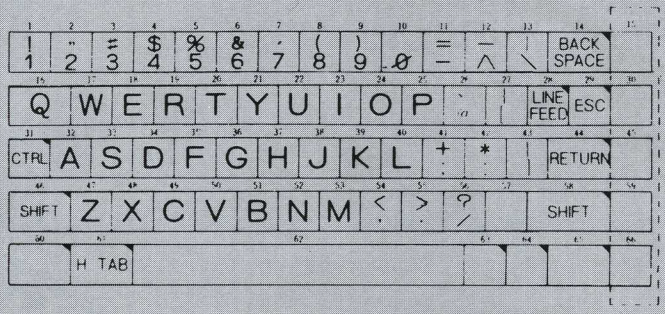
J-M 9031 Standard K/B

STANDARD FULL TRAVEL KEYBOARD WITH ENCODER

FEATURES:

- **ASCII code**
- **66 key positions**
- **2-Key rollover**
- **High reliability**
- **Negative strobe**
- **Key life of 100 million**
- **5 relegendable key positions**
- **5 blank key positions**
- **Full travel mechanical key switches**
- **Sculptured key tops**

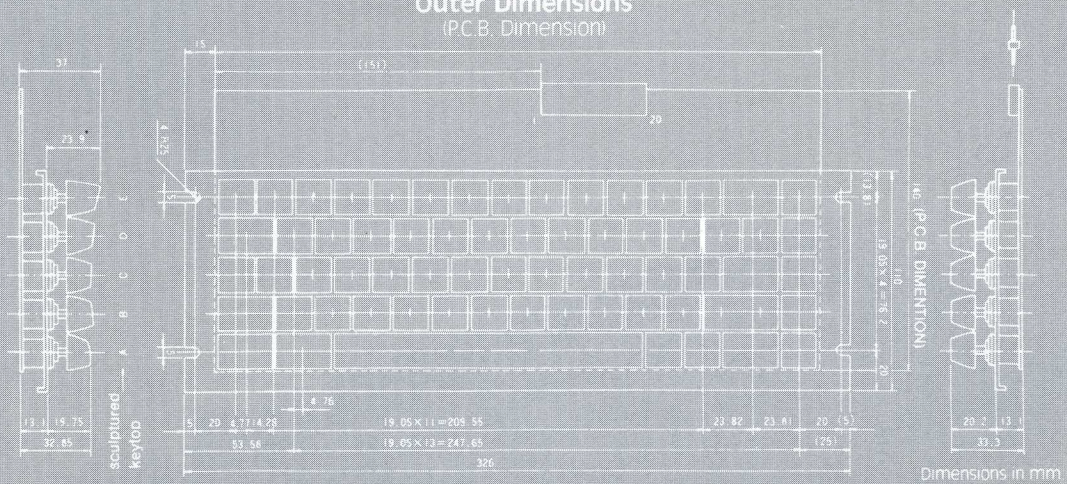
ASCII



Contact SMK for other standard and custom keyboards.

SMK

Outer Dimensions
(P.C.B. Dimension)



J-M9031 KEYBOARD SPECIFICATIONS

Circuit Board ..... .062"—phenolic material
Switches ..... SMK J-M0404 series, mechanical contacts
Pre-Travel ..... .060" ± .028" (1.50mm ± 0.7mm)
Full Travel ..... .120" ± .017" (3.00mm ± 0.4mm)
Operation Force ..... 90 grams ± 20%
Temperature ..... 0° ~ 50°C—operating
−20° ~ 60°C—non-operating
Humidity ..... 95% RH, non-condensing
Electrical ..... SMC KR-3600-PRD encoder standard TTL
(No EP-ROM is provided) See note #1
Power Requirement ..... −12VDC @ 20mA/standard
+5VDC @ 150mA (*optional) See note #2
Connector ..... 20 pin Connector (Molex P/N 3024-20A)

Output Pin Assignment

P-01	+5V	P-11	Data Bit 6
P-02	NC	P-12	Data Bit 7
P-03	−12V	P-13	Data Bit 8
P-04	GND	P-14	Strobe
P-05	GND	P-15	Reset
P-06	Data Bit 1	P-16	S1
P-07	Data Bit 2	P-17	S2
P-08	Data Bit 3	P-18	S3
P-09	Data Bit 4	P-19	S4
P-10	Data Bit 5	P-20	S5

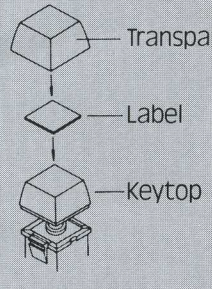
CIRCUIT SPECIFICATION

Power supply ..... Available input • DC + 5V (150 mA)
• DC − 12V (20 mA)
Circuit composition ..... LSI (SMC KR-3600-PRD) encoder, standard TTL.
Operation characteristic ..... 2-key roll over
Output code ..... 8 bit output; using EP-ROM change encoder LSI output into 8 bit output. K/B is delivered without EP-ROM. So, K/B should be used after assembling of EP-ROM.
Strobe signal ..... Strobe; negative logic pulse signal (around 45 μ S).

Note 1: Recommended EP-ROM: Intel 2716
Note 2: Optional Power (+5VDC @ 150 mA)
Requires installation of: TDK CB-3811 converter
47 μ F electrolytic capacitor (Position C_9 on Keyboard P.C.B.)
68 μ F electrolytic capacitor (Position C_{10} on Keyboard P.C.B.)

KEYSWITCH SPECIFICATION

Operation force ..... 90 ± 30 g.
Stroke ..... 3.0 ± 0.4 mm (full stroke)
1.5 ± 0.7 mm (on stroke)
Life ..... more than 100 M
Option ..... Power; it is possible to assemble DC-DC converter (TDK-CB-3811) on this K/B. If DC-12V not available, it is possible to operate the K/B by using DC +5V only. At that time it is recommended to assemble electrolytic capacitor of C_9 (47 μ F) C_{10} (68 μ F).



Key No. 15, 30, 45, 59, 66 are relegendable keytops.

It is possible to put various labels (colors and legends) on the keytop by removing the transparent cap. Label Size: 12.6 × 0.2 m/m.

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