

# 3C CODE BAR SWITCHES AND KEYBOARDS



COMPUTER CONTROL COMPANY, INC.

FRAMINGHAM, MASS. LOS ANGELES. CALIF

## CODE BAR **SWITCHES** KEYBOARDS

3C Code Bar Switches\* and Keyboards were developed to meet a time. Any previously depressed button is automatically released. the need for a high reliability switch featuring direct binary coded outputs. Simple cam-type code bars and dependable single poledouble throw snap action switches provide encoding. These trouble-free elements replace the multiple relay contact arrangements usually employed for conversion to binary code. A mechanical interlock permits only one pushbutton key to be depressed at

High quality components and workmanship insure long, reliable service. 3C Code Bar Switches and Keyboards can be provided to MIL E 5272 for airborne and ground based equipment. This brochure describes the variety of 3C Code Bar Switches and

Keyboards now available. We welcome the opportunity to specially code or custom build these to customer specifications.

Patent Pending

#### 3C CODE BAR SWITCHES

#### DECIMAL

Model DS-1 has ten button decimal bank with 1-2-4-8 binary output contacts. Specially coded switches on request.

SWITCH TYPE Micro Switch Model V3-26, single pole - double throw DC CONTACT RATINGS 30 volts/6 amperes AC CONTACT RATINGS 125 volts/10 amperes FINISHES Cadmium plated steel and anodized

aluminum. Plastic push buttons. TERMINALS Solder-type MOUNTING POSITION Any OVER-ALL DIMENSIONS x 31/2" x 5/4" PUSH BUTTON DIAMETER %" PUSH BUTTON TRAVERSE 5/16" PUSH BUTTON SPACING

Approx. 12 ozs.

#### OCTAL

Model OS-1 has eight button octal bank with 1-2-4 binary output contacts. Model OS-2 has same features plus an entry switch coupled to the clear pushbutton. Specially coded switches on request.

SWITCH TYPE Micro Switch Model V3-26,

single pole - double throw DC CONTACT RATINGS 30 volts/6 amperes AC CONTACT RATINGS 125 volts/10 amperes FINISHES Cadmium plated steel and anodized aluminum. Plastic push buttons. Solder-type TERMINALS MOUNTING POSITION Any

PUSH BUTTON TRAVERSE 5/16"
PUSH BUTTON SPACENCE "" KEY PRESSURE Approx. 12 ozs.

#### PARITY

Decimal or octal coding plus either an odd or even parity bit. Model DP-1 has ten button decimal bank with 1-2-4-8-P binary output contacts. Model OP-1 has eight button octal bank with 1-2-4-P binary output contacts. Specially coded switches on request.

SWITCH TYPE

KEY PRESSURE

Micro Switch Model 11 SM-1, single pole - double throw CONTACT RATINGS 30 volts/5 amperes resistive at sea level AC CONTACT RATINGS 125 volts/5 amperes FINISHES

Cadmium plated steel and anodized aluminum. Plastic push buttons. Solder-type TERMINALS MOUNTING POSITION 7" x 31/2" x 3/4" OVER-ALL DIMENSIONS PUSH BUTTON DIAMETER % PUSH BUTTON TRAVERSE 5/16" PUSH BUTTON SPACING 5/8

Approx. 12 ozs.

#### INDUSTRIAL

Designed for digital process control systems, this switch provides high reliability operation in industrial, explosive or corrosive atmospheres (up to 52 ppm hydrogen sulfide). All electrical contacts are hermetically sealed. All hardware is stainless steel with heavy chrome plated steel parts. Decimal input (DH Series), octal input (OH Series) and parity (DPH and OPH Series) versions are available. Specially coded switches on request.

SWITCH TYPE

Haydon 6100 Series hermetic, single pole - double throw DC CONTACT RATINGS 28 volts/5 amperes resistive,

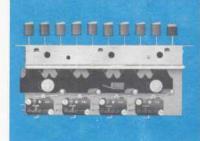
amperes inductive AC CONTACT RATINGS 110 volts/5 amperes resistive, 60-400 cycles

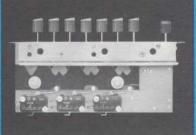
FINISHES Stainless steel hardware and springs, Heavy chrome plated steel parts. Plastic push buttons.

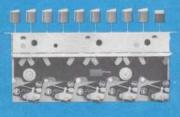
TERMINALS Solder-type MOUNTING POSITION OVER-ALL DIMENSIONS Any 7" x 31/2" x 5/4" PUSH BUTTON DIAMETER %" PUSH BUTTON TRAVERSE 5/16" PUSH BUTTON SPACING %"

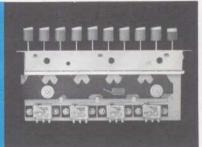
KEY PRESSURE

Approx. 12 ozs.









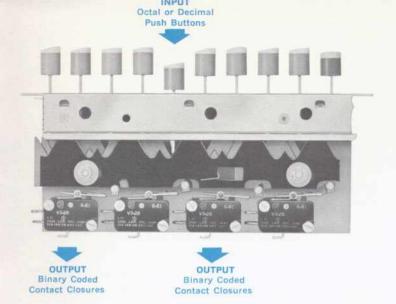
Decimal Switch

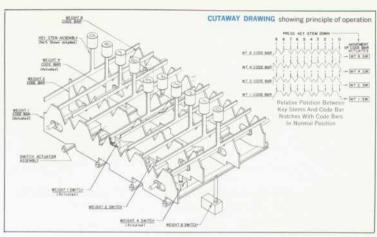
KEY PRESSURE

Octal Switch

Parity Switch

Industrial Switch





#### 3C CODE BAR KEYBOARDS

3C Code Bar Keyboards incorporate the dependable components and quality features of 3C Code Bar Switches. Applications include use in airborne, ground support or digital test equipment. Types available are:

**Decimal** ten button banks with 1-2-4-8 binary output contacts.

Octal eight button banks with 1-2-4 binary output contacts.

Parity keyboards with odd or even parity bit in either octal or decimal coding.

**Industrial** keyboards for process control systems, explosive or corrosive atmospheres, in either octal or decimal coding, with or without parity.

In addition, custom designed or specially coded keyboards can be built to customer specifications. Keyboards can be provided to MIL E 5272 for airborne and ground based equipment. Some of the many 3C Code Bar Keyboard variations are described below.

Price and delivery on request.

#### MANUAL ENTRY

Model pictured is a 14-row decimal to binary (0 to 9 keys) keyboard with 1-2-4-8 binary output contacts. Two double pole - double throw Model V3-26 Micro Switches are operated by a momentary action Entry Bar.

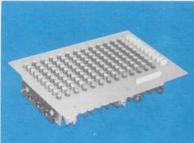
#### MANUAL ENTRY WITH CLEAR

Entry Bar automatically clears the keyboard as the information is entered into the system. A switch on the Entry Bar closes prior to the clearing action. Model pictured below has 1-2-4 binary output contacts and additional special-purpose switches.

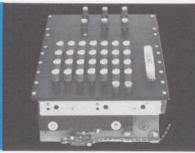
#### MANUAL ENTRY WITH REMOTE CLEAR

Solenoid release permits keyboard clearing by remote control.

Model shown below consists of 6-row decimal to binary keyboard (0 to 9 keys) with 1-2-4-8 binary output contacts. Eight SM Series Micro Switches on each Code Bar Switch provide double pole - double throw coded output. Model meets MIL E 5272 specifications.



Manual Entry



Manual Entry with Clear



Manual Entry with Remote Clear

### PRICES 3C CODE BAR SWITCHES

MODEL	QUANTITY			
	1-9	10-49	50-499	500 and over
DS-1 (decimal to 1-2-4-8)	\$ 67.50	\$ 60.75	\$ 54.00	\$ 50.60
OS-1 (octal to 1-2-4)	59.00	53.10	47.20	44.25
OS-2 (octal to 1-2-4 plus entry and clear)	67.50	60.75	54.00	50.60
DP-1 (parity version of DS-1)	85.00	76.50	68.00	63.75
OP-1 (parity version of OS-1)	67.50	60.75	54.00	50.60
DH-1 (industrial version of DS-1)	165.00	148.50	132.50	125.00
OH-1 (industrial version of OS-1)	147.50	132.50	117.50	110.00
DPH-1 (industrial parity version of DS-1)	195.00	176.00	157.00	148.50
OPH-1 (industrial parity version of OS-1)	165.00	148.50	132.50	125.00

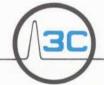
Specially coded switches available. Price and delivery on request.

#### 3C CODE BAR KEYBOARDS

Price and delivery on request

#### WARRANTY

- a) Computer Control Company, Inc. warrants all 3C products against defects in workmanship, materials, and construction under normal use and service for a period of ONE YEAR from the date of purchase except that liability for defective snap action switches, vacuum tubes, transistors, and germanium diodes shall conform and be limited to the obligations of the original manufacturer's warranties covering these components.
- b) This warranty does not extend to any of our products which have been subjected to misuse, neglect, accident, or improper installation or application; nor shall it extend to products which have been repaired or altered outside of our factory.
- c) For service under this warranty, please advise the factory promptly of all details pertinent to the defectiveness. Transportation charges covering return of defective products to our factory shall be at our expense if such products are determined to be defective within the limitations of this warranty. Computer Control Company, Inc. will repair or replace the defective product in accordance with its own best judgment.
- d) Computer Control Company, Inc. requests immediate notification for any claims arising from damage in transit in order to determine if carrier responsibility exists.



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