



Owner's Manual

Apex555 Zero-latency USB Condenser Microphone w/ Headphone Output

Overview:

The Apex555 delivers the performance and tone of a professional studio quality side address FET microphone with the convenience and simplicity of direct to digital USB 2.0 connection to any computer or laptop.

The Apex555 offers the added convenience of an internal 16bit / 192kHz digital conversion direct to the USB2.0 output, making it the ideal USB microphone for true music applications (vocals, instrumentation). As a USB 2.0 audio device, the Apex555 operates on both Windows and Mac platforms.

Apex555 is unique because in addition to being an audio to digital input device, the microphone also has an integrated D/A converter that makes the microphone in effect its own audio interface. The D/A converter provides computer playback to the 1/8th-inch headphone output jack with volume and mix controls integrated into the microphone chassis. The volume control sets the overall listening level in the headphones, while the mix control allows the user to blend the computer audio (playback mix) and source (microphone input) to the headphones mix, offering a zero-latency recording solution.

Features:

- Studio Quality 32mm Gold Sputtered Cardioid Capsule
- USB 2.0 / 16Bit / 192 kHz Output
- Integrated Stereo Headphone Output w/ Level and Mix Controls
- Microphone Input Gain Control
- Rugged Zinc/Aluminum Chassis & Stainless Steel Wire Mesh Windscreen
- Hard-tail Microphone Standmount and USB Cable Included
- Compatible with Windows and Mac Operating Systems
- Desktop Tripod Microphone Stand Included

Installation and Operation

Installing the Apex555 is a simple procedure. Since it is fully USB compliant, you can use either a Mac running OS-X or any PC running WindowsXP or later. Simply connect the microphone to a standard USB port using the included USB cable and plug and play. You will be able to control your Apex555 using the standard audio interface controls in the Mac OS-X or Windows operating system.

Since it is possible to adjust the level of the signal from the operating system preferences, and in your recording software, it's a good idea to be familiar with these controls in the Mac or Windows operating system. Therefore, we recommend that you follow the enclosed instructions for either Windows XP or Mac OS-X before installing the Apex555 software driver.

Any 1/8th-inch TRS headphone or earbud can be connected to the headphone output. It is advised to set the playback level to zero when connecting the microphone to any USB input when headphones are connected.

Setting up the Apex555 in Mac OS-X

- Plug in microphone. The LED will light to indicate it is receiving USB power. The Mac will recognize the USB audio device and automatically install a universal driver.
- To select the Apex555 as the computers audio input, open the System Preferences from the dock or the main Apple Menu
- Next open the Sound preference
- Now, click in the Input tab and Output Tab to select Apex555

Setting up the Apex555 in Windows XP (with Service Pack 2 - other versions may vary slightly.)

- Plug in microphone. The LED will light to indicate it is receiving USB power. WindowsXP will recognize the USB audio device and automatically install the universal drivers
- The Apex555 is now recognized as a Windows audio device under the name USBMIC. To set it as the default device and change computer-controlled gain, access control panel.
- Access Sounds and Audio Devices through Control Panel.
- Select Apex555 as Sound recording device in the Audio tab window. You may also have to select the microphone in most pro audio programs where multiple devices must be set within the program.
- To set the microphone Gain, click the Volume button. The Wave In window sets the computer controlled gain, pan and microphone mute.
- Select Apex555 as the Output Device in the Audio Tab Window and set level.

Powering the Apex555

The Apex555 is a condenser microphone, and like all condenser microphones, it has internal electronics that require an active power supply. Traditional studio condensers are almost always powered by a Phantom Power supply, from a mixing console or external pre-amp. The Apex555 receives its power from the USB bus. Simply connect the microphone to the computer's USB port and the microphone is ready to operate. The Apex555 features a power LED, which will illuminate when USB power is present.

Microphone Placement

A cardioid polar pattern like that used in the Apex555 is generally the standard for most applications. A cardioid pattern will deliver best results on most vocal recordings and on a wide range of solo instruments. It offers full frequency response on the front of the microphone and the advantage of proximity effect (*increased low frequency response when microphone is placed close to sound source**). A cardioid pattern also provides excellent noise rejection from the sides and back, or 180-degree position of the microphone, minimizing feedback and interference from other audio sources.

**Vocalists can use the proximity effect to their advantage, adding fullness and more 'bottom end' to the voice as they move closer to the microphone. Experienced vocalists can easily incorporate it as part of their overall microphone technique. Experimentation with mic placement during the recording process is the key.*

Specifications

Type:	USB Condenser Microphone
Capsule:	32mm Gold Sputtered Diaphragm
Polar Pattern:	Cardioid
Frequency Response:	20 – 20,000Hz
Maximum SPL:	130dB (1 kHz < 1% THD)
Sensitivity:	-35dB +/- 2dB (0 dB=1v/pa@1kHz)
Equivalent Noise:	<20dB (A-Weighted)
Signal to Noise Ratio:	86dB
Sample Rate:	192kHz (16bit AD/DA Converter)
Other Features:	Integrated -10dB pad switch, Input gain, Output Volume and Monitor Source Mix Controls, LED Power Indicator, USB 2.0 Windows and Mac Compatible

