**DESCRIPTION**

The SPL/DS Data Selector is a receive only device that decodes a simple network protocol (defined later in this document) and delivers short ASCII text strings to the terminal ports on the SPL/DS. The protocol message format is as follows: DDPP[data...data] The DD string is a drop number in ASCII between “00” and “63”. The PP string is the local port number in ASCII between “01” and “14”; the largest SPL unit has 14 ports. The [data...data] portion of the protocol message is an ASCII string with a length limited by the buffer size (about 4000 chars). The protocol message starts with and ends with ; these two characters cannot appear in the data portion of the protocol message. This protocol has been implemented on the SPL platform with front panel switches for each port and one common switch. The common switch sets the drop address to any setting between 0 and 63. Each of the port switches is used to set the data rate on that port; there is no other port option. The front panel LEDs show network activity, local drop activity, errors, and network DCD.

**FEATURES**

- Individually configured asynchronous ports
- Port speeds to 19,200 bps
- Network speeds to 38,400 bps
- Network Management Port
- Composite is asynchronous
- 2 to 14 channels
- “Copy Command” for remote training
- Many troubleshooting and monitoring management commands
**SPECIFICATIONS**

**General**
Units Available
2, 4, 6, 8, 10, 12, 14 channels

**Port Specifications**
Data Format
1 Start bit
1 Stop bit
10 Bits total
8 Data bits including parity if used
Rates: 300, 1200, 1800, 2400, 4800, 9600, 19200 bps individually selectable
Interface: CCITT V.24, RS-232-D
Connectors: DB-25 female
Buffering: 64K dynamically allocated
Flow Control: Set on an individual port basis
  Xon/Xoff
  Clear to Send
  Busy High
  Busy Low

**Network Specifications**
Rates (asynchronous): 1200, 1800, 2400, 4800, 9600, 19200, or 38400 bps
Interface: CCITT V.24, RS-232-D
Connector: DB-25 male

**Indicators (front panel)**
Power, Modem Ready, Receive Error, Activity & Test
Port Receive Data, Port Error, Port Loopback, Buffer Overflow & Switch/memory configuration differ

**Network Management Port**
Interface: CCITT V.24, RS-232-D
Connector: DE-9 female
Can be mapped to Port 1

**Network Management Port Commands**
The HD and HP commands show the front panel switch options to set the drop address and the port data rate, respectively.

The Show Config (SC) command lists the current settings for all ports in the local unit. The port data rate is set by the front panel switch or with the Config Port (CP) command. If the current data rate differs from the front panel setting, an asterisk (*) is displayed before the port rate.

The Show ID (SI) command lists all of the ports and any current IDs assigned to those ports. Because this firmware keeps track of counts for ports beyond the ones present in the unit, all 14 ports are shown in with the SI command and the last column indicates whether the port is physically present. The ID command lets you set any port ID, even if that port is not physically present. As in other DCB products, the ID strings are limited to 15 characters, maximum, and they can be upper/lower case.

The Show Network Config (SN) command shows the current network data rate setting; there is no other network port option. In addition, this command indicates whether any network activity has been detected in the past 60 seconds or so. Network activity is detected even if the protocol message is for a different drop number, however only valid protocol messages trigger the active network status message.

The Change Port Config (CP) command changes the port rate.

The Change ID (ID) command is used to set both the local unit ID and the port IDs. These ID strings are used in the Show Config (SC) and the Activity Counts (AC) screens to help identify the devices attached to each port.

The Config Network (CN) command sets the common channel serial data rate. The factory default setting for the network rate is 9600 bps.

The Activity Counts (AC) screen shows the number of protocol messages received on the network and transmitted to each of the ports. As a trouble shooting aid, the AC command shows protocol messages received for ports that are not physically present in the unit. A non-zero count on one of these ports suggests that some process at the host site does not know that this port is missing.

The Drop Activity (DA) screen shows the number of protocol messages received on the network for all valid drop addresses. An asterisk (*) indicates this unit's drop number in the summary.

The Zero Counts (Z) command clears all of the activity and error counts.

The Test Tools (TT) screen shows commands that are available for testing.

The Capture Port (CA) command enables the terminal connected to the network management port to send keyboard characters to any port.

The Monitor Network (MN) command sends all of the characters received on the network port to the network management port in addition to processing the messages normally.

The Monitor Receive (MR) command sends the characters going to a selected port to the network management port, as well.

**Physical/Electrical**
Power requirements: 120 VAC, 30-43 Watts, .25-.36 Amps
10 1/4" x 9 3/4" x 2 1/4" (2-6 channels)
10 1/4" x 9 3/4" x 4 1/2" (8-14 channels)
DCB SPL-DS Data Selector

Rear view of 6 channel DCB SPLDS-06

APPLICATION

Async Host
CPU/Controller

SPL-DS

Async Devices

Any broadcast/multidrop network

SPL-DS

Async Devices

SPL-DS

Async Devices