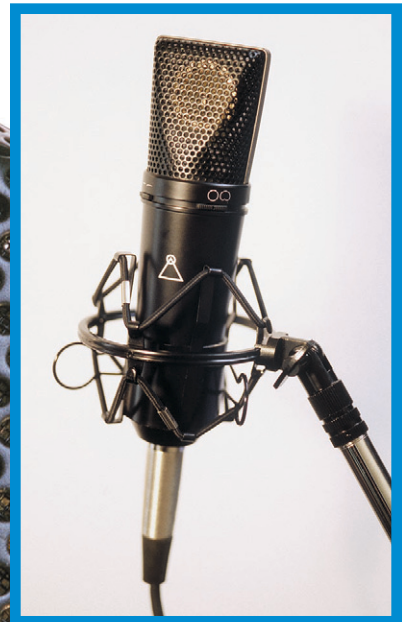


Apex 420/430

studio condenser microphones



Description:

The Apex 420 and Apex 430 are professional large-diaphragm dual pattern pressure gradient condenser microphones. Designed to offer unmatched performance at a price that any professional or home studio can afford.

The Apex 420 features switchable cardioid and omnidirectional polar patterns, switchable -6dB 100Hz low frequency cutoff and a 1 inch diameter capsule. Frequency response is 20Hz to 20kHz with a maximum SPL of 130dB (1kHz @ 0.5% THD). Input sensitivity is -40dB @ 1kHz and signal to noise is better than 73dB. Impedance is 200 ohms and the operating voltage is 48V DC.

The Apex 430 microphone has all of the same performance characteristics as the Apex 420, but operates only with a cardioid polar pattern and has no low frequency roll off selector.

Both microphones are made with a heavy duty aircraft grade machined brass body with a durable, scratch resistant anodized finish. Great for lead or background vocals, acoustic guitar, drums, or as an ambient room mic. The Apex 420 includes a 'cat's cradle' style shockmount and a windssock in an attractive flight case. The Apex 430 includes only the shockmount.

Recommended Applications:

Improved quality in ever more affordable recording equipment has brought serious power to the home studio enthusiast or small project studio. The microphone is the first and often most important link in the signal chain. The Apex 420 or Apex 430 are the first truly affordable large diaphragm condenser microphones, and one of the best choices as a main microphone for small project studios, home studios, or any of the computer based direct to hard drive recording systems now available.

Due to its rugged construction, high SPL handling, and affordable price the Apex 420 or Apex 430 are also an outstanding choice for live sound reinforcement or live recording. The 400 series microphones have been proven as excellent choices for overhead mic drum kits, for guitar or bass cabinets or any application where superior sound quality and high sound pressure handling is required. They would be an excellent choice for saxophones, flutes, acoustic guitars or acoustic bass where subtlety and clarity is paramount.

In most applications the cardioid polar pattern, (or the pattern switch set to the right on the 420) is the standard setting for almost all applications. It will give you the best results on most voice and a wide range of instruments. It offers full frequency response off of the front of the microphone, the advantage of proximity effect (increased low frequency response when microphone is placed close to sound source*) and excellent noise rejection from the sides and back, or 180° position of the microphone.

In live sound applications and remote recording the Apex 420 or Apex 430's cardioid pattern will offer excellent feedback rejection and better isolation.

The Omnidirectional polar pattern (Apex 420 only) picks up sound virtually equally

from all around the microphone. This is mostly used for recording ambient sounds, or when recording in an exceptionally good sounding live room where the character, ambiance and tone of the studio needs to be recorded, as well as the source voice or instrument. It would also be the ideal choice for picking up audience interaction in a live recording situation.

**Vocalists can use the proximity effect to their advantage, adding fullness and more 'bottom end' to the voice. Experienced vocalists can easily incorporate it as part of their overall microphone technique. Again, experimentation with mic placement during the recording process is the key. The omnidirectional polar pattern does not exhibit this effect.*

In all recording applications it is advised to always use a wind sock over the microphone, and a pop filter (available from any music store) should be employed for recording vocals for best results. The windssock and any quality pop filter will cause virtually no change in the frequency response of the microphone.

You may find better results if you don't sing directly into the microphone, but change your 'angle of incidence' so you are singing slightly off axis or over the top of the capsule. This will lessen the excessive breath noise and sibilance, and give you a more well-balanced and natural recorded sound.

Always use the supplied shock mount with the 400 series for best results. Although the microphone is not exceptionally fragile, it is very sensitive and can pick up even minute vibrations through the microphone stand and floor. Do not immerse either microphone in water.

The Low frequency roll off selector (Apex 420 only) should be used (Roll off switch position to right) to minimize low end distortion due to uncontrollable rumble or wind noise. A careful listening test should be employed to determine proper setting for each individual recording application. You may find that in almost all applications the low frequency roll off should be employed.*

**It may seem at first that the roll off should negatively impact the overall tone, but most recording engineers will agree that the frequencies being affected are at the very low end of the hearing range of most people. The information removed from this area of the spectrum only increases intelligibility and will allow the track to 'sit' better in the overall mix.*



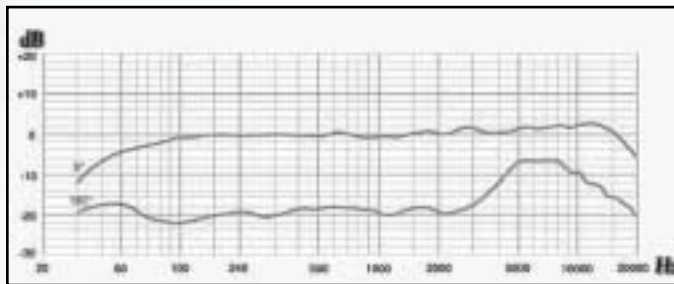
 **APEX**



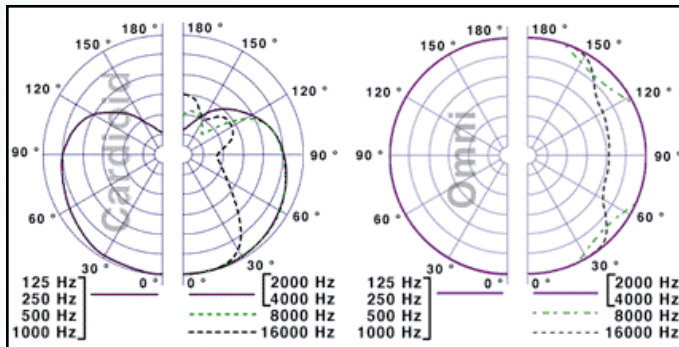
Specifications:

TYPE:	Condenser Pressure Gradient Microphone
CAPSULE:	1" Diameter, Low Micron, Gold Sputtered Gradient Design
ELECTRONICS:	Low Noise Discrete FET
OUTPUT TYPE:	Transformer Coupled, Balanced XLR, Pin 2 Hot
OUTPUT IMPEDANCE:	<200 ohms
FREQUENCY RANGE:	20 Hz to 20K Hz
POLARITY PATTERNS:	Cardioid (Apex 430) / switchable cardioid or omnidirectional (Apex 420)
SENSITIVITY:	15mV/pA 9-36.5dB = 1V/pA
EQUIVALENT NOISE LEVEL:	(a-weighted in accordance with iec 286-4) <17db
S/N RATIO:	73 db
MAXIMUM SPL FOR THD< 0.5% (1K HZ):	130 db
SWITCHABLE LOW FREQUENCY CUTOFF POINT:	-6 dB @ 100 Hz (Apex 420)
CONSTRUCTION:	Heavy Duty Aircraft Grade Machined Brass with a Durable, Scratch Resistant Anodized Finish
WEIGHT:	470 Grams
DIMENSIONS:	50 x 190 mm
OPERATING VOLTAGE:	48 V Phantom Power

Frequency Response:



Polar Patterns:



Omnidirectional pattern for Apex 420 only

Included Accessories:

- Durable travel case (Apex 420 only)
- Acoustically transparent foam Windsock (Apex 420 only)
- Cats cradle type shock mount included with all 400 series microphones

Warranty:

Coverage by the APEX one year limited warranty is transferable and it is not necessary to register your name. If, for any reason, any APEX product should fail within one year of the original purchase date due to a manufacturing defect, simply return the defective unit to your APEX dealer with original proof of purchase and it will be repaired or replaced free of charge. Freight charges and damages caused as a result of major accidents or natural disasters (such as fire, automobile wrecks, tornadoes, etc.) are excluded from this warranty.

This warranty is valid only in Canada or the United States of America.

Specifications subject to change without notice.