

October 3, 1957  
Joe Allee

Hello Bill,

I believe we have accomplished quite a lot on the scope. It would appear to be operating rather well based on what we know here of the end use. Output waveform is good on scope at 5 C.P.S. from an input of 100 mv. and below.

Installation of magnetic shield required several mechanical changes as you will see.

Also had a leaky 1 mfd. coupling condenser in the EEG channel. Replacing this gave considerably better stability. Checks with 1 mfd. Vitamin Q were even better but the only ones we had were 1" diameter and would not fit in space available.

More filter on the negative H.V. for the C.R.T. was essential for a clean spot.

Put 5751 tubes in the first two stages of the EEG Amp. and believe you can get by without shocks mounting the Amps.

Sweep circuit seems to be usable but wonder if it is entirely satisfactory. It would appear that a Sync. Ckt. and switch to Sync. from either EEK or EEG Amp. would be helpful, but did not know enough about the end use of the scope to go ahead and put it in. Perhaps driven sweep generator with either line Sync. or Internal Sync. from either Amp. would be preferable.

Will ship unit sometime next week. Anxious to know how it comes out in field tests.

Would appreciate the reference material on the subject you mentioned. Have seen enough of my own Q.R.S. and muscular patterns to have a much better idea about those. Can't however, bring myself to drilling holes in my skull for electrodes for the EEG waveforms.

Wish you a lot of luck with the device and hope school is progressing satisfactorily.

Sincerely,

Joe Allee

JBA/k