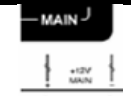

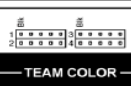
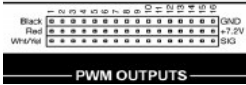







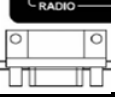
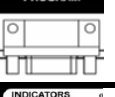



2006 FIRST Robotics - Inputs and Outputs

The Robot Controller - Quick Reference Sheet

| Input/Output | Use | Notes | View |
|-------------------------------|---|-------|---|
| Main | Used to connect 12V and Ground to the Robot Controller. | |  |
| Backup | Used to keep the Robot Controller operating even when main batter power drops. | |  |
| Team Color | Used to control the Team Color LEDs. | |  |
| PWM Outputs | Used to drive the Victor 88x speed controllers. Can also control most 7.2V servos. 16 pwm outputs available. | |  |
| Analog Inputs | Used to connect to the analog sensors. 16 analog inputs available. | |  |
| Digital In/Out | Used to connect to digital sensors or custom circuitry. 18 digital input/outputs available. | |  |
| Relay Outputs | Used to drive the Spike relays. 8 relay outputs available. | |  |
| Reset/Prog | Used for remotely resetting the robot thru an external switch. | |  |
| TTL Serial Port | Used to connect the Robot Controller to a standard PC serial port. | |  |
| Reset | Performs a complete hardware reset of the Robot Controller when pushed. | |  |
| Prog | Used to put the Robot Controller in a state to receive the user program. | |  |
| Radio | Used for wireless control of the robot. Connect to the radio thru a cable. | |  |
| Tether | Used to connect the Robot Controller to the Operator Interface. Use a DB9 Female-Female Pin-to-Pin cable. | |  |
| Program | Used to change the program inside the controller. Connects to a PC using a DB9 Male-Female Pin-to-Pin cable. | |  |
| Indicators | Used to display status of various functions on the Robot Controller and robot. | |  |
| Additional Information | www.innovationfirst.org - 2005 Full-Size Robot Controller Reference Guide. www.teamfordfirst.org - Robot Controller Quick Reference Sheet. | | |