The DCB Data Broadcast Switch is a 8 to 32 port data broadcast device that allows all output ports to become reverse channels upon command. It was designed for use with paging systems, where paging data must be replicated to many remote paging terminals. Built upon the proven DCB Access Switch platform, it includes a control port, allowing reverse channel communication from any of the selected downstream paging terminals. The reverse channel selection is typically used for remote management of the remote devices such as paging transmitters.

The Broadcast firmware is available for 8, 16, 24 or 32 ports. Ports are async 9600 bps, 8 data bits, no parity, one stop bit. Data to be broadcast enters the Switch on the “Network Composite Port”. Data is replicated on the output ports 1 through 8, 1 through 16, 1 through 24 or 1 through 32. The “Network Management Port” is a control port used to select reverse channel input. Reverse channel input can come from none or only one of the output ports, and goes out the “Network Composite Port”. The reverse channel often carries reports and transmitter information back to the head-end computer.

**FEATURES**

- Features text
- 8 to 32 ports
- Up to 9600 bps port speeds
- 1 control port, 1 data download port
- Ideal for paging transmitter applications
- Connects to any other async devices
- Optional 48V power supply
**SPECIFICATIONS**

**General**
- DB-08 - 8 port model
- DB-16 - 16 port model
- DB-24 - 4 port model
- DB-32 - 32 port model

**Output Ports**
Each Switch contains from 8 to 32 output ports. These ports are RS-232 implemented on RJ-45 connectors. Data entering the Switch on the input port is sent to all output ports. Optionally, one output port at a time can be used as a source for data transmitted back to the input port (see Operation).
- DB-08 - 8 ports
- DB-16 - 16 ports
- DB-24 - 24 ports
- DB-32 - 32 ports

**Port Specifications**
- Data Format:
  1. Start bit
  2. 8 Data bits including parity if used
  3. Stop bit
  4. 10 Bits total
- Data Rate: Fixed – all ports (input and output) fixed at 9,600 bps
- Interface: CCITT V.24, RS-232D
- Connectors: RJ-45 (8-wire)

**Indicators and Switches (front panel)**
- Power Indicator
- Reset Switch

**Operation**
Data is normally passed one way from the input port to all output ports. This is the default state, and this state can entered by entering the characters "00" at the control port. A second mode, "reverse channel", is entered when a two character port number is received at the control port. Allowable control port entries are "00" through "32" (followed by or ). "00" returns to the default one-way transmitting state. Any other acceptable entry (numbers between 1 and the highest port number present) places the Switch in reverse channel mode. When in reverse channel mode data received on the reverse channel port is passed out the input port. There is a full duplex communications channel between that reverse channel port and the input port during this mode. This operation continues until a “00” is received on the command port to switch back to normal mode.

**Control Port Commands**
The command port accepts only two characters followed by a carriage return or carriage return/line feed pair. The two characters are a number between 00 and 32 (the ASCII characters “00”, “01”, ... “32”).
- “00” returns the Switch to normal broadcast operation mode.
- “01” through “32” puts the Switch in reverse channel mode with the number being the port number to accept data through.

**Physical/Electrical**
- Power requirements: 120 VAC, 30-43 watts, .25-.36 amps
- 48 VDC Power supply optional
- 10 1/4" x 9 3/4" x 2 1/4" (AS-04, AS-08 and AS-16)
- 10 1/4" x 9 3/4" x 4 1/2" (AS-24, AS-24M and AS-32S)

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**APPLICATION**

**Users of RS-232 Data**
- Such as Paging Transmitters

**Data Source**

**Control Terminal or PC**

**DBS**

Rear view of Data Broadcast Switch DB-32 (32 port)