

Note on the Tone Control Amplifier

In Circuit & Design Ideas for November, 1971, N.W. Giles describes a Tone Control Amplifier which he built. Among other suggested applications, he pointed out that he incorporated this tone control immediately ahead of the power output stage of the Basic Stereo Amplifier, as described in June, 1966.

We have received a letter from Mr. B. Marks, 8 Mott Street, Warrnambool, Victoria 3280, who advises that he has built this tone control into the Basic Stereo Amplifier and he is pleased with the results.

However, Mr. Marks points out that, as there is a phase reversal within the tone control circuit, this must be taken into account when it is introduced within an existing feedback loop. This is the case with the Basic Stereo Amplifier and the feedback connection will need to be reversed.

While we are not particularly in favour of putting a tone control within a feedback loop, there are times when this practice can be justified, particularly on the grounds of simplicity or convenience. It is important to note that both the original author and the present correspondent have found this

approach to be satisfactory.

Mr. Giles mentions that if the tone control is to be used for stereo applications, the circuit as shown will have to be duplicated, except for the two decoupling electrolytic capacitors, and the 15K resistor, which latter should be reduced to either 8.2K or 6.8K. Again, Mr. Marks points out that the 22K decoupling resistor should also be halved when two amplifiers are used. Strictly speaking, this is correct. However, if this step were not taken, we doubt whether it would have any noticeable effect on results.