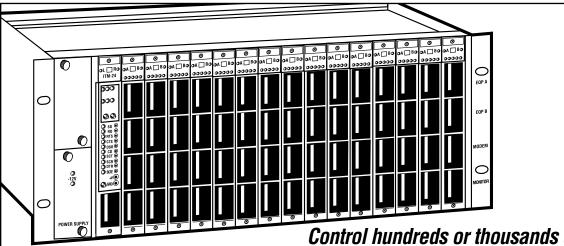


Black Box Corporation.

# BLACK BOX NETWORK SERVICES

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## PRO SWITCHING SYSTEM II



## Control hundreds or thousands of devices from a single ASCII terminal or PC!

## Key Features

- Chassis-mounted switching and patching system for RS-232, RS-530, X.21, and V.35 data communications.
- Daisychain up to 9901 fully populated chassis units to control and manage up to 158,416 A/B interface cards.
- Management Control Software makes onscreen control a snap.
- Multiple programmable alarms alert you to network conditions.
- Redundant power options.

Up to now, daisychaining several 16-port KVM switches for managing a few hundred CPUs was the standard of control.

Consider that standard demolished.

With the BLACK BOX® Pro Switching System II, you can daisychain up to 9901 chassis together to control and manage 158,416 A/B interface cards from a single console.

#### Switching—your way.

The Pro Switching System II is a chassis-mounted switching and patching system for RS-232, RS-530, V.35, and X.21 communications.

You can switch individual circuits, all 16 circuits in a chassis, or a group of user-defined circuits via remote console commands or automatically upon alarm. Or use front-panel pushbuttons to switch

individual circuits or to gangswitch an entire chassis. You can also disable manual switching capabilities with a console command.

#### Meet the switch gang.

The core of the Pro Switching System II is its chassis. Choose the SM900A model for RS-232, RS-530, X.21, or V.35 communications. For V.35 only, opt for the SM901A.

You can populate up to 16
Front Interface Cards in each slave chassis in a daisychain configuration. The master chassis can be populated with up to 16
Front Interface Cards plus 1
Terminal Display Card. You need the SM903C card for the master SM900A chassis and the SM905C for the master SM901A chassis.

Both chassis also require a Management Control Card. The SM902C card is for the SM900A chassis, and the SM904C card is for the SM901A chassis.

Lastly, equip your Pro Switching System II chassis with one or two Power Supply Modules (SM950A or SM950A-220).

### The straight deal on the Front Interface Cards.

The SM900A chassis holds up to 16 RS-232, RS-530, X.21, or V.35 Front Interface Cards (SM906C—SM909C), and the SM901A chassis holds the same number of V.35 cards. The cards feature a switchable A/B circuit, a common RS-232 or V.35 cable connection, plus five signal-monitoring LEDs.

With up to nine alarm options, each RS-232, RS-530, and V.35 circuit can be individually configured for up to a maximum of eight alarms on the presence or absence of physical layer signals; each X.21 circuit can be

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individually configured for up to six programmable alarms.

All Front Interface Cards slide into the SM900A or SM901A to mate with rear cable connectors at the chassis backplane.

#### Visualize ease of management.

The master chassis requires one Terminal Display Card to work in conjunction with the Management Control Software.

The command console can be any ASCII terminal or PC.

Management Control Software enables it to be configured to place outgoing calls and receive incoming calls from various locations equipped with Pro Switching System II chassis.

The software's simple graphical interface displays onscreen alarm conditions with a date and time stamp. A color-coded signal also shows the status of any circuit in the network, and signal status for an entire chassis can be viewed.

#### The brains behind this operation.

Manage each chassis with a Management Control Card. The control card is a micro-processor-based, multifunction logical bridge between the consolegenerated commands and the individual front cards.

Adjacent to each LED on a control card's front panel are voltage test jacks. Unbalanced signals have single jacks per signal; balanced signals have dual jacks. Positive test voltage and ground are also included.

#### It keeps you running.

Each chassis is outfitted with at least one Power Supply Module. Choose the SM950A for 110-VAC power or the SM950A-220 for 220-VAC power.

For backup power, you can equip a chassis with an additional Power Supply Module. If one module goes down, the other kicks in to keep your data moving.

## Specifications

Controls: Terminal Control:
Send Data, Receive Data,
Serial Clock Transmit, Serial
Clock Receive, Request to
Send, Data Terminal Ready,
Data Carrier Detect, Data Set
Ready;

GUI Control: Send Data, Receive Data, Serial Clock Transmit, Serial Clock Receive, Request to Send, Data Terminal Ready, Data Carrier Detect, Clear to Send

Data Format: 8-bit data, 1 stop bit, no parity

Management: Via ASCII terminal or software

#### **Operating Environment:**

Temperature: 32 to 104°F (0 to 40°C); Humidity: 10 to 80% noncondensing

#### **Programmed Alarms:**

RS-232, RS-530, V.35: Send Data, Receive Data, Serial Clock Transmit, Serial Clock Receive, Request to Send, Data Terminal Ready, Data Carrier Detect, Data Set Ready, Clear to Send; X.21: Transmit Data, Receive Data, Indicate, Control, Signal Element Timing, Byte Timing

Protocols: Transparent

**Speed:** Terminal Control: 1200, 2400, 4800, or 9600 bps; 19.2 kbps; GUI Control: 1200, 2400, 4800, or 9600 bps

CE Approval: Yes

Interface: SM900A: RS-232, RS-530, X.21, V.35; SM901A: V.35

Connectors: SM900A: (48) DB25 F, (3) per circuit; (2) DB25 F for monitor; (1) DB25 F for I/A test; (1) DB25 F for control in/out;

SM901A: (48) M/34 F, (3) per circuit; (2) DB25 F for monitor; (1) DB25 F for I/A test;

(1) DB25 F for I/A test; (1) DB25 F for control in/out

Indicators: SM903C, SM905C: SD, RD, RTS, CTS, DSR, CD, SCT, SCR, DTR, RI, SCTE; SM906C, SM907C, SM908C: SD, RD, CD, DTR, RTS

Power: 110/220 VAC, 60/50 Hz, internal, with IEC 320 connector

**Size:** 7"H (4U) x 19"W x 14"D (17.8 x 48.3 x 35.6 cm)

Weight: SM900A: 29 lb. (13.2 kg) fully loaded; SM901A: 39 lb. (17.7 kg) fully loaded

### Ordering Information

ITEM CODE
First, order the chassis for your application
Pro Switching System II Chassis
RS-232, RS-530, X.21, V.35SM900A
V.35 OnlySM901A
next, order one or two power supplies
Power Supply Modules
110-VACSM950A
220-VACSM950A-220
then, select either a control card
Management Control Cards
RS-232, RS-530, X.21, V.35SM902C
V.35 OnlySM904C
or a display card for your master chassis
Terminal Display Cards
RS-232, RS-530, X.21, V.35SM903C
V.35 OnlySM905C
and interface cards
Front Interface Cards
RS-232SM906C
V.35SM907C
RS-530SM908C
X.21SM909C
For empty slots, order
Blank Covers for Unused Slots
InterfaceSM910C
Power SupplySM911C
To manage the Pro Switching System II, order
Management Control SoftwareSM912A
You may want to order cable
Category 5 Patch Cable, 100-MHz, 4-Pair,
Straight-Pinned, PVC, Beige,
10-ft. (3-m)EVMSL05-0010
RS-232 Cable, 25-Conductor, 10-ft. (3-m)ECM25C-0010
V.35 Interface Cable, 10-ft. (3-m),
Male/MaleEYN450-0010-MM
You may also need
Modular Adapter Kits
DB25 M↔RJ-11 F 4- or 6-WireFA024
DB25 M↔RJ-45 F 8-WireFA025



Black Box offers the best warranty program in the industry—Fido Protection\*. For more information, request **FaxBack 22512**.

