

# SENSIMATIC® 700SE ELECTROSURGE



Case Study: Caries Access (1) Pre-op - Subgingival decay maxillary left central and lateral. (2) Collar tissue sculpted to expose decay using the fine tipped Scalpel Point electrode. (3) Decay removed, and teeth prepped. No additional retraction cords or pastes were used to maintain the dry field. (4) 1 week post-op.

# SENSIMATIC® 700SE ELECTROSURGE



## Efficient, Precise Tissue Management

Simplifying and improving the treatment outcomes of the procedures performed every day in your dental office, the Sensimatic 700SE cuts faster than a diode laser and produces less bleeding and better visibility<sup>1</sup> of the treatment site than a scalpel.

While devices with frequencies above 100 kHz (.1 MHz) can be used for electrosurgical procedures, the Sensimatic® 700SE uses a high radiofrequency (1.4 - 1.7 MHz) to cut and coagulate soft tissue. When used with the appropriate electrode, the advantage of operating at this high frequency is reduced collateral tissue trauma and damage during cutting.

In addition to operating at a high radiofrequency, the Sensimatic 700SE's low-impedance circuitry continually measures the impedance in the tissue at the active electrode (where the tissue contacts the cutting electrode) and adjusts the power as needed to enable stable, consistent passage of the electrode through the soft tissue as cutting depth varies.

With a combined 30 customizable settings, (3 for Modes: CUT, CUT/COAG and COAG and 10 for Power), and 7 unique electrodes, you will be able to treat virtually any clinical situation that comes your way.

### What is Monopolar?

Because of its versatility and clinical effectiveness, monopolar is the most commonly used electrosurgical modality used throughout healthcare.

The monopolar Sensimatic generates 3 different high frequency waveforms. Each has differing surgical characteristics, which cause different histological effects on soft tissue.

- **RF Mode No. 1 - "CUT MODE" (cutting with least coagulation):** A filtered, unmodulated current for cutting with the least amount of coagulation. Suited for closed wound surgery where incisions will be sutured.
- **RF Mode No. 2 - "CUT/COAG MODE" (cutting with balanced coagulation):** A fully rectified, modulated, undamped current for cutting with coagulation when control of bleeding is desired. It is the most widely employed current in dentistry and is suited for cutting procedures where incisions will not be sutured.
- **RF Mode No. 3 - "COAG MODE" (full coagulation without cutting):** A partially-rectified current for coagulation without cutting. This waveform has been found most effective for precise pin-point surface coagulation with minimal tissue destruction.



1. Scalpel versus electrosurgery: Comparison of gingival perfusion status using ultrasound Doppler flowmetry. N. Manivannan, R. S. Athaya,<sup>1</sup> and P. C. Rajaram<sup>2</sup>

## Why Use the Sensimatic 700SE?

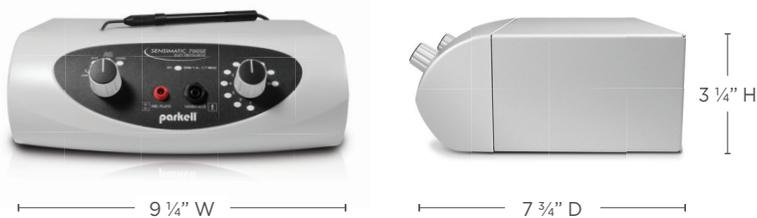
Dentists are not the only healthcare providers who routinely perform surgical procedures using electrosurgery. Medical specialists in the fields of Obstetrics and Gynecology, Otorhinolaryngology, Dermatology and Veterinary medicine, to name a few, all routinely reach for the electrosurgical handpiece each day.

When it comes to dentistry, the following procedures are routinely performed with the Sensimatic 700SE every day.

- Access to subgingival caries
- Removal of inflamed marginal tissue prior to crown cementation
- Bleeding control and coagulation
- Troughing for crown impressions
- Pericoronal flap excision
- Edentulous ridge recontouring and tissue trimming
- Sculpting tissue for acceptance of an ovait pontic.
- Excision of hyperplastic and hypertrophic tissue
- Gingivectomy/gingivoplasty
- Frenectomy
- Esthetic tissue recontouring
- Exposing teeth for orthodontic eruption
- Periodontal flap surgery
- Controlling localized bleeding
- Tissue biopsy
- Crown lengthening

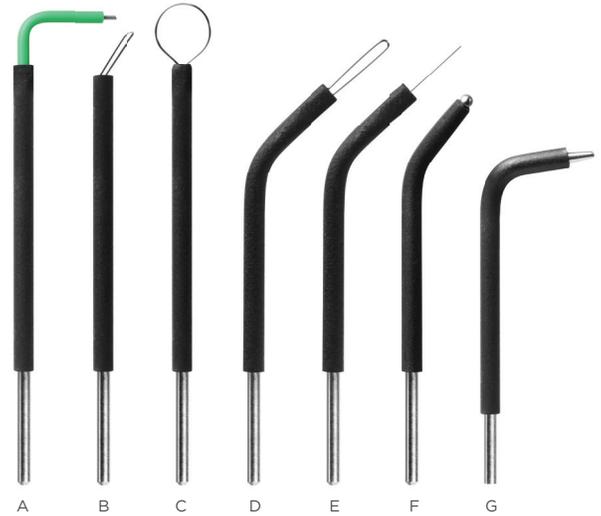
## Advantages of Electrosurgery Over a Diode Laser

- Thin wire electrodes can be adjusted to meet clinical contour needs
- The side of the electrode wire can cut in addition to the tip (Only the tip is an active cutting surface for a diode laser)
- Procedures are completed in a fraction of the time it takes to perform the same procedure with a diode laser.
- A wider, more versatile range of cutting tips
- Lower initial device cost



## Specifications

- **Power Requirements:**  
Line Voltage: 120 Volts +/- 10% AC, 60 Hz, 2 amps maximum
- **Operating Frequency:** 1.4 -1.7 MHz (megahertz)
- **Maximum Power Output:** 50 Watts rms (@ 500 Ohm load) approx.
- **Size:** 3 1/4" H x 7 3/4" D x 9 1/4" W (83mm x 191mm x 235mm)
- **Weight:** 6.1 lbs (2.8 kg)



## Seven Unique Electrodes to Treat Virtually Any Clinical Situation (see back):

- |                                 |   |
|---------------------------------|---|
| A. AP1.5-Troughing Point        | F. C3-Hemostasis Ball                           |
| B. T16-Horizontal Loop          | G. P4-Proximal Hemostasis Tip (Sold separately) |
| C. T5-Large Tissue Shaving Loop |   |
| D. T8-Vertical Loop             |   |
| E. T2-Scalpel Point             |   |



## Case Study

1. Pre-op
2. After debridement of calculus deposits
3. Electrosurgical tissue removal and sculpting
4. Surgical procedure completed
5. Suturing
6. 1 week post-op

## Recommended Electrodes for Specific Applications

Procedure	Scalpel Point (T2)	Large Loop (T5)	Vertical Loop (T8)	Horizontal Loop (T16)	Hemostasis Ball (C3)	Troughing Point (AP1.5)	Proximal Hemostasis (P4)
Access to Subgingival Caries	✓		✓	✓			
Removal of Inflamed marginal tissue prior to Crown Cementation	✓						
Bleeding Control and Coagulation					✓		✓
Troughing for Crown Impressions	✓					✓	✓
Crown Lengthening	✓		✓	✓			
Esthetic Tissue Contouring	✓		✓	✓			
Edentulous ridge Recontouring and Tissue Trimming	✓		✓	✓			
Sculpting tissue for acceptance of an ovoid pontic.	✓	✓	✓	✓			
Excision of Hyperplastic and Hypertrophic Tissue	✓	✓	✓	✓			✓
Pericoronal Flap Excision		✓	✓	✓			
Gingivectomy/Gingivoplasty	✓	✓	✓	✓			
Frenectomy	✓						
Exposing teeth for orthodontic eruption	✓	✓	✓	✓			
Periodontal Flap Surgery	✓						
Controlling localized Bleeding							✓
Tissue Biopsy	✓	✓					

## Available Products

SKU #	PRODUCT DESCRIPTION
D700SE-110	<b>Sensimatic® 700SE Electrosurge</b> (1) Electrosurge unit, (6) electrodes, (1) foot switch, (1) handpiece and cable, (1) indifferent plate and cable.
S397-T02	<b>Scalpel Point—T2 Electrode</b>
S397-T05	<b>Large Loop—T5 Electrode</b>
S397-T08	<b>Vertical Loop—T8 Electrode</b>
S397-T16	<b>Horizontal Loop—T16 Electrode</b>
S397-C03	<b>Hemostasis Ball—C3 Electrode</b>
S397-AP1.5	<b>Troughing Point—AP1.5 Electrode</b>
S397-P04	<b>Proximal Hemostasis Electrode—P4</b> (Not included with unit).
D634	<b>Indifferent Plate</b>
D703	<b>Indifferent Plate &amp; Red Cable</b> (NOTE: Connects to newer units with serial numbers beginning with 90000)
D702	<b>Black Handpiece/Cable</b> (NOTE: Connects to newer units with serial numbers beginning with 90000)
D601	<b>Indifferent Plate &amp; Red Cable</b> (NOTE: Connects to older units with serial numbers below 90000)
D633	<b>Black Handpiece/Cable</b> (NOTE: Connects to older units with serial numbers below 90000)



For more information visit [Parkell.com](http://Parkell.com)



**NOTE:** When ordering accessories, refer to the serial number located on the bottom of your Sensimatic 700SE unit to ensure you purchase the correct ones for your model.

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