

## Touch-sensitive Piano Keying

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The circuit is operated by a single-pole change-over key switch. When the key is in the fully released position C1 is held charged from the 15V rail. Q1 is turned on by the bias current supplied by R2. When the key is depressed C1 is disconnected from the 15V rail and starts to discharge through Q1 and R1. When the key is fully depressed Q1 is turned off and the remaining voltage on C1 then charges up C2 via D1. Both capacitors then discharge via R3. The envelope produced by this decaying

voltage is chopped by Q2, driven directly from the tone dividers. Upon the release of the key, C1 is disconnected from the chopper circuit and C2 discharges rapidly via R3, simulating the action of the dampers. D1 is included to prevent C2 discharging through R2 when the key is released and D2 prevents interaction with other keying circuits.

As the voltage remaining on C1 at the completion of a keystroke depends on the key velocity, a degree of touch-sensitivity is obtained with this circuit.

