

FAQ

PRODUCT BULLETIN

Motion Control
KEEPING LIFE IN MOTION

115 N. Wright Brothers Dr. • Salt Lake City, UT 84116
1 (888) 696-2767 • www.UtahArm.com

i-LIMB & bebionic Hand use with the U3/U3+ Arm Systems

February 20, 2012

How It Works:

- i-LIMB and other “multi-articulating” hands, all have on-board controllers, as do MC ProHand-type TDs, as well as OB DMC and Sensor-type TDs.
- The U3, U3+, and Utah Hybrid Arms all have the Auto-Detect feature, which insures the U3 arm connects properly with on-board controller hands.
- I-LIMB and bebionic hands also have five motors, one for each finger & thumb. This contributes to a high power consumption, compared with other types of TDs.

Modifications to the U3/U3+ Arms:

- A supplemental battery, made specifically by the hand’s manufacturer, is highly recommended for the wearer’s convenience, if daily use of a multi-articulating hand is expected. The hand’s higher current draw, coupled with the draw of the motorized elbow, will result in shorter battery life if the additional battery is not utilized.
- Order the “i-LIMB/bebionic Battery Upgrade”, p/n 3010677, with a new U3/U3+ Arm. An additional battery management circuit is installed into the forearm of the Arm, with an additional connector at the top of the humeral section for the supplemental battery. The battery should be supplied by the hand’s manufacturer, to insure compatibility with the hand. The modification is available for retrofitting also, if the Arm is returned to Motion Control. Additional labor may be necessary for the retrofit, depending upon the Arm.

Setting Up the Arm:

- The Hand/Wrist Circuit of the Arm will actually process the signal to the Hand (EMG or Alternate Input may be used). The U3/U3+/Hybrid Arm signals are adjusted via the Computer Interface as usual.
- ***The Hand’s on-board controller (including i-LIMB, bebionic, or other) should be set up for Dual-Site EMG inputs (start with neutral, balanced settings).***
- ***Set up the Arm’s controller*** For example: If you want to use a ***Linear Pot*** for the Hand & Wrist input, setup the Hand (i-LIMB or bebionic, or other), via its own Bluetooth connection, for Dual-Site EMG inputs. Set up the Arm (***U3, U3+, or Utah Hybrid***) for single-site, alternate input. The Arm will provide the inputs to the Hand in the appropriate way. Adjust the Linear Pot settings via the Computer Interface for the Utah Arm, in the usual way.
- Make sure the Forearm connections to the Hand are complete – see Figure 1 on Page 2.

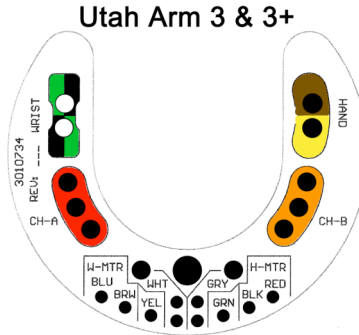
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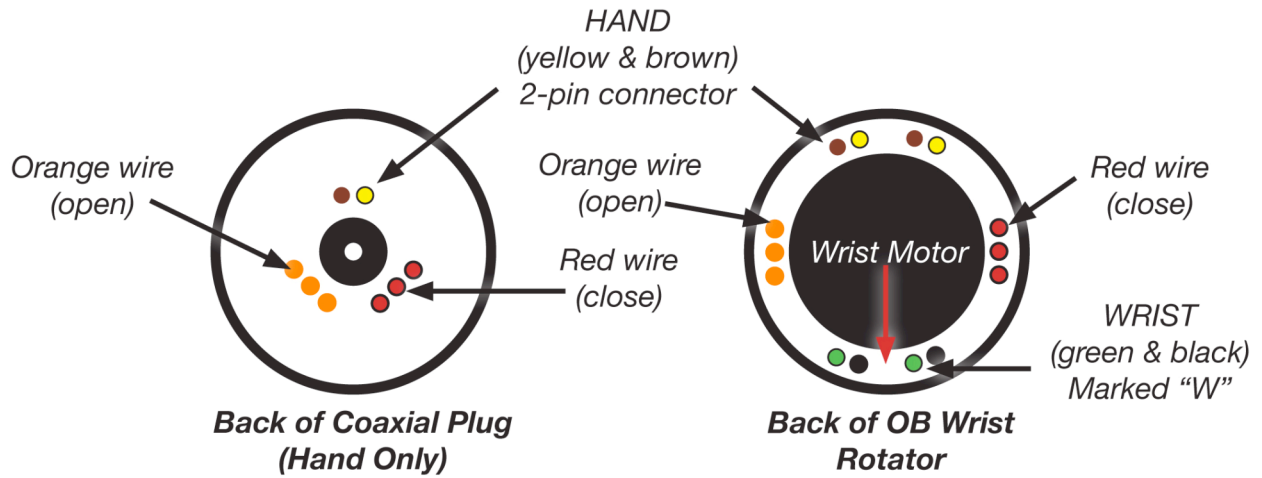
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Figure 1 – Forearm connections in U3, U3+, or Utah Hybrid Arm



Option A: MC Wrist Rotator



Option B: OB Coaxial Plug

Option C: OB Wrist Rotator