



PROGRAMMABLE SWITCH 9812

- IEEE/GPIB/IEC/HPIB
- 6 program modes
- Remote or local operation
- Self test feature
- 24 switches + LED status
- 2 pole changeover

The 9812 is a microprocessor controlled switch with full local controls and LED status indicators. The local control mode is particularly useful at system design stage and for checking and troubleshooting.

Advanced programming capability with 6 program command modes simplifies the bus control program and enhances the switch performance. Additionally the 9812's self test mode enables malfunctions to be detected without external bus control. All 24 switches are operated sequentially by the 9812's internal self test program.

Construction is standard 19" Euroframe with plug-in modules which allow easy access and improved servicing and maintenance. It can be rack mounted or housed in a free standing case.

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INTERFACE

- Interface Type:** IEEE488/GPIB/IEC/HPIB
Device Address: Rear panel switch 0-31
Bus Connection: Standard 24 pin IEEE488-1975 connector
Bus Isolation: All switch contacts are isolated from the bus up to 350V ac/dc.

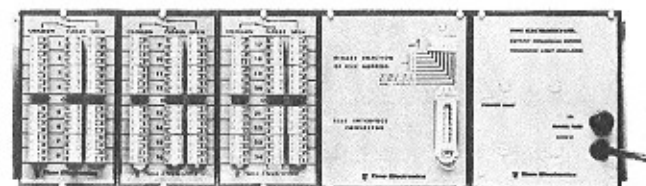
SWITCH SPECIFICATION

- Type:** 24 way double pole changeover, break before make.
Contact Res: 40 milliohms per switch.
Contacts: Gold.
Operation Time: 20 millisecc.
Operating Life: 30 million operations.
Connections: Multiblock connectors on rear of unit bring out all switch contacts giving a total of 144 connections in 3 blocks.
Rating: 1 Amp @ 30Vdc (100V ac)
Thermal EMF: Less than 1 microvolt per switch. Internal EMF's have been kept to a minimum using special techniques. External effects can be reduced by a thermal cover over the output terminals. Details available on request.

GENERAL SPECIFICATION

- Power:** 220-250V ac 50/60Hz.
110-120V ac to order 30 watt consumption.
Dimensions: Rack mount version—
480 × 240 × 130mm × 5.5 kg
Bench version—
494 × 374 × 154 mm × 10 kg

REAR PANEL



ORDERING INFORMATION

- Programmable Switch.....9812
Free Standing Case.....9047

Note: Standard mains input is 200/250v 50/60Hz. If 100/120v 50/60Hz is required please specify.

PROGRAMMING

Each switch is addressed by its physical position number as shown on the front panel i.e. 1-24. Either a single switch or several can be operated by one command string. The commands to each switch are separated by a semicolon (;) and the delay option specified last by '/X/Y' where X is the 'turn on' delay in 1/10th seconds and Y is the 'turn off' delay in 1/10th seconds. The complete command string is terminated by either carriage return (CR) or line feed (LF). The G.E.T., Go local Transmit local, Go remote commands are implemented by transmitting G1, L, T, R, respectively.

PROGRAM MODES

- Decimal:** Switches to 'turn on' specified by decimal command. All other switches 'turn off'.
Memory +: Switches to 'turn on' specified by positive (+) decimal command. All other switches remain unchanged (i.e. in previous state).
Memory -: Switches to 'turn off' specified by negative (-) decimal command. All other switches remain unchanged.
Delay option: Delays the decimal memory + or - commands by specified amount (0.1 sec - 25 sec). 'On' and 'Off' delays are specified separately.
Hexadecimal: Switches to 'turn on' specified by a hexadecimal string. All others 'turn off'.
G.E.T.: Sets the 9812 to operate commands only after the IEEE Group Execute Trigger command is received.
Go local: Sets the 9812 to local mode (manual operation).
Transmit local: The 9812 transmits all the switch settings back to the IEEE bus controller.
Go remote: Sets the 9812 to remote mode (programmable operation).

An example of a command string could be '-3; +22; +23/10/20 «CR»' which will specify—switch No. 3 'off'—switch No. 22 'on',—switch No. 23 'on', all other switches unchanged, (/10)—switches turning 'on' delayed by 1 sec., (/20)—switches turning 'off' delayed by 2 secs.

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