

# *Microphone Techniques*

by Tim Marriner

## **What are your needs?**

There are many different types of microphones on the market these days to enhance vocal performance; hand held, lapel, and headset types to name a few. Each has benefits and draw backs. A wireless microphone system is very useful for teaching and demonstrating. A regular hand held microphone can add timber and clarity to the delivery. A wireless system can pick up interference and is subject to an occasional drop out. A hand held unit has limited mobility due to the connecting cable. One fact remains, if the dancers can not hear the commands they can not execute the routine to your delivery. For some the answer is to have the best of both worlds; a wireless system and a hand held cable microphone. If one of your goals is to have the opportunity for repeated business then at the very least, it is essential to own a personal hand held unit best suited for a clear commanding delivery.

## **Which one to buy?**

Much like automobiles there are many different manufacturers of microphones with similar styles and quality. Some offer more features than others. It can be difficult to choose. The best way to determine which microphone suits you is to test as many as possible before making a purchase. There are microphones designed for wind instruments, horns, guitars, and vocals; male or female. Some enhance high and low frequencies or filter both. Boosting the bass or treble response might be necessary for vocals that lack richness or clarity. If you can not hear the subtle differences seek advice from someone that can.

A sturdy quality microphone can range between \$90 to \$250, not including the cable which can run around \$100 depending on the length and added features. Low impedance, high impedance, transformers, cable shielding, music reset, volume control, and ability to connect with multiple amplifier types are more issues to consider. If your music source is from a laptop computer there are cable options to connect directly into the USB port. Determining needs and obtaining the right product for the job isn't as easy as it sounds. Seek assistance from someone doing what you wish to do.

Better high end microphones are usually low impedance with a cable transformer adapting to a quarter inch jack that plugs into the amplifier. Electro Voice series 257-967 are the most common hand held microphones utilized in our industry. There are other brands and models with similar features being used but the EV seems to be the standard to beat.

### **How does it work?**

When we speak air passes through our vocal folds that vibrate and create noise. Our mouth, tongue, teeth, and lips mold the noise creating sounds that have meaning to us. Under the protective shield of most microphone heads is a small diaphragm that picks up the vibrations and electronically transfers that energy through the cable into the amplifier for us to hear. The diaphragm is very sensitive and can break if dropped or mishandled. This is why one should never blow into a microphone to test if it is on. For best performance a microphone should be placed two fingers length away from the lips pointing directly into the mouth. Vocal quality changes if a microphone is moved closer or directed anywhere else.

### **What about maintenance?**

With much invested in such an item proper care is necessary in order to maintain longevity. One by-product of speaking or singing is spittle that occasionally can leave our vocal cavity. It can cling to the shield of the microphone. This moisture can corrode working parts inside the microphone and should be removed. Occasionally the microphone shield comes in direct contact with the lips resulting in a transfer of skin or in some cases lip gloss or lip stick. If this is not removed the sound will be impeded. It is best have a microphone that has a removable shield in order to remove the build up.

Visiting callers, cuers, club officers, and guest sometimes want to use your microphone. Ask yourself this question, would you share your toothbrush with them? That's just about what you are doing. Treat your microphone as you would any other personal hygiene product. Have another microphone head that you can swap out for these situations. Any reputable caller or cuer should have their own microphone if asked to do a guest spot.

To clean the shield, remove it and scrub it inside and out with a toothbrush in soapy water then allow it to thoroughly dry. You can also spray it with a disinfectant especially after getting over a cold. Yes, germs will grow on

the shields. This is just another reason not to share or use a house microphone.

### **Is this all I need?**

One still must articulate to be understood with a proper balance between the volume of music and voice. Busy music with lots of instrumentation or vocal backgrounds can hinder a dancer's ability to decipher the commands. It is great to have someone you trust assist with this needed balance from the floor. What you hear with your ears and the surrounding staging area can be different from what is being heard on the dance floor.

The best microphone will not magically transform you into the most sought after public speaker. Developing into a dynamic speaker and entertainer is an art that can be acquired. Study those that you feel are very effective at using a microphone. Learn their attributes. Before long you too could be guiding a floor of dancers with great confidence behind a good quality microphone.

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