A new high in Digital-S video tape performance

ATOMM Technology Ensures Outstanding Image Quality and Durability

Fujifilm D421 videocassettes use proprietary ATOMM technology to take Digital-S video performance a step into the future. By simultaneously coating an ultra-thin magnetic upper layer and a non-magnetic bottom layer, ATOMM technology makes it possible to achieve the high recording densities needed for Digital-S 4:2:2 digital component recording. It also provides the high reliability and durability that only metal-coated media can offer.

Superior C/N Ratio and Error Rate Characteristics

To ensure high output, D421 tape features magnetic particles that are 20% smaller than those used on our H471S (S-VHS) tapes. The new ultra-fine particles have a Br value of 310 mT and an Hc value of 147.2 kA/m, and are evenly dispersed through the magnetic layer. The small size, superior performance characteristics and even dispersion of the particles – coupled with the ultra-thin structure of the magnetic layer – ensure a magnetic energy level that is four times higher than on our H471S tapes. As a result, D421 tapes boast superior C/N characteristics and a low error rate at all frequency levels.

Improved Transport Stability and Durability

New binder, backcoating and lubricant materials assure superior transport stability and durability. The polymer binder has excellent adhesion characteristics to reduce the flaking and chipping that can occur during extended still and high-speed shuttle operations, and the backcoating material has a low friction coefficient for stable tape transport in all operating modes and environmental conditions. Lubricant is contained in both layers of the tape, ensuring that a constant level is maintained in the magnetic layer at all times.

Improved Long-Term Storage Stability

To protect valuable recordings during long-term storage, the ultra-fine metal magnetic particles in the magnetic layer are coated with an anti-oxidant. This prevents corrosion and oxidation, and ensures that magnetic performance characteristics and image quality remain high. In addition, carbon has been added to the lower layer to prevent static electricity build-up from attracting dropout-causing dust. Our deformation-resistant base material further extends storage life by preventing the tape deformation which can result in track misalignment.

High-Rigidity, Precision-Built Cassettes

D421 videocassettes are constructed of high-rigidity, precision-built cassette halves, and feature anti-static cassette lids that help shut out dropout-causing dust and dirt.

*ATOMM is an acronym for Advanced Super Thin Layer & High Output Metal Media.