

Funk Tonstudioteknik LAP-2.V3 Preamplifier

By Frank Berryman, Ultrahighend, October 1, 2012



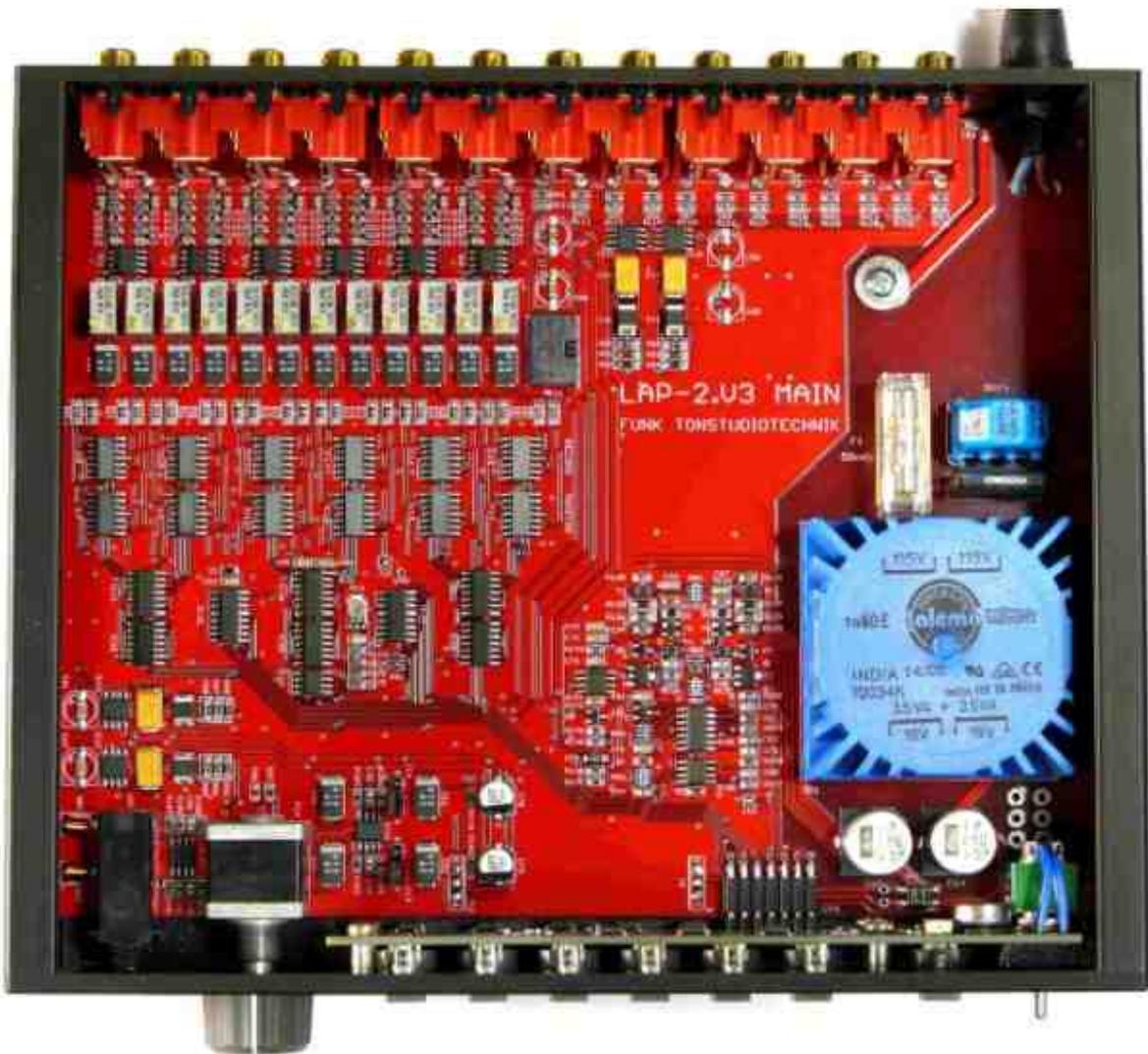
A preamplifier: how quaint in today's world of the ubiquitous computer connected to a USB DAC with digital volume control. And if digital audio files are your sole source of music, it is certainly an attractive option. But if you are like me and have multiple sources – two phono stages, a reel-to-reel tape deck, a CD player and two DACs, and need multiple outputs for recording and the option for a subwoofer, you simply cannot do without one. And that is before the discussion about the transparency of digital volume controls.

I was initially attracted to the Funk Tonstudioteknik LAP-2.V3 preamplifier based on a single specification – an A-weighted dynamic range of 137.5db, which is very close to the 144db range of a 24-bit digital file, and significantly better than any other preamplifier that I am aware of. I had to hear what a preamplifier that quiet sounded like, if anything at all.

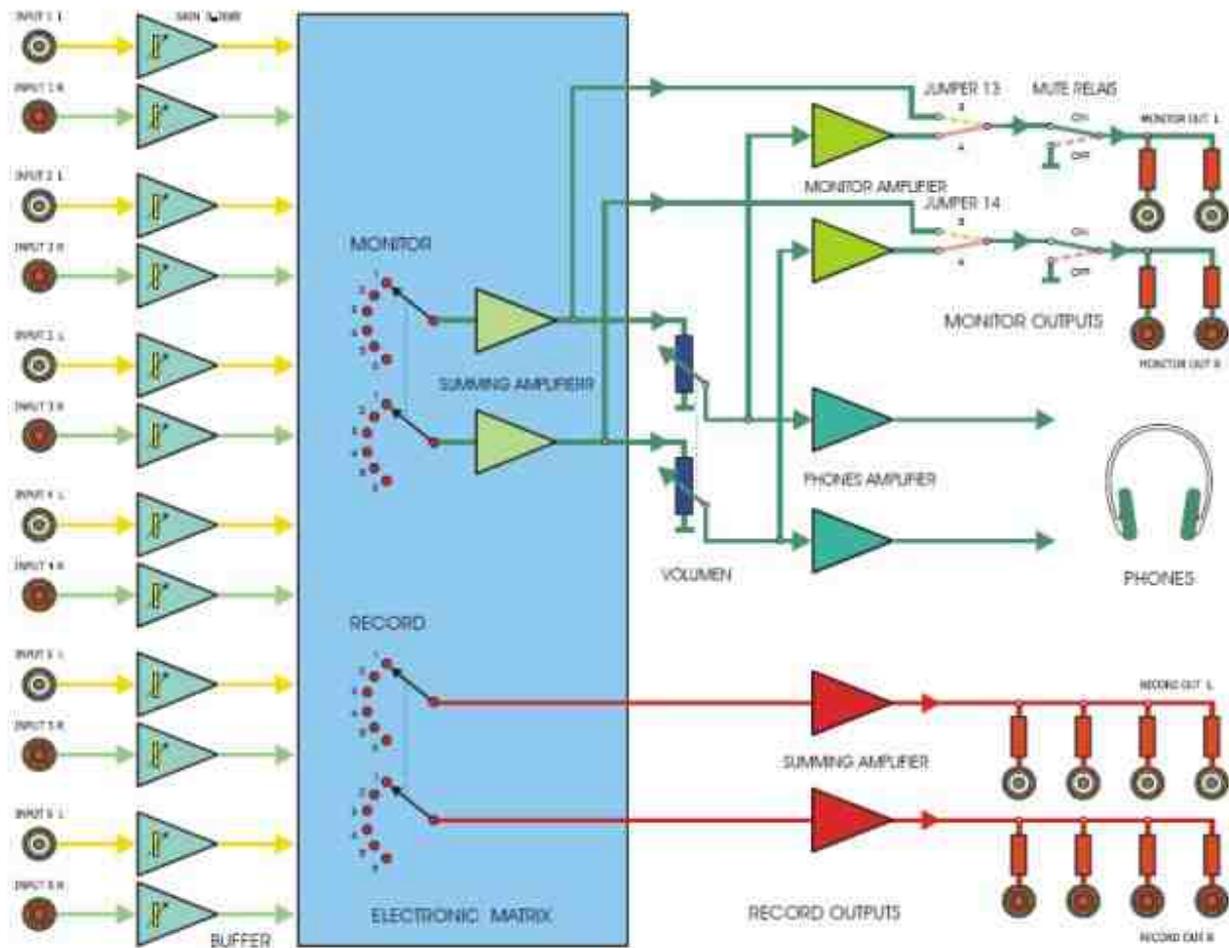
Funk Tonstudioteknik, based in Berlin, is not a well-known brand in the United States, but is well-known among professional recording engineers and knowledgeable audiophiles in Europe. Thomas Funk himself is a professional recording engineer who answered to call to deliver his own designs beginning in 1978 after repairing inferior recording equipment for years. His MTX monitoring system has long been a staple in European recording studios.



The first thing you notice about the LAP-2.V3 is its diminutive size. It occupies a mere one-half of a standard 1U rack mount space. The front panel is replete with a 21 step volume control, buttons for the six inputs and for selecting the source to record from, a 1/4" headphone jack, and a power switch. The rear panel is busy, but symmetrically laid out. Twelve sets of gold-plated RCA jacks are available for the six inputs, two parallel outputs for a power amplifier or active speakers and a subwoofer, and four parallel outputs for recording devices, more than needed for most audiophiles but just sufficient for professional mastering use. All inputs and outputs are unbalanced. Cramping all of that functionality into such a small form-factor was only accomplished by using a carefully laid out short-trace circuit board and surface-mount components.



Front panel operation is straight-forward. Input is selected by pressing the corresponding electronically controlled source selection button. A green LED indicates which source is selected for monitoring. Mute is accomplished by pressing and holding down the source button for at least once second. When mute is engaged, the green LED dims. You select the source to send to the four parallel record outputs by holding down the red Record button and pressing one of the source input buttons. A red LED indicates which source is selected for recording. The sensitivity of the inputs, and even the brightness of the LEDs, are user adjustable from within the unit. Shown below is a schematic of the input/output options. Although it may look complicated, such flexibility does not come at the cost of a non-intuitive interface. It's a snap to operate.



I have been listening to Bonnie Raitt's new album *Slipstream* quite a bit of late. There are a couple of cuts I use as a reference. *Right Down the Line* has a driving bass line punctuated by a kick drum. Neither requires exceptionally low frequency extension, but they do require a fast, articulate response which the LAP-2.V3 provides in spades. In addition, the snare is very crisp, and you can clearly hear the texture of the skin of the head. The sparse strings of electric guitar, particularly the grace notes, are finely delineated, with an extended decay when played as such. Bonnie's vocals stand out starkly from the rest of the instruments which surround her, creating a pinpoint soundstage. All of this results in large measure from the quietness of the LAP-2.V3 and its transparency. In *Not Cause I Wanted To*, instrumentation is spare, limited to electric bass, acoustic guitar, and keyboards faintly in the background. Unexpected for such a neutral preamp, the acoustic guitar has a full, even warm sound. I am certain this is a result of the recording engineers selection of mics and EQ, and not euphony added by the LAP-2.V3. Though there are plenty of opportunities, Bonnie's voice is reproduced without sibilance.



Shifting genres, I put on Sara K.'s audiophile classic *Closer Than They Appear*. In *Miles Away*, the bass is more prominent than in Bonnie Raitt's *Not Cause I Wanted To*, but it is just as fast and articulate. There is a marked difference in tone, though, because it is an acoustic rather than electric bass. The finger pluck is quite distinct. The occasion bell rings out clearly from seemingly nowhere. Brushes on the cymbal have their characteristic metallic swish, though that quality is not emphasized. On *Jasmine*, the bass has a very full sound. Shakers are clearly audible behind and slightly above the vocals. Bass overwhelms the hammer dulcimer, and substantially robs its characteristic sound. No fault of the LAP-2.V3 though. As a side note, I played this album at a volume of 68 rather than at 58 where I played Bonnie Raitt's *Slipstream*. Although *Slipstream* is extremely well recorded, it is also significantly louder. A sign of the times.



Piano is always a challenge to reproduce. Feeling nostalgic, I put on Keith Jarrett's *The Koln Concert*. It is readily apparent that this is a live recording as the LAP-2V.3 retrieves all of the low-level ambient background noise. The piano sound is huge, with the recording microphones capturing the sound from very close to or inside the piano. In achieving its enveloping sound, the piano does not seem unnaturally large though, just a very close, forward and exciting sounding presentation. The LAP-2.V3 is clearly up to the task of reproducing the dynamics of the recording. Sustain notes go on and on, rather than abruptly fading into a noise floor. It sounds nothing like it did in the 1970's on my hi-fi...thankfully.



I also put it through the paces as a headphone amplifier and was amazed. I plugged in my Etymotic ER-4 in-ear headphones, selected my Wadia 121 DAC and, with no music playing, turned the volume up all the way. I could hear no noise of any kind, just deathly silence. I dialed the volume back down, began playing music, and gradually turned the volume up. The LAP-2.V3 provides more than enough gain for the hard-to-drive ER-4s. What emerged from an absolutely black background was sound that was extremely transparent, neutral and dynamic. Details that were just audible through loudspeakers took on an exceptional clarity through headphones, though I would not characterize the sound as clinical. Headphone listening alone provides a *raison d'être* for the LAP-2.V3.

The only shortcoming of the LAP-2.V3 I could identify is that it does not directly accept balanced inputs and does not directly offer balanced outputs, which may limit its appeal to audiophiles as well as professional recording engineers in the US. For those wanting balanced operation, Funk Tonstudioteknik does, however, provide several balancing/differential amplifier systems which can be used in conjunction with the LAP-2V.3 to provide true balanced inputs and outputs.

Conclusion

The LAP-2.V3 provides more flexibility than you are likely to ever need in a small, beautifully crafted chassis with elegantly simple operation. It is completely silent, neutral, and transparent. If you are looking for a preamplifier with personality, particularly something to warm up and round off the sound of your other components or loudspeakers, you'll need to look elsewhere. As an added bonus, the front faceplate of the LAP-2.V3 is available in black, white, blue, dark red, silver and gold, as well as polished brass, gold plated or chrome plated. Both your eyes and ears are rewarded. Even if you have no need for multiple inputs and outputs, as a headphone amplifier, it is killer. The LAP-2.V3 is in all respects a jewel at a bargain price. At just €840 + VAT (~\$1100), it is an easy recommendation.

- *Frank Berryman*

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Associated Equipment

Analog Source: VPI Scout; Dynavector 20X2; Musical Surroundings Phenomena II; Otari MX-5050BII-2
Digital Source: Meridian G08; Mac Mini; Wadia 121; Halide Design Bridge and DAC HD; Amarra and Pure Music

Preamplifier: Meridian G02; Meridian G68ADV

Power Amplifier: Krell Evolution 302e; Meridian 557

Loudspeakers: Magnepan 1.7; Meridian DSP5500; YG Acoustics Carmel

Cables: Analog: Kimber KS1016, KS1116; Speaker: Kimber KS6063, KS9033; Power: Kimber PK10G

Accessories: GIK acoustic treatments; dedicated 20 amp circuit; Audience aR2p power conditioner