Solid State Audio Switch

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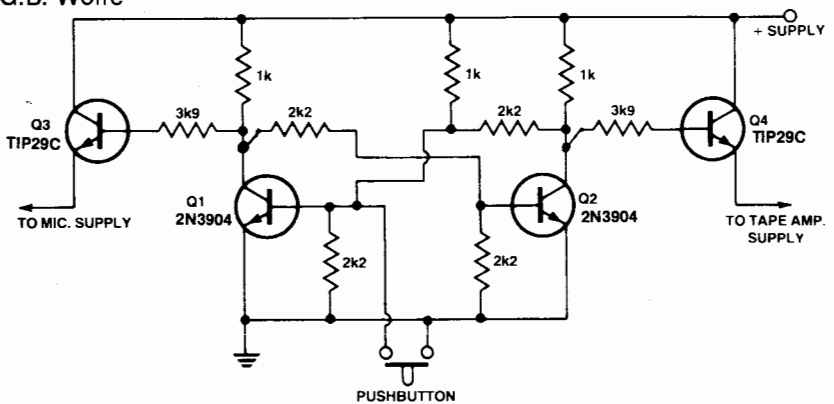

The purpose of this circuit is to switch off a music source (from a tape amp in this case) and turn on a microphone.

The pushbutton on the microphone stand is pressed into service to operate the solid-state switch. When operated (i.e: when you want to switch the music off and switch the mic in), the pushbutton shorts the base of Q1 to 0V. Q1 turns off and Q2 turns on. This turns Q4 off, and as it is in series with the positive supply rail to the music source (tape amp), then the music source turns off. At the same time, Q3 turns on and provides positive supply to the mic preamp.

When the pushbutton is open, Q1 is biased on and Q2/Q3 biased off. Thus only Q4 will be biased on and the music source will be oeprating.

This way, there is no need to alter the signal circuits and the only change required is to the supply rails; control is by a single-pair lead.