

## *Electrical Stimulation to Facilitate Walking*

# Bioness® L300

The Bioness® L300 Foot Drop System is an electrical stimulation device that helps patients regain mobility and independence while reducing the risk of falls and injuries.

### **How does the Bioness® L300 work?**

The Bioness® L300 consists of a small wireless gait sensor connected to a leg cuff and handheld control. The leg cuff sits just below the knee and contains a stimulation unit and electrodes. The clinician programs the device to stimulate the appropriate nerves and muscles in the leg to lift the foot and help the patient walk more naturally with increased speed and improved balance. As the individual takes a step, wireless signals are sent to the leg cuff, stimulating the muscles to contract and lift the foot while walking.

The Bioness® L300 gait sensor adapts to changes in walking speed and terrain, enabling patients to walk easily on stairs, grass, and carpet, and eliminating the need for a rigid ankle-foot orthosis (AFO) or braces.

### **What are the benefits of the Bioness® L300?**

The device can be used to re-educate muscles, increase muscle strength, improve range of motion, and increase blood circulation. The device has been shown to improve walking ability for people living with multiple sclerosis, stroke, brain injury, and spinal cord injury.



MARIANJOY

Assistive  
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The **Marianjoy Assistive Rehabilitation Technology Institute** offers solutions to everyday problems of daily living encountered by individuals with disabilities. The Institute consists of seven distinct centers which apply advancements in technology to benefit individuals with disabilities through maximizing functional independence, as well as expanding educational, vocational, recreational, and communicative opportunities.

- **Assistive Communication and Daily Living Center**
- **Balance and Vestibular Center**
- **Driver Rehabilitation Center**
- **Gait Analysis and Mobility Center**
- **Prosthetic and Orthotic Center**
- **Swallowing and Voice Center**
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To make an appointment or  
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**630-909-7150**

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