

New Smaller Size

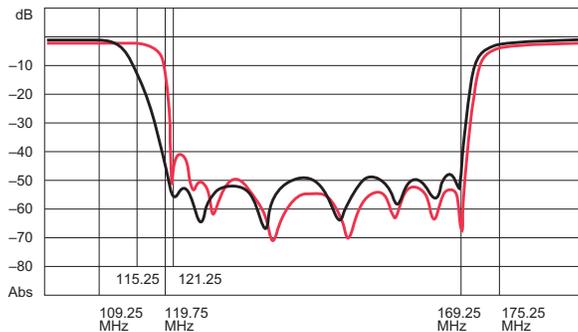
Only 2.965" in length for 8 Pole models, 3.465" for 10 Pole models for easier installation in small lockboxes and distribution panels.

Superior environmental stability due to patented dome seal, patented double "D" outer shield, elastomeric O-rings and polymer male connector seal.

Superior Selectivity

Sharper band selectivity for reduced filter guardband, especially at higher frequencies (for many applications the filters can attenuate a pay tier without losing any channels in the guardband)

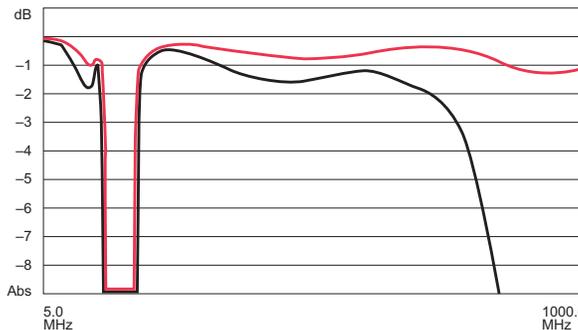
Eagle Elite 10MNF ———
Eagle Elite 8MNF ———



Performance To 1 GHz

Wide range of frequencies available with excellent performance to 1 GHz.

Eagle Elite 8MNF ———
Typical Filter ———



What Is A Tier Trap?

Multichannel negative trapping blocks groups (or tiers) of channels from nonpaying subscribers. The trap filters out selected frequencies, passing some channels and rejecting others.

Multichannel negative traps offer the highest form of protection against theft of services at an affordable cost. By blocking tiers of channels, there is no descrambling or encoding of signals, eliminating the need for expensive subscriber equipment. Instead, traps are installed outside the subscriber's home, either on the directional port at the pole or in a lockbox mounted on the side of the building. The new, smaller size of the Eagle Elite Multichannel Negative Tier Traps makes these installations a lot easier. Special security hardware is also available for extra protection against tampering with or removal of the filter.

Tier Trap Characteristics

Eagle Elite Multichannel Negative Tier Traps have three characteristics: a passband that allows (or passes) the frequencies (channels) purchased by subscribers, a reject band that blocks the frequencies from subscribers who did not pay for them, and a guardband (the frequency normally lost in transition from the passband to the reject band - channels within this band are often called bumper channels because they get bumped for the programming lineup).

Pay Television Multi Channel Negative Tier Traps

8 Pole
8MLP, 8MNF, 8MHP
10 Pole
10MLP, 10MNF, 10MHP

Multi-channel tier traps are becoming increasingly more popular to selectively control, block or access groups (tiers) of pay television channels. Traps are designed to meet a cable operator's specific requirements and are available in band reject (NF), lowpass (LP), and highpass (HP) styles.

Specifications

Upper Frequency Response:
<1.5 dB (<0.5 dB typical to 1 GHz, except at band edges)

Return Loss:
-15 dB typical
(-1 dB/octave > 50mHz)

Impedance:
75 Ohms

Current Capacity:
0.75 amps

RFI Isolation:
>100 dBi

Typical Attenuation:
50 dB

Operating Temperature:
-40° to +140° Fahrenheit

Frequency Stability:
5 ppm/Degree Fahrenheit

Connectors:
Type F Female/Male Per SCTE Specification IPS-SP-400/600

Finish:
Nickel Plated per QQ-N-290 Class 1 Grade G

Corrosion Resistance:
Per Mil-Std-14072D and SCTE IPS-TR-406, ASTM 368 Salt Fog Test

Environmental Exposure:
Cycled at 95° F and 95% Relative Humidity, SCTE IPS-IP20/.00

Seal:
Withstands 20psi

Dimensions:
8 Pole: 2.965" long, 0.825" diameter
10 Pole: 3.465" long, 0.825" diameter

Specifications subject to change without notice.



EAGLEelite™
SERIES



For more information or to place an order, please contact Supply Solutions at 866-978-7759. Courtesy of Eagle/Comtronics.

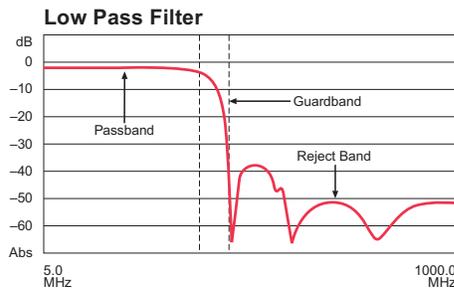
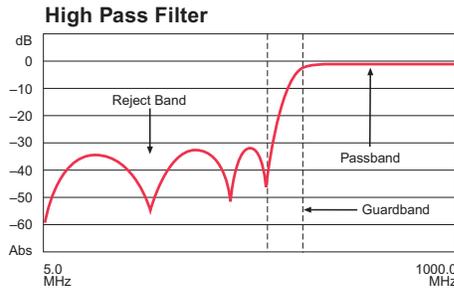
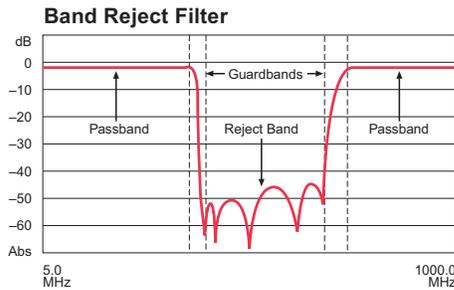
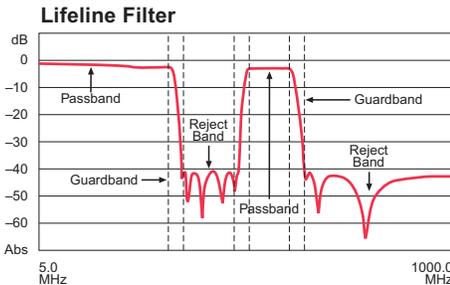
Tier Trap Styles

There are three basic styles of multichannel negative tier traps available: band reject (designated as an NF style filter), high pass (designated as an HP style filter), and low pass (designated as an LP style filter).

NF Style (band reject) filters have two passbands, one on each side of the reject band. High Pass Style (HP) and Low Pass Style (LP) filters have one passband.

Tier traps come in six, eight, and ten pole configurations. The number of poles is directly proportional to the amount of attenuation the filter can deliver. As you increase the number of channels to be blocked, the guardband also widens. By adding more poles in a filter, attenuation can be improved without increasing the width of the guardband.

Trap styles can be combined for multi-purpose applications. For example, an NF Style and an LP Style can be combined in a 10 pole filter. This forms a Lifeline Filter, commonly used for broadcast-only channels to pass a basic (or "Lifeline") tier.



Using Tier Traps To Meet Your Marketing Plan

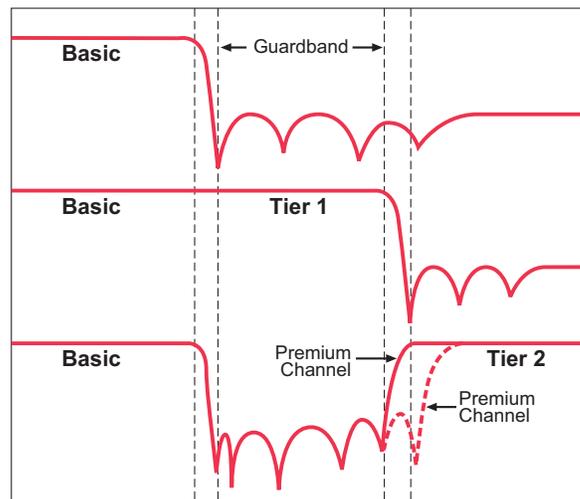
Eagle Elite Multichannel Negative Tier Traps can be designed to offer subscribers a wide selection of pay television packages in any television format in the world. They can also be used in combination to provide a variety of passbands to meet specific pay television marketing plans.

Tier traps can be coordinated with an operator's marketing plan to offer subscribers a menu of ala-carte services. A fundamental plan offers a group (tier) of channels to all subscribers as a base (or basic) service. The "basic" service can be separated from other channels using a low pass filter. Other channel tiers can be offered individually or in combinations.

Tier traps can also be designed to support marketing plans that package both premium and popular channels. By placing the premium channel(s) in groups together with other channels, a tier trap can be made to block all of the selected channel groups as well as premium channels.

Eagle can design and build a tier trap to meet any marketing plan requirement.

All Eagle Elite Multichannel Negative Tier Traps offer performance to 1 Ghz.



Pay Television Multi Channel Negative Tier Traps

Specifying Multi Channel Negative Tier Traps

When ordering tier traps, low pass and high pass filters are designated by using the channel or frequency at the borderline of the passband. For example, an 8MLP-13 is an 8 pole low pass filter that passes channel 13.

Band reject filters are designated as NF Style filters and are described by noting the edges of the reject channels or frequencies. For example, an 8MNF-A-1 blocks channels A through 1 for System M formats. It could also be described using the channel frequencies as an 8MNF-121.25-169.25.

When stating the design frequencies for international channels, it is useful to state the channels, frequencies, and the format. For example, an 8 pole band reject filter that blocks channels E8 (196.25 MHz) through S12 (238.25 MHz) in the PAL B/G format would be noted as 8MNF-196.25-238.25 (E8-S12)(PAL B/G)

For additional information on the Eagle Elite Series of Multichannel Negative Tier Traps, contact your Eagle representative.



For more information or to place an order, please contact Supply Solutions at 866-978-7759.

Courtesy of Eagle/Comtronics.