Setting Up the NESS L300 Plus System

Preparing the Skin

Before you put on the L300 and Thigh FS Cuffs, prepare your skin where the electrodes will touch.

To prepare your skin:

- 1. Clean the skin where the electrodes will touch with a wet washcloth. If any lotions are on the skin, clean the skin with soap and water. Rinse well.
- 2. If necessary, trim excess body hair from the area using an electric shaver or scissors. Do not use a razor. A razor can irritate the skin.
- 3. Check the skin for signs of irritation. If any irritation is present, stop using the NESS L300 Plus System. Contact your clinician and the Bioness Client Relations Department, Option 3. Wait for complete healing before using the NESS L300 Plus System.

Checking the Components

Check all components and accessories for signs of wear or damage. If any component is damaged, contact the **Bioness Client Relations Department** at (800) 211-9136, Option 3. If the electrodes are old, replace them.

Putting on the L300 FS Cuff

To put on the L300 FS Cuff:

- 1. Remove and wet the L300 cloth electrode(s), if appropriate.
- 2. Remove the covers on the hydrogel electrodes, if appropriate.
- 3. While seated, slightly straighten your leg. The outline of your kneecap should be clearly defined. Place your foot on a footrest, if necessary. See Figure 7-1

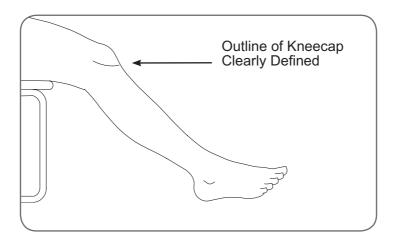


Figure 7-1: Recommended knee angle for putting on the L300 FS Cuff.



CAUTION: Turn off stimulation before putting on or taking off the L300 FS Cuff.



- 4. Grasp the front of the L300 FS Cuff by the cradle. Then tilt the bottom of the L300 FS Cuff up.
- 5. Slide the locator up your leg until it rests snugly and comfortably below your kneecap. See Figure 7-2.

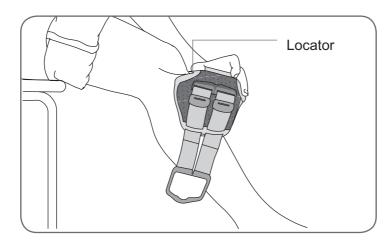


Figure 7-2: Aligning the L300 FS Cuff locator below the kneecap.

- 6. While holding the locator in place, lower the L300 FS Cuff until it rests flush against your leg. The L300 FS Cuff should gently grip your leg.
- 7. Grasp the handle of the L300 FS Cuff strap.
- 8. With your thumb on the cradle, fasten the L300 FS Cuff strap handle around the cradle. See Figure 7-3.

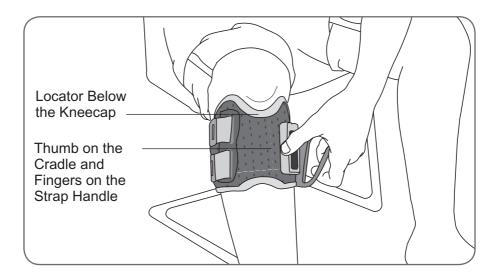


Figure 7-3: Fastening the L300 FS Cuff strap.



9. Make sure the L300 FS Cuff is correctly positioned. The locator should rest below the kneecap. The RF Stim Unit should face the inside of the leg. See Figure 7-4.

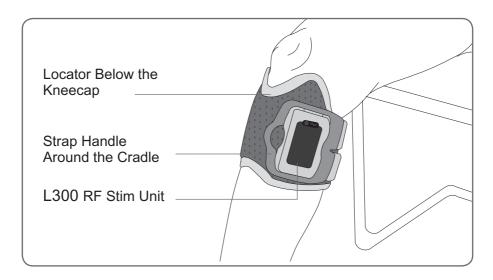


Figure 7-4: The L300 FS Cuff correctly positioned on the right leg.

Testing the Position of the L300 FS Cuff

To test the position of the L300 FS Cuff:

- 1. Place the L300 Plus Control Unit in standby mode.
- 2. Press the L300 RF Stim Unit selection button. The arrow next to the L300 RF Stim Unit indicator will light GREEN to confirm the selection.
- 3. Press and hold the stimulation test button. The L300 RF Stim Unit will stimulate until the stimulation test button is released.

If the L300 FS Cuff is not positioned correctly:

- 1. Turn off the L300 Plus System.
- 2. Unhook the L300 FS Cuff strap handle from the cradle.
- 3. Slowly lift the L300 FS Cuff away from the skin.
- 4. If appropriate, gently peel the L300 hydrogel electrodes from the skin. Then make sure the L300 hydrogel electrodes are adhered correctly to the bases.
- 5. Repeat the steps for putting on the L300 FS Cuff.
- 6. Retest the position of the L300 FS Cuff.



CAUTION: Remove the L300 FS Cuff from the skin every 3 to 4 hours for 15 minutes to allow the skin to breathe.



Putting on the Thigh FS Cuff

To put on the Thigh FS Cuff:

- 1. Remove and wet the Thigh cloth electrodes.
- 2. Sit in a stable position on the edge of a chair.
- 3. Place the Thigh FS Cuff locator on the midline of the thigh, approximately three finger widths from the knee. See Figure 7-5.

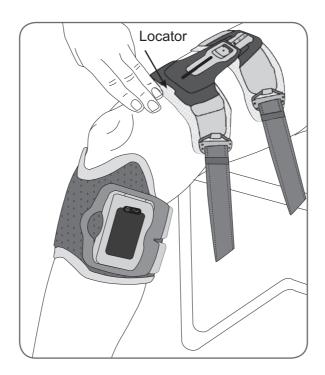


Figure 7-5: Thigh FS Cuff locator correctly positioned on the quadriceps.

4. Center the elongation bar on the midline of the thigh. See Figure 7-6.

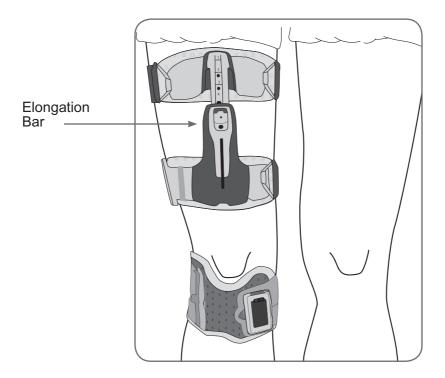


Figure 7-6: Thigh FS Cuff correctly positioned on the quadriceps.

5. Fasten the straps.



CAUTION: Turn off stimulation before putting on or taking off the Thigh FS Cuff.



Testing the Position of the Thigh FS Cuff

To test the position of the Thigh FS Cuff:

- 1. Place the L300 Plus Control Unit in standby mode.
- 2. Press the Thigh RF Stim Unit selection button. The arrow next to the Thigh RF Stim Unit indicator will light GREEN to confirm the selection.
- 3. Press and hold the stimulation test button. The Thigh RF Stim Unit will stimulate until the stimulation test button is released.

If the Thigh FS Cuff is not positioned correctly:

- 1. Turn off the L300 Plus System.
- 2. Loosen the Thigh FS Cuff.
- 3. Slowly lift the Thigh FS Cuff from the skin.
- 4. Make sure the Thigh cloth electrodes are wet and attached correctly.
- 5. Repeat the steps for putting on the Thigh FS Cuff.
- 6. Retest the position of the Thigh FS Cuff.

Note: Do not rotate (slide) the Thigh FS Cuff on the leg while it is fastened. Rotating the Thigh FS Cuff while it is fastened could loosen or damage the Thigh cloth electrodes.



CAUTION: Remove the Thigh FS Cuff from the skin every 3 to 4 hours for 15 minutes to allow the skin to breathe.

Placing the Intelli-Sense Gait Sensor in the Shoe

The Intelli-Sense Gait Sensor is used when walking in gait mode. Make sure it is placed in your shoe before selecting gait mode.

To position the pressure sensor:

1. Lift the insole of the shoe, and attach a gait sensor pad under the insole, at the heel of the shoe. Make sure the gait sensor pad is in the same location as initially fitted by your clinician. See Figure 7-7.

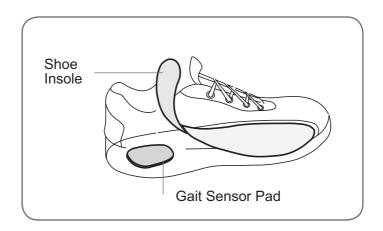


Figure 7-7: Lifting the insole and attaching a gait sensor pad.



CAUTION: Do not use the Intelli-Sense Gait Sensor with a rigid insole, such as a custom rigid orthosis or an ankle foot orthosis.



Note: If your shoe does not have a detachable insole, place the pressure sensor on top of the insole. Then, place a generic (one layer versus two) insole over it. Generic insoles can be purchased from drugstores, shoe stores, or Bioness. Contact the **Bioness Client Relations Department at (800) 211-9136, Option 2.**

2. Point the wire of the pressure sensor toward the toe of the shoe. Then press the pressure sensor to the gait sensor pad. See Figure 7-8.

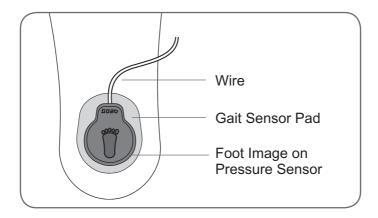


Figure 7-8: Positioning the pressure sensor in the heel of the shoe

Note: Refer to the foot image on the pressure sensor for correct orientation.



CAUTION: The Intelli-Sense Gait Sensor has not been validated for use by individuals weighing more than 300 pounds (136 kilograms).

To position the transmitter:

1. Cover the inner clamp of the Intelli-Sense Gait Sensor with the shoe spacer. See Figure 7-9.

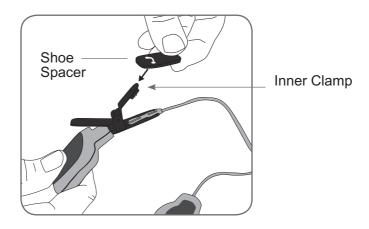


Figure 7-9: Attaching the shoe spacer.



2. Clamp the transmitter to the inner rim of the shoe. The NESS logo on the transmitter should face away from the ankle. See Figure 7-10.

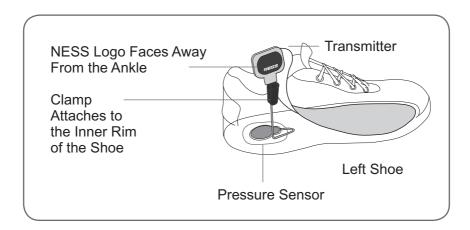


Figure 7-10: Clamping the transmitter to the inner rim of the shoe.

3. Lower the insole. Tuck any excess wire under the insole. See Figure 7-11.

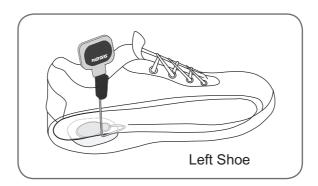


Figure 7-11: Intelli-Sense Gait Sensor correctly positioned.

Transferring the Intelli-Sense Gait Sensor to Another Shoe

To transfer the Intelli-Sense Gait Sensor to another shoe:

- 1. Turn off the NESS L300 Plus System.
- 2. Remove the Intelli-Sense Gait Sensor from the shoe.
- Select another shoe.
- 4. Follow the steps for placing the Intelli-Sense Gait Sensor in the shoe. Be sure to place the gait sensor pad in the same location as determined by your clinician.

Using Multiple Intelli-Sense Gait Sensors

If you have more than one Intelli-Sense Gait Sensor, you can place each one in a different shoe, and then switch shoes.

Note: Be sure to register any new Intelli-Sense Gait Sensor to your L300 Plus System. See Chapter 10.

To switch shoes using multiple Intelli-Sense Gait Sensors:

- 1. Turn off the NESS L300 Plus System.
- 2. Switch shoes.
- 3. Turn on the NESS L300 Plus System.

Operating the NESS L300 Plus System

The NESS L300 Plus System is designed to operate as a complete system. The L300 and Thigh FS Cuffs both must be on and the system components close to each other to communicate wirelessly.

Turning On/Off the NESS L300 Plus System

To turn on the NESS L300 Plus System, press the on/off button on the L300 Plus Control Unit once. The system will start in standby mode. All display indicators will light up for a few seconds while the system performs a self-test. The on/off button will FLASH GREEN to indicate the system is on.

To turn off the L300 Plus System, press the on/off button once.

Testing the Position of the FS Cuffs

The stimulation test button is used to test the position of the FS Cuffs. Only one FS Cuff can be tested at a time.

L300 FS Cuff

To test the position of the L300 FS Cuff:

- 1. Place the L300 Plus Control Unit in standby mode.
- 2. Press the L300 RF Stim Unit selection button. The arrow next to the L300 RF Stim Unit indicator will light GREEN to confirm the selection.
- 3. Press and hold the stimulation test button. The L300 RF Stim Unit will stimulate until the stimulation test button is released.

Thigh FS Cuff

To test the position of the Thigh FS Cuff:

- 1. Press the Thigh RF Stim Unit selection button. The arrow next to the Thigh RF Stim Unit indicator will light GREEN to confirm the selection.
- 2. Press and hold the stimulation test button. The Thigh RF Stim Unit will stimulate until the stimulation test button is released.



Selecting an Operating Mode

Selecting Gait Mode

To select gait mode:

- 1. Turn on the L300 Plus System.
- 2. Press the mode button briefly.

The L300 Plus Control Unit will beep and the mode button will FLASH YELLOW SLOWLY (stimulation is off). When stimulation is on, the mode button will FLASH YELLOW RAPIDLY.

Selecting Training Mode

To select training mode:

- 1. Turn on the L300 Plus System.
- 2. Press and *hold* the mode button.

The L300 Plus Control Unit will beep, the mode button will FLASH YELLOW SLOWLY, and ("t" for training) will alternate with the intensity level in the digital display.

When stimulation is on, the mode button will FLASH YELLOW RAPIDLY.

Returning to Standby Mode

To return to standby mode from gait or training mode:

Press the flashing mode button briefly.

The L300 Plus Control Unit will beep, and the mode button will stop flashing.



Adjusting Stimulation Intensity

When the L300 Plus Control Unit is turned on, the stimulation intensity level will be "5."

L300 FS Cuff

To adjust stimulation intensity for the L300 FS Cuff:

1. Press the L300 RF Stim Unit selection button. The arrow next to the L300 RF Stim Unit indicator will light GREEN to confirm the selection. See Figure 8-1.

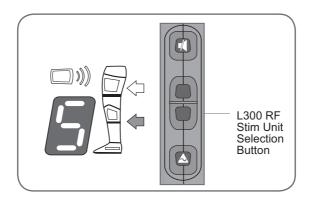


Figure 8-1: L300 RF Stim Unit selection.

2. Press the plus or minus intensity adjustment button on the L300 Plus Control Unit to change the intensity level.

The L300 Plus Control Unit will beep with each change in level. The new level will show in the digital display.

Note: An intensity level of "0" equals no stimulation.

Note: When the system is turned on, the default stimulation intensity level is restored.

Adjustment Guidelines

If your foot slightly drags or catches on the floor while walking, increase the stimulation intensity in the L300 FS Cuff to lift the foot higher.

If your foot rises too high while walking or if stimulation is unpleasant, decrease the stimulation intensity in the L300 FS Cuff. Be sure your foot does not drag or catch on the floor after decreasing the intensity level.

Consult your clinician if you have questions.



Thigh FS Cuff

To adjust stimulation intensity for the Thigh FS Cuff:

1. Press the Thigh RF Stim Unit selection button. The arrow next to the Thigh RF Stim Unit indicator will light GREEN to confirm the selection. See Figure 8-2.

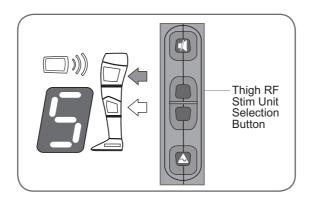


Figure 8-2: Thigh RF Stim Unit selection.

2. Press the plus or minus intensity adjustment button on the L300 Plus Control Unit to change the intensity level.

The L300 Plus Control Unit will beep with each change in level. The new level will show in the digital display.

Note: An intensity level of "0" equals no stimulation.

Note: When the system is turned on, the default stimulation intensity level is restored.

Turning on Audio Feedback During Stimulation

The mute button is used to turn on audio feedback when stimulation is on. Audio feedback can be turned on for one FS Cuff or both.

L300 FS Cuff

To turn on audio feedback during stimulation:

- 1. Place the L300 Plus Control Unit in standby mode.
- 2. Press and hold the L300 RF Stim Unit selection button.
- 3. While holding the L300 RF Stim Unit selection button, press and hold the mute button for three seconds.

The L300 Plus Control Unit will emit an audio alert when stimulation is on.

To turn off audio feedback during stimulation:

Press the mute button or the on/off button.



Thigh FS Cuff

To turn on audio feedback during stimulation:

- 1. Place the L300 Plus Control Unit in standby mode.
- 2. Press and hold the Thigh RF Stim Unit selection button.
- 3. While holding the Thigh RF Stim Unit selection button, press and hold the mute button for three seconds.

The L300 Plus Control Unit will emit an audio alert when stimulation is on.

To turn off audio feedback during stimulation:

Press the mute button or the FLASHING GREEN on/off button.

Muting/Un-Muting the L300 Plus Control Unit

To mute/un-mute the L300 Plus Control Unit:

Press the mute button briefly.

Note: When the system is turned on, the default volume setting is restored.



Turning Off Audio/Visual Alerts

The NESS L300 Plus System is designed to be worn as a complete system in gait mode, with both the L300 FS Cuff and the Thigh FS Cuff on. In training mode, the L300 FS Cuff and the Thigh FS Cuff can be worn individually.

When only one FS Cuff is worn, the NESS L300 Plus System will emit a faulty electrode contact alert for the other FS Cuff. It will also emit an RF communication error alert for the other RF Stim Unit, if it is out of range. These alerts can be temporarily turned off.

L300 FS Cuff

To temporarily turn off the alerts:

- 1. Place the L300 Plus Control Unit in standby mode.
- 2. Press and release the L300 RF Stim Unit selection button.
- 3. Press and hold the mute button for three seconds.

Thigh FS Cuff

To temporarily turn off the alerts:

- 1. Place the L300 Plus Control Unit in standby mode.
- 2. Press and release the Thigh RF Stim Unit selection button.
- 3. Press and hold the mute button for three seconds.

Note: When the system is turned on, the default settings are restored.