

Neutrik NP3X-B

Neutrik NP3X-B 3-Pole 1/4-inch Professional Phone Plug

Instruction Manual

1. INTRODUCTION

The Neutrik NP3X-B is a high-quality 3-pole 1/4-inch (6.35 mm) professional phone plug designed for audio applications. It features gold contacts for optimal signal transmission and a robust construction suitable for demanding environments. This manual provides instructions for the proper assembly, use, and maintenance of the NP3X-B connector.

2. SAFETY INFORMATION

- Always disconnect power from audio equipment before connecting or disconnecting cables to prevent electrical shock or damage to devices.
- When soldering, ensure adequate ventilation and use appropriate personal protective equipment, such as safety glasses.
- Keep soldering irons and hot components away from flammable materials.
- Ensure all connections are secure and properly insulated to avoid short circuits.

3. PRODUCT OVERVIEW

The Neutrik NP3X-B plug consists of several components designed for reliable performance and ease of assembly. Key features include a durable metal housing, a robust chuck-type strain relief, and precision-machined gold contacts for the tip, ring, and sleeve connections.



Figure 1: Assembled Neutrik NP3X-B 3-pole 1/4-inch professional phone plug. This image shows the black housing, the gold-plated tip, ring, and sleeve contacts, and the overall robust design of the connector.



Figure 2: Angled view of the Neutrik NP3X-B plug, highlighting the textured grip on the housing and the distinct segments of the gold-plated connector tip.

4. SETUP AND INSTALLATION (SOLDERING INSTRUCTIONS)

The NP3X-B requires soldering for proper cable termination. Follow these steps for a secure and reliable connection:

1. **Prepare the Plug:** Unscrew the housing from the connector body. Slide the housing and the chuck (strain relief components) onto the cable in the correct order before stripping the cable.
2. **Prepare the Cable:** Carefully strip the outer jacket of your audio cable (e.g., AUX cable) to expose the inner conductors. For a 3-pole (TRS - Tip, Ring, Sleeve) connection, you will typically have three conductors: a signal wire for the tip, a signal wire for the ring, and a ground wire for the sleeve. Strip a small amount of insulation from each inner conductor.
3. **Tin the Wires:** Apply a small amount of solder to the exposed ends of each conductor. This process, called tinning, prepares the wires for easier and more reliable soldering to the plug's terminals.
4. **Solder Connections:** Solder each tinned wire to its corresponding terminal on the plug:
 - **Tip (T):** Connect the 'hot' or positive signal wire to the tip terminal.
 - **Ring (R):** Connect the 'cold' or negative signal wire (for balanced connections) or the right channel signal (for stereo unbalanced) to the ring terminal.
 - **Sleeve (S):** Connect the ground or shield wire to the sleeve terminal.

Ensure solder joints are clean, shiny, and free of cold solder joints or bridges between terminals.

5. **Assemble the Plug:** Once soldering is complete and the joints have cooled, carefully slide the chuck and housing back over the connector body. Tighten the housing securely. The chuck-type strain relief will grip the cable, preventing tension on the solder joints.
6. **Test Connection:** Before use, test the continuity and proper wiring of your newly assembled cable using a cable tester or by connecting it to known working audio equipment.

5. OPERATING INSTRUCTIONS

Once the Neutrik NP3X-B plug is properly assembled onto a cable, it can be used to connect various audio devices. This plug is compatible with equipment such as amplifiers, mixing desks, musical instruments, and speakers that utilize 1/4-inch TRS (stereo) or balanced mono inputs/outputs.

- Ensure the cable is fully inserted into the corresponding 1/4-inch jack on your audio equipment.
- Avoid excessive force when inserting or removing the plug to prevent damage to the connector or equipment jack.
- Route cables carefully to prevent tripping hazards and minimize strain on connections.

6. MAINTENANCE

- **Cleaning:** Periodically inspect the gold contacts for dirt or oxidation. Clean with a soft, dry cloth. For stubborn residue, a small amount of isopropyl alcohol on a cotton swab can be used, ensuring the plug is completely dry before use.
- **Inspection:** Regularly check the cable entry point for signs of wear or damage to the cable jacket. Ensure the housing is tightly screwed to maintain strain relief.
- **Storage:** Store cables terminated with NP3X-B plugs in a clean, dry environment, away from extreme temperatures and direct sunlight. Avoid tightly coiling cables to prevent internal wire damage.

7. TROUBLESHOOTING

If you experience issues with your audio connection, consider the following troubleshooting steps:

- **No Sound:**
 - Verify that both ends of the cable are fully inserted into the respective equipment jacks.
 - Check the volume levels on all connected audio devices.
 - Inspect the cable for visible damage.
 - Test the cable with a known working cable or device to isolate the problem.
- **Intermittent Sound or Static:**
 - Ensure the plug's housing is tight and the strain relief is functioning correctly.
 - Clean the plug contacts and the equipment jack.
 - Check for loose solder connections inside the plug (requires disassembly and re-soldering if necessary).
- **Hum or Buzz:**
 - Ensure the ground connection (sleeve) is properly soldered and secure.
 - Check for ground loops in your audio system.
 - Verify that the cable is not running parallel to power cables or other sources of electromagnetic interference.

8. SPECIFICATIONS

Feature	Specification
Brand	Neutrik
Model Name	NP3X-B
Connector Type	1/4 Inch Jack (Phone Plug)
Number of Pins	3 (TRS - Tip, Ring, Sleeve)
Contact Plating	Gold
Outer Material	Metal
Maximum Voltage	10 Volts
Compatible Devices	Amplifier, Mixing Desk, Musical Instrument, Speaker
Special Feature	Unique Design, High Density Compatibility
Product Dimensions	1 x 2 x 2 inches (approximate)
Item Weight	0.704 ounces (approximate)
Specification Met	EIA, UL
Indoor/Outdoor Usage	Indoor, Outdoor

9. WARRANTY AND SUPPORT

For information regarding warranty coverage and technical support for your Neutrik NP3X-B product, please refer to the official Neutrik website or contact your authorized Neutrik dealer. Keep your purchase receipt as proof of purchase.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question