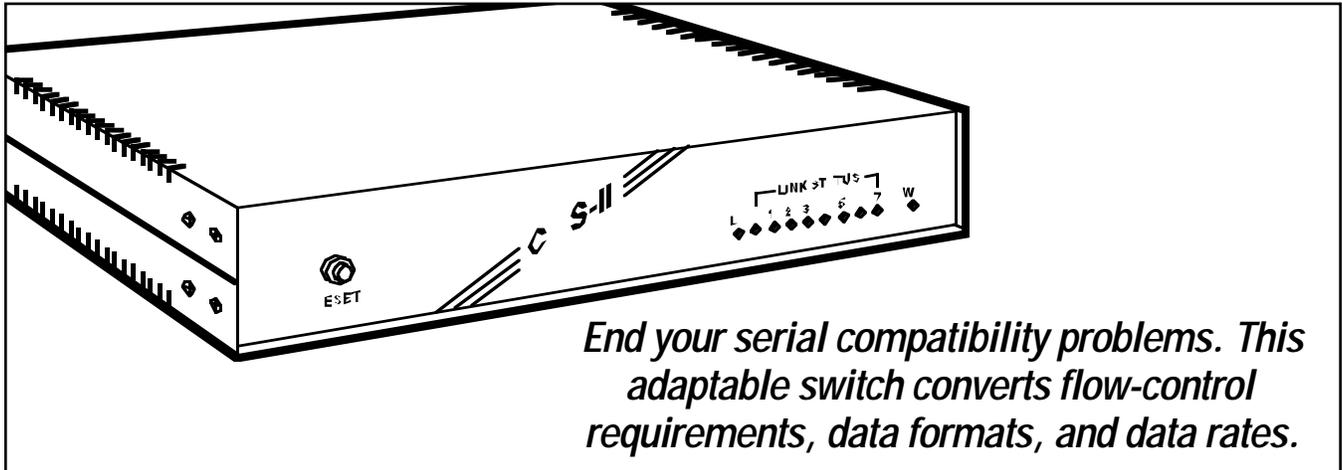




BLACK BOX[®]

NETWORK SERVICES

CODE OPERATED SWITCH II



Key Features

- ▶ **Switch four serial slave devices with a control sequence you choose.**
- ▶ **Expand to eight ports.**
- ▶ **Configure and set each port independently as DTE or DCE.**
- ▶ **Converts between data rates from 110 to 19,200 bps; data formats of 7 or 8 data bits with even, odd, or no parity; and hardware or software flow control.**
- ▶ **User-settable "graphics pause" greatly reduces the chances of accidental switching.**

Control up to eight serial devices with your PC—and never lift a finger. Just set the Code Operated Switch II (COS II) to react to a control sequence of your choice—and walk away from everyday switching duties.

Since each port can handle a variety of data rates and formats, you can mix older plotters with newer laser printers and fast (up to 19.2 kbps) async modems.

When you use the COS II with printers or plotters, you can send your data to the best available output device without having to turn knobs, press buttons, or configure software. And when you set the COS II to look for a "pause period" before recognizing a control sequence, graphics files pass safely through the COS II without causing accidental switching.

And what about industrial machinery or test equipment? Tired of the constant hands-on intervention it requires? Just

connect it and the PC/terminal of your choice to the COS II. You'll be able to manage lathes, meters, controllers, and more from your office or data center. And if you write a program for the master PC that includes the COS II's control codes, the PC can manage those devices without your even being there.

The COS II can convert between differing data rates, data formats, and types of flow control, and its 8-KB buffer

preserves your data intact through these conversions.

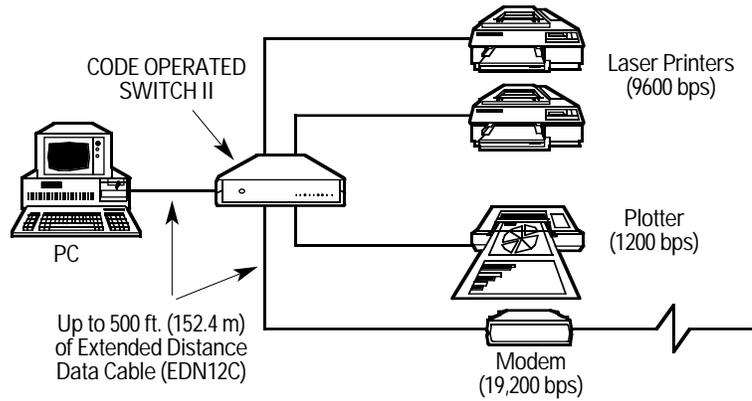
In short, the COS II has the flexibility to adapt to nearly any group of serial devices. But if you have unusual requirements, we can custom-configure a COS II for you. Call Black Box Technical Support for more details.

Typical Applications

Connect your PC to a laboratory device, a laser printer, a minicomputer, and a modem. Send and receive data almost transparently—the COS II resolves all of the differences between data rates and formats without any additional hardware or software.

Access several different types of printers and plotters through the COS II. It buffers data, overcomes flow-control differences, and handles graphics data smoothly.

Solve complex serial conversion problems simply—with the COS II.



Specifications

Compliance: FCC Part 15 Class A, DOC Class/MDC classe A

Interface: EIA RS-232/ITU-TSS V.24; each port can be set independently as DTE or DCE

Protocol: Asynchronous

Code Set: ASCII

Data Format: 7 or 8 data bits with even, odd, or no parity (user-selectable); 1 stop bit (fixed)

Flow Control: Hardware (DTR/CTS) or software (X-ON/X-OFF), user-selectable

Operation: Full duplex

Data Rate: 19,200, 9600, 4800, 2400, 1200, 600, 300, or 110 bps, user-selectable

Maximum Distance: 50 ft. (15.2 m) to any attached device using standard cables, or 500 ft. (152.4 m) using Extended Distance Data Cables

Internal Memory: 8 KB of buffer RAM

User Controls: ASCII characters from master device; (7) Internal 8-pos. DIP switches: (2) for system options, (5 or 9*) for port options; (5 or 9*) Internal jumpers for DTE/DCE; (1) Front-mounted reset button

Diagnostics: Various self-tests

Indicators: (10) Front-mounted LEDs: (1) Power, (1) Lockout, and (8) Link Status

Connectors: (5 or 9*) Rear-mounted DB25 female

Leads Supported: Pins 1 through 8, 20, and 22

Power: Through nondetachable desktop power supply: SW590A-R2: 115 VAC, 60 Hz; SW590AE-R2: 230 VAC, 50 Hz

MTBF: 20,000 hours (16,000 hours with Expansion Board)

Temperature Tolerance: Operating: 0 to 45°C (32 to 113°F); Storage: -20 to 70°C (-4 to 158°F)

Humidity Tolerance: 0 to 95% noncondensing

Enclosure: Steel

Size: 5.8 x 31 x 27.9 cm (2.3"H x 12.2"W x 11"D)

Weight: Base unit with power supply: 4.4 kg (9.6 lb.); Expansion board: 0.3 kg (0.6 lb.)

* 1 for each basic or expanded port

Technically Speaking

- The control sequence of the Code Operated Switch II is a pair of ASCII characters: one "arming character" that gets the box's attention and prepares it to switch, and one "port-selection character" that identifies the port to switch to. You can select any of the 256 characters in the extended ASCII character set to be the arming character.
- Graphics data can include almost any combination of characters, including those of the COS II's control sequences. For this reason, the COS II has a "graphics pause" feature that allows it to handle graphics files without unintentional switching: A pause (an absence of data) whose length you can set must occur before the COS II will recognize a pair of characters as a control sequence; otherwise, the COS II will pass the characters as data.
- You can also choose whether the COS II passes the hardware flow-control leads DTR and CTS through to the attached devices, or uses them strictly to control its buffer.

Additional equipment you might need:

- A snap-in 4-Port Expansion Board for controlling four additional slave devices. You can install this circuit board in only minutes with just a screwdriver.
- An asynchronous RS-232 modem or line driver for long-distance control of your devices.
- RS-232 cable.
- AC and data-line surge protectors.
- A country-specific power cord or adapter for operating the COS II outside of North America.
- Communications software.

Ordering Information

ITEM	CODE
Code Operated Switch II	
115 VAC	SW590A-R2
230 VAC	SW590AE-R2
<i>OPTIONAL ACCESSORIES</i>	
4-Port Expansion Board	SW591C
Extended Distance Data Cable (12 conductors)	EDN12C

