

2) Float all inputs and outputs from the chassis with isolated, gold RCA (Old Colony has them for \$1.75 each) jacks. Then bring both the "hot" and the shield to a "make before break" input selector switch. By switching both the signal and return, no other sources are tied into the selected source and ground crosstalk is also reduced. Only one source ground/return is attached to the circuitry of the preamp. This leads to further improvement in detail and resolving power so well as more exact spatial definition.

RICHARD MARSH

I just finished building my Marsh preamp. There aren't words strong enough to describe just how good this preamp really is. My reference preamp was a Conrad-Johnson which I had updated to the latest circuit. I added a very large power supply, regulated heaters, all polypropylene coupling caps, new low cap. polypropylene coax cable for all signal paths, etc. My C-J was very open, sweet, dynamic, beautifully detailed, and quiet.

The Marsh circuit is so much better. The sense of quiet is awesome. There are delicate little sounds which I never heard on previous occasions. While I have not measured the distortion, this preamp sounds cleaner by a large margin. The sound is pure, uncolored and dynamic.

Please use polypropylene caps. for all coupling. A switched attenuator is justified. Another suggestion is to use a "switching type" cap. for the large caps. in the power supply. They make a big difference. I added 20,000 μ F of this type to my Pass 40 amplifiers (which already had 75,000 μ F per channel) and the change was dramatic.

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MORE ON MARSH PREAMP

IN ADDITION TO MY preamp PCB corrections which appeared in 2/81 I would like to pass on the following update information. Since a few people have mentioned transformers, I'll start with them.

1) The power supply DC voltage should be close to the value shown on the schematic (30V). The minimum is 27VDC and the maximum is 40VDC. The proposed transformer produces close to the max input rating of the IC regulator chips. Therefore, for increased reliability the signal 241-6-48 or as reader John Adelsbach has suggested, a signal LP-40-150 or an Avel-Lindberg 40/3004 will give voltages more near the middle of the IC regulator min/max inputs.

The toroidal transformers offer low radiated magnetic fields. They also offer lower primary to secondary capacitance for improved rejection of AC line disturbances (RF, transients).

MARSH KUDOS

I WAS TRULY DELIGHTED to read your TAA article on pre-amps and particularly your driver (line) amp. I was so excited I built the line amp at once, using 2N2905A's and 2N2219A's in lieu of MPQ6600A-2 but similar in every other aspect. The results are, of course, superb.

Coincidentally, in the July issue of *Wireless World* there is an interesting contribution from a Russian Engineer (Moscow) who advocates a class-A power amp using only local negative feedback, i.e. no overall NFB. He stipulates curve-tracer matched output bipolars, emitter follower in the output stage for maximum linearity and using highest V_{ce} devices possible. It is a wideband minimum phase design.