NON-MOVING KEYS ON KEYBOARDS

206

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It should be possible to make key foot keyboards on which the 'keys' do not move at all. Already 'key-clicks' are simulated rather than real. Some mechanism (contact potential, obscuring a photodetector etc) in the key-top could easily replace physical movements of keys.

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ASCII/DTMF Phone transmission

'Touch tone' or dual-tone multifrequency telephones operate by sending one of a group of four low tones (697, 770, 852, or 941 cycles) plus one of a group of four high tone (1209, 1336, 1447, 1633 cycles) to define digits 0-9 and '*' and '#'. (Actually 16 possibilities, 4×4). Use of all eight tones allows exactly one byte to be defined (2^8). A complete 256-character set can be defined with one blast using 0 to 8 of these frequencies on existing equipment only.

Ref. J. A. Kuecken, 'Telecomputers and telecommunication', p. 33.

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VELOCITY OF SOUND IN 2 MEDIA

Velocity of sound (ft/sec) (at 32°F)	air	hydrogen	driven HeH_2O_2	water	steel
	1048	4220	4000	4760 at 59°F	

For gases, $v = \sqrt{\frac{\gamma P}{d}}$ (v: velocity, P: pressure, d: density)

For solids, $v = \sqrt{\frac{B}{d}}$ where B = bulk density; for water B = 310,000 psi; for mild steel 30,000,000 psi

For diatomic gas, $\gamma = 1.40$
For monatomic gas, $\gamma = 1.60$.

* Can this be exploited to extract energy/give information, like a bi-metallic strip extracts temperature information or current?