# R700 Vector Robotic Arm Start Up

# **Using the Keyboard**

The R700 Robot Arm comes pre-installed with the Keyboard program. To use the R700 this way, right out of the box:

- Make sure all 6 servo wires are connected.
- Connect the keyboard to the R700 with the included 8-pin flat cable.
- Connect the AC adapter to the R700.
- Switch on the power with the slide switch.
- Press the program reset button.
- Move the R700 by pressing the buttons on the keyboard.

If these procedures do not work for you, perhaps the keyboard program was not installed correctly. Please proceed with the RACS instructions.

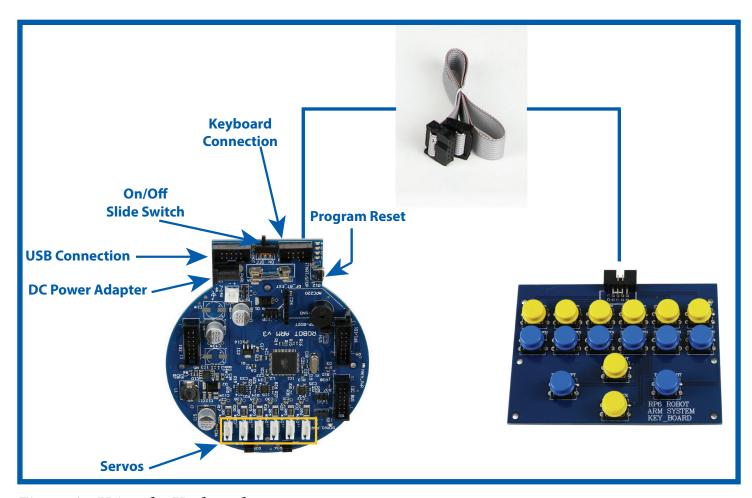


Figure A. Using the Keyboard

# **RACS**

The RACS software allows you to move (actuate) the robot arm from your computer keyboard.



Figure B. R700 with Included Accessories

#### 1. Driver Setup

- If you have previously connected the USB to your computer, the computer may have already
  assigned a driver will not work. If this is the case, please uninstall the drivers, then follow this
  procedure.
- Copy the CD to your desktop. To make sure you have the latest updates, go to globalspecialties.com. Go to your particular robots homepage. Go to the Downloads tab. CD Contents.
- In the software folder you will find USB\_DRIVER\Win2k\_XP\CDM20600.exe. Install this driver to your computer.
- Now connect the USB programmer to the computer using the USB cable.
- Connect the R700 to the AC adapter.
- Switch on the R700 with the on/off slide switch. A blue LED should continue to blink.
- Connect the USB programmer to the R700 with the 10-pin cable. Leave the programmer connected between the computer and the robot.

#### 2. RobotLoader Setup

- Open the RobotLoader program from "RobotLoader start.exe".
- Under the Step 1, make sure the "USB..." line is highlighted.





Figure C. Starting RobotLoader

Now click "Connect."

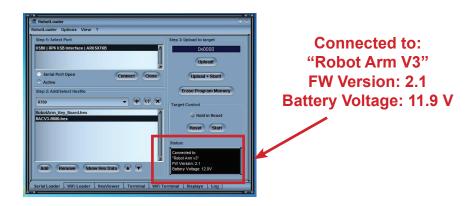


Figure D. RobotLoader Status

You should see a message under that status box that tells you that RobotLoader is "seeing" your robot (see Figure D). If you do not see this message. Close robot loader. First, turn on the robot and connect to the computer. Now launch RobotLoader again. If there is still no connection, please double check that you have the correct driver installed. Make sure old drivers are deleted.

- Step 2. Select the plus sign and name a new category something like "R700". See Figure D. This is just to keep your files separate from other robots you may use.
- Now select "Add".
- Browse to: Software/RACS/RACS\_HEX/R700/RACV3-R700.hex". Select this file.
- Now Step 3. Hit "Upload!" to upload the RACS program onto your robot arm.
- Once successfully uploaded, close out the RobotLoader program.

# 3. Using RACS

- Now start the RACS software.
- Select the highest number COM Port. If only one COM port shows, select "update".
- Select "connect".
- Select "servo control".
- You should now be able to use your computer to move the robot with the slides on your screen.

# For More Help

If you have any questions. Please see our website: globalspecialties.com or contact us at info@globalspecialties.com

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