

ABSTRACT

PULSELESS KEYPAD SCANNING MECHANISM

A transistor-based telephone keypad scanning mechanism that uses a constant scanning voltage signal instead of a pulse signal to reduce pulse-related noise in the telephone receiver. The mechanism circuit includes a plurality of C lines and R lines terminating to a contact point. A unique pair of one C line and one R line corresponds to each key of the keypad and the contact point for each line is placed under each key. Each of the R lines is connected to the base of a transistor. The corresponding collector of the transistor and the corresponding C line are connected to a microcontroller and tied high to a DC voltage source. When a key is depressed the inputs to the microcontroller corresponding to the key is pulled to ground and the key-depression is detected.

FIG. 1