

## Network Performance with RS-232 Devices Without the Usual Network Hassles

### StarBus - Device Networking Solution

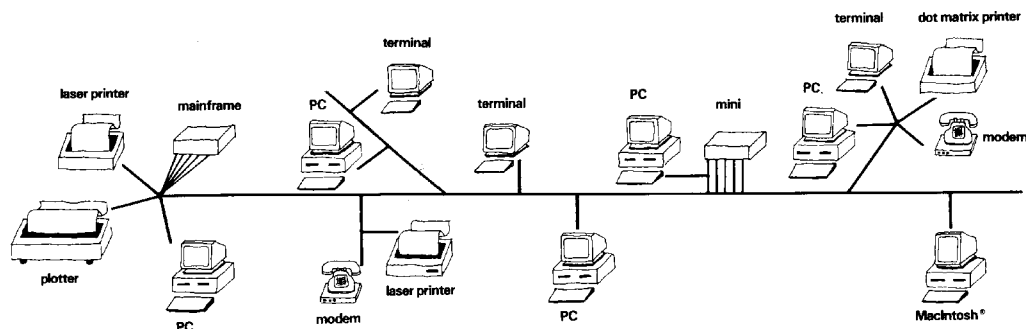
#### Model SBH-96

StarBus provides a simple and expandable data communications system that accommodates just about any computing device. The StarBus network conforms to your system needs: from 2 to 50 nodes can be added individually to grow with the system. Simply plug a StarBus unit into the RS-232 port of the device, whether a computer or peripheral, and connect one pair of "network" wires to the RJ-11 jack or screw terminals. The network wire can be telephone wire, even an extra pair in your existing wiring. Expanding a StarBus network is easy: plug the new unit into a PC or terminal and hold down the space bar to "train" the new node to recognize your communications protocol. Finally, complete the simple menu-driven instructions to configure the port, give the node a "name" and connect the new node to the network. The new StarBus unit is automatically recognized by the rest of the network.



The RS-232 device can operate at any baud rate from 110 to 57,600. StarBus buffers and multiplexes the RS-232 data onto the network wire at a data rate of 115,200 baud. Most operations are performed with commands such as "connect," "disconnect," "help" and "network map." All commands are available through a built-in menu function or via commands embedded within outgoing data. A communications package is included which provides a pop-up menu of network nodes and commands for DOS applications. In many applications, the connection command can be embedded into the configuration string for the remote networked device (such as a modem). A convenient "home base" feature allows any node to be configured to send unaddressed data to a preset default location, entirely eliminating any connection commands for that node! The additional connection methods below make StarBus a remarkably versatile communications tool:

- Full duplex connections provide a cable-type connection with the added benefit of buffering and allowing mismatched protocols
- Queuing removes the burden from the 232 device of checking the network for device availability. StarBus will manage the connection
- Group Broadcasts allow up to 10 predefined groups to receive broadcast data
- Datagrams allow transmission of bursts of data without establishing a full duplex connection. This allows transmission of events such as alarm conditions without waiting for the remote port to be free or even powered on!



#### SPECIFICATIONS:

|  |  |
|--|--|
| <b>Local Port:</b>   | RS-232, DB25 female connector                                |
| <b>Local Port Protocol:</b>  |  |
| Data Rate:   | 110 – 57,600 baud  |
| Stop Bits:   | 1 or 2   |
| Handshaking:   | hardware (multiple configurations), software, both or none   |
| Data Bits:   | 7 or 8   |
| Parity:  | even, odd or none (parity requires 7 data bit setting)       |
| Local Echo:  | enabled or disabled  |
| <b>Data Buffer:</b>  | 9 kB per connection or datagram<br>3 kB for group broadcasts |
| <b>Network Configuration:</b>  |  |
| Supports bus, star and "sloppy tree" configurations                  |  |
| 50 nodes maximum   |  |
| 4,500 ft maximum using 22AWG twisted pair                            |  |
| 4,500 ft total (2,800 ft max. end to end) using 24AWG telephone wire |  |
| Network transceiver meets RS-485 specifications                      |  |
| Data Rate: 115,200 baud, throughput efficiency > 90%                 |  |
| <b>Power Requirements:</b>   | 8.5 – 11.5 VDC @ 330 mA                                      |
| <b>Power Supply:</b>   | Plug-in powerpack included (11VDC output)                    |
| <b>Dimensions:</b>   | 5.2W x 1.7H x 6.0D in  |

1997 B&amp;B Electronics

Phone: (815) 433-5100  
Office Fax: (815) 433-5105  
Tech Fax: (815) 433-5104  
Sales Fax: (815) 433-5109



**electronics**  
MANUFACTURING COMPANY  
707 Dayton Road – P.O. Box 1040 – Ottawa, IL 61350 USA

Home Page: [www.bb-elec.com](http://www.bb-elec.com)  
E-mail: [orders@bb-elec.com](mailto:orders@bb-elec.com)  
[support@bb-elec.com](mailto:support@bb-elec.com)  
[catrqt@bb-elec.com](mailto:catrqt@bb-elec.com)