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Subject: K-502 pt II Chassis

Posted by [GarMan](#) on Fri, 07 Jan 2005 14:04:04 GMT

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Happy New Year everyone. Hope we all had a wonderful holiday. For myself, I was pretty busy with a couple of audio-related projects, one of which was to build an enclosure for the K-502 amp that I put together in Nov. I did a couple of mods on it too, but since most of this post is about the chassis, thought I'd post in Craftsman. Like I've said in a previous post, this little amp sounds very good, and not just in a "for-its-price" kind of way. Unfortunately, the pine board it came with wasn't going to cut it, not from an aesthetics, functional nor safety point of view. It deserved a proper chassis. In keeping with the price/performance spirit of the kit, the chassis had to be nice, but inexpensive. No Cardas connectors or binding posts, but at the same time, I made sure the parts were decent. For the chassis, oak panels from Home Depot in the "Handy Panel" area and steel panels from the Metal Supermarket. Rest of the components (except for the Solen caps) were from the local surplus store (Active Surplus) or component store (Supremtronic). I got myself a compound mitre saw over the holiday and got a chance to use it for the mitre cut frame. The saw was a Porter Cable 10" with twin laser guidance discounted from \$299 to \$199. Funny thing was, it was (and still is) discounted only at my local HD. The saw was (and is) selling for regular price at other HD locations. Epstein, your advice of using masking tape to roll the mitre-cut panels into a frame worked like a charm. I was stubborn though. I tried every which way to hold the pieces together with no success and all but gave up. Finally tried Epstein's crazy masking tape idea when I thought I had nothing else to lose. Big thanks. Do a search on "masking tape" in this forum for more detail from Bill. As you can see, the wood sides are almost an inch thick, so the front and back had to be routed out to almost 1/8" thick (thin?) for me to install the connectors. The top plate is spray painted with two coats of brilliant blue and then topped with a very thin coat of hammer-finished gray. You can't see it in the photo but it does have a translucent gray/blue effect. The component shop had microphone cables for \$0.60/ft and was perfect for running the signal from input jacks to selector. Just remember to only ground one end of it, or you'll create a ground loop. The power cord that came with the kit is replaced with a proper three-prong cord. I decided to install a permanent cord instead of one that's detachable from an IEC connector. I seriously doubt I'd ever find a need to experiment with different power cords with this amp. In shopping for parts, I was very happy to "discover" 120V indicator lights, which made this part of the project many times easier. Working with LED's in the past, I had to search for a low voltage source and experiment with dropping resistors. In terms of mods to the PCB, I tried the amp with both an ALPS pot and a generic \$2 pot. Both made a difference from the stock pot, but not much from each other. The stock pot is linear tapered and normal listening is done at the 9 o'clock position. It's not until you replace it with a log tapered pot that you realize how low the gain is with this amp. Normal listening is done at 2 or 3 o'clock with a log tapered pot. That might explain the similarity between the ALPS and the \$2 log pot. When you listen with the pot wide open, it has very little impact on the signal. No brainer here. \$2 pots goes in the amp, \$15 ALPS goes back in my bin for another project. What made a big difference was the replacement of the six coupling caps. No Auricaps for this project. The Solens are more than adequate. Replacing the caps cleaned up the sound. The amp now sits on the bright side of neutral, but still an improvement from stock. Here's a list of mods and material for the chassis: Solen caps \$2 x 6 Power resistors \$0.25 x 3100K Audio Tapered Pot \$1.75 RCA jacks - \$0.70 x 10 Binding Posts - \$3.50 x 2 Power Cord - \$1.50 Power Switch - \$2.12 120V Indicator Light - \$1.50 Selector Switch - \$1.50 Control Knobs - \$1.75 x 2 Mic Cable - \$2.80 3"x1"x4' Oak Panel \$6 Top and bottom steel plate

(8x10) \$6Rubber feet \$0.15 x 4(All reference to costs in this post are in \$Cdn)Other supplies I had at hand: Spray paint, Nuts & Bolts, Screws, Hookup Wires, Solder, Stain, Tung Oil.All in all, I spend a total of just over \$50 and many many hours to mod and dressed up the amp. In \$Cdn, this amp costed a total of \$235, which is still a great price for the performance you get.Gar.  
K-502 Photos

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Subject: Sweet!  
Posted by [Wayne Parham](#) on Sat, 08 Jan 2005 09:31:18 GMT  
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That's one great looking amp you built there!Gar's K-502 amp photos

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