with your new amp – but how do you follow it up and keep the thing alive? I've a few suggestions – how about "Project Audio" continuous extension of your design. It really should have been obvious that it's a little like a shag on a rock – it doesn't interface either with your equalizer (what a waste – how else would you control a high quality amp) – nor is it powerful enough to run your top quality TL speaker (min. 75 W!) – so how about some extensions, e.g. can the amp deliver 75 W or more (reading the specs for the output transistors, don't understand why not – could you explain?) – you suggest that they could be paralleled. Why don't you do it and check. (I'd imagine a resistor value would have to be changed) – and show how two can be coupled out of phase to give 200 W.

How about using the LED VU meter to show not only output power but the tone control input as well so that they can be attenuated to give optimum strength (it could be switchable)?

How about upgrading your active crossover to use better more modern components (the 4136 for example!). I've noticed that many companies have brought out upgraded substitutes for common ICs – how about some info on them so that existing (and aging) units can be upgraded.

Finally (thank God, I hear you cry!) how about letters and advice (including small project changes, e.g. a buffer for your power amp to make it a bit more useful).

I hope this lot is food for thought – good luck and keep up the good work (yes, you do plenty, but I don't feel the need to change it).

Ian Catt
Baulkham Hills, NSW

Dear Mr Catt

I'm glad you like the new format and presentation. With regard to the ETI 470 60W audio amp modules, the input impedance is close to 100 ohms. To successfully drive these modules and achieve the amplification 'accuracy' attainable, the source impedance should be one-tenth to one-twentieth the input impedance, i.e. 5 to 10 ohms.

Personally, as much as possible, I try to adhere to the principle 'do it properly or not at all'. In magazine publishing, it is not always possible – disasters do occur and articles have to be replaced last minute – but we are working towards improving the editorial material presented in ETI.

With regard to the 'Series 4000' amplifier project, it is being followed up. This issue includes the 'Series 4000 moving coil cartridge preamp'. The object was to suggest a group of audio components with the title – hence the word 'series'. The moving coil preamp will be followed by a number of other projects – the eventual aim being to present a cohesive set of related audio components for home construction.

We cannot present these projects one on top of the other in successive issues. Apart from the necessary development time required (five months for the stereo amp, three months for the moving coil preamp, etc.) the individual projects need time to gain acceptance – both amongst readers and parts suppliers. We exist in a symbiotic industry – we depend on the parts suppliers to support our projects and they depend on us to present well-designed, popular projects.

In summary, I think you can see we have spent a lot of time and thought very carefully about the many factors involved in this series of audio projects.

The Series 4000 will successfully drive transmission line speakers to painful levels in many a suburban lounge room. Indeed, we have given a demonstration in a very large church-style hall at Sydney University with the Series 4000 driving a pair of Tannoys in a large TL enclosure. Sound levels were quite adequate.

Extending the power level of the ETI 470 60 W module is not possible as the safe-operating area of the output devices will be exceeded. Bridging two modules can be done, but it is not simple. We have this on our list of "things to do". As for the VU meter, active crossovers, etc., there are only so many hours in a day and so many demands on our time from enthusiasts with other interests we're hard pressed to get as much done as we do!

For a glimmer of hope, an interface/driver for the 60 W module is being designed. It will appear . . . eventually.

Here is the "Letters" page!, Ideas for Experimenters has already been extended and the "Lab Notes" occasional Column for such semi-project extensions as you suggest was introduced several issues back.

Roger Harrison
Editor