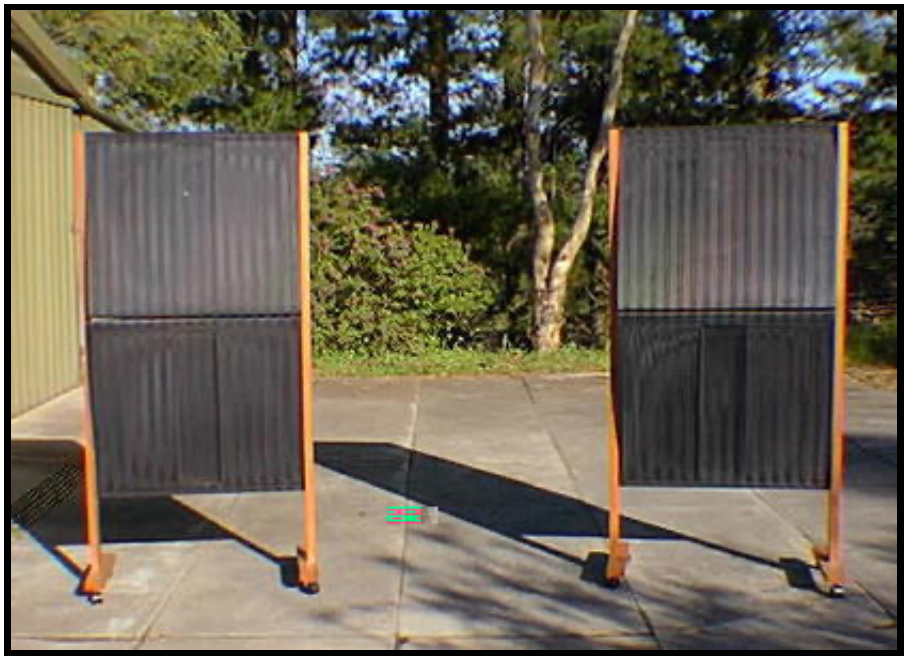
Pete's Double Quad ESL Page

While I acknowledge that the original Quad ESL has some limitations, to me these are vastly out weighed by the many good qualities this loudspeaker possesses. My first step in reducing the limitations was to stack the ESLs as others have done in the past. I used solid Meranti timber to make the inverted "T" stands. For strength the timber had a cross-section dimension of 70 mm x 32 mm and the total length of each stand was 1760 mm. The cross piece on the "T" had a section cut from it so that there was tight fit for the timber up-right which is glued and screwed in place. The cross piece was 420 mm long and this appears to be sufficient to provide the finished speaker with good stability. Before the speakers were secured to the timber up-right I fixed castors to the under side of the cross piece so that the finished speaker could be easily manoeuvred into position. The castors were 40 mm making the stands exactly 1800 mm high.The original timber side rails and the legs were removed in preparation for the final assembly. I found that the best way to assemble the speakers was to position each ESL so that they rest on one side, this allows easy alignment of units prior to securing a stand. When the screws were in place the whole structure was carefully inverted so that the second stand could be secured to the ESLs. So that the power and signal connections are tidy I made a special *connection enclosure*.

During the first subjective test I was amazed by the difference. The improvement in bass response and high frequency vertical dispersion is dramatic while the rock solid stereo was maintained. If you like sound of the Quad ESL and have the opportunity to acquire two pair, you can't go wrong if you stack them. One word of warning, do not over drive the ESLs because the treble diaphragm can be damaged. While you can now once again source spare part replacement panels, like everything they come at a cost. If you need Quad ESL spare parts then contact *Dr. Frank Hirsch* of Quad (Germany).

All of my ESLs were made in the mid 1970's. The serial numbers are 36121, 36127, 36129, and 37593.



For those you who want to set up stacked Quad ESLs or if you have purchased a single pair, I recommend that the units be checked for faults and repaired as required. You may encounter an ESL that someone has tried to re-wire and has done a bad job. In this case a competent person should re-wire the unit, poor wiring in these speakers at best could potentially cause a large repair bill and at worst can be a death trap. Having said that, anyone who can make clean rounded solder joints and who has had some experience with electronics should have no trouble re-wiring the ESL as most of the repair information is readily available (*Quad ESL Service Data*).

The panels should be thoroughly cleaned occasionally as they attract dust while operating and over a period of time a "thick" layer will develop on the dust cover. If you are setting up a stacked pair of Quad ESLs would be wise to check the general condition of the speakers prior to assembly and as removal of the grills is not a five minute job you might as well clean the panels while the grills are off.

In my case getting to the point of assembling the Quad ESL stacks involved some additional effort. One power supply had to be rebuilt and one bass panel required a new dust cover. Later when the assembly was complete, three weeks later to be precise, one of the bass panels started giving trouble. It appears that the diaphragm had suffered some damage from prolonged leakage/discharge. I found the problem as a result of hearing a buzz from the panel and there was excessive ozone in the general area. When I removed the panel and the dust covers I found one of the rivets had corroded so much that it fell out of the panel. This I replaced with a 4BA Nylon screw and nut, then I found the cause, there was a small drill hole in the side of the panel near the faulty rivet. It appears that the pilot hole for the center hole of one of the side rails was drilled in too far during assembly. This hole has possibly allowed moisture in causing a small amount of discharge and over the years slow cumulative damage. My efforts to repair the panel made considerable improvements but I was unable fix a buzz that occurred whilst the

programme material produced large displacement of the diaphragm. As I could not live with this problem I decided to purchase a replacement bass panel, once it was installed the speaker performed faultlessly. As the guarantee on the workmanship expired 20 years ago I think it is a bit late to make a claim but if anyone from Quad reads this and is prepared to send me a cheque to cover the cost of a replacement bass panel I won't say no!

Since writing the above text (Oct 96) I have disassembled the offending bass panel and the pilot hole did not open the panel to the atmosphere it seems just to have been coincidental that internal corrosion occurred. There were two effects, first the aluminium foil edge strip used to conduct charge to the diaphragm had turned into aluminium oxide and secondly a 50mm piece of the diaphragm had broken away, this was the source of the buzz.

Please send any comments or questions to *poneill@clove.net.au*

Back *Home*

Last updated on April 03, 1998