



## 2008-2009 FRC New Control System Checklist

- Download and/or Print Updated Control System Manual From FIRST.
  - <http://www.usfirst.org/community/frc/content.aspx?id=10934>
  - Sections 1-5
  - FRC Control Layout Diagram
  - Power Distribution Diagram
  - Data Connectivity Diagram
  - 2009 Early Ship Control System Checklist
- Inventory ALL Control System Components
- Run "Out of the Box" Benchtop test (Section 2)
- Install Hardware and Software and Updates (Section 4)
  - Install 2008-2009 FIRST Software (4.2)
    - Set of 2 DVDs
  - Update Workbench Installation (Section 4.2.5.2)
    - <http://www.usfirst.org/frcontrolsysteem>
    - "C/C++ updates for WPILib software update"
  - Install NI Updates (4.3.1)
    - <http://joule.ni.com/nidu/cds/view/p/lang/en/id/1180>
  - Install the SVN plug-in for Eclipse / Wind River Workbench (4.4.1.1)
  - Install Tortoise SVN Subversion Client (Optional but helpful)
  - Install SilkSVN Command Line Subversion Client (Optional but helpful)
  - Install FRC 2009 WPILib Source Code (4.4.3)
- Update Firmware in Driver Station (DS) (5.1.1)
- Update Firmware on cRIO & set correct team number on cRIO (5.1.2)
  - Will need to set static IP for laptop to communicate with cRIO (5.1.2.3; 5.2.1)
- Set correct team number on Driver Station (5.3.2)
- "Benchtop" hardware test again with new updates (Repeat 2.3.1)
  - Verify "Tethered" Communication (2.3.4 for operation changes)
- Setup Wireless Control System
  - Configure wireless adapter and Bridge (5.6.1)
  - Configure wireless router (5.6.2)
  - Configure hardware as described in 2.3.2
- Verification of Wireless Operation (2.3.1 {2.3.4 for operation changes})
- Software Development Tools Verification (1.6.7)
  - Confirm with "Benchtop" Test
- Transplant new control system to old/new robot (1.6.8)
  - Modify wiring as needed
  - Set up minimal code and drive train for robot and test operation (1.6.9)
- Set up full control of robot, including sensors, encoders, etc.
- Report any issues/bugs to FIRST Control System Forum.