

# 3.5.3 Serial Port Settings

This applies only if you use RS232 commands to control the Bobcat X.

If you wish to control Bobcat Xs remotely with RS232 commands from a computer, read this section. Otherwise, skip it.

Bobcat Xs can be linked together for RS232 using straight-through 8-conductor cable with RJ-45 connectors. This is the common type of LAN connection cable, *not* null-modem, sometimes call Cat-5 cable.

RS232 is also used to upgrade the firmware of the unit.

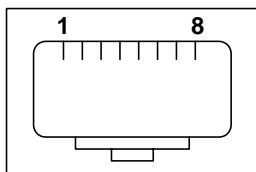
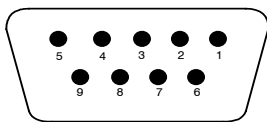
## Adapter from computer to RJ45

At the computer end, you will need an adapter to go from the computer's 9-pin serial output connector to a female RJ45 connector. Electronics stores have these ready-to-wire types. Buy one with a female 9-pin sub and connect the wires as shown.

### Wiring the adapter

To go from 9-pin D-sub serial connector on the back of the computer to an RJ45 connector, use a standard RJ45-to-9-pin adapter. Wire it internally as shown. The wiring shown for this adapter is correct for *straight-thru* cables. Straight-thru cables are wired 1-to-1, 2-to-2, etc.

Yellow wire	pin 3
Black wire	pin 2
Green wire	pin 5
RJ45	9-pin
6	3
5	5
3	2



RJ45 looking into the socket.



female 9-pin

Connect all the Bobcat Xs together through their RS232 ports: from the computer to the first Bobcat X RS232 IN; from the first Bobcat X RS232 OUT to the next Bobcat X RS232 IN, etc. It doesn't matter what order you string them together. Most RS232 signals easily travel up to 150 ft. (50 m) between Bobcat Xs.

## Setting Unit IDs

Each Bobcat X in the RS232 series needs a unique ID so it can be individually addressed. To set unit IDs, go to Main Menu > Advanced Options > Serial Port Settings.

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**Main Menu**

- Picture ▶
- Size & Position ▶
- Aspect Ratio & Wall ▶
- Memory ▶
- Diagnostics ▶
- Advanced Options ▶
- Program Information ▶

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**Advanced Options**

- Color Balance ▶
- Miscellaneous Options ▶
- Backlight Settings ▶
- Serial Port Settings ▶
- Auto Setup Options ▶
- Menu Options ▶
- Message in Picture ▶
- Capture Custom Logo ▶

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<b>Serial Port Settings</b>	
Group ID	1
Unit ID	1
ASCII Response Type	Symbolic
ASCII Response Terminator	CR
Baud Rate	19200

The ID is in two parts, Group ID and Unit ID. Each of these has a range of 0–9, A–Z. This range results in 1296 possible addresses.

You can group the Bobcat Xs by using the same letter or number of the Group ID, such as 8. In this way you can address the group as 8\*, and all the Bobcat Xs in the string that have Group ID 8 and any Unit ID will execute the command. See the RS232 programming guide for Bobcat X (part number 070-0108-02 or later) on [www.ClarityVisual.com/login/](http://www.ClarityVisual.com/login/).


1. Click the lower, **blue** button.
2. Use the name “tech” and password “help”.

### Response type and terminator

The ASCII Response Type determines what type of data will be returned to the computer. For human readable text in a serial program choose Symbolic. For computer-read data you can use Numeric or Data Only.

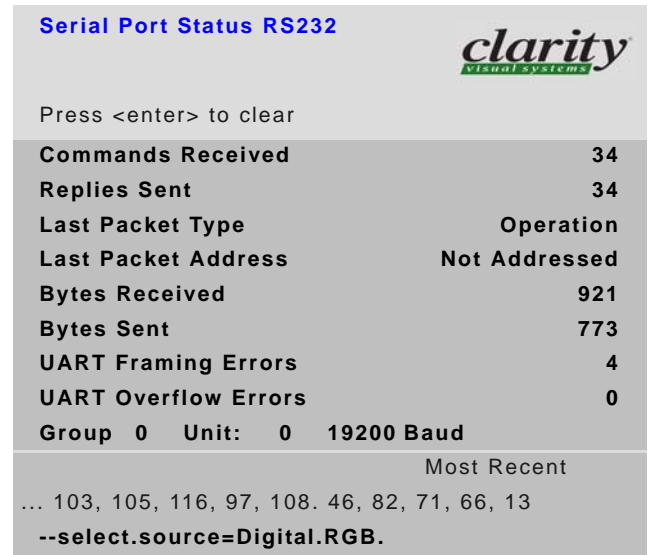
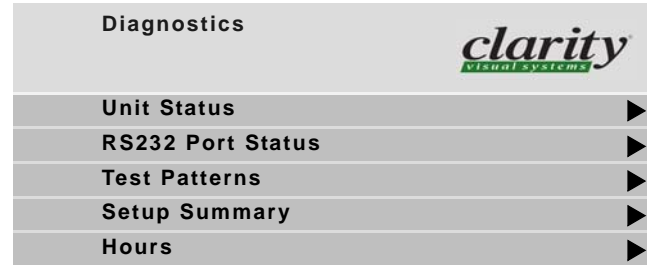
The ASCII Response Terminator will be determined by what your serial program wants to see at the end of every transmission from the Bobcat X.

Baud Rate *must* be the same as that used by the controlling computer. The baud rate is *not* automatically set, as it is with modem communications. It must be manually set here and at the computer to match each other.

-  For firmware upgrades, you don’t need to adjust the baud rate.

### Diagnostics for RS232

To view RS232 port status, go to Main Menu > Diagnostics > RS232 Port Status.



The Serial Port Status RS232 menu lists items that concern RS232. For more information, see “Serial Port Status Settings” on page 91.