



Frequently Asked Questions

What is Essence of Music?

Essence of Music two-step CD cleaner and treatment is an essential product for preparing your CD and Blu-ray discs for upload and playback. Ripping following Essence of Music application reveals and permanently captures visceral details, spatial cues, and ambient intimacies of a live event to your media server - delicacies always present, but obscured within your disc, prior to Essence of Music application.

How does Essence of Music improve the performance of a media disc?

The audio and video performance of a disc relies upon the optical pick-up assembly's ability to read the disc. Our product Essence of Music, improves your players ability to read the disc by penetrating, renewing, and visibly improving the polycarbonate surface. This isn't just advertising hype; testers and customers report significant improvements from using Essence of Music. The improvements are from the disc becoming more transparent and a reduction in *birefringence* (double refraction) the cause of birefringence induced jitter and other distortions. (See more information on birefringence below.)

The splendor experienced by Essence of Music users is due in part by using nano-coating technology. Nano coatings are applied to the world's finest optical instruments including the Hubble telescope. Essences of Music's two liquid formulae synergistically form a self-assembling monolayer (SAM) - to create an ultra smooth disc surface (http://en.wikipedia.org/wiki/Self-assembled_monolayer). The protective nano-film improves optical transparency and resists static build-up.

What is Birefringence and why is it a potential source of musical degradation?

Birefringence (double refraction) occurs when the light transmitted through a medium takes two separate paths. In media discs it is caused by residual stresses induced during the disc's manufacturing process (i.e. transient cooling stresses; transient thermal stresses).

In Japan, producers of SHM-CD, HQCD, Blue Spec CD, and others, have improved disc manufacturing techniques by utilizing a higher quality polycarbonate plastic to reduce birefringence. Essence of Music brings much of the improvement of these expensive newer production discs to your existing CD, DVD, and Blu-ray library.

(Birefringence Links: <http://www.youtube.com/watch?v=-6U4uembaNQ>; <http://www.positive-feedback.com/Issue39/shmcd.htm>)

Don't take our word for it!

The following articles in Absolute Sound and Stereophile respectively, found the same results.

CD: The \$2000 CD made From Glass, by Robert Harley • *Absolute Sound*: April 6, 2009
<http://www.theabsolutesound.com/articles/the-2000-cd-made-from-glass-1/>

"...it's worth noting that polycarbonate can introduce optical distortions that affect the playback laser beam. Specifically, polycarbonate can cause a phenomenon called "birefringence"—a double refraction of the playback beam introduced by variations in the refractive index of the material through which the beam is passing."

CD: Jitter, Errors & Magic, by Robert Harley • *Stereophile*: May 1, 1990
<http://www.stereophile.com/content/cd-jitter-errors-magic-page-4>

"CDs exhibit greater variations in jitter than that between a cheap transport and a state-of-the-art transport, the inexorable conclusion is that CDs made under different conditions have different sonic characteristics."

"Birefringence, which varies in amount between manufacturing runs, should certainly be considered a potential source of musical degradation."

"Although I had wanted to find measurable differences with the tweaks, the experiments at least ruled out data errors and jitter as the cause of audible differences. More significantly, however, the jitter measurements led to the hypothesis that the conditions under which CDs are made have audible effects on playback quality. This idea has profound ramifications, warranting a full investigation to reveal its merit."

Doesn't the error correction circuitry present in all disc players already correct these issues?

Many studies confirm the efficacy of error correction circuitry. We agree. Even so, we surmise that the less the error correction circuitry is called upon to intervene; the truer the playback performance will be to the master recording. Our premise is supported by experienced listeners in both unstructured and single-blind tests, and by scientific measurements (discussed below).

What benefits accrue in using Essence of Music prior to ripping discs to a media server?

Essence of Music is an essential product for preparing your discs for uploading. Ripping following Essence of Music application uncovers and then permanently captures additional detail, spatial cues, and ambient information to your hard drive - information that was always present but latent in your disc prior to Essence of Music application.

Are there any media discs on which Essence of Music is not recommended for use?

Yes, a few. Some early Philips (pre 2004 hybrid dual-layer SACDs only), had a silicone coating utilized in their manufacture. The Hybrid SACDs were produced for several record labels. Philips advises against using any cleaning solution on these early Hybrid SACDs produced by Philips Sonopress - Germany and Philips ODTG - Netherlands. To identify a suspected Hybrid SACD disc, locate the hologram on the laser read side of the disc just outside the spindle hole. To test a disc for compatibility, use a toothpick to apply a tiny dot size amount of EOM **Step 1** liquid to an area of the disc with no data encoded. (for example on the clear hub near the spindle hole) Inspect the area for visible changes. If the surface immediately absorbs the liquid, becomes tacky, textured, or hazes, the disc is not compatible.

Can the effects of Essence of Music be measured?

In a recent independent test, Jim Aud of Purist Audio Design utilized a certified Phillips Professional CD reader with two identical discs. One disc remained untreated (control); the other disc was treated with Essence of Music. The treated disc reduced bit read errors by 33%.

Have any listening tests have been conducted?

During the Purist Audio testing once the test measurements were confirmed, a single blind listening test was conducted with the company's reference audio test system. Two identical copies of 8 different CDs were played randomly. Participants selected the Essence of Music treated disc *every* time. Audible improvements noted were additional detail retrieval and an improved spatial presentation.

Bottom Line

Essence of Music improves your CD, DVD and Blu-ray experience by delivering more accurate information to your player. Uploading/ripping captures the information to your media server. The improvements described have been verified by experienced listeners in both unstructured and single-blind tests, and by scientific measurements. We are confident you will agree with our listeners. For a limited time we offer new purchasers a 30 day in-home evaluation.