

OPERATION AND MAINTENANCE INSTRUCTION MANUAL

AEU-260S Implant System



Aseptic

TABLE OF CONTENTS:

Introduction	1
Package Contents	1
Safety Precautions	2
Setting Up the Unit	4
Quick Start Operation	6
Chart 1 - Implant Default Presets	7
Control Panel Functions	8
Advanced Operation	11
• Editing Presets	11
• System Setup Menu	12
Variable-Speed Foot Control Operation	14
Reprogramming the Unit	16
Sterilization	17
Maintenance & Cleaning	18
Troubleshooting	19
Specifications	20
Changing the Fuse	20
Symbol Definitions	21
Warranty	Back Cover

CLASSIFICATIONS:

- Class I Equipment
- Type B Equipment
- Ordinary Equipment - degree of protection against ingress of water
- Not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

INDICATIONS FOR USE:

The AEU-260S is an electric drive system for instruments and tools used in dentistry for implant procedures. The system includes a wide range of user controls designed to provide precision implant procedures.



MEDICAL – GENERAL MEDICAL EQUIPMENT AS TO ELECTRICAL SHOCK, FIRE AND MECHANICAL HAZARDS ONLY, IN ACCORDANCE WITH:
UL 60601-1: First Edition - Medical Electrical Equipment, Part 1: General Requirements for Safety.
ANSI/AAMI ES60601-1:2005/(R)2012 and A1:2012, C1:2009/(R)2012 and A2:2010/(R)2012 - Medical electrical equipment—Part 1: General requirements for basic safety and essential performance.
CAN/CSA C22.2 NO. 60601-1-08 (2013) - Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance (Adopted IEC 60601-1:2005, third edition, 2005-12), Includes Corrigendum 1:2011.

RX: FEDERAL LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A DENTIST

INFORMATION CONCERNING THE ACCURACY AND PRECISION OF THIS PRODUCT MAY BE OBTAINED UPON REQUEST BY CONTACTING ASEPTICO AT THE ADDRESS SHOWN ON THIS PAGE.

This device has been tested and found to comply with the emissions requirements of IEC 60601-1-2:2001-09. These requirements provide reasonable protection against harmful electromagnetic interference in a typical medical installation. However, high levels of radio-frequency (RF) emissions from electrical devices, such as cellular phones, may disrupt the performance of this device. To mitigate disruptive electromagnetic interference, position this device away from RF transmitters and other sources of electromagnetic energy.

Your new Aseptico AEU-26OS Implant System is one of the finest units available to the dental profession. The system features a high torque brushless motor, intuitive user interface, and an easy to read digital display. These features combine to make the AEU-26OS an exceptionally powerful and convenient system for Implant procedures.

Congratulations!

This system is engineered to provide many years of reliable service. Please read the instructions provided in this manual to receive the best and longest service from your Aseptico equipment.

Separate manuals may be provided to cover the operation and maintenance of handpieces or other accessories for your unit.

PACKAGE CONTENTS:

- AEU-26OS Electronic Control Console
- Autoclavable Brushless Micromotor, P/N AE-225-30
- Autoclavable Motor Holder, P/N 461561
- Motor Holder Attaching Bracket, P/N 461653
- On/Off Foot Control, P/N AE-7PM
- Power Cord
- Operation and Maintenance Instruction Manual, P/N 420840

PURCHASED SEPARATELY:

- 1:5 Increaser Contra Angle Handpiece
- 1:2 Increaser Straight Handpiece
- 1:1 Contra-Angle Handpiece
- 16:1 Reduction Handpiece
- 20:1 Reduction Handpiece
- Optional AE-70V2 Variable-Speed Foot Control
- MC-26OS Memory Card

To prevent injury to people and damage to property, please heed relevant warnings and remarks. They are marked as follows:

WARNING: Serious injury or death may result if ignored.

CAUTION: Damage to property or the environment may result if ignored.

NOTE: Important additional information and hints.



SAFETY PRECAUTIONS:

Aseptico accepts no liability for direct or consequential injury or damage resulting from improper use, arising in particular through the non-observance of the operating instructions, or improper preparation and maintenance of this product.

CAUTION: The AEU-26OS system is supplied Non-Sterile! Before first use, and before each patient use thereafter, sterilize specified components as recommended in the Sterilization and Maintenance section.

WARNING: Use for intended purposes only. Failure to observe the operating instructions may result in the patient or user suffering serious injury or the the product being damaged, possibly beyond repair. Before using this product, make sure that you have studied and understood the operating instructions.

CAUTION: Federal law restricts this device to sale by or on the order of a dentist.

CAUTION: Use of other dental accessories or sub-assemblies from third-party manufacturers is the sole responsibility of the user.

CAUTION: All repairs are to be performed by authorized Aseptico service personnel only.

WARNING: Always follow these guidelines when operating the unit:

- Never touch drills, burs, or other handpiece tips when they are still rotating.
- Handpieces should only be attached when the motor has stopped running.

WARNING: Do not install where there is a risk of an explosion. The AEU-26OS is not intended for operation in the presence of flammable anesthetics or gases.

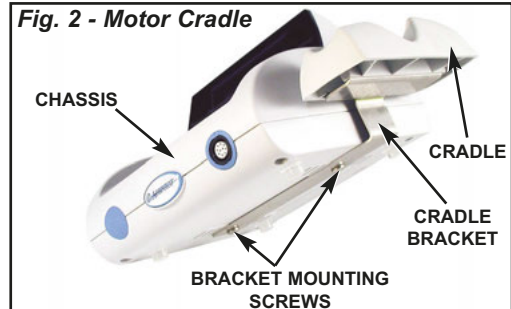
CAUTION: In order to compensate for handpieces with inconsistent torque or high drag, it is recommended that calibration be performed for each change of handpiece, or daily if the same handpiece is used.

WARNING: Always comply with the handpiece and attachment manufacturer's instructions regarding maximum speeds, torques, forward and reverse directions, and use of all instrumentation, drills, burs, etc., used in implant applications.

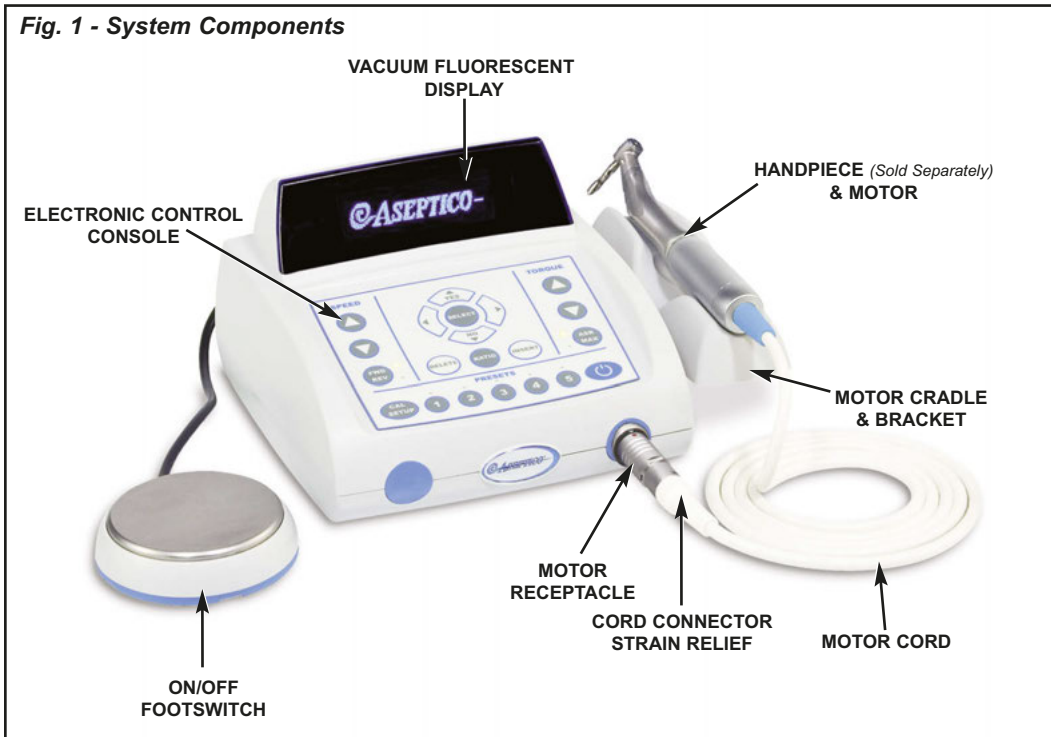
- CAUTION:** Connect mains power cable to a properly grounded outlet only.
- CAUTION:** The AEU-26OS motor is sensitive to shock and may be damaged if dropped or impacted against a hard surface.
- WARNING:** Do not disassemble or alter the AEU-26OS motor, console, or foot switch.
- CAUTION:** Use only appliance cord Type C13, 10A per IEC / EN 60320-1. Note: North America, Denmark, Australia, and New Zealand may require hospital grade plugs. Consult local codes.
- WARNING:** Never use damaged or worn drills, burs, or other attachments as they may not function properly.
- WARNING:** Do not use this device in conjunction with an electric scalpel or on patients with pacemakers.
- WARNING:** Always use irrigating coolant when using high-speed handpieces or when required by the procedure in use.
- WARNING:** Since torque percentages can vary between different handpieces, the torque percentages indicated by this device should only be construed as an approximation of the actual torque provided.

SETTING UP THE UNIT:

1. Unpack the Console and accessories (see Figure 1).
2. Install the Motor Cradle: The autoclavable Motor Cradle can be attached to either side of the Console or placed flat on any adjacent tabletop surface or tray. Install the Cradle by mounting the Cradle Bracket onto the bottom of the Chassis with the two screws provided (see Figure 2). Align the slot on the bottom of the Cradle with the mounting rail on the Bracket and snap into place.
3. Attach the supplied foot control to the connector on the back of unit marked "Footswitch" (see Figure 3). The cord connector and receptacle are keyed to engage one another. Insert, then turn the locking nut clockwise to secure.



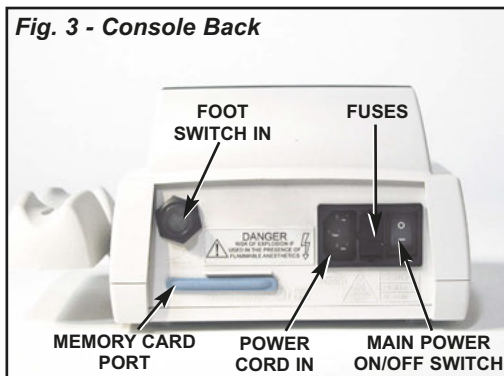
4. Attach the remote power cord to the back of the console (see Figure 3) and plug into a hospital-grade grounded electrical receptacle. Confirm that the type of cord plug cap is correct for the country of usage.



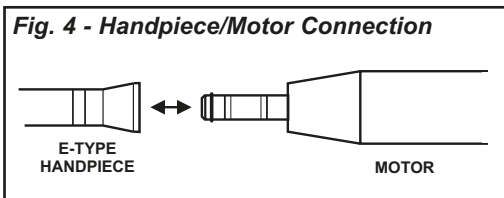
5. Connect the Motor/Cord Assembly to the Motor Receptacle on the lower right front of the console (see Figure 1). The motor cord connector and console receptacle are keyed to engage one another.

IMPORTANT: Align the red dot on the motor cord connector with the arrow located on the top of the receptacle. Gently push cord connector straight in to lock into place.

Remove cord by pushing inward slightly on the strain relief, then grasping connector body near the red dot and pulling the connector straight out of receptacle.



6. Attach the appropriate "E-Type" handpiece to the motor as shown in Figure 4.



QUICK START OPERATION

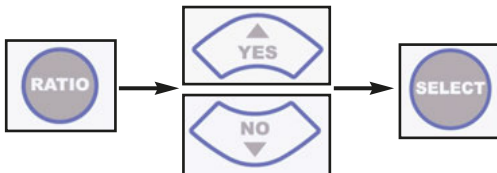
After the unit has been set up, you are ready for quick start operation as follows:

1. Turn the Power Switch on the rear panel of the console from the 'OFF' (O) to the 'ON' (—) position. The Console Display will turn on. An introduction will scroll across the screen then briefly display the software version installed and date:

**ASEPTICO
AEU-26OS
Ver. X.X DATE**

The AEU-26OS is programmed at the factory to initially start up with Preset 1 active when: the unit is first turned On; after the factory settings are recalled; or, after using a memory card to reprogram the unit. Subsequently, whenever the power is turned on, the last used settings will be activated.

2. Insert a drill or bur into the handpiece.
3. Select the handpiece ratio. To calibrate a handpiece for the AEU-26OS, the user must first select the ratio. Press the **RATIO** key and use the Navigation Up/Down keys to select the ratio that corresponds to the handpiece being used. Press the **SELECT** key to confirm your selection.



4. Use the Calibration function to calibrate the motor and handpiece. Press and release the 'CAL' key. The following prompt will display:

**Attach Handpiece To Motor,
Press 1 To Continue
Or 3 To Exit.**

Press Key #1 (Preset 1) to continue.

CAUTION - During calibration, the handpiece will run through a series of preprogrammed speeds. Ensure that a drill or bur is secured in the handpiece.

If the handpiece fails the calibration test, the following message will be displayed:

**Calibration Failed !
Press 1> Retry 3> Exit**

Note: Repeated failures during this calibration procedure can indicate a damaged or defective handpiece or motor - Exit test and inspect and/or repair handpiece/motor before next use.

Note: Pressing, holding, then releasing the **CAL/SETUP** key will enable the system's advanced setup options menu. Refer to the Advanced Operation section for complete instructions.



5. Select the Preset Key corresponding to the implant step you are performing. By default, the preset buttons are set for the implant protocol shown in Chart 1, page 7.



Note: Pressing and holding a Preset Key will enter advanced preset options. Refer to the Advanced Operation section for instructions.

6. Press the on/off foot control to activate motor and begin operation.
7. If Sleep Mode has been enabled and no activity has occurred for 15 or 30 minutes (see instructions on page 13 to select desired Sleep Mode features), the AEU-26OS will go into Sleep Mode to conserve power. To exit Sleep Mode and resume operation, press the 'STANDBY' Key or foot pedal.

Chart 1 - Implant Default Presets

PRESET	NAME (Label)	RATIO	SPEED (RPM)	DIRECTION	TORQUE
1	Extraction	1:2	60,000	FWD	MAX
2	Pilot Drill	20:1	1,200	FWD	MAX
3	Finishing Drill	20:1	800	FWD	MAX
4	Tapping/Threading	20:1	15	FWD	50%
5	Reverse Tap	20:1	25	REV	60%

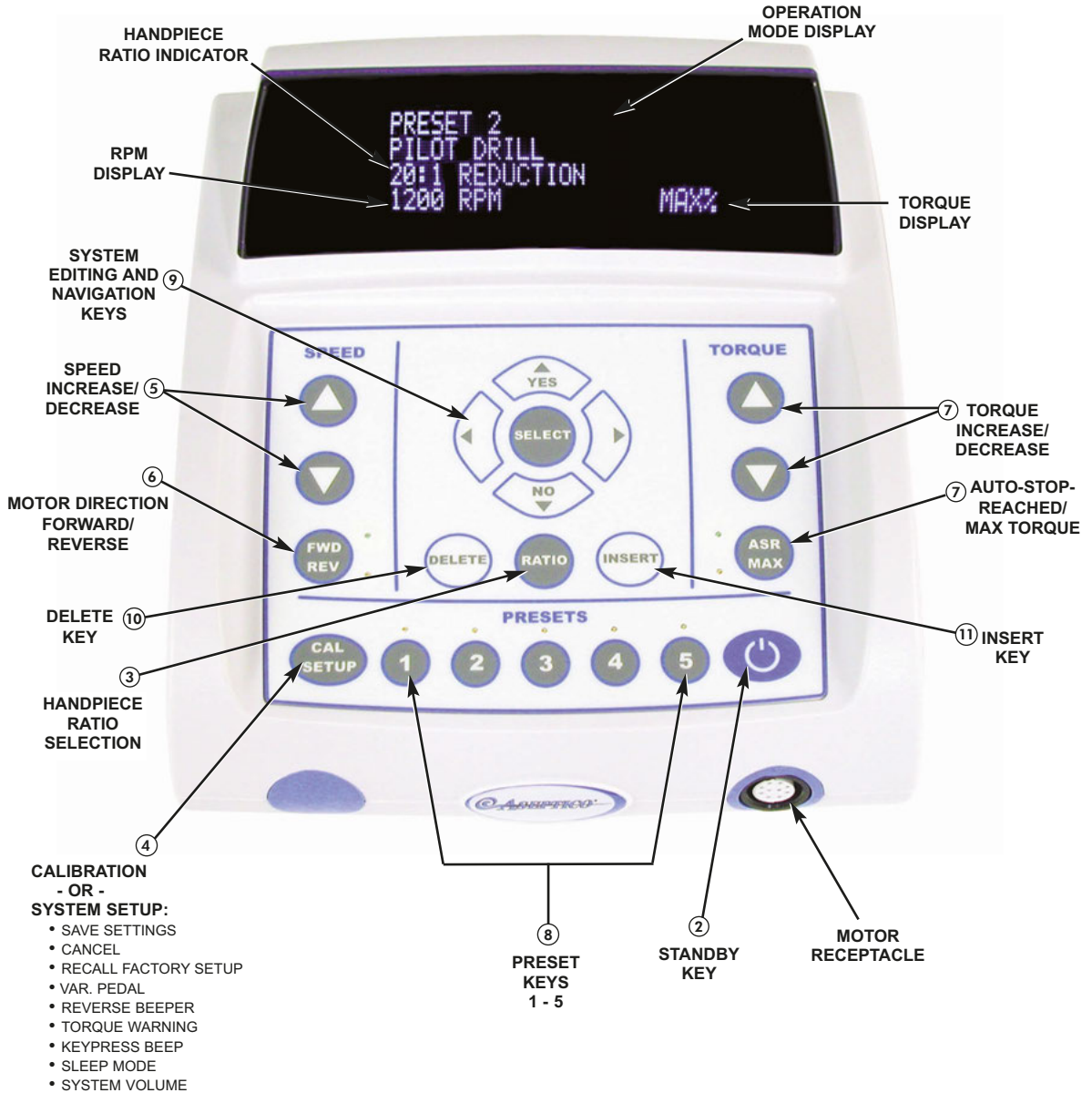
IMPORTANT: Torque Accuracy - Your AEU-26OS came preprogrammed with a generic implant protocol. Maximum torque indicated on the display, and any percentages thereof, assumes the use of a well-maintained (per the manufacturer's instructions), high-efficiency reduction handpiece, such as the **AHP-85MB** or **AHP-MB-C Mont Blanc 20:1** reduction contra angle. Torque efficiency can vary widely between handpieces and brands, so it is recommended that placement torque always be verified using the manual torque wrench included with your implant kit (provided by your implant manufacturer of choice. If you do not have a manual torque wrench, please order one from the implant manufacturer directly, as these are not supplied by Aseptico).

IMPORTANT: Surgical Irrigation - Your AEU-26OS does not have on-board irrigation capability. Therefore, it is recommended that you always use a sterile irrigation wand, such as the Aseptico **NWS-9** or other appropriate irrigation sources, during all highspeed drilling procedures or as required by the procedure being done, i.e., caries removal, surgical applications, osteotomies, etc.

CONTROL PANEL FUNCTIONS

The intuitive user interface makes it easy to begin using your new AEU-260S. Advanced features for editing and programming the system are discussed following the control panel descriptions.

Fig. 5 - Console Display & Controls



1. Main Power Switch:

Located on back of console (see Figure 3). Controls main power On/Off to the console.

2 Standby Key

Turns control panel on and off. Reactivates system from Sleep Mode.



a. Press the Standby key to turn system display off and put the system into Sleep Mode. If the console was turned off using the Standby key, or if the unit has entered Sleep Mode, pressing the Standby key again, or the foot pedal, will return the system settings to the last state used.

3 Handpiece Ratio Selector:

Allows user to select ratio of handpiece.

Press the RATIO Key to display the handpiece ratio selection options. Press the Up/Down (YES/NO) keys until the Handpiece Ratio matches the handpiece being used. The available ratios are 1:5, 1:2, 1:1, 16:1, and 20:1. Press SELECT key to set the ratio, or select CANCEL to abort. If a new handpiece ratio is selected while in Manual Mode, the new ratio is immediately activated. If a new ratio is selected while a Preset is active, the user will be given the option to replace the handpiece ratio in that Preset. The following prompt will display:



Change The Handpiece Ratio For The Current Preset?
(YES/NO)

Press YES to change ratio. Press NO to exit Preset - the Unit will automatically switch to Manual Mode and activate the new ratio.

4 CAL/SETUP Key:

Activates the Integrated Calibration Program & System Setup Menu



Press and release CAL key to activate the calibration program. The following prompt will display:

**Attach Handpiece To Motor,
Press 1 To Continue
Or 3 To Exit.**

Press Key #1 (Preset 1) to continue.

The system will automatically run the handpiece and system through a self test. It is recommended to calibrate at the beginning of each day and when handpieces are changed.

Press and hold the CAL/SETUP key to enter SETUP Mode. Refer to the Advanced Operation section (page 11) for instructions.

5 SPEED Key:

Allows user to select desired speed (RPM) for motor/handpiece.

Press the Speed Selector Up/Down keys to adjust speed.

Note: For display accuracy, the Ratio Selector must match the ratio of the handpiece being used.

Note: Speed ranges are accurate when handpieces are used with the supplied 30K motor.



Fig. 6 - AEU-260S SPEED RANGES

1:5	1,500 - 150,000	RPM
1:2	600 - 60,000	RPM
1:1	300 - 30,000	RPM
16:1	20 - 1,800	RPM
20:1	15 - 1,500	RPM

CONTROL PANEL FUNCTIONS - cont'd

6 Forward/Reverse (FWD/REV):

Sets the rotational direction of the handpiece.

The green LED illuminates when forward rotation is selected. The amber LED indicates reverse rotation. An audible tone will also indicate reverse rotation.

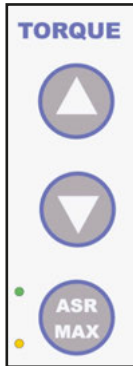
Reverse tone may be adjusted or turned off as described in the Advanced Operation section.

7 TORQUE Controls (ASR/MAX):

Allows the user to select torque limits, in 10% increments. Allows the choice of Auto-Stop Reached (ASR), Maximum (MAX), or Torque Limit Modes.

a. ASR Mode - For 1:1, 16:1, or 20:1 ratio handpieces only. ASR is an optional setting for torque controlled procedures, indicated by the illuminated green LED. The drill will automatically stop when the selected torque percentage is reached. When in ASR mode, press the Torque Selector Up/Down keys until the desired torque percentage is indicated on the Console Display. **NOTE:** ASR mode uses a percent-age of available torque, therefore the ASR torque value indicated is only an approximation of the actual torque provided.

b. MAX Torque Mode - For 1:1, 16:1, or 20:1 ratio handpieces only. Press the ASR/MAX key to enter Maximum Torque Mode, which turns off the torque control feature. The amber LED will be illuminated and "MAX%" will replace the torque value on the display. This mode allows the motor to run at its maximum torque level and is to be used for lowspeed applications.



c. Torque Limit Mode - Pressing the Torque Modes Button (ASR/MAX) until neither LED is lit will limit torque to the value set via the torque Up/Down buttons. The handpiece will stop when the torque limit is reached and then restart once the load is removed. The Torque Limit Mode is the only Mode available for 1:5 and 1:2 increaser handpieces.

8 PRESETS:

Allows user to quickly access five



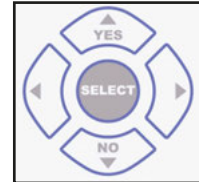
factory default Aseptico implant series or customized implant settings.

Select the desired Preset Key. By default, the preset buttons are set for the Aseptico implant series shown in Chart 1 on page 7.

Note: Pressing and holding a Preset Key will enter advanced preset options, allowing the user to customize its settings. Refer to the Advanced Operation section, page 11, for complete instructions.

9 System Editing & Navigation Keys:

Allows user to navigate through text characters, menus and adjust settings when modifying presets. SELECT key saves reconfigured settings. YES/NO Keys



allow user to interact with visual prompts on the display.

10 DELETE Key:

Allows user to delete a character from a preset name when editing the label.



11 INSERT Key:

Allows user to insert a space to a preset name when editing the label.



ADVANCED OPERATION:

After the unit has been set up and the user has become familiar with the system's control panel functions, there are two different modes that can be used to begin operation:

- 1. MANUAL MODE** - At any time, the user can adjust the handpiece ratio, speed, torque, motor direction, and torque mode settings using the control panel keypad. The Display will indicate Manual Mode.
- 2. PRESET MODE** - This Mode allows the user to quickly access and store up to five different implant settings (see *Chart 1 on page 7 for the default presets*). Each preset location can be customized by the user.

EDITING PRESETS

A. Adjust the handpiece ratio, speed, torque, motor direction, and torque mode settings as desired.

B. Press and hold the desired Preset key that you wish to save the changes to (two tones will sound). Release the key. The Preset's new operating parameters will display on the Console screen.

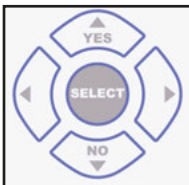
(Preset's Name)	
(RPM)	(Torque %)
(Scrolling Messages)	

Scrolling messages at the bottom of the screen display three different commands that the user can invoke:

1) Press SELECT To Save Changes: Press SELECT to save the new settings to the Preset

2) Edit Preset Name With Arrows:

Use the Left or Right arrow buttons to move the display cursor left/right under the Preset Name's text characters. Position the cursor under the specific



character that is to be changed. Use the Up or Down (YES/NO) arrow buttons to change the character to the desired letter, symbol, or numerical value. To enter a blank space into the text line, place the cursor under the character and press the INSERT Key. To delete a character in the text line, place the cursor under the character and press the DELETE Key. Repeat the above procedure for all remaining text characters that are to be changed.



3) Press SPEED or TORQUE Buttons to Change:

The user can also change the Speed or Torque settings while the Preset's operating parameters are displayed. Press Speed or Torque buttons as desired to adjust settings.

NOTE: The Motor Direction and Torque Mode can also be changed at this time, if so desired.

Once all the Preset's parameters have been adjusted to the desired settings, press SELECT to save the new settings to the Preset. The following message will display:

Preset Details Were Modified Save Changes? (YES/NO)
--

- To keep your new settings, press the YES Key.
- To ignore all new settings and return the Preset to its previous settings, press the NO key.

C. The new settings are now loaded into the Preset location and are ready to use.

NOTE: These new changes will overwrite any previous changes that were made.

ADVANCED OPERATION - Cont'd:

SETUP

Press and hold the CAL/SETUP Key to enter Setup Options Mode. Press the Up/Down Keys to scroll through the options.



Press SELECT key to select the option to adjust. The options are as follows (Note: Info enclosed in parenthesis indicates currently activated settings):

1. **Save Settings**
2. **Cancel**
3. **Recall Factory Setup**
4. **Var. Pedal (VAR)**
5. **Reverse Beeper (ON)**
6. **Torque Warning (ON)**
7. **Keypress Beep (ON)**
8. **Sleep Mode (15)**
9. **System Volume (100%)**

NOTE: These are system-wide options and can not be saved to any particular Preset Button during programming. See descriptions for each option below:

1. Save Settings:

This option allows the user to accept and save all Setup option changes into System memory. Adjust option settings as desired, then scroll to "Save Settings" using the Up or Down Keys and press SELECT Key. The following message will display:

**System Settings Were Modified
Save Changes? (YES/NO)**

- a) To keep your new settings, press the YES Key.
- b) To ignore all new settings and return the System memory to its previous settings, press the NO key.

2. Cancel:

Allows user to exit out of the Setup Options menu without saving any changes to System memory. SELECT "Cancel" to exit.

3. Recall Factory Setup:

Recalling the Factory Setup allows you to reset your Implant System to factory specifications. When this feature is selected, the following message will display:

**Factory Reset:
Are You Sure?
(YES/NO)**

NOTE: Any customized presets will be lost if you Recall Factory Setup.

- a) To keep your customized settings and return to the Setup Options Menu, press the NO Key.
- b) To restore the Implant System's presets to the factory settings (as shown in Chart 1 on page 7), press the YES Key. The unit will reset and return to the startup screen and then display the Preset 1 settings.

4. Variable Pedal (for AE-70V2 Foot

Control Only): This prompt allows the user to choose whether the optional AE-70V2 Variable Speed Foot Control operates in "Variable" Mode (runs from '0' up to 'set' speed), or in "On/Off" Mode (runs only at 'set' speed):

**Variable Pedal Mode:
Cancel
On/Off
Variable Speed**

Press the Up/Down Keys to scroll through the options. Press the SELECT Key to select the desired option:

- a) SELECT "Cancel" to escape out of this menu and return to previous menu.
- b) SELECT "On/Off" to enable On/Off Foot Control operation and return to previous menu.
- c) SELECT "Variable Speed" to enable variable-speed Foot Control operation and return to previous menu.

5. Reverse Beeper:

When the Reverse Beeper feature is active, an audible beep will sound when the handpiece is rotating in the reverse direction. When this feature is selected, the following message will display:

**Reverse Beeper:
Cancel
On
Off**

Press the Up/Down Keys to scroll through the options. Press the SELECT Key to select the desired option:

- a) SELECT "Cancel" to escape out of this menu and return to previous menu.
- b) SELECT "On" to enable the Reverse Beeper feature and return to previous menu.
- c) SELECT "Off" to disable the Reverse Beeper feature and return to previous menu.

6. Torque Warning:

When the Torque Warning feature is active, a chirping warning noise will be audible when the torque level reaches approximately 75% of the selected torque limit. When this feature is selected, the following message will display:

Torque Warning:
Cancel
On
Off

Press the Up/Down Keys to scroll through the options. Press the SELECT Key to select the desired option:

- a) SELECT "Cancel" to escape out of this menu and return to previous menu.
- b) SELECT "On" to enable the Torque Warning Tone and return to previous menu.
- c) SELECT "Off" to disable the Torque Warning Tone and return to previous menu.

7. Keypress Beep:

When the Keypress Beep feature is active, an audible beep will sound when any Key on the keypad is pressed. When this feature is selected, the following message will display:

Keypress Beep:
Cancel
On
Off

Press the Up/Down Keys to scroll through the options. Press the SELECT Key to select the desired option:

- a) SELECT "Cancel" to escape out of this menu and return to previous menu.
- b) SELECT "On" to enable the Keypress Beep feature and return to previous menu.
- c) SELECT "Off" to disable the Keypress Beep feature and return to previous menu.

8. Sleep Mode:

The Implant System can be programmed to enter Sleep Mode after 15 or 30 minutes of

inactivity to conserve power. In Sleep Mode, the lighted Console Display will turn off and the green LEDs above the five Preset keys will blink consecutively. To resume normal operation when the Implant System is in Sleep Mode, press the Standby key or the foot pedal.

When this feature is selected, the following message will display:

Sleep Mode:
Cancel
OFF
15 min
30 min

Press the Up/Down Keys to scroll through the options. Press the SELECT Key to select the desired option:

- a) SELECT "Cancel" to escape out of this menu and return to previous menu.
- b) SELECT "OFF" to disable Sleep Mode and return to previous menu.
- c) SELECT either "15 min" or "30 min" to set the desired Sleep Mode activation period and return to previous menu.

9. System Volume:

Controls the volume of all system sounds, including reverse beeper, torque warning, and keypress beep. When this feature is selected, the following message will display:

SYSTEM VOLUME:
Cancel
OFF
20%
40%
60%
80%
100%

Press the Up/Down Keys to scroll through the options. Press the SELECT Key to select the desired option:

- a) SELECT "Cancel" to escape out of this menu and return to previous menu.
- b) SELECT "OFF" to turn all System sounds Off and return to previous menu.
- c) SELECT desired Volume setting, in 20% increments, from "20%" to "100%" and return to previous menu.

VARIABLE-SPEED FOOT CONTROL OPERATION

The optional AE-70V2 Variable-Speed Foot Control may be used on the AEU-26OS System to control motor on/off, direction, torque, and to select presets.

Installation:

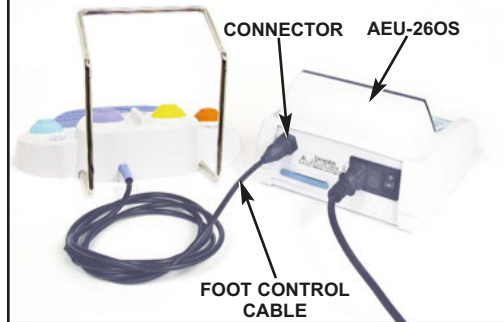
1. Attach the Foot Control cable to the connector on the back of the AEU-26OS Console (see Figure 7). Note keyway on connector. Turn locking sleeve clockwise to secure cable to connector. The AEU-26OS will automatically sense the Foot Control and invoke the proper control software, which allows dual functionality, through either the key pad or foot switch.

Foot Pad Functions (See Figure 8):

2. The 'M' pad (Upper left - Yellow) performs the same function as the Motor direction button on the console. Each press of the pad

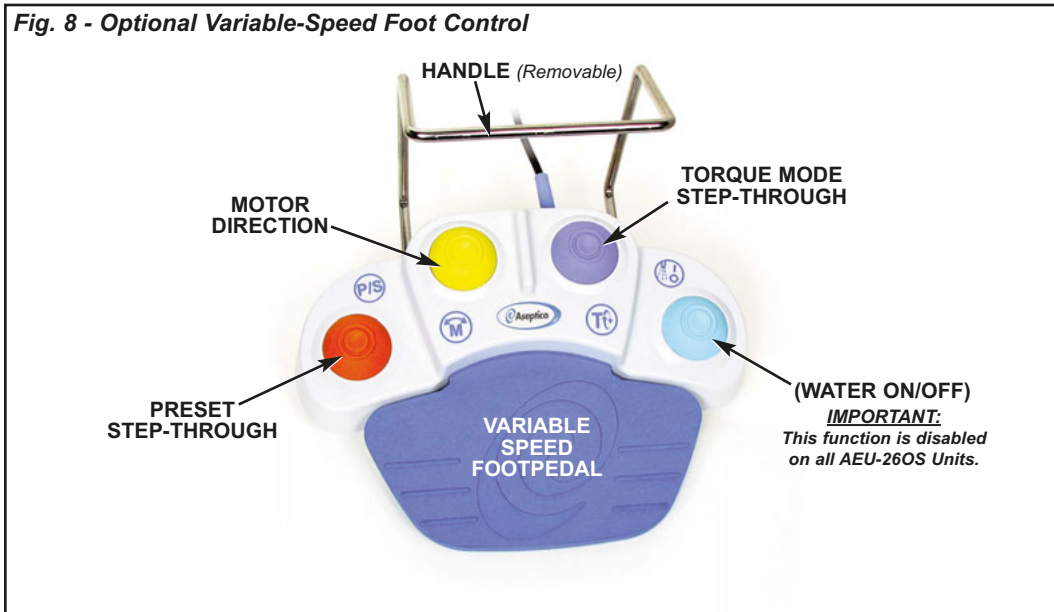


Fig. 7 - Foot Control Connection



changes the direction of Motor rotation. When the Motor is in reverse, the reverse warning tone will sound if this option is selected in the SETUP options.

Fig. 8 - Optional Variable-Speed Foot Control



- The 'T' pad (Upper right - Lavender) increases the torque setting by 10% each time the pad is pressed, up to a maximum increase of 100%. Once the total increase in torque reaches this 100% threshold, the unit will cycle the next torque setting back down to its initial (10%) setting. For example, repeated pressing of the pad will increase the torque by 10/20/30/40/50/60/70/80/90/100 %, then automatically recycle back to 10/20/..etc.



- The 'P/S' pad (Lower left – Orange) cycles through System Presets 1 - 5. Each press of the pad selects the next preset.



- The center **Variable Pedal** can be operated in either the 'Variable' or 'On/Off' modes, depending on which option is selected during Setup (page12). (**NOTE:** This pedal can also be used to bring the unit out of Sleep Mode.)

a. Variable Mode - Motor speed is proportional to how far the pedal is depressed. Depress to gradually increase speed; release to decrease speed.

b. ON/OFF Mode - Foot pedal will switch the Motor 'On/Off' when depressed/ released approximately halfway.

Handle Installation/Removal:

- The Foot Control Handle may be installed for easy repositioning of the AE-70V2.

Grasp vertical guide rods and push handle straight into Switch base (see Figure 9). To remove, pull rods straight out.

Fig. 9 - Handle Installation/Removal



AE-7PM FOOT CONTROL (Standard Equipment on AEU-26OS System)

Fig.10

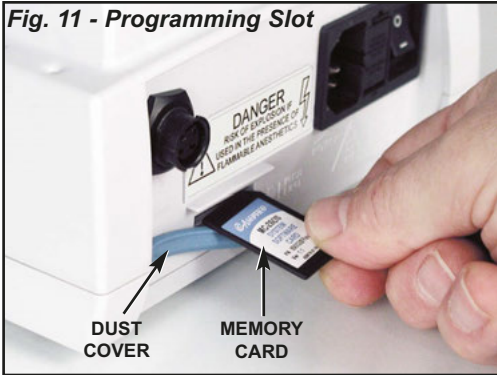


The AE-7PM Foot Control is provided as standard equipment on the AEU-26OS System. The AE-7PM is used to turn the motor On/Off. The AE-70V2 Variable Speed Foot Control is available on the AEU-26OS System as an option.

AE-7PM Installation:

Attach the Foot Control cable to the connector on the back of the Console. Note keyway on connector. Turn locking sleeve clockwise to secure cable to connector.

REPROGRAMMING THE UNIT



The AEU-26OS has the ability to load software updates and enhance the functionality of the system, should this be desired. A card slot, labeled “Memory Card Port”, is provided on the back of the unit (see Figure 11). This Port accepts memory cards very similar to those used in common consumer devices. These cards, available from Aseptico, enable a user to update software or replace existing software that might have been accidentally erased or corrupted. Contact Aseptico for more information on card usage and availability. To reprogram an AEU-26OS unit, follow the Steps below:

Programming Steps:

1. Turn ‘Off’ the Main Power Switch on the back panel.
2. Grasp the right-hand end of the rubber dust cover for the Memory Card Port and pry open the cover to expose the card slot.
3. Insert the new memory card in the slot with label facing upward (card terminals should face downward). Carefully and slowly press card inward until a ‘click’ is felt, then release card.
4. Turn the Main Power Switch (on the back panel) ‘On’.

5. The AEU-26OS Display will show the following messages:

NOTE: Pressing the ‘NO’ key at any time will abort the reprogramming process.

**Memory Card Detected.
Re-program? (YES / NO)**

- Press the ‘Yes’ key on the Control Panel.

6. The Display will then show the following message:

**Presets Will Be Erased!
Continue? (YES / NO)**

- Press the ‘Yes’ key on the Control Panel.

7. The Display will show the following message:

Programming...

- A status bar will indicate the progress of the programming.

8. When the programming is complete, the Display will show the following message:

**Programming Successful.
Eject Card.**

- Press the card inward slightly, then release it to eject it. When the card is ejected, the AEU-26OS System will reset with normal power-up screen displayed.

9. Remove the memory card and store it in a safe place. Close the rubber dust cover on the Memory Card Port.

In the event that the programming procedure is interrupted, the unit will display the following message:

Programming Failed

Then:

**Console Software Error.
Re-program unit.**

Re-start the programming procedure from Step #1 (Remember to turn main power ‘Off’ before reprogramming).

STERILIZATION:



WARNING - Sterilize the motor between each patient use.

WARNING - Use of a sterilization method or temperatures other than what are prescribed may damage the motor or present a risk of cross-contamination between patients.

CAUTION - Do not soak or submerge the motor in any liquid.

STERILIZATION PROCEDURE:

Pre-clean

- 1) Brush off any visible signs of debris from the motor and cord.
- 2) Thoroughly clean the device with a moist cloth or towel to remove any remaining signs of debris.

Sterilize

- 3) Select one of the three following sterilization methods (A, B, or C.):

Wrapped Sterilization – Place in an appropriately sized sterilization pouch and seal it.

A. Standard autoclaving (Gravity displacement method)

Time: 15 min

Temperature: 132° C (270° F)

Dry time: 30 minutes

B. Pre-vacuum (dynamic-air-removal)

Time: 4 minutes

Temperature: 132° C (270° F)

Dry time: 40 minutes

Flash Sterilization – For immediate use only.

C. Unwrapped standard autoclaving (Gravity displacement method)

Time: 10 minutes

Temperature: 132° C (270° F)

No dry time is required for flash sterilization.

Motor & Cord Assembly:

The entire AE-225-30 motor and cord assembly is fully autoclavable. Loosely coil the motor cord when autoclaving. Avoid sharply bending the cord when autoclaving.

NOTE: The motor-holder cradle and mounting bracket are also fully autoclavable.

Fig. 12 - MOTOR & CORD STERILIZATION



MAINTENANCE & CLEANING:

HANDPIECES - Thorough cleaning and lubrication of handpieces after each use and before sterilization is very important to ensure proper operation and service life of the handpiece. Follow the instructions provided with the handpiece for complete maintenance instructions.

MOTOR - IMPORTANT!

Protect motor from excess oil draining from handpiece. After lubricating and before autoclaving, stand handpiece by its base on a paper towel and allow excess oil to drain (see Figure 13).



WARNING

- Do not attempt to disassemble the motor or motor connector.
- Do not oil or lubricate the motor.
- Do not attach a handpiece to the motor while the motor is running.
- Do not bend motor cord sharply.
- The motor is sensitive to shock. Do not drop or impact motor against a hard surface.

Failure to comply with any of the above instructions may void your warranty.

CONSOLE - The exterior of the console may be cleaned by wiping with a soft cloth moistened with a mild detergent or a 1:10 bleach solution (1 part household bleach to 10 parts water). **IMPORTANT:** Use of other cleaning or disinfecting solutions may damage the console and may void the warranty.

FOOT CONTROLS - The exterior of the foot controls may be cleaned by wiping with a soft cloth moistened with mild detergent or disinfecting solution. When cleaning the optional AE-70V2 Multi-Function Foot Control, you may remove the handle from the foot control and wipe clean with disinfectant, then reinstall.

TROUBLESHOOTING:

Problem:	Correction:
Console does not light up when on:	<ul style="list-style-type: none"> • If Preset LEDs are blinking, press Standby Key on Control Panel or press foot pedal to exit Sleep Mode. • Check console to power connection. • Check fuse. If blown, replace with 1.6A, 250V slo-blow fuse.
Console lights up when turned on, but handpiece does not turn:	<ul style="list-style-type: none"> • Check motor plug connection. • Check foot control connection. • Depress foot control. • Increase RPM. • Increase Torque setting • Check that a drill or bur is properly seated in the handpiece and the latch is closed.
Motor slowing down or sluggish:	<ul style="list-style-type: none"> • Check for dirty, under-lubricated handpiece. • Check if handpiece lubricant is draining into motor. After lubricating and before autoclaving, stand handpiece on its base to let excess lubricant drain out.
Cannot remove motor/cord from unit:	<ul style="list-style-type: none"> • Grasp the strain relief directly behind the cord connector and gently push inward. Then, grasp the connector body near the red dot and pull the connector straight out of the motor receptacle.

SPECIFICATIONS:

Console Dimensions: 6.8"W x 7.2"L x 4.5"H
(17.3 cm x 18.5 cm x 11.3 cm)

Console Weight: 2.0 lbs (0.91kg)

Power: 100-240V ~
1.0 - 0.5 A
50-60 HZ

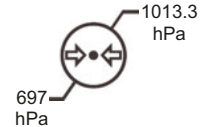
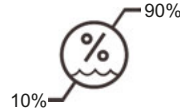
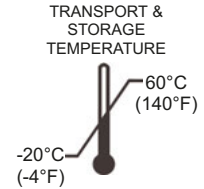
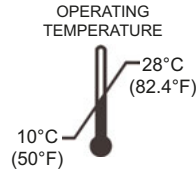
Fuses: 1.6A, 250V, Slo Blow Type

Duty Cycle: 16.7%

NOTE: The appliance inlet is the
mains disconnect means.

Environmental Conditions:

- Operating Temperature 10 to 28°C (50 to 82.4°F)
- Transportation & Storage Temperature -20 to 60°C
(-4 to 140°F)
- Relative Humidity 10 to 90% non-condensing
- Altitude 0 to 3048 meters (0 to 10,000 feet)



CHANGING THE FUSE:



WARNING



Turn the power off and unplug the unit
before following the steps below.

1. Remove the Fuse Holder from the Power Inlet connector (see Figure 14).
2. Replace the fuses in the Fuse holder.

Replacement Fuses:





1.6A, 250V slo-blow fuse
(Fuse size: 5 x 20mm)

3. Reinstall the Fuse Holder.

NOTE: The AEU-26OS features auto-sensing, global voltage compatibility. The fuse indicated is correct for 100V-240V 50/60 Hz line voltage.



SYMBOL DEFINITIONS:

	Consult Instructions For Use		Authorized European Representative
	Type B Equipment		Standby Switch
	Footswitch		Dangerous Voltage
	Do Not Throw Into Trash		Alternating current
	Manufacturer	IPX1	Protection Against Dripping Water
	Fuse Rating		Protective Earth (Ground)
	Motor Direction		Preset Step Through
	Torque Mode Step Through		Pump On/Off (Not Activated)
	Temperature Limitation		Serial Number
	Humidity Limitation		Attention, consult accompanying documents
	Atmospheric Pressure Limitation		

WARRANTY

Aseptico warrants this product against defects in material or workmanship for a period of two (2) years, from date of original invoice. Some handpieces are warranted for one year under the same conditions. Other handpieces and expendable components, such as air turbines and light bulbs, are covered by shorter warranty periods, or have no warranty. Aseptico's sole obligation under product warranty is (at its sole option and discretion) to repair or replace any defective component or product in part or whole. Aseptico shall be the sole arbiter of such action.

In the event of alleged defect under warranty, the purchaser is to notify Aseptico's Customer Service Department promptly. Customer Service will provide instructions, usually directing that the product be returned for service. Shipment to Aseptico and the cost thereof is always the responsibility of the purchaser.

Accidental misuse, inappropriate installation, or failure to perform directed maintenance voids the warranty. Deliberately defacing, modifying, or removing the serial number voids the warranty.

Aseptico does not assume, under this warranty, any risks or liabilities arising from the clinical use of its products, whether or not such use involves coincidental utilization of products manufactured by others.



P.O. Box 1548 • Woodinville, WA 98072
8333 216th Street S.E. • Woodinville, WA 98072
(425) 487-3157 • (800) 426-5913
www.aseptico.com • info@aseptico.com

P/N: 420840
Rev. E
ECO 14684
03/2019

PRINTED IN THE USA