

Lafont Audio Labs LP-24

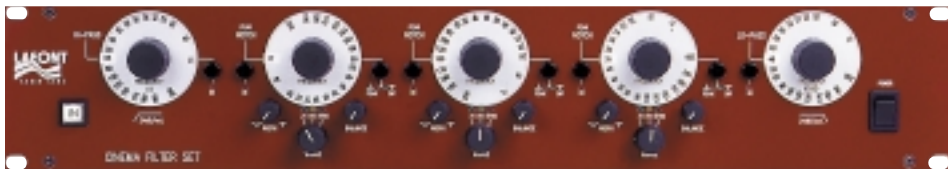
Essential but unassuming outboard, the 'cinema filter set' has been revived and updated. **Rob James** favours the French

ANYBODY WHO HAS spent time in film dubbing theatres will have noticed huge white dials occupying the outboard territory. Usually to be found in a rack behind the console, these units look as if they would be more at home in the radio room on the Titanic than in a modem studio. But no; for while the enduring Urei Little Dipper filter set is now out of production, it owes its considerable longevity not to looks but to a unique set of features. Unique, that is, until now.

They say if you build a better mousetrap the world will beat a path to your door. With the LP-24 Cinema Filter Set, Lafont Audio Labs have set out to retain the all the virtues of the classic Little Dipper while adding a few wrinkles of their own. Jean-Pierre Lafont claims the unit to have been designed specifically for, and with considerable input from, several Hollywood dubbing (sorry, rerecording) mixers and I can well believe it. The LP-24 is more compact than its predecessor. It is a neat 2U-high rack-mount

nology has advanced. In fact, due to a combination of factors, if anything the average standard has deteriorated. HMI lights which emit multi-frequency whistles, noisy cameras in inadequate locations and the general trend away from a trained, theatrical style of delivery are just some of the factors involved.

The usual technique of removing a sufficient amount of unwanted signal may be unfamiliar to some. Essentially, it is to first identify and remove the dominant fundamental(s) frequency(s) followed by objectionable harmonics then to apply broad-band noise reduction if necessary, such as is provided by a Dolby Cat 43a or Cat 430. The easiest way to identify specific frequencies is to boost a narrow band and sweep the centre frequency of the filter until the unwanted signal peaks, at which point the filter is switched to Dip. The width is progressively narrowed and the filter re-tuned until the greatest benefit is obtained. The BALANCE control helps with fine tuning.



with the front panel finished in the Lafont restrained dark claret, dominated by four prominent knobs, skirted in translucent white with black markings. A single-channel unit, connections are few, with XLRs for audio in and out and an IEC mains socket.

The Little Dipper had two identical bands of peak-notch filtering - to this, the LP-24 adds a third. There are also high-pass and low-pass band limiting filters. Each filter uses a latching pushbutton (with associated LED) for insert into or bypass of the audio chain. The controls of the band rejection filters are almost identical in layout to the Urei. A second pushbutton with two indicator LEDs switches between Peak and Dip modes. A 3-position rotary RANGE switch selects the frequency multiplier to be applied to the legends on the big dial. This gives ranges of 18Hz-200Hz, 180Hz-2kHz and 1.8kHz-20kHz. The indicator LEDs are green, yellow and red respectively allowing the operator to see at a glance which range is selected even in the stygian gloom of the average dubbing theatre. A pot selects the width of the notch and a further pot adjusts the 'balance' of the filter. The LP-24's band-pass filters are 24dB per octave and the dip is fixed at a whopping 60dB. Peak is a mere 6dB by comparison.

If this sounds like a rather odd specification for an equaliser, it is. The LP-24 and the Little Dipper before it, really have only one application in film mixing. However, it is arguably the most important application of the lot - cleaning up location dialogue recordings.

You might imagine the quality of location dialogue recordings would have improved as tech-

There is of course a catch. Too narrow a notch may result in the unwanted signal drifting out of range, too wide a notch can ruin the quality of the remaining signal. Over use of this type of filter tends to result in a hard, phasey quality to the voice, particularly with some female voices. Careful design of the filter elements obviously plays a large part in the equation. Analogue filters are not phase linear.

Theory states this should not matter but I remain to be convinced. While it is perfectly possible to design linear phase digital filters with very narrow and deep notches there are surprisingly few stand-alone units about. I suspect there are several reasons for this. The total market for boxes aimed specifically at this task is, even in global terms, tiny and therefore unlikely to attract the volume producers. The digital filter units available tend to be aimed at a wider market and therefore have features which clutter them up and make them awkward and time-consuming to use for dialogue clean up. Film mixing, especially in Hollywood, commands a high hourly rate so speed is of the essence. A device that presents a familiar, unfussy user interface and can be used with little or no training will be far more acceptable than an unfamiliar, complex, programmable unit.

Lafont has done an excellent job of updating an old friend. From memories of hours spent using original Little Dippers I would say the Lafont design is more tolerant and rather less likely to severely degrade the dialogue. It is also very much quieter. The LP-24 may well be the answer to many a dubbing mixer's prayer. ■