ESG-300 (Electrosurgical Generator) Quick Reference Guide

CAUTION: This guide is only a summary of the instructions for use of the ESG-300 Electrosurgery Generator. Be sure to reference the instruction manual that was included with your product purchase.

ESG-300 and APU-300 Display Interface

Electrosurgical Generator (ESG-300)
- Bipolar
- Monopolar
- On/Off
- Neutral

Argon Plasma Unit (APU-300)
- On/Off
- Argon

Graphical User Interface
- Purge button

Monopolar Home Screen
- Active socket
- Contact Quality Monitor
- Active Mode
- Procedure name
- Setting name
- Power adjustment
- Effect level adjustment
- Open user defined settings
- System setup
ESG-300 (Electrosurgical Generator)
Quick Reference Guide

Bipolar Home Screen

- Output Socket Name
- Active Mode Name
- Power adjustment
- Effect level adjustment
- Open user defined settings
- System setup
- Change Output Sockets

Argon Home Screen

- Foot Switch Indicator
- Contact Quality Monitor
- Output Socket Name
- Communication Indicator
- Setting Name
- Argon Gas Flow Rate
- Power Level
- Type of Connected Argon Probe
- Effect Level
- Argon Supply Indicator
ESG-300 (Electrosurgical Generator)  
Quick Reference Guide

ESG-300 System Operating Steps

1. Turn on the ESG-300 & APU-300.

2a. Select Mode: Monopolar; Bipolar; Argon

Select mode by tapping on the desired mode located on the bottom of the touch screen.

2b. (Optional) Select User Defined Setting or Procedure.

1.) Select “Open”  
2.) Select setting or procedure  
3.) Verify setting is correct
ESG-300 (Electrosurgical Generator)  
Quick Reference Guide

ESG-300 System Operating Steps

3  Mode Menu

1.) Select the mode by tapping on color bar on the touch screen
2.) In the menu screen, tap to select the desired mode
3.) Once selected, the home screen will display the change

4  Changing the Power Level
   Select to adjust power level

5  Changing the Effect
   Select to adjust effect

6  Argon Plasma Applications

1.) Open the argon tank
2.) Confirm supply connection indicator displays connection and tank status

CONTINUED ON NEXT PAGE
ESG-300 (Electrosurgical Generator)
Quick Reference Guide

ESG-300 System Operating Steps

7

1.) Apply the neutral electrode to the patient
2.) Connect to the ESG-300

8

Monitor Neutral Electrodes: Contact Quality Monitor

If the red neutral electrode lights up & alarm tone sounds:
- Is the neutral electrode correctly connected to the device?
- Does the neutral electrode have sufficient contact to the skin?

Correct = Green          Error = Red
ESG-300 (Electrosurgical Generator)  
Quick Reference Guide

ESG-300 System Operating Steps

9. Connect device in appropriate receptacle

Creating User Defined Settings

STEP 1
On the home screen
- Select Preferred Modes
- Select Power Level
- Select Effect Level
- Select Menu
Creating User Defined Settings

**STEP 2**
Edit Settings/Procedures screen
- Select “New” Setting

**STEP 3**
Save Setting Screen
- Enter the setting name
- Select “OK”

**STEP 4**
Edit Settings/Procedures screen
- Select “Return” to return to the Home Screen

Creating User Defined Procedures

A user-defined procedure is a compilation of user-defined settings.

**STEP 1**
On the Home screen
- Select Menu

**STEP 2**
Edit Settings/Procedures screen
- Select “New” Procedure

**STEP 3**
New Procedures screen
- Use up/down to highlight the setting
- Use arrow to move the setting on the left into the procedure column on the right

**STEP 5**
Save Procedure Screen
- Enter the procedure name
- Select “OK”

**STEP 6**
Edit Settings/Procedures screen
- Select “Return” to return to the Home Screen
### ESG-300 Operation Settings

#### Basic Procedures

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Instrument or Technique</th>
<th>Mode</th>
<th>Power</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snare Polypectomy: Sessile polyp</td>
<td>Close the snare slowly and gently</td>
<td>PulseCut Slow</td>
<td>120</td>
<td>2</td>
</tr>
<tr>
<td>Snare Polypectomy: Pedunculated polyp</td>
<td>Close the snare slowly and gently</td>
<td>ForcedCoag</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>Endoscopic Mucosal Resection (EMR)</td>
<td>Close the snare slowly and gently</td>
<td>PulseCut Slow</td>
<td>120</td>
<td>2</td>
</tr>
<tr>
<td>Hemostasis</td>
<td>Coagrasper</td>
<td>SoftCoag</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Sphincterotomy</td>
<td>Sphincterome</td>
<td>PulseCut Fast</td>
<td>120</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Endoscopic Submucosal Dissection (ESD)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Instrument or Technique</th>
<th>Mode</th>
<th>Power</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marking</td>
<td>Knife (apply gentle pressure)</td>
<td>ForcedCoag</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SoftCoag</td>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>Pre-Cut/Incision</td>
<td>Knife</td>
<td>PulseCut Fast</td>
<td>120</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BlendCut</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Submucosal Dissection</td>
<td>Knife</td>
<td>PowerCoag</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Hemostasis</td>
<td>Closed Knife</td>
<td>PowerCoag</td>
<td>30</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Peroral Endoscopic Myotomy (POEM)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Instrument or Technique</th>
<th>Mode</th>
<th>Power</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incision</td>
<td>Knife</td>
<td>PulseCut Fast</td>
<td>120</td>
<td>2</td>
</tr>
<tr>
<td>Dissection/Tunneling</td>
<td>Knife</td>
<td>SprayCoag</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
<td>Myotomy</td>
<td>Knife</td>
<td>PulseCut Fast</td>
<td>120</td>
<td>2</td>
</tr>
<tr>
<td>Hemostasis</td>
<td>Coagrasper</td>
<td>SoftCoag</td>
<td>50</td>
<td>3</td>
</tr>
</tbody>
</table>

The above settings are examples based upon previous general clinical usage of the device. Please note that clinical staff are solely responsible for selection of an appropriate mode and power level, dependent upon the instrument being used and the condition of the tissue being treated. Due to the heterogeneity of instruments and clinical conditions, Olympus cannot accept liability for clinical risks arising from the use of these example settings.
**ESG-300 (Electrosurgical Generator)**

**Quick Reference Guide**

### ESG-300 Operation Settings

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Instrument or Technique</th>
<th>Mode</th>
<th>Power</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Argon Plasma Coagulation (APC)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diffuse bleeding in the right colon/duodenum</td>
<td>Activate MAPC probe within a 2-5 mm distance from tissue</td>
<td>SmartArgon</td>
<td>120</td>
<td>4</td>
</tr>
<tr>
<td>Diffuse bleeding in the remaining colon and rectum</td>
<td>Activate MAPC probe within a 2-5 mm distance from tissue</td>
<td>PulsedArgon Fast</td>
<td>30</td>
<td>N/A</td>
</tr>
<tr>
<td>GAVE/radioproctitis</td>
<td>Activate MAPC probe within a 2-5 mm distance from tissue</td>
<td>PulsedArgon Fast</td>
<td>30</td>
<td>N/A</td>
</tr>
<tr>
<td>Angiodysplasia</td>
<td>Activate MAPC probe within a 2-5 mm distance from tissue</td>
<td>PulsedArgon Fast</td>
<td>30</td>
<td>N/A</td>
</tr>
<tr>
<td>Tumor Reduction</td>
<td>Activate MAPC probe within a 2-5 mm distance from tissue</td>
<td>ForcedArgon</td>
<td>50</td>
<td>N/A</td>
</tr>
<tr>
<td>Barrett’s Esophagus</td>
<td>Activate MAPC probe within a 2-5 mm distance from tissue</td>
<td>PulsedArgon Fast</td>
<td>40</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Pulmonary Procedures</strong></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less extended lesion, bleeding</td>
<td>CD-6C-1</td>
<td>SoftCoag</td>
<td>40</td>
<td>3</td>
</tr>
<tr>
<td>Polypoid Lesion (intraluminal mass)</td>
<td>SD-7C-1</td>
<td>PulseCut Slow</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>Web-like Stenosis</td>
<td>KD-31C-1</td>
<td>PulseCut Fast</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
<td>Tissue Ablation</td>
<td>Activate MAPC probe within a 2-5 mm distance from tissue</td>
<td>ForcedArgon</td>
<td>35</td>
<td>N/A</td>
</tr>
</tbody>
</table>

The above settings are examples based upon previous general clinical usage of the device. Please note that clinical staff are solely responsible for selection of an appropriate mode and power level, dependent upon the instrument being used and the condition of the tissue being treated. Due to the heterogeneity of instruments and clinical conditions, Olympus cannot accept liability for clinical risks arising from the use of these example settings.
ESG-300 (Electrosurgical Generator)
Quick Reference Guide

ESG-300 Monopolar Modes

The wired foot switch is an accessory and must only be used in conjunction with the compatible ESG-300 to activate the generator.

The foot switch consists of:
- Yellow cut pedal to activate the selected cutting mode.
- Blue coagulation pedal to activate the selected coagulation mode.
- Toggle button to switch between user-defined settings within the procedure.
- Foot switch plug (7-pin connector) to connect the foot switch with the ESG-300. The length of the connecting cable is 4m.

Yellow Pedal
Press to activate the selected **CUTTING** mode

Blue Pedal
Press to activate the selected **COAGULATION** mode

<table>
<thead>
<tr>
<th>CUT MODES</th>
<th>COAGULATION MODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>PureCut</td>
<td>PowerCoag</td>
</tr>
<tr>
<td>PulseCut</td>
<td>ForcedCoag</td>
</tr>
<tr>
<td>BlendCut</td>
<td>SprayCoag</td>
</tr>
<tr>
<td>Continuous cutting</td>
<td>Superficial coagulation with increased dissection capability</td>
</tr>
<tr>
<td>Controlled cutting with an intermittent duty cycle of different duration</td>
<td>Superficial pinpoint coagulation</td>
</tr>
<tr>
<td>Cutting of varying tissue structures with increased hemostasis capacities</td>
<td>High peak voltage for superficial coagulation without contact between the HF instrument and the tissue</td>
</tr>
<tr>
<td>High Power Cut Support (HPCS) – immediate cutting</td>
<td>Deeper coagulation</td>
</tr>
<tr>
<td>Fast Spark Monitor (FSM) – optimized cutting power</td>
<td>Versatile coagulation technology</td>
</tr>
</tbody>
</table>

Olympus is a registered trademark of Olympus Corporation, Olympus America Inc., and/or their affiliates. Medical devices listed may not be available for sale in all countries.