

prepared board is etched and drilled and the components soldered in as per the overlay. For the benefit of other, more experienced constructors, this unit works well at various HF frequencies also. Test the unit by connecting the LED's and relays to points X-X, Y-Y, Z-Z and W-W respectively, observing the LED polarity. Feed in some RF and the "on-air" LED should come on whilst the "power" LED should indicate as soon as power is available. A single pole on/off switch adds in the electrolytic to provide the delay or hang time on SSB and this should be checked whilst the pre-set is adjusted to suit. The pre-set simply adjust the rate at which the electrolytic performs, and has no effect when the unit is on FM. Connect the "vox" into the circuit by feeding RF from the txcvr into A and the relay contacts as per Fig 1. The author uses sticky fixers to hold both the relays and the "vox" board in place, and the LED's, switches and a Fuse holder are mounted on one end of the die cast box.

The writer feels that far too many homebrew projects are crammed into enclosures that are patently too small, and this situation is most probably the result of conditioning by our far eastern friends. When working on the shack bench we do not have the factory assembly facilities enjoyed by the black box builders, and it is for this reason that the diecast box specified is larger than might be strictly required, but it does allow the welding of a hot soldering iron without a magnifying glass and without the destruction of the insulation of nearby wiring. co-axial connections from the relays to the board, and form and to each other, as short and symmetrical as possible.

On air

Finally, on-air reports for the unit on both FM and SSB are very good, and although the unit should be re-peaked for SSB use, in practice using the 2N6083 device, no noticeable difference can be ascertained from on-air reports. I hope for those of you who have never constructed anything, this article may be the spark, I find that a lot of hobby is construction, especially when the junk box can provide a lot of the parts. Perhaps I will hear you on the air soon, I certainly hope so. ●

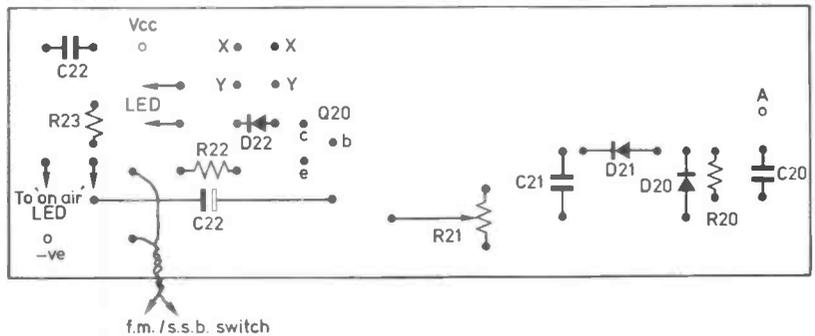


FIG. 5b. Component layout (from top).

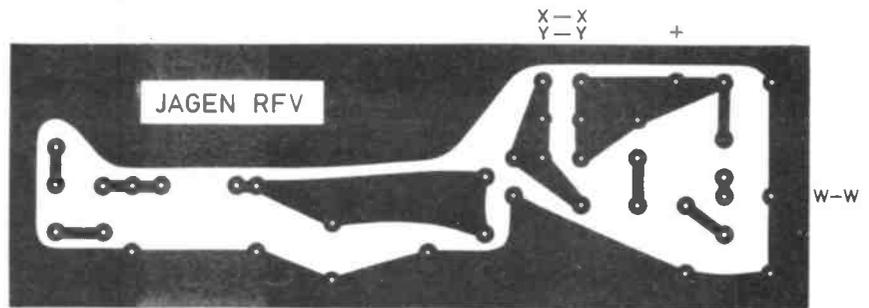


FIG. 5a. PCB etch pattern (from foil side)

Interior view of the linear amplifier. Although the quality of the picture leaves something to be desired (our apologies!) the author's simple 'pad' construction technique can be seen. The PCB conductors are cut out separately and stuck to a groundplane copper PCB using superglue. Not only does this allow easy modification of the circuit without scrapping the basic layout, it also offers a very rapid building up of the circuit.

