# 4608



# **Owner's Manual**

The Apex460B tube condenser microphone is perfect for recording both critical vocals and instruments. The dual diaphragm multipattern design gives you nine different polar pattern settings to get the perfect microphone sound for every application.

The Apex460B features dual 1-inch gold sputtered 5-micron diaphragms in a shockmount capsule. The 12AX7 vacuum tube pre-amp

and capsule is suspended in a solid machined casing to further reduce tube-induced noise.

The included external shock-mount suspension virtually eliminates vibration and handling noise, while safely securing the microphone in any position needed during the recording process.

## **The Power Supply & Controls**

The Apex460B has nine available polar patterns, selectable from the front panel of the power supply. Rather than limiting the user to only the three most common patterns (Omnidirectional, Cardioid, and Figure-8 patterns), the Apex460B has three gradient stages between each of those positions. This allows the artist and recording engineer far more versatility. In vocal applications where an Omnidirectional pattern isn't quite 'fat' enough, but Cardioid is too narrow, you now have three additional steps to find the right subtle mix between those two standard patterns.

With the Apex460B you have the rare opportunity to use the proximity effect of a Cardioid, yet still open up the microphone to hear some of the natural early reflections of a good sounding live room.



An Omni-directional pattern will give your microphone the ability to pickup sound from all directions. This is ideal for recording sounds that emanate from multiple directions, or picking up the source material as well as the natural ambiance and reverberation of a room. Omnidirectional patterns also have no proximity effect, or 'bottom end enhancement' as the source gets closer to the microphone. This makes the Omnidirectional polar pattern ideal for recording choirs, string sections, background vocals or acoustic instruments where a natural 'open' tone quality is preferred.

The Cardioid pattern is ideal for single instrument or solo vocal use. This pattern picks up only sound directly in front of the microphone, and sounds from back and sides of the microphone are rejected. The cardioid pattern also has the most pronounced proximity effect, and best off-axis rejection.

Bi-directional or Figure-8 will hear sound from both front and back. This is ideal for recording a main sound while still picking up room ambience from behind or duets.

The Apex460B has three gradient patterns between Omnidirectional and Cardioid, and an additional three gradient patterns between Cardioid and Figure-8 making for a total of nine available polar patterns. These additional polars allow for a subtle combination of proximity effect, off-axis rejection, overall EQ or tonal response.





## **Caring for your 460B**

All large diaphragm condenser microphones are fragile. They do not like to be exposed to any sharp impact that may stretch or knock the element out of alignment including being dropped, tapped, or being blown into. This is especially true of any tube condenser microphone, including the Apex460B.

It is always advisable to use a pop filter when recording vocals not

only to avoid sibilance (overly accentuated 'S', 'P' and 'B' sounds) but also to keep excessive moisture off the element.

The outer shell of your mic can be cleaned with a soft damp cloth. Do not use harsh detergents, solvents, or abrasive materials. Never immerse any microphone in water.

#### **Other Features**

- High Performance Tube Microphone
- Nine User-selectable Polar Patterns including Omnidirectional, Cardioid and Figure-8 (with gradient positions between each)
- Dual 1-inch Custom Designed Gold Sputtered Capsules
- External High Voltage Power Supply
- 7-pin Microphone Cable

#### **Features**

#### **Constant Voltage Power Supply Module**

9-position multi-pattern selection control on power supply module provides omnidirectional, cardioid and figure-8 patterns with three gradient settings between each position. Constant voltage ensures quiet operation.

#### **Shockmount Adaptor**

Stops noise from transferring through the floor and mic stand to the sensitive microphone capsule.

#### 7-pin XLR Sheilded Microphone Cable

Provides clean signal from microphone while transferring power to drive capsule and preamp from power supply.

### **Specifications**

Type Condenser Pressure Gradient Microphone with 1-Inch Dual Diaphragm and Tube Preamp

Polar Pattern(s) Omni, Cardioid, Figure-8 with 6 intermediate stages

Frequency Response 20 - 20000 Hz

Sensitivity 14mv/Pa = -37dB (0dB = 1v/Pa) -10dB

Impedance <200 Ohms S/N Ratio 76dB

Max SPL (For 1% THD @ 1000Hz) 125dB
Equivalent Noise (IEC 268 - 4 - A weighted) 20dB
Power Requirement Dedicated Power Supply (included)
Controls Pattern Select knob (on power supply)
Dimensions 1.8 inches x 9.5 inches (46mm x 240mm)

Weight 29oz (824g)