

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

Manuals.plus /

- › [Dunlop](#) /
- › Dunlop Super Pot DSP500K Split Shaft 500K-ohm Instruction Manual

Dunlop DSP500K

Dunlop Super Pot DSP500K Split Shaft 500K-ohm Instruction Manual

1. INTRODUCTION

The Dunlop Super Pot DSP500K is a high-quality, high-performance 500K-ohm potentiometer designed for use in musical instruments, particularly as volume or tone controls. Engineered for durability and smooth operation, this component is resistant to dust and corrosion, ensuring reliable performance over an extended lifespan. This manual provides essential information for the safe installation, operation, and maintenance of your Super Pot.



Figure 1.1: Close-up view of the Dunlop Super Pot DSP500K, displaying its 500K rating and the Dunlop brand logo. This image highlights the component's construction and markings.

2. KEY FEATURES

- **Audio Taper:** Provides a logarithmic resistance change, ideal for volume and tone controls in audio circuits.

- **24-Knurl Split Shaft:** Designed for compatibility with a wide range of standard control knobs.
- **Proprietary Technology:** Ensures enhanced durability and performance.
- **Resistance to Dust and Corrosion:** Minimizes noise and scratchiness, contributing to a longer operational life.
- **High Quality Construction:** Built to withstand extensive use, tested beyond 7 million turns.



Figure 2.1: The Dunlop Super Pot DSP500K presented in its retail packaging. The packaging emphasizes its status as a 'High Performance Part' and mentions a 'Limited Lifetime Warranty'.

3. SAFETY INFORMATION

WARNING: Installation of this product involves working with electrical components and soldering. Improper installation can result in electric shock, damage to your instrument, or personal injury. If you are not experienced with electronics work, it is recommended to seek assistance from a qualified technician.

- Always disconnect power from the instrument or amplifier before beginning any installation or maintenance.
- Use appropriate safety gear, including eye protection, when soldering.

- Ensure proper ventilation when soldering to avoid inhaling fumes.
- Verify all connections are correct before re-applying power.

4. INSTALLATION GUIDE (SETUP)

This section outlines the general steps for installing the Dunlop Super Pot DSP500K. Specific wiring diagrams may vary depending on your instrument or amplifier model. Refer to your instrument's specific wiring schematics if available.

4.1 Tools Required

- Soldering iron and solder
- Wire cutters/strippers
- Small Phillips head screwdriver (for control plate/cavity cover)
- Wrench or pliers (for potentiometer nut)
- Multimeter (optional, for testing connections)

4.2 Installation Steps

1. **Preparation:** Disconnect the instrument from any power source or amplifier. Remove the control knobs and the control plate or access cover to expose the existing potentiometer(s) and wiring.
2. **Document Existing Wiring:** Before desoldering, take clear photos or draw a diagram of the current wiring connections to the potentiometer you are replacing. This will serve as a reference for connecting the new Super Pot.
3. **Remove Old Potentiometer:** Carefully desolder all wires connected to the old potentiometer. Use a wrench or pliers to loosen and remove the nut securing the old potentiometer to the control plate.
4. **Mount New Super Pot:** Insert the shaft of the Dunlop Super Pot DSP500K through the mounting hole in the control plate. Secure it with the washer and nut, tightening it firmly but not excessively.
5. **Wire the Super Pot:** Solder the wires to the terminals of the new Super Pot according to your documented wiring diagram. Ensure clean, strong solder joints. Typically, a potentiometer has three terminals: input, output, and ground.
6. **Test Connections:** Before reassembling, you may use a multimeter to check for continuity and proper resistance changes as the shaft is turned. Briefly connect the instrument to an amplifier to ensure basic functionality (e.g., volume control works).
7. **Reassembly:** Once satisfied with the installation, reattach the control plate or access cover and replace the control knobs.

5. OPERATING INSTRUCTIONS

The Dunlop Super Pot DSP500K functions as a variable resistor, commonly used to control volume or tone in musical instruments. Its operation is straightforward:

- **Volume Control:** When wired as a volume control, rotating the knob clockwise typically increases the signal output, while rotating it counter-clockwise decreases the signal.
- **Tone Control:** When wired as a tone control (often in conjunction with a capacitor), rotating the knob adjusts the frequency response, typically from brighter (more treble) to darker (less treble).

The audio taper ensures a smooth and natural-sounding response across the full range of the potentiometer's

rotation, making it suitable for precise adjustments.

6. CARE AND MAINTENANCE

The Dunlop Super Pot DSP500K is designed for longevity and resistance to environmental factors. Follow these guidelines to ensure optimal performance:

- **Cleaning:** Due to its resistance to dust and corrosion, the Super Pot generally requires minimal internal cleaning. If external dust accumulates around the shaft, gently wipe it with a dry, soft cloth. Avoid using liquid cleaners directly on the potentiometer.
- **Connection Checks:** Periodically inspect solder joints and wiring for any signs of loosening or corrosion, especially if the instrument experiences frequent vibrations or temperature changes. Re-solder any loose connections as needed.
- **Avoid Excessive Force:** While durable, avoid applying excessive force when turning the knob or tightening the mounting nut, as this can damage the shaft or internal components.

7. TROUBLESHOOTING

If you encounter issues with your Dunlop Super Pot, consider the following troubleshooting steps:

- **No Sound or Intermittent Sound:**
 - Check all solder joints for cold joints or breaks.
 - Ensure wires are not shorting against other components or the instrument's shielding.
 - Verify the potentiometer is correctly wired according to the circuit diagram.
- **Scratchy or Crackling Sound:**
 - While Super Pots are resistant to dust, extreme environments can still cause issues. If persistent, ensure the pot is clean and connections are secure.
 - This can also indicate a faulty connection elsewhere in the circuit.
- **Knob Spins Freely or is Loose:**
 - Tighten the mounting nut on the potentiometer shaft.
 - Ensure the control knob is properly secured to the split shaft.

If problems persist after troubleshooting, consult a qualified instrument technician.

8. TECHNICAL SPECIFICATIONS

Specification	Detail
Model	DSP500K
Resistance	500K-ohm
Taper	Audio Taper (Logarithmic)
Shaft Type	Split Shaft, 24-Knurl
Material	Delrin (internal components)

Dimensions (L x W x H)	Approximately 6 x 6 x 5 inches (packaging dimensions, actual pot dimensions are smaller)
UPC	710137102361

9. WARRANTY INFORMATION

The Dunlop Super Pot DSP500K is designed and built to last a lifetime, reflecting Dunlop's commitment to quality. This product is backed by a **Limited Lifetime Warranty**. For specific terms and conditions of the warranty, please refer to the official Dunlop website or contact their customer support.

10. CUSTOMER SUPPORT

For further assistance, technical inquiries, or warranty claims regarding your Dunlop Super Pot DSP500K, please contact Dunlop customer support through their official channels:

- **Official Website:** Visit the [Dunlop Store on Amazon](#) or the main Dunlop website for product information and support resources.
- **Contact Information:** Refer to the Dunlop website for current contact details, including phone numbers and email addresses for technical support.