



## Help Enhance Therapy Aid with sEMG Biofeedback Technology

Interactive Therapy helps patients to receive visual and audible feedback leading to enhanced patient engagement during swallowing exercises. Supplementing a standard therapy program with sEMG biofeedback helps facilitate functional swallowing recovery.<sup>1</sup>





### **Swallow in Action**

Project live treatment progress onto a computer or tablet screen. The Screen Mirroring technology helps clinicians to guide patients through personalized, targeted swallowing exercises. Preset or customized programs allow the provider to truly customize treatments while biofeedback and visuals create a patient-focused experience that encourages engagement and achievement of goals.

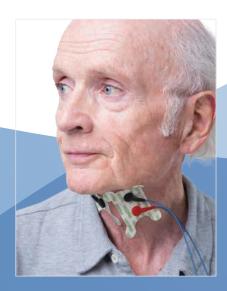
## **Immediate Patient Progress Data**

Quantify progression with objective data that helps demonstrate outcomes for each therapy session.

### The Taste of Independence

VitalStim® Plus neuromuscular electrical stimulation helps recruit and re-educate muscles in the process of swallowing. Under the guidance of a clinician, patients partner in an interactive therapy that aids muscle strengthening to rehabilitate swallowing.

sEMG biofeedback helps to increase effort and duration of swallowing attempts and to improve coordination. It also offers the potential for objective evaluation of swallowing function and patterns.<sup>2</sup>



# VitalStim® Plus

## Electrotherapy and sEMG Biofeedback System

#### **Patient Data**

Treatment data on stimulation and sEMG can be stored, displayed or exported to a PC to track patient progress and generate reports.

#### VitalStim® Treatment

The VitalStim waveform is delivered in Co-Contraction Mode. Up to four separate channels help deliver stimulation concurrently and pause at the same time.

#### **VMS Treatment**

You are in control! Customize your treatment protocol by adjusting the parameters of your choice, such as Phase Duration, Frequency, and Work and Rest Time. VMS helps offer even more flexibility by allowing you to sequence the stimulation in the various channels to more closely match the natural swallowing sequence.



#### **sEMG Treatment**

Electrical signals in the muscle are measured and displayed on a screen and are amplified into sounds that the patient can hear. This feedback helps increase patient effort and participation, and helps provide the data and documentation required to measure patient outcomes and quantify progress.

### sEMG + Triggered Stim

The patient initiates the swallowing exercise with the assistance of sEMG biofeedback. When the set threshold is reached, VitalStim Plus will switch to stimulation mode to help increase the effort and exercise load.

## Bluetooth Technology

a computer or tablet screen. This helps allow you to guide therapeutic exercise activities and increase patient engagement.

#### **Education Videos**

A complete education tool at your finger tips. VitalStim Plus includes videos that help demonstrate key therapeutic exercises, such as the Masako Exercise, the Mendelsohn Maneuver, the Supraglottic Maneuver, and various Electrode Placements Options

#### **Anatomical Library**

VitalStim Plus includes a Dysphagia image library of Anatomy, Pathology and Therapeutic Treatment options to







## Ordering Information

Part Number	Description
5923-3	Vitalstim Plus Electrotherapy System
Accessories Included in Standard Kit	
25-8080	Vitalstim Plus Snap Lead Wires
13-8083	Vitalstim Plus Reference Emg Lead Wire
13-8085	Vitalstim Plus Hand Switch
13-8088	Vitalstim Plus Stand
13-8089	Vitalstim Plus Stylus
13-8090	Vitalstim Plus Rubber Sleeve
Optional Accessories	
13-8082	Vitalstim Plus Reference Emg Electrode
59000	Vitalstim Adult Electrodes, 12 Pack
59042	Vitalstim Adult Electrodes, 30 Pack
59043	Vitalstim Adult Electrodes, 50 Pack
59044	Vitalstim Adult Electrodes, 100 Pack
13-8075	VitalStim Plus Battery Door

The VitalStim® Plus Electrotherapy and sEMG Biofeedback System

### Activate the Power to Swallow™

www.djoglobal.com/vitalstimplus

Contact your representative to learn more how The VitalStim® Plus Electrotherapy and sEMG Biofeedback System can deliver customer-specific solutions to help you deliver quality care for your patients.

1. Crary MA, Carnaby Mann GD, Groher ME, Helseth E. Functional benefits of dysphagia therapy using adjunctive sEMG biofeedback. *Dysphagia*.2004;19(3):160-4. 2. Crary MA. A direct intervention program for chronic neurogenic dysphagia secondary to brainstem stroke. *Dysphagia*.1995;10(1):6-18.

