

"Hillar's Amp" BTI LK-2000 Amplifier to gs35b

Contributed by Administrator
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The BTI LK-2000 was originally a 3-1000z based amplifier. It's nearly as old as I am.

The LK-2000 has some pros and cons:

Pro -

- beefy PI-L output circuit
- robust Peter Dahl Transformer (capable of over 4500v in this configuration)
- Reasonable layout, lots of room for modifications

Cons -

- 220v input, only 3 wire cord and hookup, needs to be FOUR wire for current electrical code
- No 160 meter operation
- Rust (on the front panel)

Challenges to getting this converted to a GS-35b included:

- Fixing bad metering resistors
- Replace faulty interlock switch
- Replace rectifier stack and HV Capacitors for good measure
- Remove old fan, re-orient high-output replacement fan
- Adding a variac to the plate transformer input
- Mount and adjust W4ZT Bias Board

I purchased the RF Deck from Hillar N6HR, who then threw in the power supply for free. The GS35b Socket fit just fine in the 3-1000z hole.

Schematic

Tube Chimney RF-Induced Plastic Slag and Blowout

After starting to use it in an RTTY contest on 15m, I had just commented to K7BTW that I smelled something getting hot and BRAAAP -- a nice blue-green spark on the side of the tube. The smell of PVC plasma filled my small shack. The 'crash' relay tripped, so there wasn't any major damage. PVC doesn't seem to like to be in heavy RF fields. Others have reported this phenomena -- see www.gs35b.com.

After the contest, I used some hi-temp rubber material to fashion this chimney -- have been using it since.

This amp's blower is just too noisy to use near any operating position for phone, however the cooling is excellent for RTTY.