

I have been using the RoboLab 1.0, 1.5, 2.0, 2.5 software since 2000. I have used the NXT since it came out in 2006, and I have used the Robotic Invention System at times when I've worked with schools that use that program. Almost all of this has been on personal computers (versus Apples) and running Windows Operating Systems (98, ME, 2000, XP and I thought 95).

Some People confuse the names, so here are my two cents worth: The earlier RCX kits were sold as either the *Robotic Invention System* (RIS) or as the *MindStorms kit*. They are now referred to as the *Team Challenge Kit*. The earlier kits were virtually the same except for which software they used. RIS if it used RIS, and MindStorms if it used *RoboLab*. With the advent of the NXT and the new software, they re-issued the name *MindStorms* as the name of the kit and the software to use with the NXT.

The RoboLab and MindStorms software appear virtually identical on either Windows or Macintosh systems, although I cannot speak to the peculiarities of the software on the Macintosh systems. I know that the first generation of Maine Laptops through the MLTI project had compatibility issues related to permissions (worked fine when logged in as a super user, but not as a student). These have been resolved both with upgrades to the software and the Mac OS.

The Robotic Invention System (RIS) does not run on Apple Computers of any type. And I've had problems with the MindStorms (NXT) USB connections on a Windows XP 64-bit system, although there are drivers for the 64-bit system.

I've listed the system requirements for the MindStorms and RoboLab software as taken directly from the LEGO MindStorms page. Remember to check www.mindstorms.com for continued information on the system.

MindStorms NXT and MindStorms 1.1 Software (current as of 11/07)¹

Microsoft Windows:

Windows XP operating system

Pentium processor, 800 MHz (1.5 GHz or better recommended)

256 MB Ram minimum (512 MB recommended)

Up to 300 MB of available hard-disk space

XGA display (1024 x 768)

One available USB port

Compatible Bluetooth adapter (optional)¹

Note from Tom: Installation took 350 Mbytes of space on my hard drive and loads 135 Mbytes of RAM when in use (at least when I checked).

¹ From www.legoeducation.com - Product ID: W700077

Apple Macintosh:

Apple Mac OS X v. 10.3.9 or 10.4
PowerPC G3, G4, G5 processor, 600 MHz minimum (1.3 GHz or better recommended)
256 MB Ram minimum (512 MB recommended)
Up to 300 MB of available hard-disk space
XGA display (1024 x 768)
One available USB port
Compatible Bluetooth adapter (optional)¹

MindStorms RCX and RoboLab 2.5.4 (current as of 11/07)²

NOTE: Will NOT run on Windows VISTA and may not run on XP 64 bit version

Microsoft Windows:

133 MHz PC (166 MHz recommended)
Windows 98 operating system or later
Minimum of 250 MB free hard drive space
One serial or USB port
RAM for Windows 98 or later - 128 MB (64 MB recommended)
RAM for Windows XP or later - 128 MB (192 MB recommended)

Note from Tom: I've run this on antiquated laptops and desktops (different versions as they became available) since 2000. Have never had problems with memory, processor power, etc.; although program will work quicker with a faster machine, it's hard to find a 133 MHz machine these days.

Note from Tom: Installation took 150 Mbytes of space on my hard drive and loads about 30 Mbytes of RAM when in use (at least when I checked).

Apple Macintosh:

166 MHz Mac processor
System 8 or later for serial transmitter
System 9.0.4 or later for USB transmitter
Minimum of 300 MB free hard drive space
One serial or USB port
RAM for system 8 or later - 128 MB (64 MB recommended)
RAM for OS X - 128 MB (192 MB recommended)

² From www.legoeducation.com - Product ID: W900076