LTI Remote Electrode System

- Ultra-thin Electrode-Amplifiers
- Adjustable gain
- Thin shielded cables with strain-relief eyelets to connect the metal electrodes
- LTI Cavity-Back™ electrodes for lump-free connection to the cables

The new LTI Remote Electrode System is built around a thin Electrode-Amplifier specifically designed to be used with remote metal electrodes. This is not a modified cased electrode, but one designed specifically for test sockets, frame-type sockets and roll-on silicone sleeve suspension systems. The case measures just 1.2 x 0.7 x 0.2 inches, L x W x H, (31 x 17.5 x 5 mm). The Electrode-Amplifier has a performance similar to common cased electrodes such as the Otto Bock 13E200, and it can be used with both older batteries and the newer Li-Ions. The adjustable gain permits use with both microprocessor-based and traditional controllers and terminal devices.

Cavity-Back™ Electrodes improve cosmesis. These metal electrodes are used in test sockets and soft inner socket applications. Attaching cables has always been a problem with separate metal electrodes. With a hard inner socket, a standard 4-40 nut followed by the cable eyelet and a second nut can add a lump ¼ inch (6mm) high. With the Cavity-Back™ feature and a soft socket liner, you will get excellent electrical continuity with just a thin washer, the cable eyelet, and the small pattern 4-40 nut supplied. These components will deflect the liner down into the cavity. When the stud on the electrode is cut flush with the nut, only the 2mm thick nut and cable will protrude above the surface resulting in a cosmetically appealing socket. If there is enough space for the cable, there is space for the nut.
The Cavity-Back Metal Electrodes are available in three shapes; High, Medium and Small dome. The Medium dome is the standard or default if no other shape is specified. These are used in most applications. The High dome electrode is intended for situations where there is significant soft tissue over the muscle site to assure good contact. Finally, the Small dome is primarily for pediatric applications or for adult cases where there are severe space constraints.

A complete LTI Remote Electrode System consists of the Electrode-Amplifiers, Remote Electrode Cables of various lengths (3, 6, 12, and 24 inches) and the Metal Electrodes in one of the three sizes listed below. The Electrode-Amplifiers are provided with a 6 inch output cable and connector for the LTI VariGrip, VASI SPM, Otto Bock and Animated Prosthetics controllers. Where the manufacturer requires two inputs to one connector, these are also available. To order, just specify the number of Electrode-Amplifiers (1 or 2) and the connector type, the length of Remote Electrode Cables and the shape of the Metal Electrodes.

Remote Electrode Cables (REC). Three shielded cables attach to the Electrode-Amplifier with a detachable strain-relief clamp. Eyelets with strain-relief on the other end of each cable connect to the Metal Electrode stud with 4-40 small pattern nuts. To accommodate various prosthetic configurations, these Remote Electrode cables are offered in four standard lengths; 3, 6, 12 and 24 inch. Generally, 3 inch cables are used for pediatric and long residual limb trans-radial applications, 6 and 12 inch for shorter trans-radial and trans-humeral applications and 24 inch for high-level (i.e. shoulder disarticulation) cases.

Remote Electrode-Amplifiers:
- **DC200B**: One Remote Electrode-Amplifier, Otto Bock connector
- **DC200L**: One Remote Electrode-Amplifier, Lumberg connector (for additional Boston Arm-TMR electrode sites)

Cables to Connect Remote Metal Electrodes:
- **REC03**: Remote Electrode Cable, 3-inch (76mm)
- **REC06**: Remote Electrode Cable, 6-inch (150mm)
- **REC12**: Remote Electrode Cable, 12-inch (300mm)
- **REC24**: Remote Electrode Cable, 24-inch (600mm)

Metal Electrode Kits: Electrodes are supplied with appropriate nuts and washers.
- **EL11**: Kit of 3 EL01 High Dome Metal Electrodes – 0.56in dia. x 0.19in high (14.2mm dia. x 4.7mm)
- **EL12**: Kit of 3 EL02 Medium Dome Metal Electrodes - 0.56in dia. x 0.13 high (14.2mm dia. x 3.2mm)
- **EL13**: Kit of 3 EL03 Small Dome Metal Electrodes – 0.38in dia. x 0.10 high (9.5mm dia. x 2.5mm)