

## Apex Apex460B

# Apex Apex460B Large Diaphragm Multi-Pattern Tube Studio Condenser Microphone User Manual

Model: Apex460B

## 1. INTRODUCTION

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The Apex Apex460B is a large diaphragm multi-pattern tube studio condenser microphone designed for professional audio recording. It offers versatile polar patterns including omnidirectional, cardioid, and figure-8, making it suitable for a wide range of recording applications from vocals to instruments. This manual provides essential information for the proper setup, operation, and maintenance of your Apex460B microphone.

## 2. SAFETY INFORMATION

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**CAUTION: RISK OF ELECTRIC SHOCK. DO NOT OPEN.**

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

- Always ensure the power supply is disconnected from the mains before making any connections or disconnections.
- Do not operate the microphone or power supply if they appear damaged.
- Keep the unit away from water or excessive humidity.
- Only use the power supply unit provided with the microphone.
- Refer all servicing to qualified service personnel.

## 3. SETUP

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### 3.1 Unpacking

Carefully remove all components from the packaging. Ensure the following items are present:

- Apex460B Condenser Microphone
- Dedicated Power Supply Unit

- Multi-pin Cable (for connecting microphone to power supply)
- Shock Mount Clip
- Power Cable

### 3.2 Connecting the Power Supply Unit

The Apex460B requires its dedicated power supply unit for operation. Follow these steps to connect it:

1. Ensure the power supply unit is turned off and disconnected from the mains power.
2. Connect the multi-pin cable from the Apex460B microphone to the **INPUT** port on the power supply unit. Ensure the connection is secure.
3. Connect a standard XLR cable (not included) from the **OUTPUT** port on the power supply unit to your audio interface, mixer, or preamplifier.
4. Connect the provided power cable to the power supply unit and then to a suitable AC power outlet.



Figure 1: Apex Apex460B Power Supply Unit. This image shows the power supply unit for the Apex Apex460B microphone. It features an XLR output, a multi-pin input for the microphone, and a rotary knob for selecting polar patterns, ranging from omnidirectional to figure-8.

### 3.3 Mounting the Microphone

Attach the Apex460B microphone to the included shock mount clip. The shock mount helps to isolate the microphone from vibrations and handling noise. Secure the shock mount to a sturdy microphone stand (not included).

## 4. OPERATING INSTRUCTIONS

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### 4.1 Powering On

Once all connections are made, switch on the power supply unit. Allow the microphone approximately 10-15 minutes to warm up for optimal performance, as it is a tube microphone.

### 4.2 Selecting Polar Patterns

The Apex460B features multiple polar patterns, selectable via the rotary knob on the power supply unit. Each pattern offers distinct directional characteristics:

- **Omnidirectional:** Captures sound equally from all directions. Ideal for room ambiance, group vocals, or instruments where a natural, open sound is desired.
- **Cardioid:** Most sensitive to sound from the front, with significant rejection from the rear. Best for isolating a single sound source, such as a lead vocal or individual instrument, and minimizing room reflections or bleed from other sources.
- **Figure-8:** Captures sound equally from the front and rear, with strong rejection from the sides. Useful for recording two vocalists facing each other, or for capturing the direct sound of an instrument along with room reflections from the rear.
- **Intermediate Patterns:** The knob allows for selection of patterns between the main three, offering fine-tuning for specific recording scenarios.

Rotate the **POLAR PATTERN** knob on the power supply unit to select the desired pattern. It is recommended to experiment with different patterns to find the best sound for your specific recording environment and source.

### 4.3 Basic Recording Tips

- Position the microphone appropriately for the sound source and chosen polar pattern.
- Use a pop filter (not included) for vocal recordings to reduce plosive sounds.
- Monitor your input levels carefully to avoid clipping and ensure a clean recording.
- Experiment with microphone placement and room acoustics to achieve desired tonal characteristics.

## 5. MAINTENANCE

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### 5.1 Cleaning

Wipe the microphone body and power supply unit with a soft, dry cloth. Do not use liquid cleaners or solvents, as these can damage the finish or internal components. Avoid touching the microphone capsule directly.

### 5.2 Tube Replacement

The Apex460B uses a vacuum tube which may require replacement over time. Tube replacement should only be performed by qualified technicians due to high internal voltages. If you experience a significant change in sound quality or a loss of signal, consult a professional audio service center. **WARNING:** High voltages are present inside the power supply and microphone. Do not attempt to open or service these units yourself.

### 5.3 Storage

When not in use, store the microphone in its protective case (if provided) or a clean, dry environment to protect it from dust, moisture, and physical damage.

## 6. TROUBLESHOOTING

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Problem	Possible Cause	Solution
No sound output	Power supply not connected or turned on. Cables incorrectly connected or faulty. Audio interface/mixer input not selected or gain too low.	Check power connections and switch. Verify multi-pin and XLR cable connections. Test with different cables if possible. Ensure correct input is selected and gain is adjusted on your audio device.
Low or distorted sound	Incorrect gain staging. Faulty tube. Microphone too far from source or polar pattern unsuitable.	Adjust gain on your audio interface/mixer. Consult a qualified technician for tube inspection/replacement. Adjust microphone position or select a different polar pattern.
Excessive noise/hum	Ground loop issue. Interference from other electronic devices. Faulty cable.	Ensure all equipment is on the same power circuit or use a ground loop isolator. Move microphone and cables away from power sources, monitors, or other electronics. Test with a different XLR cable.

## 7. SPECIFICATIONS

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- **Model:** Apex460B (SYS6043)
- **Microphone Type:** Large Diaphragm Multi-Pattern Tube Condenser
- **Polar Patterns:** Omnidirectional, Cardioid, Figure-8 (continuously variable)
- **Connectivity:** XLR (Output from Power Supply)
- **Audio Sensitivity:** 34 Decibels
- **Signal-to-Noise Ratio:** 76 dB
- **Power Source:** Corded Electric (via dedicated power supply)
- **Enclosure Material:** Metal, Film
- **Recommended Uses:** Voice Recording, Video Recording
- **Included Components:** Microphone, Power Supply, Multi-pin Cable, Shock Mount Clip, Power Cable
- **Item Dimensions:** 8 x 18 x 24 inches (Packaging/Overall product dimensions, specific mic dimensions not provided)

## 8. WARRANTY INFORMATION

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Apex products are designed and manufactured to the highest quality standards. This product is covered by a limited warranty against defects in materials and workmanship. The specific terms and duration of the warranty may vary by region and retailer. Please retain your proof of purchase for warranty claims. For detailed warranty information, please refer to the warranty card included with your product or contact your local Apex distributor.

## 9. CUSTOMER SUPPORT

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If you have any questions, require technical assistance, or need to report a problem with your Apex460B microphone, please contact Apex customer support or your authorized dealer. Please have your product model number (Apex460B or SYS6043) and proof of purchase ready when contacting support.

For the most up-to-date support information, visit the official Apex website.

