

Buffalo 80500

Buffalo Dental ThermaKnife 80500 Hot Tray Trimmer Knife User Manual

Model: 80500

INTRODUCTION

The Buffalo Dental ThermaKnife 80500 is a specialized hot knife system designed for precise trimming of thermoplastic dental appliances. This system includes a control console and a 6-inch lightweight pen with a permanent knife-edge tip. It is engineered for efficiency and accuracy in dental laboratory and clinical settings.

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your ThermaKnife 80500.

SAFETY INFORMATION

WARNING: Read all safety instructions before operating this device. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always ensure the device is connected to a grounded power outlet of the correct voltage (120V).
- The knife tip becomes extremely hot during operation. Avoid direct contact with skin or flammable materials.
- Use in a well-ventilated area to dissipate any fumes produced during trimming.
- Do not immerse the console or pen in water or any other liquid.
- Keep out of reach of children and unauthorized personnel.
- Disconnect power before cleaning or performing any maintenance.
- Do not operate the device if the power cord or pen cable is damaged.

SETUP

1. **Unpacking:** Carefully remove all components from the packaging. Verify that all parts are present:

the control console and the 6-inch pen.

2. **Placement:** Place the control console on a stable, flat, heat-resistant surface, away from flammable materials and liquids. Ensure adequate ventilation around the unit.
3. **Connect the Pen:** Insert the connector cable from the 6-inch pen into the designated port on the front or side of the control console. Ensure a secure connection.



Image: The Buffalo Dental ThermoKnife 80500 control console with the 6-inch pen resting on top. The console features an ON/OFF switch and a temperature control dial. The pen is connected via a cable to the console.

4. **Power Connection:** Plug the power cord from the control console into a standard 120V AC grounded electrical outlet.

OPERATING INSTRUCTIONS

1. **Power On:** Flip the ON/OFF switch on the control console to the "ON" position. The indicator light (if present) should illuminate.
2. **Set Temperature:** Rotate the temperature control dial to the desired setting. Start with a lower setting and gradually increase if needed. The optimal temperature depends on the thickness and type of thermoplastic material being trimmed. The knife-edge tip heats up rapidly, typically within 30 seconds.
3. **Trimming Procedure:**
 - Hold the 6-inch pen firmly and comfortably.
 - Carefully guide the heated knife-edge tip along the desired trim line of the thermoplastic appliance (e.g., bleaching trays, night guards, mouthguards).
 - Apply gentle, consistent pressure. The heated tip will melt through the material, creating a clean cut.
 - Avoid excessive force, which can damage the tip or the appliance.
 - For materials up to 0.040" thickness, the ThermoKnife provides precise and efficient trimming.
4. **Power Off:** Once trimming is complete, flip the ON/OFF switch to the "OFF" position. Allow the knife tip to cool completely before handling or storing.

MAINTENANCE

- **Cleaning the Tip:** After each use, or as needed, clean the knife-edge tip to remove any accumulated plastic residue. Buff-Brite polishing wheels are recommended for effective cleaning of the tips. Ensure the unit is unplugged and the tip is cool before cleaning.

- **Console Cleaning:** Wipe the exterior of the control console with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the unit is unplugged before cleaning.
- **Storage:** Store the ThermaKnife system in a clean, dry place when not in use. Ensure the pen is securely placed to prevent damage to the tip.
- **Tip Replacement:** Note that replacement tips are sold separately. Refer to Buffalo Dental's official resources for ordering information.

TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|-----------------------------|---|---|
| Unit does not power on. | Not plugged in. Power switch is OFF. Faulty power outlet. | Ensure power cord is securely plugged into a 120V grounded outlet. Flip the ON/OFF switch to "ON". Test the outlet with another device or try a different outlet. |
| Knife tip does not heat up. | Pen not properly connected. Temperature dial set too low. Damaged pen or tip. | Check the pen's connection to the console. Increase the temperature setting on the dial. Contact Buffalo Dental customer support for assistance or replacement parts. |
| Uneven or poor trimming. | Tip is dirty or worn. Incorrect temperature setting. Improper technique. | Clean the knife tip thoroughly. Consider replacing if worn. Adjust the temperature dial for optimal cutting. Practice on scrap material to refine trimming technique. |

If troubleshooting steps do not resolve the issue, contact Buffalo Dental customer support for further assistance.

SPECIFICATIONS

- **Model:** 80500
- **Input Voltage:** 120V
- **Pen Length:** 6 inches
- **Heating Time:** Approximately 30 seconds
- **Applicable Materials:** Thermoplastic appliances up to 0.040" thickness (e.g., bleaching trays, night guards, mouthguards)
- **Item Weight:** 4.02 pounds
- **Package Dimensions:** 7.01 x 6.34 x 5.43 inches
- **Manufacturer:** Buffalo

WARRANTY AND SUPPORT

For warranty information, technical support, or to order replacement parts, please refer to the official Buffalo Dental website or contact their customer service department directly. Contact details are typically provided with the product packaging or on the manufacturer's website.

Note: Tips are sold separately.

