30 dB level
Alternate DC Power Requirement:	Panel Size: 483 mm (19") W x 88 mm (3.5") H (2 standard rack spaces high)
RF Monitor Port:	Overall Depth: 355 mm (14")
Panel Size:	Weight: approx. 6 Kg (13.2 Lbs.)
Overall Depth:	Ambient Temperature Range: -10° to 50° C (14° to 122° F)
Weight:	Pre-emphasis: for FCC 75 μ sec; for CCIR 50 μ sec; or flat for Stereo, all user selectable

Composite Operation

MPX Input:	BNC and XLR connectors (selectable, w/ selectable impedance 10kohm - 600 ohm)
Stereo L + R Channel inputs:	XLR w/ selectable impedance (for units with built-in stereo generator)
MPX Input Level:	adjustable from - 13 to + 13 dBm, normally set to 3.5 Vp-p (1.237 Vrms / 4.1 dBm)
Composite FM S/N ratio:	>80 dB below ± 75 kHz deviation at 400 Hz measured in a 30 Hz to 100 kHz bandwidth with 75 μ sec de-emphasis (RMS)
Composite Amplitude Response:	± 0.5 dB, 20 Hz to 53 kHz; ± 0.2 dB, 53kHz to 100kHz
Composite Total Harmonic Distortion:	<0.05%
Composite Intermodulation Distortion:	<0.05%, measured with a 1 kHz and a 1.3 kHz tone, 1:1 ratio, at 100% modulation
Stereo Separation:	>50 dB (60 dB typical)
Crosstalk:	main to stereo subchannel and stereo subchannel to main >55 dB (60 dB typical)
SCA & RDS Inputs:	3 unbalanced BNC connectors
SCA & RDS Input Impedance:	10k ohm
SCA & RDS Input Levels:	- 20 dBm to +10 dBm, adjustable
SCA Amplitude Response:	± 0.2 dB, 40 kHz to 100 kHz
Crosstalk:	67 kHz SCA to main or to stereo subchannel >65 dB
Crosstalk:	92 kHz SCA to main or to stereo subchannel >70 dB

Monaural Operation

Audio Input:	BNC w/ selectable impedance 10kohm - 600 ohm
Audio Input Level:	adjustable from - 13 to + 13 dBm, normally set to 3.5 Vp-p (1.237 Vrms / 4.1 dBm)
FM S/N Ratio:	>80 dB below ± 75 kHz, deviation at 400 Hz measured in a 20 Hz to 20 kHz bandwidth with 75 μ sec de-emphasis (RMS)
Audio Frequency Response:	± 0.5 dB, 30 Hz to 15 kHz
Total Harmonic Distortion:	<0.05% or better
Intermodulation Distortion:	0.02% or less, measured with a 1 kHz & a 1.3 kHz tone, 1:1 ratio, at 100% modulation

Other Connectors:

- 30 dB RF Monitor: BNC • Interlock: BNC • RS 232: DB 9 • Remote control: DB9