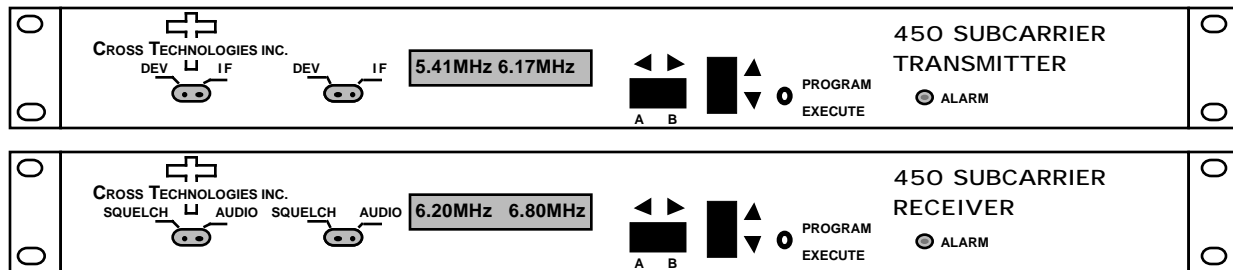


## Model 450 Dual Channel Subcarrier System

The 450 is a dual channel, frequency agile, synthesized FM subcarrier system for narrow band multi-channel applications above a video signal with low distortion and flat frequency response from 50 Hz to 15 kHz. Frequency from 1 MHz to 9.99 MHz, subcarrier "off", and compandor "in/out" settings appear on the front panel LCD display. The 450 uses a 3:1 compandor and provides >85 dB dynamic range. With companding disabled, the 450 is a standard subcarrier system with selectable 75 usec or J17 emphasis networks. Connection to video is via a passive directional coupler which does not load the video signal even when power is lost. The 450 demodulator's threshold extension allows receiving signals under severe fades.



### Model 450T Transmitter and Model 450R Receiver

#### 450 EQUIPMENT SPECIFICATIONS\*

##### **System - Audio**

Peak program level (PPL)	+9 or +18 dBm, selectable
Frequency response	± 0.25 dB from 50 Hz to 15 kHz
Distortion	< 0.2% at 1 kHz (De-emph, 30 kHz bandwidth)
Compandor type	3:1 or none, front panel selectable
Emphasis	75 usec or J17, selectable
Dynamic Range	> 85 dB from PPL

##### **System - Other**

Frequency range	1.0 to 9.99 MHz in 10 kHz steps
Channel spacing (min)	280 kHz
Deviation (at PPL)	± 75 kHz, adjustable
Connectors	BNC, female, subcarrier in/out; terminal strip, audio and alarm
Power	115/230 VAC (47-63 Hz) < 30 W
Size	1.75" X H 19" W X 15" D, each

##### **Modulator Characteristics:**

Subcarrier output level	25 to 100 mV P/P (adj.)
Output impedance	Bridging (>4 k ohms) to 75 ohm line
Audio Impedance	600 Ω, balanced transformer coupled or high impedance (> 50K Ω)
Alarms	Synthesizer out of lock; Carrier frequency out of lock
Indications	Frequency, Alarm, Off

##### **Demodulator Characteristics**

Subcarrier input level	25 mV to 100 mV P/P
Input impedance	Bridging (> 4 k ohms) to 75 ohm line
Audio Impedance	600 Ω, balanced transformer coupled
C/No for threshold	61 db - Hz
Alarms	AFC; Carrier below squelch level; Synthesizer out of lock
Indications	Frequency, Alarm, Off

\*+10 to +40 degrees C; Specifications subject to change without notice

Request A Quote