

Analog Signal Processing S450P

S-Series Frequency Agile Heterodyne Processor



The S450P Frequency Agile Heterodyne Processor, offers an economical way to process off-air or cable-delivered signals in CATV headends without sacrificing performance. All adjustments are made via convenient front panel controls; no internal adjustments are required.

Input frequency selection is accomplished with front panel dipswitches located behind a sliding cover. The S450P accepts VHF and UHF broadcast channels up to 801 MHz and cable channels to 450 MHz. Output channel selection is also accomplished with front panel dipswitches that tune in 0.25 MHz increments from 50 to 450 MHz. Other front panel adjustments include: an audio/video ratio (A/V) control which adjusts the aural carrier from -12 dB to -17 dB below the video carrier; an offset adjustment control which enables the output frequency to meet FCC requirements; and an RF output level control which can be adjusted 10 dB down from typical 60 dBmV output. The S450P can accept and process BTSC stereo delivered signals with no added signal degradation.

The S450P full-featured frequency agile heterodyne processor offers an economical way to process off-air or cable-delivered signals in CATV headends without sacrificing performance.

BENEFITS INCLUDE:

- Frequency agile output: 50 to 450 MHz
- BTSC stereo compatibility
- Front panel controls
- On-Channel operation Mode
- FCC Compliant



SPECIFICATIONS

RF INPUT

Input Channels	VHF and UHF channels to 801 MHz and cable channels to 450 MHz
Impedance	
VHF	75 Ohms
UHF	75 Ohms
Signal Level Range	
Off-Air Channels	-15 to +25 dBmV
Cable Channels	-15 to +10 dBmV
Adjacent. Channel Rejection	>60 dB
AGC Range	-15 to +25 dBmV
Carrier to Noise	55 dB (Typical, with +10 dBmV input level)
Noise Figure	
VHF	8 dB (Typical)
UHF	10 dB (Typical)
Frequency Response	2.5 dB P-P

RF OUTPUT

Output Channels	Channel 2 through 69, (50 to 445.25 MHz)
FCC Offset	Front Panel Adjustable +12.5 kHz and +25 kHz
Output Level	+55 dBmV Min, +60 dBmV Typical
Output Level	Control 10 dB
Spurious Output	>60 dB below video carrier level
Out-of-Band Noise	>80 dB below video carrier level
Output Impedance	75 Ohms

GENERAL

Fuse	0.5A, 250 V, slo blo
Power Requirements	117 Vac, 60 Hz, 35W
Dimensions	19"W x 1.75"H x 7"D (48.07 cm x 4.42 cm x 17.71 cm)
Input Impedance	75 Ohms

CONTROLS/INDICATORS

Front Panel LED Indicator	Power On
Front Panel Controls	Input Channel Selection
	Output Channel Selection
	RF Output Level
	Audio/Video Ratio
	-20 dB test point (MG connector)
	Offset Adjust
Rear Panel Connectors, Type F RF Input	RF Output
	IF Out
	IF In