

Electronic Crossovers

Tube

Solid State

Passive Crossovers

Line level

Speaker level

Custom Solutions

We can customize our crossovers to your specific needs. We can add notch filters, baffle step compensation, etc....

*All available as kit**Free Catalog:*

Marchand Electronics Inc.

PO Box 18099

Rochester, NY 14618

Phone (585) 423 0462

FAX (585) 423 9375

info@marchandelec.com

www.marchandelec.com

Ready, willing and Avel



*offering an extensive
range of ready-to-go
toroidal transformers
to please the ear, but won't
take you for a ride.*

Avel Lindberg Inc.

47 South End Plaza
New Milford, CT 06776
tel: 860-355-4711
fax: 860-354-8597
www.avellindberg.com

Xpress Mail**CORRECTION**

In aX 2/05, Play Things of Past was referenced in Aren van Waarde's "A Study System: Part 1, The SE Amplifier," but an incorrect address was given. The correct website is www.olderadioparts.com

TRANSFORMER POWER

The power transformer Rick Spencer specified ("A Mini SE Amp," aX April '04, p. 6) handles 269mA of current draw, but the choke specified is rated at 150mA. I have a number of possible transformers I could use, but really need to know what the current need actually is.

Bruce Brown

Tuninfork@aol.com

Rick Spencer responds:

I thank Mr. Brown for his interest. I am certain that once he has built the amplifier, he will be surprised and pleased with the quality of sound for such a small investment.

You are correct regarding the quoted specs of the transformer and the choke. When selecting the B+ transformer for any project, I like to use one with a power rating that is approximately 25 to 30 percent greater than the circuit will normally demand. This will prevent any overheating of the windings and will, of course, extend the life of the tranny itself.

Sometimes it is difficult to find HV transformers with the proper rating, especially when constructing amplifiers that are capable of very high power output. Most high power units require separate transformers to supply the various branches of the circuit, such as B+, heaters, or filaments, and even the bias voltage. The same is true concerning the size of the choke.

If you wish to use choke filtering for all the B+ circuit, then choose a choke that can handle all of the current required throughout the entire circuit. Some of these larger value chokes are quite heavy and have dimensions that are almost the same as some power transformers. On the other hand, some may wish to filter the B+ supplied to the driver tubes only, which may be accomplished with a smaller type of choke.

The transformer I chose is perfect for the application. Concerning the load on the B+, if you add up

the total draw, you will find that the idle current is only around 110mA and not much more at maximum output. The Hammond #261M6 is just loafing along at this rating in the choke input filter configuration. The choke is rated for 150mA while maintaining its value of 5H.

This choke, like most others, will have a little less inductance when operated at a DC current higher than recommended and will show a little more when used at a lower current. When I pushed my amp hard during testing (maximum power for periods of ten minutes or more), neither the transformer nor the choke became more than slightly warm to the touch.

I think all Hammond products are rated very conservatively. I have never had one roll over and quit! So, if you build the amp with a transformer and choke within these stated parameters, you can't go wrong. If you still desire a "beefier" choke, then I suggest the Hammond #159S, but you will definitely need a larger chassis.

You stated that you had some transformers on hand. Just remember to keep the B+ for the 12L6s within the 200V range. The Hammond transformer and choke combo that I used gave me the required voltage without requiring any dropping resistors.

Good luck, and, please, write back to *audioXpress* when you are finished, and let everyone know how it turned out!

BOSTON AUDIO SOCIETY

In the January 2005 issue of *audioXpress*, there was a very good review by Gary Galo titled "A Matter of Coincidence and Boston Audio Society CD-1." The reviews were complete and thorough and certainly would be very useful to someone who is planning to purchase either of the CDs.

On page 47, Gary says that Peter Mitchell was the founder of the BAS. Gary got this information from the Test CD booklet notes, which incorrectly state, "We could not issue this CD without a recording by our late founder, Peter Mitchell." Although Peter Mitchell was influential in founding the BAS, primarily, but not solely, through promotion on his program "Shop Talk," if I remember correctly, the person who germinated the idea of the Boston Audio Society was Alvin Foster. Many people helped Foster to

achieve his goal of a society, but the idea of a society and the effort and drive to form what grew into the BAS was Alvin Foster's.

I don't want to appear to be minimizing Peter Mitchell's contribution to the audio industry. Peter was a superb author, consulted for a couple of audio companies, even to the design, and was a superb evaluator of audio equipment, just to name a few of his achievements.

C. Victor Campos
cvc.aap@rcn.com

BOARDS TO THE MAXX

With reference to my MaxxBass article in the Nov 2004 issue of aX (p. 6), the following are now available: MX3000AS processor chips are \$15 each postpaid in the US and Canada. We also have double-sided processor boards with plated-through holes at \$20 each postpaid. The new boards (MAXXB-4) are the same size as the original MAXXB-2 and use the same parts except for the +3.3V regulators.

The teeny-tiny regulators in my original board layout are hard to solder even when I use a 2.5 power head-band magnifier. So I replaced them with regulators in a TO-92 package. Also, not having to solder all the vias makes the plated-through board much easier to build. The original board set is available from FAR Circuits, so you can take your choice.

Ron Tipton
TDL Technology, Inc.
5260 Cochise Trail
Las Cruces, NM 88012

POWER CORD SOURCE

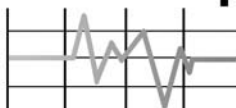
Regarding Charles Hansen's modification of the HP 3400A voltmeter ("Noise Meter Amp," Jan. '05, p. 32): Mouser offers the direct replacement for the old Hewlett-Packard power cord, part # 686-17952. Please note that the hot and neutral positions are reversed as compared to the arrangement on an IEC cable, so for those people who modify their old units to an IEC connector, make sure that the hot leg is connected to the fuse.

Bill Coe
Newtown Square, PA

Charles Hansen responds:

I'd like to thank Mr. Coe for this information. The Volex replacement cord didn't become available from

Test Equipment Depot



800.996.3837

The source for premium electronic testing equipment

New & Pre-Owned

- Oscilloscopes
- Power Supplies
- Spectrum Analyzers
- Signal Generators
- Digital Multimeters
- Network Analyzers
- Function Generators
- Impedance Analyzers
- Frequency Counters
- Audio Analyzers

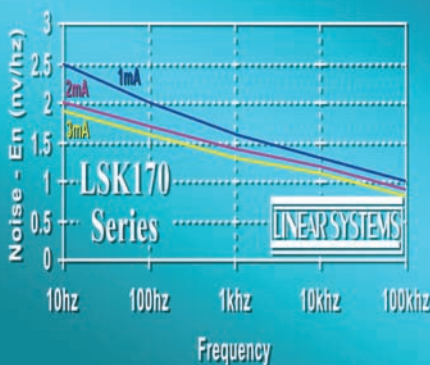


Call now to speak to one of our knowledgeable salespeople or browse our extensive online catalog

www.testequipmentdepot.com

• Sales • Repair & Calibration • Rental • Leases • Buy Surplus

1nV Low Noise JFET



Low Noise <1nV
Low Capacitance, 20pf
High Input Impedance
Selected Idss Grades
Available in SOT23 Package
Pin for Pin Replacement for 2SK170

www.linearsystems.com

800-359-4023



A Winding Path

There is no music on a record! Just a winding path of vertical and lateral amplitude waves.

The time signature comes from the spinning turntable platter.

Modern disc cutters can achieve Wow and Flutter of 0.01%. Shouldn't your turntable do as well?

The Audiophile Standard

KAB

Preserving The Sounds Of A Lifetime

www.kabusa.com

Mouser until the May 2004 catalog.

This would save anyone restoring a 3400A a bit of extra work.

PA CONCERNS

The bass enhancement control circuit in the "High-Quality Tube Type Control Unit" (*audioXpress*, 10/04, p. 26) caught my attention because I have been using almost the opposite response curve in public-address systems. That is, I would shelf down the bass below 160 or 200Hz by 6dB and slope the response between there and 400Hz; above that the response would be flat. Although this would take the punch out of rock and rap music, vocal clarity seems much better, especially for senior citizens and other audience members whose hearing needs a little help.

Perhaps this low-frequency cut shelving compensates for the bass boost caused by the proximity effect of most cardioid vocal microphones and the reverberant acoustics of many public meeting spaces, especially gymnasiums. Those who work with PA systems that have equalizers may choose to give this a try. On the other hand, with home music systems, these conditions generally do not exist, and mild, controlled

bass boost may add warmth to music.

Michael Kiley
Crestwood, Ill.

HELP WANTED

I am seeking help on finding a repair person(s). I have a simple preamp (not passive, but with two Stan Warren audio boards and two separate output chips that need fixing, replacing, or upgrading). I am looking for someone from the DIY or music/audio lovers community who would be comfortable working on my preamp.

Mark Shane
marklshane1942@earthlink.net

Does any reader know of a source that can help me get information on a "Phase Linear Model 2000 Series Two Stereo Console"?

Dale Douglas
dale.douglas@comcast.net

Readers with information on these topics are encouraged to respond directly to the letter writers at the addresses provided.—Eds.

XM

P-N-F AUDIO

Do it yourselfers or Speaker manufacturers:
We offer a source for standard or custom enclosures
at prices starting at 99.95*

Modern Factory with advanced equipment!

Full featured design, including Solid Modeling
Leap analysis system, complete testing lab
Five axis CNC routers, 8 foot capacity
Hot Veneering Press, 9 foot capacity
Dozens of exotic veneers in stock!
Latest finishing equipment

PNF AUDIO
2598 Tuckahoe RD
Franklinville NJ 08322
877-57-AUDIO

fax 856-697-7050
www.pnfaudio.com
sales@pnfaudio.com