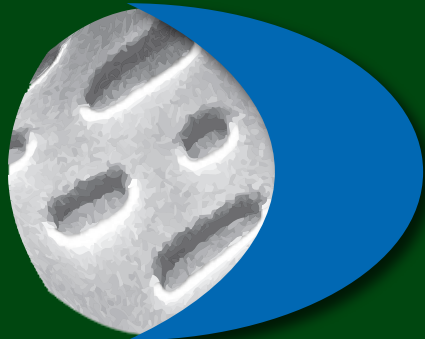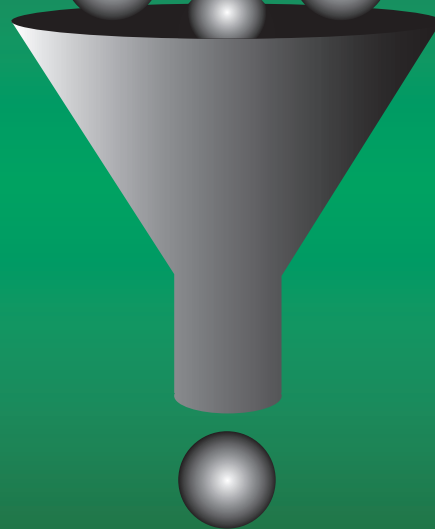# EFM Decoder

DCA
The Innovation Continues!

Complete HCRC Verification

For LBR Bitstreams
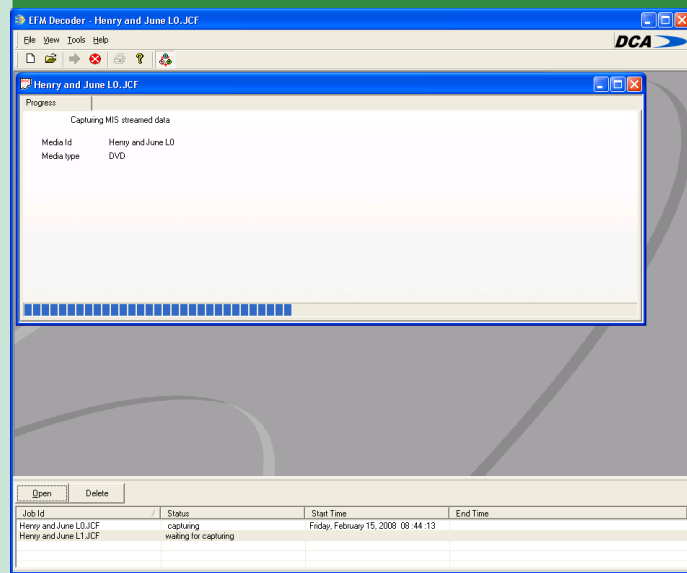
B I T S T R E A M   V E R I F I C A T I O N

EFM Decoder is DCA's complete HCRC verification solution at the LBR, allowing you to check the integrity of image data at the last possible place a bit could change.
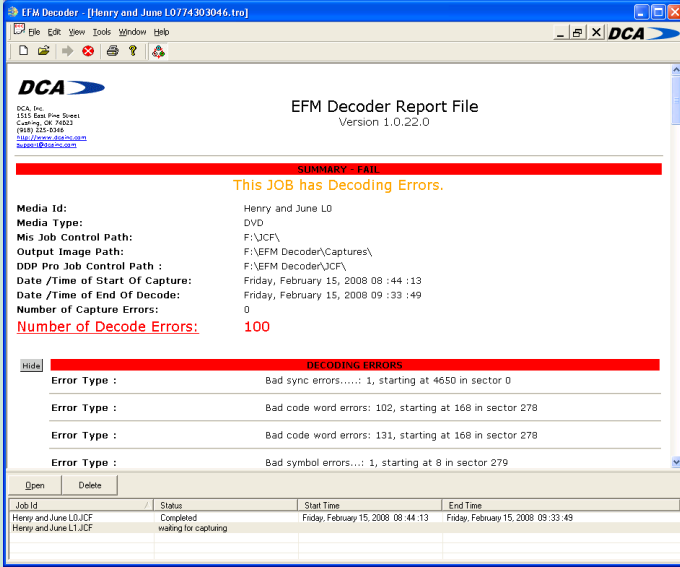
DCA has always been at the forefront of data verification, whether it was the introduction of the industry's first bit-to-bit verification tool for CD (DVS), integrated signal verification (SVS) or complete format analysis and HCRC comparison (Viper). Now, with EFM Decoder, DCA brings the power and flexibility of HCRC to bitstream analysis.

EFM Decoder works in two steps, essentially first capturing the data from the LBR return beam path, and second, decoding and verifying the data against the 'Gold Reference' HCRC source or DDP.

Integration with DCA Mastering

EFM Decoder constantly monitors the DCA mastering application (MIS 8.20+ or Titan) for incoming jobs. Upon seeing a job start, EFM Decoder starts capturing the raw data from the TTL inputs. Upon the mastering job reaching lead-out or middle area, it begins the demodulation and decode process, ensuring that the cut does not need to completely finish before the verification can start.

HCRC Data Verification

Immediately after decoding the user data areas, EFM Decoder starts the HCRC Verification, using the same image or HCRC provided for the input to the DCA mastering application as the reference source. If HCRC errors occur, the mastering operator is notified with a message at the mastering station. A complete report detailing the verification can be printed or sent to metadata upon completion of each job.

Format Ready

Both CD and DVD jobs can be handled without any changes to the EFM Decoder system.

Multiple Jobs

EFM Decoder can capture and decode multiple jobs simultaneously at mastering speeds up to 53 MHz.
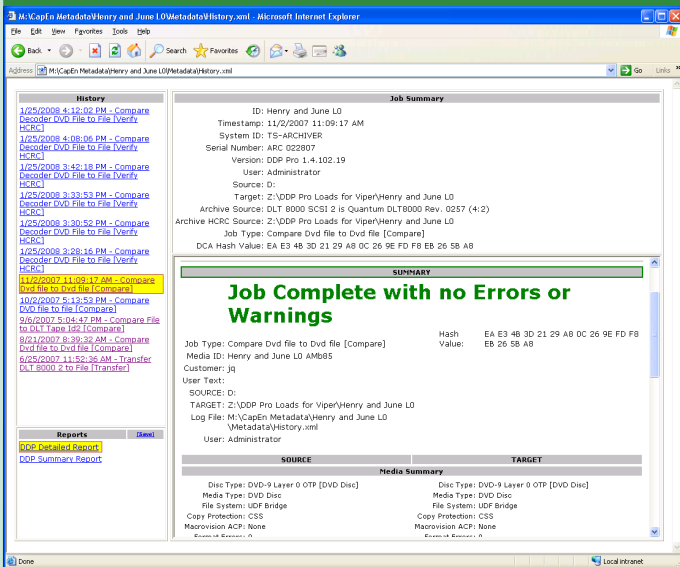
Small Form Factor

Knowing that plants are constantly faced with space constraints, DCA delivers EFM Decoder in a space efficient 2U chassis that fits in most mastering racks. A tower chassis is also available.

Coming With Version 2.0

In 2008, DCA will release version 2 of EFM Decoder which will bring:

- Single stage capture/decode/HCRC comparison
- Near real-time verifications (over 3R DVD)
- Blu-ray format capability

DCA's EFM Decoder provides simple, automated verification for LBR bitstreams or any source with TTL level access to the raw data. EFM Decoder takes care of demodulation, decoding, HCRC comparison and reporting, and will automatically notify you if it finds a problem, all before your stamper is ready.

Also Available for DCA Pre-Mastering:

Viper: - the ideal pre-mastering suite for next generation workflows with complete support to Transfer, Analyze and Verify images relating to Blu-ray, HD DVD, DVD or CD production.

Fully DiscTag Enabled, Viper automates data entry for operators, preventing mistakes and saving your plant time and money.

Viper's new analysis engine detects DDP, Format, Copy Protection, File System and Video errors, and in several cases can AutoFix the problem for you.

Class A Verifiers - Only DCA has file system and video system verifiers available for all next generation formats.

Recognized as the most user friendly and reliable class A verifier tool, DCA's product provides ease of use and simple to interpret results.

File System Verifier runs in less than a minute on most media and supports UDF 2.5 and UDF 2.0 on BD, HD and DVD media.

Video System Verifier supports Blu-ray (HDMV and BD-J) and HD DVD (standard and HDi) formats.

Contact Us
For more information on Viper with DiscTag Integration, contact your DCA Account Manager

Americas & Asia
Eric Carson, Product Mgr
eric@dcainc.com
T:918.225.0346 x1054
F:918.225.1113
www.dcainc.com

Europe & India
Chris Vangramberen
chrisv@dcainc.com
T:+49.6021.45900.0
F:+49.6021.45900.29

Japan
Nozomu Hayatsu
nozomu@dcainc.com
T:+81.3.3402.5631
F:+81.3.3402.5615

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