



PFAP550M

806 MHz Agile Signal Processor



- 125 Channel Input Range
54-806 MHz (CATV 2-125, TV 2-69)
- 82 Channel Output Range 54-550MHz
(CATV 2-78)
- High 57dBmV output for optimum carrier-to-noise performance
- Broadcast-quality specifications for unparalleled picture quality
- In-band carrier-to-noise ratio >60dB ensures superior picture quality
- Microprocessor control enables digital push-button input and output channel selection for ease of installation, configuration, and servicing
- Non-volatile memory for input and output channel recall in the event of power failure
- Front panel controls and test point enable easy setup and monitoring
- Double heterodyne conversion provides over 60dB spurious output and channel rejection for interference-free adjacent channel operation
- Auto-insertion of standby carrier with audio-mute generator in the event of input signal loss preserves system integrity
- Sync tip detection AGC circuitry provides wide dynamic range for robust system regulation
- BTSC stereo compatibility for pass-through of stereo signals
- Composite audio-video IF loop provides compatibility with encoders, ghost cancellers, and video override applications
- SAW filtered for superior adjacent channel performance enables drop-in channel expansion
- IRC and HRC input and output offset available for frequency settings in systems using offset channels

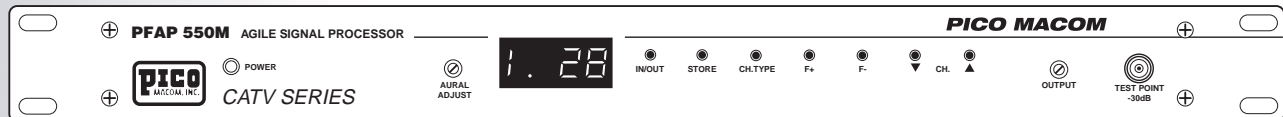
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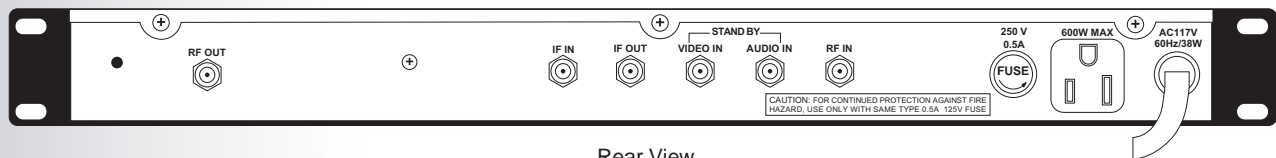
The **Pico Macom PFAP550M** is a frequency agile, microprocessor-controlled, professional re-broadcast grade double-heterodyne signal processor that converts one channel to another without the need to demodulate and remodulate the signal. Front panel push-button controls enable input and output channel selection. The unit uses state-of-the-art low noise PLL, SAW filter, and AGC techniques to provide superior picture quality and reliability thereby dramatically improving customer satisfaction. The **PFAP550M**'s unique sync tip detection AGC design delivers consistently high quality picture even at extremely low input levels. Its high-selectivity SAW filtering enables the unit to process any single cable channel, even in the most crowded systems. In the event of power failure, the microprocessor's non-volatile memory preserves input and output channel identification guaranteeing proper reset when power is restored. The **PFAP550M**'s high frequency and extremely high accuracy phase-locked-loop oscillators enable the unit to meet the frequency offset and stability requirements of FCC Docket 21006. **Pico Macom** backs up this product with its industry leading 5-year limited warranty.

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Front View



Rear View

RF

Output Frequency:	54-550 MHz
Input Frequency:	54-806 MHz
Input Channels:	2 to 125 (HRC, IRC)
Output Channels:	Channels 2 to 78 (HRC, IRC)
Maximum Output:	57 dBmV min.
Input Level:	0 dBmV (For 55 dB min C/N)
	Min.
	Max.
Output Adjust Range:	25 dBmV
Gain:	48-60 dBmV
AGC Range:	70 dB
AGC Type:	0 dBmV to +25 dBmV input
AGC Stability:	Keyed sync tip
Noise Figure:	±5 dB
Differential Gain:	8 dB VHF, 10 dB UHF
Differential Phase:	<5% (10 to 90% APL)
Visual C/N:	<5° (10 to 90% APL)
Out-of-band C/N:	55 dB @ 0 dB input
Frequency Response:	-65 dB
Selectivity:	±1.7 dB
Spurious Outputs:	-60 dB (Adjacent Channel)
	>-60 dB
	>-60 dB
Aural Carrier Adjust Range:	12 dB
Return Loss: Input/Output:	12 dB typical
IF Output:	35 dBmV (45.75 MHz)
Controls:	Aural Carrier and Output Level

General

Power Input:	105 to 130 VAC, 60 Hz, 15 W
Operating Temperature:	-10° C to 50° C
Dimensions:	19"(L) x 9"(D) x 1 3/4"(H)
Weight:	7.9 lbs.
Test Point:	-30 dB

NOTE: In stand-by mode, this unit is an agile 550 MHz modulator

Ordering Information

PFAP550M