

## Indoor Radio Modems Connect RS-232 Devices

Communicate up to 300 feet in tough indoor environments

Models: 200-232-DC 200-232-BAT 200-DTG-DC



Model 200-232-DC, front and back

### Introduction

These modems act like a hard-wired connection without the wire. The 200 series modems include software for easy setup. Distances up to 300 feet can be achieved indoors. Communicating through walls will degrade the signal and result in shorter achievable distances. The modems work with any RS-232 device and will support handshaking - either software or hardware. The modems are robust with error detection and retransmission, so the data received is 100% accurate. Use the radio modems in pairs for a simple connection or replace a network with a modem for each network node. Products are sold separately (1 unit per order).

Packet radio technology allows you to operate an almost unlimited number of remote transceivers at one time without interference from each other. These modems use the CSMA/CD technique to prevent data collisions. Your PC is used to set unique destination codes and names for each node, but once that is done, a PC connection is not required so the units may be taken to any location.

Each unit includes a 12VDC power supply and a built-in antenna. A 4-foot cable with DB-25 male plug for the modem connection and a dual DB9/DB25 female connector on the opposite end is provided. These units are not weather-proof.



- Send and receive data at baud rates up to 38400 bps.
- Operate on the 915Mhz band – no FCC license required.
- Models 200-232-DC and 200-232-BAT are used for point-to-point communication applications.
- Model 200-DTG-DC is used for multidrop applications, master/slave or peer-to-peer networks.

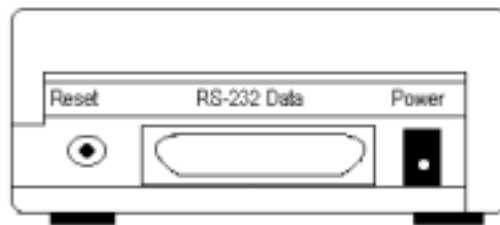
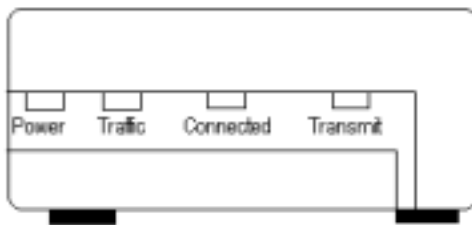
This Spread Spectrum radio modem can be used as a point-to-point network just like a cable. In some applications, it can also be used in a multipoint-to-point configuration, such as a network sharing a printer. Use these modems with PCs, printers, plotters, robots, point-of-sale scanners, terminals, data collection cards, wired modems, etc.

In addition, the 200 series provides transparent serial communications (RS-232) at any of the standard baud rates from 300 baud to 38400 baud. Can also be used to match baud rates - **the baud rates at the two ends of the link need not be the same.** This feature gives you greater versatility with the equipment you can connect.

Each unit includes a 12VDC power supply and a built-in antenna. A 4-foot cable with DB-25 male plug for the modem connection and a dual DB9/DB25 female connector on the opposite end is provided. These units are not weather-proof.

200-232-DC Front Panel

RS-232 Data Female 25 pin



### Software

The 200 series is configured for its intended application by using the RSLAWN Installation Program (included). Once configured, its operating parameters are retained in the battery-backed-up RAM, so it is ready to go whenever the power is on and the RSLAWN program will be no longer needed until the user wants to change the settings.

The RSLAWN Installation Program automates the installation and provides simple, menu-driven means to set up the desired operation parameters. The parameters may be saved to a disk file for record keeping purposes and recalled from either a disk file or from the modem itself. Thus, if multiple units are to be installed, it is easy to set up or record the parameters for any future modifications, expansions, or debugging. In addition, the program provides automated testing to verify the hardware operation of an installation.

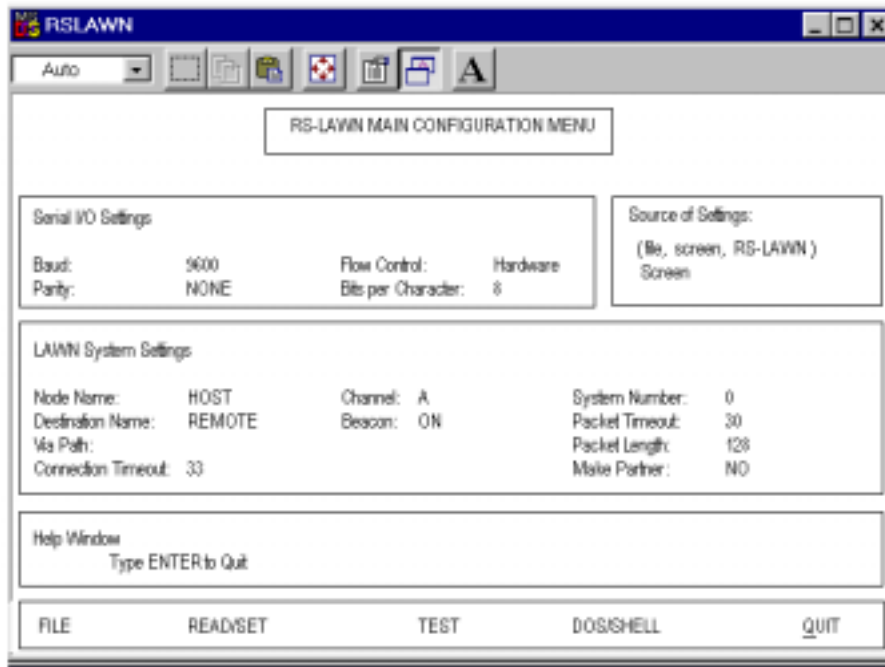
B&B Electronics -- Revised March 2002

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

**B&B 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)  
[catrst@bb-elec.com](mailto:catrst@bb-elec.com)

Lawn Software setup screen



### Specifications

Interface:	DB25 female RS-232 serial port (DCE configured)
Flow Control:	Both hardware and software
RF Channels:	3
Transmit Power:	16dbm (max) 13dbm (min)
Sensitivity:	-90dbm, typ., -87dbm (min)
Frequency Channel A:	907.45 MHz
Frequency Channel B:	914.81 MHz
Frequency Channel C:	921.10 MHz
Modulation:	FSK, spread spectrum
Antenna:	One, internal
No. of chip per bit:	16
Bit Rate (raw):	76.8 Kb/sec
Throughput:	38.4 Kb/sec
Protocol:	AX.25
Contention:	CSMA/CD
Range:	300 feet typical, indoors; 3000 feet typical, outdoor unobstructed
Dimensions:	7L x 4W x 2H in
Weight:	13 oz.
Power Supply:	120 VAC input 60Hz (included) Output 9VDC .500mA
Battery Charger:	12V .35A; fast charge, 12V .8A (200-232-BAT ONLY)
Operating Temperature:	-0 to +50°C

**200-232-DC.....One-to-One Wireless Transceiver (Use one for each communicating location)**  
**200-232-BAT...One-to-One Wireless Transceiver, Battery Powered (Use one for each communicating location)**  
**200-DTG-DC...Master/Slave or Peer-to-Peer Wireless Transceiver (Use one for each communicating location)**

B&B Electronics -- Revised March 2002

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

**B & B 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)