



Why Ribbon Mics?

Since the digital age fell upon the recording industry, and with the demise of analog tape as the major multitrack recording medium, engineers (young and old) have been searching for ways to make digital recordings sound more analog. It's the old adage of not knowing what you had until it's gone...

There are countless new gadgets on the market today that emulate a tape "sound", with varying degrees of success. The description of this sought after sound is often passionately (but unanimously) described using terms like "warm", "smooth", "soft-compressed" and "fat" – we've heard all of them. Although analog tape *does* have many of these qualities, there are other secret weapons that engineers have been using for years that have been responsible for helping create the quality sounds that we hear on classic albums. Maybe tape wasn't the only "tool" that's been overlooked or replaced in the modernization of recording technology.

Enter the ribbon mic. Ribbons are unique creatures – dynamic by definition, but ultimately more detailed than many dynamic mics and to many engineers the antidote to the condenser mic's glassy brittleness. All ribbon mics are characterised by a very detailed midrange, so they find obvious use on vocals, guitars and solo instruments. As a percussion mic, ribbons can produce extraordinary results due to their natural "soft-compression". The Ribbon element is not as fast-moving as a condenser diaphragm, which is why some associate ribbons with a soft high frequency response. Because of this, the transients of drum and percussion instruments are softened, and the overall "volume" can be more easily captured by digital recorders without overshooting the converter's brick wall 0db limit. The result is fatter, more detailed percussion.

The softening high frequency response of most ribbons may seem a little less instantly "ear-grabbing" than condensers, but the detail of midrange frequencies shifts the focus towards the *tone* of the source, and away from cosmetic "sheen". Add to that the smoothness of the high frequency response, and (with a good EQ) a ribbon can sound as bright as a condenser, but with a much less peaky HF – great for drum overheads and vocals.

Overall, ribbon mics can be heard on many of the great studio albums, and with some more contemporary models becoming available, are finding even greater use in modern productions and even live sound. The alternative to condenser-dominated digital music? Definitely a great tool for capturing sound - honestly.

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