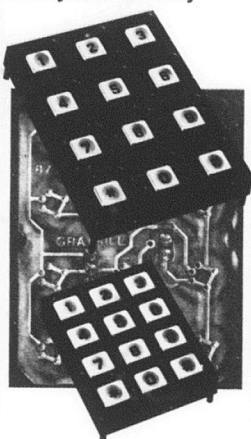


A New Standard of Keyboard Quality



Grayhill 3x4 Keyboard Pads for data input and telecommunications

2 out of 7 coded output—
tested for millions of operations!

- 1/2" or 3/4" button centers
- Excellent tactile and audio feedback
- Patented snap-action dome contact provides rugged, durable performance

These new Grayhill low-profile, 12-button keyboard pads feature a 2 out of 7 coded output, standard mounting dimensions, and are ready for top-side or sub-panel mounting. The contact system is life-rated for 3,000,000 operations per button, and is readily interfaced with logic circuitry. The new Grayhill Series 87 modules offer excellent audio and tactile feedback characteristics with total button travel of only .015". These durable keyboards are molded of tough ABS plastic; feature buttons with black on white molded-in legends as standard, and a variety of other legend options including clear snap-on caps for user legending. Complete specifications and truth table are provided in Bulletin #262, available free on request from Grayhill, Inc. 561 Hillgrove, La Grange, Illinois 60525 (312) 354-1040.



DATA PROCESSING

Versatile PROM programmer takes on all memories



Data I/O, P.O. Box 308, 1297 N.W. Mall, Issaquah, WA 98027. (206) 455-3990. P&A: See text.

Able to program any available PROM, the Model 7 from Data I/O offers the user more than just another universal PROM programmer. To begin with, the Model 7 is a "portable" but line-operated unit, only 6 x 11 x 15 in., and has a wide selection of options and communication capabilities.

In its basic configuration, the Model 7 can program over 200 PROM types. Program-personality modules, which dedicate the programmer to a specific PROM family, plug into an access opening below the front panel. Socket adapters, which match the programmer circuitry to the PROM pinouts, plug directly into the front panel. Thus, generic PROM families from one manufacturer can be programmed with a single personality module and different socket adapters.

This generic programming capability can produce significant savings. For example, the 12 PROMs in the Monolithic Memories generic family can be programmed on the Model 7 at a cost of \$400 for one personality module and \$600 for 12 \$50 socket adapters. Without the Model 7's generic-programming ability, programming the Monolithic Memories family might cost well over \$4800. A separate person-

ality module may be required for each PROM in the family.

A modular design enables the Model 7 to communicate with serial or parallel peripheral devices. Serial I/O is ASR33 and RS232-compatible, at 110 to 2400 baud. Parallel I/O operates on a busy/ready basis. I/O interfaces, available to make the programmer compatible with any data terminal, can automatically check for faults in data transmission. And a remote control option lets the programmer work as a computer peripheral.

An expansion option upgrades the unit to a Model 9 by adding direct entry of keyboard data, address and data display of RAM contents, display of error codes, random-addressing capability, and insertion/deletion RAM editing. Also, a 1-k x 8 bit RAM included in the basic Model 7 to hold programs can be optionally expanded to 4 k x 8 in 1-k increments.

Power required for the programmer can be 100 to 240 V ac, 48 to 66 Hz, at 120 VA. Designed to operate over a 0-to-45°C range, the programmer has an optional, 18.5 x 14 x 8-in. carrying case.

Prices for the Model 7 start at \$1095 and I/O options up the price by \$225. Additional memory costs \$50 to \$200 more, while conversion to the Model 9 costs \$995. Delivery is from stock.

CIRCLE NO. 301

CIRCLE NUMBER 82