





KEYBOARD SWITCHES



P/N 10530

Jay-El Products has developed a quality Keyboard Switch P/N 10530 for military airborne and commercial applications. This illuminated switch, utilizing four different cap styles, is an ideal unit for keyboard data entry systems requiring high reliability, airborne lighting and compact size.

The P/N 10530 offers the following special features: The basic SPDT switch package is per MS 24547-1. Complete unit is designed to meet MIL-S-22885. Four pushbutton styles - 1/2 in. round metal with EMI screen, 1/2 in. round black plastic, 1/2 in. sq. black plastic, 3/4 in. x 3/8 in. rectangular black plastic. Lighting is accomplished thru a flat cast acrylic color filter and diffused legend plate using a T 1 1/4 M.F. lamp. A cover plate is also provided to protect engraving. Re-lamping from front of panel. A variety of lighting displays are available.



1859 W. 169th St., Gardena, Calif. 90247
Telephone: FA 1-3260 - DA 3-7130
Cable: Jayelite - TWX (213) 327-1471

Transistor Electronics Corp., Minneapolis, Minn. The firm claims display and control functions can be intermixed in any sequence — separated by colored barriers — in an extruded aluminum frame up to four ft. long. The frame forms its own bezel and mounts in a single rectangular hole. Incandescent and neon lamps are T-1-3/4 type and replaceable. Switch options offered include: 1 or 2 SPDT N.O. or N.C. switching circuits mounted behind single length button lenses and up to 4 SPDT switching circuits mounted behind double length button lenses. Contact rating is: 1/2 amp inductive, 1 amp resistive at 30 VAC with gold contacts; 3 amps non-inductive at 30 VAC, 5 amps at 125-250 VAC with silver contacts.

Circle Reader Service Card No. 50

Image Intensifier

Westinghouse New Products Div., Westinghouse Electric Corp., Pittsburgh, offers a two-stage image intensifier which reportedly intensifies low light level images with low distortion, high resolution, and high signal-to-noise ratio at high gains. Applications include observation of transient events and viewing under very low light level conditions. The two-stage magnetically focused image converter is designed to eliminate stray light and prevent corona. According to the firm, the intensifier can be used as a directly viewed light amplifier, or as an image amplifier when coupled to a video camera tube. The 1.5 in. dia. viewing screen is of Phosphor P-11 for optimum energy transfer to a photographic film or succeeding image tubes. Magnification is unity, and typical center resolution is 36 lines per millimeter.

Circle Reader Service Card No. 51

Communications Station

A modular remote terminal, called the CC-30 Communications Station, has been announced by Computer Communications Inc., Inglewood, Calif. The terminal is applicable both as a single remote user display and data entry station communicating over phone lines or other common carriers and as a directly computer-coupled input-output device at computer rates. The heart of the station is the CC-301 Display Controller which drives a standard television receiver or TV monitor; this makes possible the use of any TV set as a readily available computer CRT readout. It contains a high-speed buffer memory and allows interface to a computer either directly or over serial or parallel common carrier transmission paths. The manufacturer reports that optional input-output devices for either on-line or off-line data entry or printout can be attached through the controller.

Circle Reader Service Card No. 52

Indicator Lights

Penn Keystone Corp., Derby, Conn., offers the Peaklite Indicator Light Assembly, a simple one-piece component designed for operation in ambient temperatures from -65F to +150F. The firm claims it is sufficiently rugged to withstand the hazards of severe shock and vibration encountered in handling or the operating environment, because resilient encapsulation material cushions the lamp, removes the heat, and thermal conduction of the encapsulant lowers the bulb temperature and extends life. An insulated case provides 1000

volts rms min. isolation from the mounting and between lamp circuits of dual aperture units. Power requirements — approximately 2.5 watts total for 2 lamps (2 lamps per Indicator Light Assembly).

Circle Reader Service Card No. 53

Low Noise Level Chopper

A low noise level chopper which reportedly eliminates thermal noise is available from Electronic Applications Co., El Monte, Calif. The noise elimination is effected by using copper cored header pins and gold contacts mounted



to these pins. Magnetic coupling noise is less than one microvolt, which is achieved by shielding the drive coil from the contacts. Model 600, with a standard 7 pin plug-in header, is a direct replacement for many units now in the field. It has a standard drive voltage of 6.3 volts, 160 ohm coil with an impedance of 200 ohms and exceeds the requirements of MIL-E-5400. All units have various mounting options, terminations and top drive is available.

Circle Reader Service Card No. 54

Decoding Readout

Numex Corp., Waltham, Mass., has announced Numex Series SR-100 decoding readout assemblies. The unit provides a 1 1/2 in. high, 250 ft.-Lamberts numerical readout. The device uses one four-element lens and a single powerful bulb to project distortion-free in-plane numerals on a wide-angle, high-contrast screen, the firm reports. Although the unit is designed to take BCD 8-4-2-1 input, any other four-bit code can be included to order. Only a standard 6.3 volt transformer is required as a power source. Optional messages of up to four lines, five characters per line, are available on special order.

Circle Reader Service Card No. 55

High Speed Printer

Shepard Laboratories Inc., Summit, N.J., offers the Model 824 Minityper High Speed Printer which is activated by a computer. After data is supplied through the information stream, the printer will, upon command, go "on-line" or "off-line," provide horizontal or vertical formatting and perform other programmed detail functions. The product is a 24 column unit, capable of printing alpha-numerics at a rate of 1200 lines per minute with a 64 character

font, full line of buffering, solid-state power supply and enclosed in a compact rack mounted pack 12 1/2 x 19 x 22 in. The units are designed for 10,000 hours of operation.

Circle Reader Service Card No. 56

Tape Buffer

Houston Omnigraphic Corp., Bellaire, Texas, offers Model 6830, a buffer for use in selecting and presenting data read from tape readers to a Houston Omnigraphic Model 6710 Digital Plotting System. It accepts ASC II tape code. The word length on the tape may be any length between 3 and 10 digits. Reading speed is 120 characters per second maximum. The output is a controlled transfer of any three adjacent digits from a 10 digit word on the tape to the 6710 system. The reader may be stopped automatically with a null code on the tape. The 6830 uses end of tape contact closure from tape reader to sense end of tape.

Circle Reader Service Card No. 57

Operational Demonstrator

A portable, fully operative demonstrator that includes several types of lighted pushbutton switches, word indicator lights, and unlighted pushbutton and toggle switches is available from Master Specialties Co., Costa Mesa, Calif. It was designed to provide a means of quick comparison of various units under actual operating conditions, and to assist in determining proper light levels for optimum visibility under known ambient light conditions. Each series is displayed to show the key functional features, mounting methods, and wiring requirements. A master dimming switch controls light intensity, making it possible to determine the proper color filter value and intensity required

Circle Reader Service Card No. 58

Oscilloscope

Tektronix Inc., Beaverton, Ore., offers the Type 454 portable oscilloscope with 2.4-ns risetime and DC-to-150 MHz bandwidth at the probe tip. It features a 5 mV/div-dual-trace vertical, 150 MHz triggering, 5-ns/div delayed sweep and solid state design in a 31-lb instrument. 1 mV/div single-trace measurements and 5 mV/div X-Y measurements can also be made. Featured is a new CRT with distributed vertical deflection plates and a 14-kV accelerating potential. It has a 6 x 10 div viewing area, a P-31 phosphor and an illuminated, n-parallax, internal graticule. The Type C-30 and Type C-40 camera mount directly on the oscilloscope.

Circle Reader Service Card No. 59

Electronic Magnifiers

Fairchild-Du Mont Electron Tubes, N.J., has introduced electronic magnifiers and minifiers, a new development in tube technology. The tubes perform as image intensifiers and image converters as well as enlargers and reducers. Large area flat photocathodes are featured; 4 in. useful diameter for the minifier, 2 in. for the magnifier as well as flat anodes and short length to useful and overall diameter ratios. The magnifier has a magnification capability of continuously variable electrostatic magnifications from 1:1 to 1:4 with a single control; the minifier has a minification capability of 4:1.

Circle Reader Service Card No. 60

Page Printer

The Datalog div. of Litton Industries, Santa Monica, Calif., offers a high-speed alpha-numeric page printer which records over a

half-million characters per minute on photosensitive paper. The MC 8800 Datalog is a CRT printer designed for compatibility with existing computers and communications equipment. It accepts data serially at a rate, consistent or varying from zero to 8800 characters per second. Although the printer uses a photosensitive paper, the printed record as it emerges is a permanent copy. The MC 8800 is said to have an MTBF of over 8000 hours, chiefly through the extensive use of integrated circuits.

Circle Reader Service Card No. 61

Incremental Plotters

Benson-Lehner, Van Nuys, Calif., offers the 8000 Series of incremental plotters, operating at the rate of 800 steps per second. The series features a resolution up to 0.0025 in. All models make use of Delta Control Logic, an exclusive engineering concept introduced by the firm to generate multiple plotting commands from a minimum of digital input. Over an average run of plotting applications, Delta Logic is said to save from 50% to 90% of computer write-time. The 8000 Series is designed to operate on-line with computer, multiplexed to a time-sharing system, or off-line with magnetic tape input. Used off-line, the plotters accept either 7-track or 9-track mag tape.

Circle Reader Service Card No. 62

Decade Counters

Veeder-Root, Hartford, Conn., offers the Veeder Decade electrical counter family of single-wheel counter modules, featuring electric reset, readout and transfer. The basic 1969 unit with decimal readout is available with or

without a preset/reset function, and a subtractive version is also offered. New models consist of a binary coded decimal counter and a unit equipped with an acknowledgement switching function. The binary coded decimal model features four-line 1, 2, 4, 8 - readout. The "acknowledgement" decade utilizes a switching function to verify the account registration at a remote location. The model is also available as a subtractive version.

Circle Reader Service Card No. 63

Servo Amplifier

Westamp Inc., Santa Monica, Calif., announces Model A466 high power DC servo amplifier, designed to drive DC servo motors up to 3/4 hp. Unique feature is said to be the self-contained RFI filter. The amplifier is designed to fulfill requirements for a power servo amplifier suitable for operation in adverse conditions of shock, vibration and moisture and when RFI suppression is required.

Circle Reader Service Card No. 64

CRT

A new cathode ray tube, especially designed for high frequency operations, has been developed by Electron Tube Division of General Atronics, Philadelphia, Pa. Designated the ETC Model M1252, the all-electrostatic tube has a rectangular helix and a mesh deflection system to insure superior performance in HF applications. It is flat faced with a 4 x 5 in. viewing area and features high light output at good resolution; the tube has been designed with an aluminized screen for maximum light output and minimum charging effects.

Circle Reader Service Card No. 65

NEW 913 SERIES ILLUMINATED MOMENTARY ACTION SWITCH

For Computer, Data Processing and Automation Industries

MOUNT IN 3/8" CLEARANCE HOLE ON 19/32" CENTERS




Price: As low as \$1.11 each in 1000 lot quantities.

Here's another new Switch Series from Dialco—foremost manufacturer of indicator lights!

This series offers S.P.S.T. double break, N.O. or N.C.; or S.P.D.T. double break (one N.O., one N.C.) switching; with or without non-replaceable neon lamp and required resistor.

For use with low currents at higher voltage—or for dry circuits, ratings are: 0.1 amp, 125V AC; 0.1 amp, 30V DC (non-inductive). Life is over one million operations (approx.). Terminals are gold plated.

Ask for new catalog today!

Foremost Manufacturer of Indicator Lights

DIALIGHT CORPORATION

60 STEWART AVENUE, BROOKLYN, N.Y. 11237 • AREA CODE 212 497-7600

Circle Reader Service Card No. 66