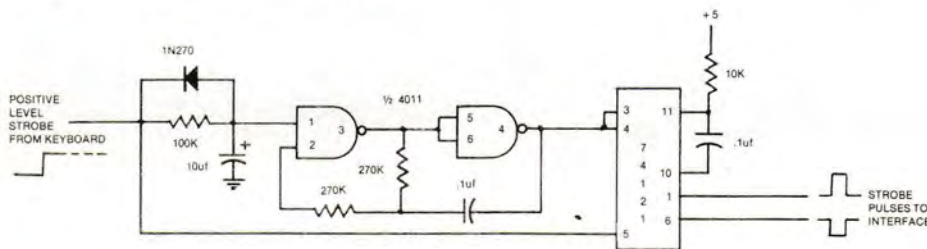


KEYBOARD TRICKS YOU CAN USE... (FREE!!!)

As an OEM keyboard vendor, GRI has accumulated a few little "tricks of the trade," which come in darned handy now and then. Here are a few:

AUTO-REPEAT (usually found on only the maxi-buck equipment)

Repeat is neat, but ever try to generate a slew of control Q's? Using a separate repeat key can try one's patience, if not tie one's fingers in knots! This circuit uses two I.C.'s and provides control over the delay before auto-repeat begins, the repetition rate, and the strobe pulse width. It works by merely generating one pulse for each normal key depression, and outputting numerous pulses if the key is held down for a certain length of time. Each pulse signals valid data, hence, repeating characters appear!



NUMERIC PAD (decimal numerics, for people with 1x10¹ computers!)

Another premium feature in some equipment, is the numeric pad. Useful for entering numeric data (like for accounting or games uses) the pad usually shares the keyboard's encoder and data lines. Contrary to some stories, they do not output hexadecimal, etc., but just plain old ASCII. The key is, they are unaffected by the shift or control keys. For those who need or want one, GRI offers a numeric pad accessory for the 756 keyboard. Wires connect the Model 710 Numeric pad to the mother board, allowing use of the same input port. At \$9.95 from most stores, you won't mind coming up with a box or longer enclosure for it. (won't fit GRI 701 or 702 enclosures.)

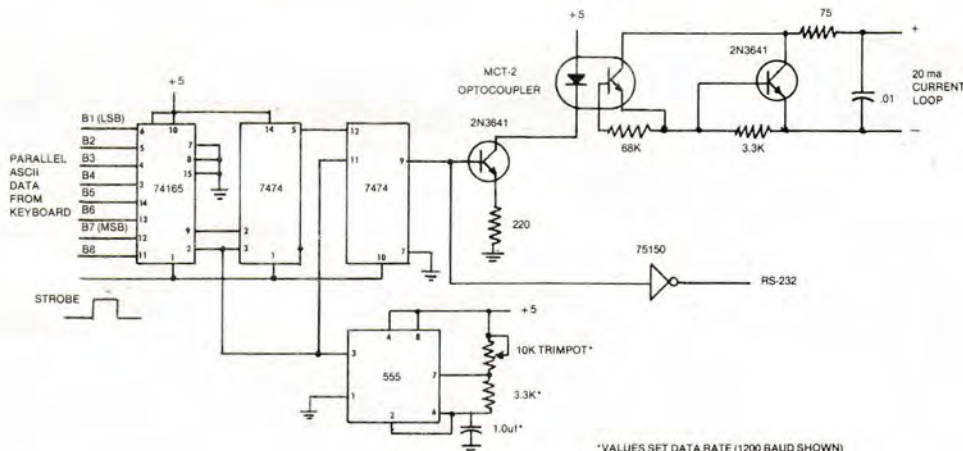
SINGLE SUPPLY OPERATION

What? No minus 12v supply? Never fear, because the clever guys at Elexon Power Systems have an under \$10 solution to your problem which will not put more lead (iron?) in your pants. The DC-512 dc-dc converter manufactures its own minus twelve volts, with just a little 5 volt input! And the best part is, it plugs right into the holes provided on the upper left hand corner of the pc board. Order model DC-512 (be sure to include the "dash") from GRI or:

Elexon Power Systems
 3131 S. Standard Ave.
 Santa Ana, CA 92705 (714) 979-4440

SERIAL OUTPUT

Sure you can use a UART, but here is a little circuit which requires only 5 volts, is easily built with regular TTL parts, and is easily adjusted to any desired baud rate without crystals. The 555 oscillator is steady enough (1%) for most uses, and the output can drive either a 20 ma current loop, RS-232, or what have you.



*VALUES SET DATA RATE (1200 BAUD SHOWN)