

Eclipse Pre-Mastering System

Checks structural make-up of masters regarding:

- Playability
- Proper authoring

Common issues with audio masters:

Unreadable Sector:

This happens when there is significant corruption in the sub-channel ATIME.

CU Detected:

This occurs when an audio sector has an uncorrectable error. It means that at least 24-bytes of information are unreadable. This can result in popping and cracking within the sound of the disc. Slower burning speeds or media changeovers often correct this problem.

Common issues with video (DVD) and CD-ROM masters:

VOBU length and number of sectors disagree:

If the Video Object Unit disagrees with the number of sectors, this error will trigger. This problem is quite serious and the disc will need to be replaced. If this error occurs, it means that the any number of cells might be corrupt in the disc. In this case, a fix might be as simple as re-burning the information onto a new piece of media, or the entire project might need to be completely re-done, depending on where the error occurs.

Audio coding mode incompatible with TV system:

This is where the audio stream is not compatible with NTSC or PAL TV systems. The author might have left the stream open and the Eclipse system is unsure which one is supposed to be utilized. This issue is often triggered because of outdated software being used to create the project. Authoring with current software is always recommended. The Eclipse system will usually look for an AC-3 line when in fact the disc is relegated to a MPEG1 or 2. This issue is something that can easily be corrected with updated authoring software.

Video Manager IFO and BUP files in the same ECC block:

This means that the main files and back up files are located in the same folder. If the main files fail because of a nick or scratch, the entire disc will fail because it has no safety net. For redundancy purposes, the video specs require a backup file for the video manager information file. Then, if the main file becomes corrupt, the DVD player can locate the backup file and utilize it instead.

How to correct the master:

Common fixes:

In most cases, errors can be fixed easily, such as just re-burning the disc using different media, different burn speeds, different burning software, or a different physical burning apparatus entirely.

Rare fixes:

In rare instances, projects will need to be re-started from scratch to create a new master that eliminates any errors.