

# Your NESS L300 Components

## Functional Stimulation (FS) Cuff

Your NESS L300 FS Cuff is lightweight and easily fits under clothing. See Figure 1. It features a cradle for the RF Stim Unit and an anatomically designed locator for accurate placement on your leg. It also features a strap that can be fastened with one hand. Your clinician will fit the electrode bases to the inner liner of the FS Cuff and attach the electrodes to the bases. Afterward, you will need to replace the electrodes every two weeks. You can easily replace the electrodes without moving the bases. You will need to replace the electrode bases after one to two years of use.

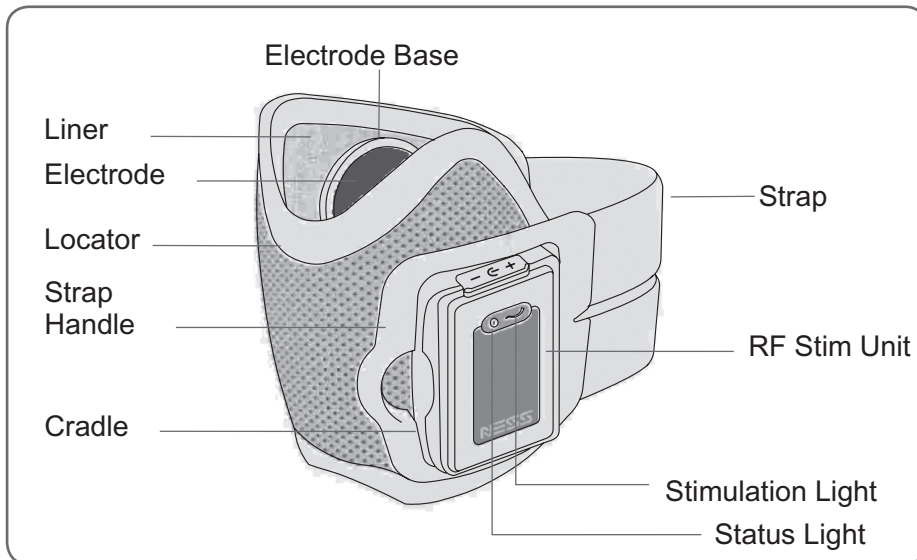


Figure 1: NESS L300 FS Cuff (right configuration) and RF Stim Unit.

## RF Stim Unit

The RF Stim Unit fits into the cradle of the FS Cuff. See Figure 1. It responds to signals from the Control Unit and Intelli-Sense Gait Sensor to turn stimulation on/off. It has a rechargeable battery, a status light, and a stimulation light. See Table 1. The RF Stim Unit emits an audio alert when radio communication fails or the component malfunctions. Remove the RF Stim Unit when cleaning the FS Cuff and for maintenance.











RF Stim Unit	Display	Description	Definition
<b>Status Light</b> 		Flashes GREEN	System is On
		Flashes YELLOW	Low Battery
		Alternately Flashes YELLOW and GREEN	Battery Charging
		Solid GREEN	Battery Fully Charged
		Flashes RED	Radio Communication Failure
		Solid RED	RF Stim Unit Malfunction
<b>Stimulation Light</b> 		Flashes YELLOW SLOWLY	Stimulation is Off
		Flashes YELLOW RAPIDLY	Stimulation is On

Table 1: RF Stim Unit displays and definitions.

## Intelli-Sense Gait Sensor

The Intelli-Sense Gait Sensor detects when your foot is in the air and on the ground, and wirelessly signals the other NESS L300 components to move your foot accordingly. The Intelli-Sense Gait Sensor features a pressure sensor and a transmitter. The pressure sensor fits under the insole of the shoe of your weak foot, attached to a Gait Sensor pad. See Figure 2. The transmitter is worn clamped to the inner rim of your shoe. (Shoe spacers are provided to protect the shoe from damage from the clamp.) The Intelli-Sense Gait Sensor can be transferred to a different shoe, or additional sensors can be purchased for different shoes. You do not need to detach the Intelli-Sense Gait Sensor between uses.

The Intelli-Sense Gait Sensor is powered by a small non-rechargeable battery. The battery will need to be replaced after approximately six months of use. A Phillips screwdriver is provided for changing the battery.



**Caution: The Gait Sensor has not been validated for use by individuals weighing more than 136 kilograms (300 pounds).**

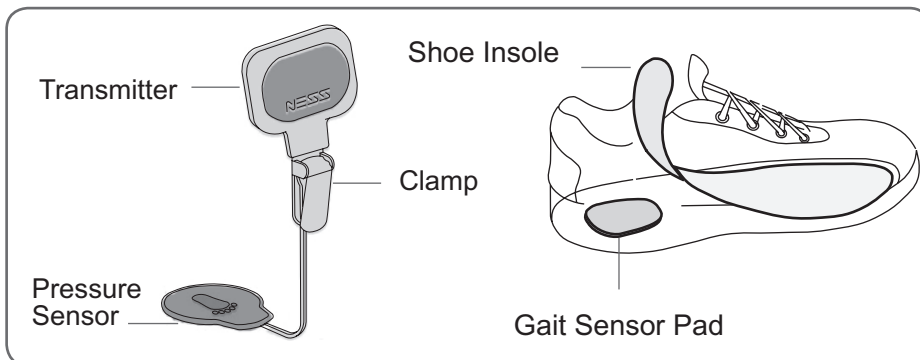


Figure 2: NESS L300 Intelli-Sense Gait Sensor.

## Control Unit

The Control Unit is used to turn on/off the system, select an operating mode (gait, training, standby, or clinician), fine-tune stimulation intensity, adjust audio alert volume, and monitor system performance. See Figure 3. The Control Unit communicates wirelessly with the RF Stim Unit and Intelli-Sense Gait Sensor. It is powered by a single rechargeable AAA battery.

Your NESS L300 System Kit includes a system charger set for charging the Control Unit and RF Stim Unit. It also includes a belt pouch, wrist strap, and neck strap for carrying the Control Unit. A Phillips screwdriver is provided for changing the Control Unit battery.

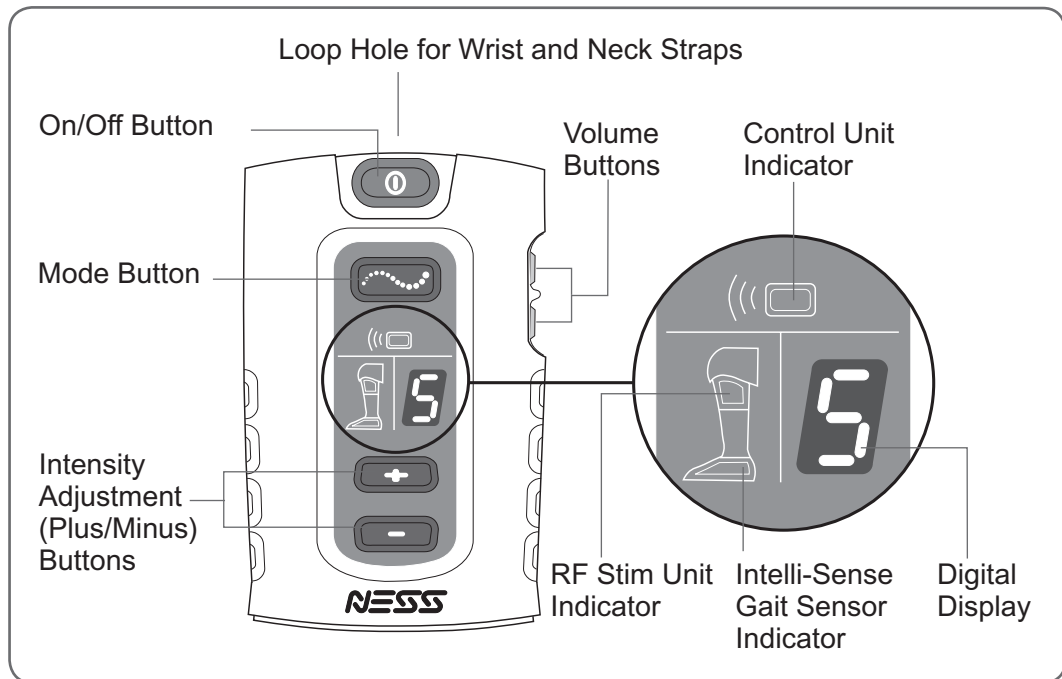


Figure 3: Control Unit operating buttons, indicators, and digital display.

## Control Unit Operating Buttons

The Control Unit operating buttons and their functions are described in Table 2.

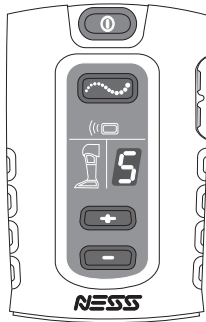

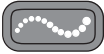


Control Unit	Operating Button	Description	Function
		On/Off	Turns On/Off the Control Unit
		Mode	Selects Standby, Gait, Training, or Clinician Mode
		Volume	Adjusts Volume of Audio Alerts and Turns On/Off Audio Feedback for Stimulation
		Intensity Adjustment (Plus/Minus)	Adjusts Stimulation Intensity Level

Table 2: Control Unit operating buttons and functions.

## ***Control Unit Operating Modes***

The Control Unit has four operating modes: standby, gait, training, and clinician. Only clinicians use clinician mode.

### **Standby Mode**

In standby mode, the NESS L300 is on and waiting for commands. Stimulation is off.

### **Gait Mode**

Gait mode is used when walking. In gait mode, the Gait Sensor signals the RF Stim Unit when your heel leaves the ground, turning stimulation on. It also signals when your heel contacts the ground, turning stimulation off.

### **Training Mode**

Training mode is used to train muscles when you are not walking (for example, sitting or lying down). Training mode should not be used when walking. Training mode works independently of the Intelli-Sense Gait Sensor. Stimulation is delivered in cycles pre-set by your clinician. Training mode is designed to facilitate muscle re-education, prevent or retard disuse atrophy of the lower leg muscles, maintain or improve range of motion of the ankle joint, and improve local blood circulation. Training mode also can be used to check if the FS Cuff is positioned properly. If your foot does not respond to the stimulation as it should, reposition the FS Cuff.

## ***Control Unit Digital Display and Indicator Lights***

The Control Unit digital display and indicator lights indicate stimulation intensity level, operating mode, battery charge status, electronic registration status, and error messages. See tables 3 and 4.

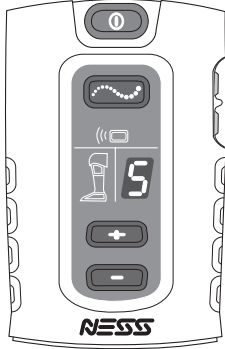








Control Unit	Display	Description	Definition
		On/Off Button Flashes GREEN	System is On
		Mode Button Flashes YELLOW SLOWLY	System is in Gait/ Training/Clinician Mode, Stimulation is Off
		Mode Button Flashes YELLOW RAPIDLY	System is in Gait/ Training/Clinician Mode, Stimulation is On
		Displays 0–9	Intensity Level
		Intensity Level and “t” Alternate in the Digital Display	Training Mode
		A Component Indicator Flashes YELLOW	Component Low Battery
		Rotating GREEN Circle	Control Unit Charging
		Horizontal GREEN Line	Control Unit Fully Charged

Table 3: Control Unit visual displays and definitions.

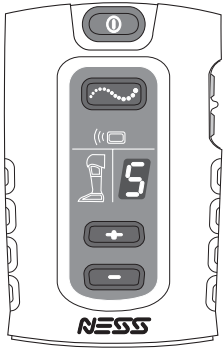




Control Unit	Display	Description	Definition
		RF Stim Unit Indicator Flashes RED and Intensity Level Flashes	Faulty Electrode Contact
		Control Unit and RF Stim Unit Indicators Alternately Flash RED and “E” Flashes	Radio Communication Failure Between the Control Unit and RF Stim Unit
		Gait Sensor and RF Stim Unit Indicators Alternately Flash RED and “E” Flashes	Gait Sensor Hibernation or Radio Communication Failure between the Gait Sensor and RF Stim Unit
		A Component Indicator is Solid RED and “E” Appears	Component Malfunction

Table 4: Control Unit error displays and definitions.

## ***Control Unit Audio Indicators***

**The Control Unit beeps to indicate:**

- The system is on.
- A button was pressed.
- Low battery.
- An error (usually accompanied by a visual indicator).