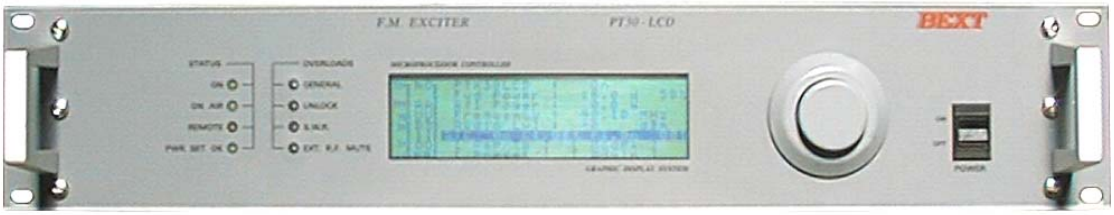

PT 30 LCD
PT 60 LCD
PT 100 LCD

Frequency Agile FM Exciters / Transmitters

- Completely Microprocessor supervised
- All functions including frequency reassignment can be remotely supervised & controlled by PC via Modem
- Optional AES/EBU Input for Digital Audio Available
- 90 dB S/N typical provides Digital CD Quality
- Optimized PLL Design improves the low frequency response
- Exhaustive Listening Tests confirm transparency and clearness of audio
- User Friendly Graphics Interface allows the setting and reading of all exciter's parameters
- Settings and measurements available through RS-232C interface
- External analog signal reading and relay control of external devices
- Automatic notification of alarm conditions
- Always ON-AIR at any VSWR level due to built-in proportionate auto-foldback
- Can be powered by 24 V DC

General	
Rated Output Power:	0-30W (PT30), 0-60W (PT60), 0-100W (PT100) continuously variable (A.L.C.)
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
Frequency Stability:	±2.5 ppm from -10°C to 50°C
Modulation Type:	direct carrier frequency modulation
Modulation Capability	meets or exceeds all FCC and CCIR requirements, typical 240 kHz on MPX
Spurious & Harmonic Suppression:	meets or exceeds all FCC and CCIR requirements, typical -85 dB
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:	60 dB or better below reference carrier with 100% amplitude modulation at 400 Hz, without de-emphasis, FM modulation = ±75 kHz at 400 Hz
Transient Intermodulation Distortion:	less than 0.1% measured with a 3.18 kHz square wave and a 15 kHz sine wave at 100% modulation (typical 0.05%)
AC Power Requirement:	110-130 V, 50-60 Hz, single phase 198-250V, 50-60 Hz, single phase
Power Consumption:	approx 120 VA (PT 30), approx 200 VA (PT 60), approx 300 VA (PT 100)
Panel Size:	483 mm (19") W x 88 mm (3½") H (2 standard rack spaces high)
Overall Depth:	344 mm (26.5")
Weight:	13 Kg (PT 30), 15 Kg (PT 60), 15 Kg (PT 100)
Ambient Temperature Range:	-10° to 45° C
Pre-emphasis:	for FCC: 75 µsec; for CCIR: 50 µsec
Other Features:	Signal Test Samples, Relay Contacts, Serial Interface, Telemetry Interface
Composite Operation	
Composite Inputs:	four total, 1 for MPX and 3 for SCA
MPX Input:	1 unbalanced BNC connector
MPX Input Impedance:	10 k ohm
MPX Input Level:	3.5 V P-P (1.237 V RMS / 4.1 dBm)
Composite FM S/N ratio:	-87 dB (-90 dB Typical) below ±75 kHz deviation at 400 Hz measured in a 20 Hz to 200 kHz bandwidth with 75 µsec de-emphasis (RMS)
Composite Amplitude Response:	±0.05 dB, 20 Hz to 53 kHz, ±0.2 dB, 53 kHz to 100 kHz
Composite Total Harmonic Distortion:	< 0.02% (0.01% typical)
Composite Intermodulation Distortion:	< 0.02%, 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 Inputs / SCA Impedance:	3 unbalanced BNC connectors / 10 k ohm
SCA Input Levels:	0 dBm (775 mVrms/2.2 Vp-p) nominal for ±7.5 kHz deviation, adjustable
SCA Amplitude Response:	±0.15 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 Impedance:	600 ohm balanced or unbalanced; 50 dB common mode suppression
Audio Input Level:	0 dBm (775 mVrms/2.2 Vp-p) for ±75 kHz, adjustable
FM S/N Ratio:	> 87 dB (-90 dB Typical) below ±75 kHz, deviation at 400 Hz measured in a 20 Hz to 20 kHz bandwidth with 75 µsec de-emphasis (RMS)
Audio Frequency Response:	±0.5 dB, 30 Hz to 15 kHz
Total Harmonic Distortion:	< 0.02% (0.01% typical)
Intermodulation Distortion:	0.02% or less, measured with 1 kHz & 1.3 kHz tone, 1:1 ratio, at 100% modulation