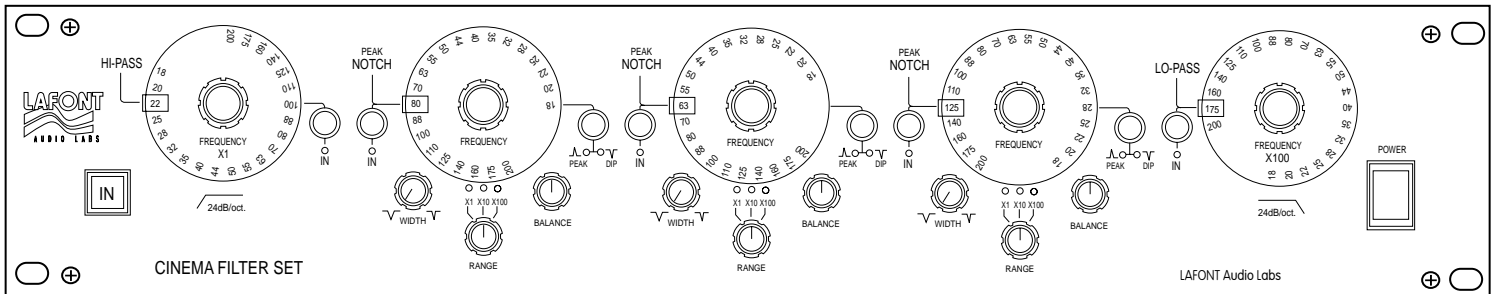


# LAFONT LP-24 CINEMA FILTER SET

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## "QUICK START"



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# CINEMA FILTER SET

## LAFONT LP-24 CINEMA FILTER SET - "QUICK START"

The LP-24 provides two continuously tunable band limiting filters and three band reject filters. It is designed for no-loss insertion in program circuits. A silent 'IN' switch is provided to add or remove all filter action instantly.

### Band Limiting Filters

Using the high-pass and low-pass filters is quite simple. Each filter has an individual by-pass switch and a frequency sweep control that covers 3.4 octaves (1 to 11 ratio). The slope is constant at 24dB per octave for maximum efficiency.

Ensure that the unit is powered and the green illuminated master 'IN' switch is engaged.

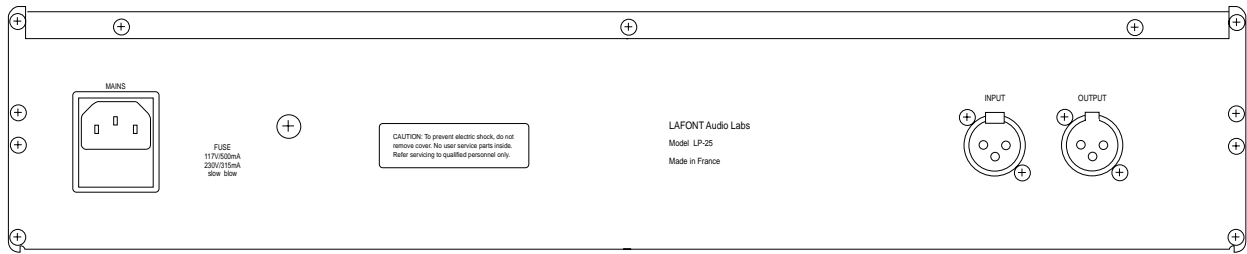
The high-pass filter is located on the left side of the front panel. Press the black IN button to insert the filter in the audio chain. Then turn the big wheel clockwise to eliminate unwanted frequencies in the bottom of the audio spectrum. The selected cut-off frequency is displayed in the high-pass window. Located on the right side of the front panel, the low-pass filter works in a similar manner. Turn the frequency control counter clockwise to limit the upper end of the audio frequency spectrum. The value displayed in the low-pass window should be multiplied by 100 to obtain the cut-off frequency.

### Band Rejection Filters

When program material contains undesirable noise components, the band rejection filters provide an efficient solution for noise removal. Each of the three rejection filters in the LP-24 are capable of covering a center frequency range of ten octaves in three bands. We recommend that you start the procedure by using only one filter.

### Procedure:

When using the LP-24 for the first time, it is recommended that you simulate a polluted track by mixing a sine wave (at about 0dB) with a music or film soundtrack and then follow the procedure described below. This will help you to become familiar with it, and be able to quickly remove complex noise in a real situation.



1. Choose a filter and press the peak/dip switch to put the filter in the peak mode, (red indicator).
2. Turn the WIDTH potentiometer fully counter clockwise.
3. Turn the BALANCE potentiometer to the mid position.
4. Select the estimated frequency band with the X1, X10, X100 rotary switch.
5. Turn the frequency potentiometer fully counter clockwise.
6. Press the black IN switch located at the left of the frequency potentiometer. Most of the audible spectrum disappears except for a narrow band amplified by 6dB.
7. Rotate (slowly) the frequency potentiometer to sweep the band until the noise becomes enhanced. It should not take too much fine tuning to settle the filter into the center of the noise spectrum. If you do not find the noise frequency, switch to another band. Then turn the WIDTH control to its mid position and adjust the frequency for a closer tuning.
8. Release the peak/dip switch (green indicator). The program signal comes back and the unwanted signal is dimmed.
9. Adjust the BALANCE potentiometer to increase attenuation. Then adjust the FREQUENCY and WIDTH in order to obtain maximum rejection.

## NOTE:

Although the obvious goal is to remove only the problem areas and nothing else, high rejection with a narrow band makes the controls very sensitive and may not provide optimum results.

Also, void excessive reduction of the bandwidth as the unwanted noise spectrum may be larger than the width of rejection. Noise of a complex nature with a heavy harmonic content will probably not be fully rejected with one filter. In this case, repeat procedure (steps 1 to 10) with a second and eventually a third filter focusing on the harmonics.