



## Important Notes on Operating the BarrettHand:



1. To prevent firmware corruption during shipping, the Hand is shipped without firmware installed. You **MUST** download the firmware to the BarrettHand to operate the hand for the first time. Also, if the Hand is not used for several days, it is advisable to re-download the firmware to guard against intermittent hand errors due to firmware corruption.



2. If the Hand is not used for several hours, a finger may activate its TorqueSwitch™ prematurely, so that only the outer link moves. This is a normal, though infrequent, occurrence until the Hand is operated for several cycles to redistribute its internal gear lubricant.



3. Issuing a Close (C) command followed by an Open (O) command causes the Spread fingers to accelerate rapidly and hit their mechanical stops at high speed. This is normal and is due to a combination of the trapezoidal motion control law and the fact that the fingers interfere with each other, prohibiting free spread motion. To avoid this, please consider issuing Grasp Open (GO) followed by Spread Open (SO) after a full close.



## Component Checklist:

- ☐ BH8-Series 3-fingered robotic hand
- ☐ Threaded locking ring for base mounting
- ☐ 24v Power Supply unit
- ☐ 3-m flexible BarrettHand Cable (8-mm diameter)
- ☐ 3-m serial cable (computer to Power Supply unit)
- ☐ 2-m line cord (US type) with int'l connection to Power Supply unit
- ☐ Transparent (Lexan®) robot lab-bench mount stand, with friction feet and cable-management strain relief clips
- ☐ Labeled envelope with any/all software, example files, firmware and manuals. (BarrettHand BH8-Series Control Software)
  - ☐ BH8-Series Control Software CD-ROM in a plastic sleeve
  - ☐ BarrettHand User Manual
  - ☐ BHControl Interface Manual
  - ☐ Notice for Web site password
- ☐ Maintenance kit in bag labeled "BarrettHand Maintenance Kit":
  - ☐ 1.27-mm Hex Wrench
  - ☐ 2.0-mm Hex Wrench
  - ☐ 2.5-mm Hex Wrench
  - ☐ Mobil 1® Synthetic grease in syringe
  - ☐ Set of (10) wooden lubricant applicators
  - ☐ Set of (12) self-adhesive cable-management strain relief clips
  - ☐ Torque Wrench with a 2.0-mm Hex bit
  - ☐ 1x60 Phillips Head Screwdriver
- ☐ Robot Arm Adapter

## Options:

- ☐ BarrettHand C-Function Library Manual (software included on CD-ROM listed above)
- ☐ Set of (3) Strain Gage Joint-Torque sensors (factory-installed)

## QUICK-START INSTRUCTIONS

1. Unpack the following:
 

· Hand	· Hand Cable
· Lexan Bench Stand	· Serial Cable
· Power Supply unit	· Line Cord
· CD-ROM	
2. Mount the BarrettHand on Lexan Bench Stand, securing it mechanically with the threaded locking ring.
3. Attach the Line Cord to the Power Supply unit, then plug the Line Cord into any AC outlet. (In some countries, users may need a plug adapter, but the Power Supply unit safely accepts all AC voltage standards.)
4. Verify that the Power Supply is switched OFF (the green Power Supply light is off).
5. Attach the serial cable from your 9-pin serial port to the Power Supply unit.
6. Attach the 15-pin end of the BarrettHand cable to the Power Supply unit and the other end into the BarrettHand. Make sure to strain-relieve the BarrettHand cable by using the cable management clips on the bottom of the Lexan Bench Stand.
7. Install the BarrettHand software from the CD-ROM onto a PC running Windows 95, 98, NT, or 2000 with at least one free 9-pin serial port.
8. Launch BHControl.exe (installed from the CD-ROM).
9. Click the "Start Download..." button and select the BarrettHand Firmware (installed from the CD-ROM) when prompted.
10. Switch the Power Supply ON, wait for the firmware to be downloaded (about 4 minutes).
11. Press the "Initialize Library" button.
12. Click the "Visual" button and then use the left and right mouse buttons to control the positions/velocities of various axes.

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