MARK II KEYBOARDS

- SNAP ACTION KEYS
- INTEGRATED CIRCUITRY
- FLEXIBLITY
- ELECTRONIC INTERLOCKS
- RELIABILITY

The Controls Research Mark II Keyboard is the most advanced systems concept available today. It is engineered to provide the simplest and most efficient link available between the operator and the computer or industrial control system.

Magnetic snap action of the Mark II Keyboard is provided through the use of CRC 02 keyboard switches. This unique concept in key design allows complete flexibility in key arrangement. The custom keyboard is now economically feasible.

The use of integrated circuitry in the Mark II Keyboard hearlds the beginning of a new generation of highly reliable and extremely versatile encoding systems. Through the use of integrated circuits, electronic interlocks, variable strobing, and high speed bounce-free outputs are available, which are compatible with modern computer and industrial control systems.

CONTROLS RESEARCH CORPORATION Garden Grove, California
Box No. 5037 11762 Western Street (714) 892-9415 (714) 537-1900

KEYBOARD OPTIONS

KEYS AND ARRANGEMENTS

Any specified keyboard with any number of keys.

No restrictions on key placement except ¾ inch minimum center-to-center spacing.

CODING OPTIONS

STANDARD: ASCII, 7 Bit + parity Bit, 8 Bit total.

OPTIONAL: BCD or other codes to customer specification with any number of outputs.

OUTPUT OPTIONS

1. Single line output from glass reeds (voltage and current supplied by user)
2. Binary coded single line output
3. Binary coded "Bounce-Free" transistor output with electronic interlock.
4. Binary coded "Bounce-Free" buffered integrated circuit output with electronic interlock.
5. Binary coded "Contact Closure" output with electronic interlock.

Voltage and current supplied by user on all encoded keyboards – 40V & 50MA max.

Options 3, 4, & 5 require a D.C. voltage of 4.0 – 6.0 V at 100 MA in addition to other voltages as required by specific applications.

SPECIAL OPTIONS

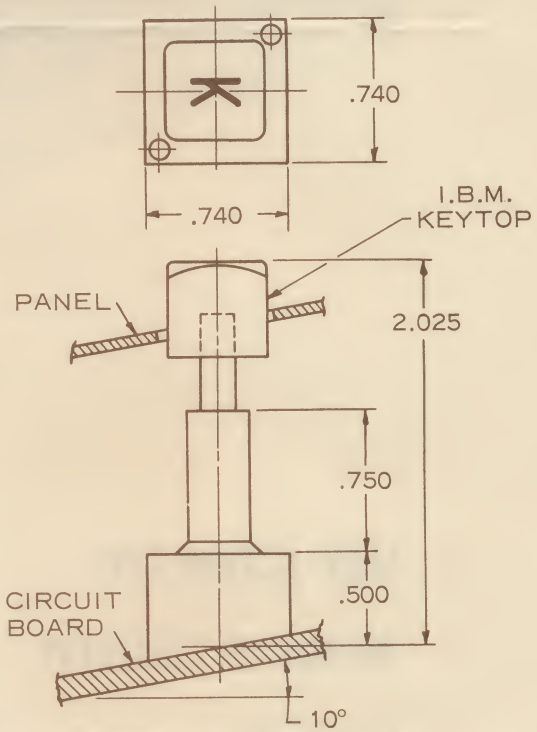
Strobe Signal

Delay variable from 100 NSEC to 500 MSEC

Width variable from 250 NSEC to 500 MSEC

Output Reset

Internally variable or externally controlled



ACTUAL SIZE

KEY SPECIFICATIONS

Snap Force:	3 oz.
Return Force:	1 oz.
Contact Life:	1,000,000 cycles
Contact Rating:	100 mils max.
Contact Bounce:	½ millisec
Contacts:	Dry reed switch
Shaft Dim.:	.040 x .187
Shaft Material:	301 full hard stainless
Housing:	Noryl Plastic
Return Spring:	302 stainless
Mounting:	(2) 2-56 machine screws
Travel	.156

PATENTS PENDING

Date_____ Quote Reqd by_____

Controls Research Corporation P.O. Box No. 5037 11762 Western St., Garden Grove, California

■ SPECIALIZING IN PRECISION SWITCHING DEVICES Telephone (714) 892-9415
(714) 537-1900

Your Name_____Company_____

Address_____Phone_____

City_____State_____Zip_____

Keyboard Requirements

1. Supply quote on quantities_____ _____ _____ _____ _____ _____
   (circle quantity representing normal buy)
   to be delivered over a period of_____months, starting_____.

2. Total number of keys per keyboard_____.

3. Unit is to be panel mounted_____or self contained_____.

4. Keys are on .750 centers_____or_____centers. (if possible send dwg)

5. Keytops to be IBM in size and color_____or_____(send dwg)

6. Output requirement will be:
   Single line outputs from reed switches_____keys.
   Binary coded single line outputs_____keys.

7. Output code is___bit ASC II or_____(if possible send chart)

8. Electronic interlock is required____not required_____.
   Interlock to be reset externally____or Internally_____.

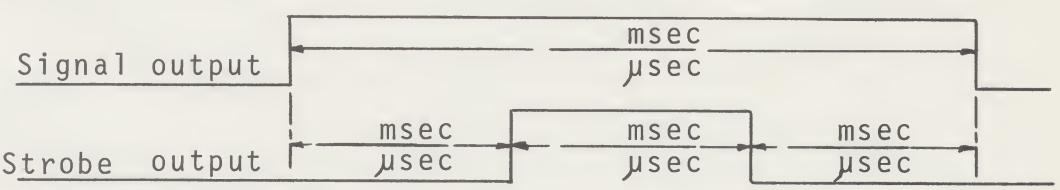
9. Output logic levels are_____Vdc ±____Vdc = logical "0"
   _____Vdc ±____Vdc = logical "1"

10. Output current requirements are_____mAdc "forcing" current.
    _____mAdc "sinking" current.

11. External voltages are_____Vdc at___mA. None_____
    _____Vdc at___mA.

12. Output reset is required and is to be externally controlled_____,
    or internally controlled after_____msec,_____µsec.

13. Strobe output is required_____. (Complete timing diagram below)



Please add any special requirements you may have on back of this sheet.

THANK YOU