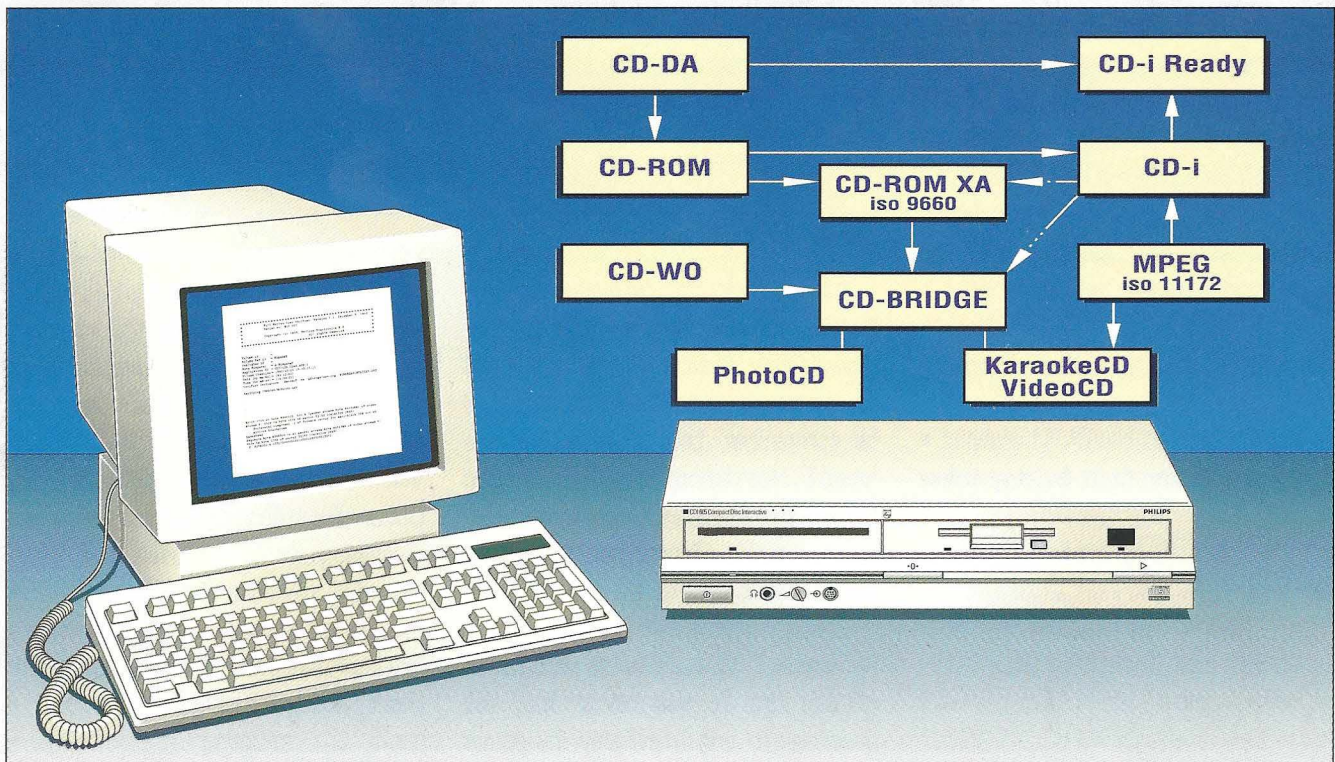




Optical Disc Verifiers



- 22SW1696 FMV disc verifier
- 22SW1697 CD-i disc verifier
- 22SW1698 Video CD disc verifier
- 22SW1699 Photo CD disc verifier
- 22SW1702 MPEG stream verifier

- **Checks that disc layouts and structures comply with all relevant standards**
- **Checks on all sectors for internal consistency**
- **Reports on all detected deviations from standards (errors)**

- **Optional warnings of recommendation violations and inconsistencies (oddities)**
- **Optional progress reports during lengthy tests.**

This set of software tools is specially constructed to simplify the release procedures for optical discs of the Compact Disc Interactive family, by checking the structures and formats (**not the application and its data**) against the relevant specifications.

Whether your activity is authoring tool development or application building, they can save you a lot of time and effort, as well as reducing risk and frustration and, very importantly, minimizing cost.

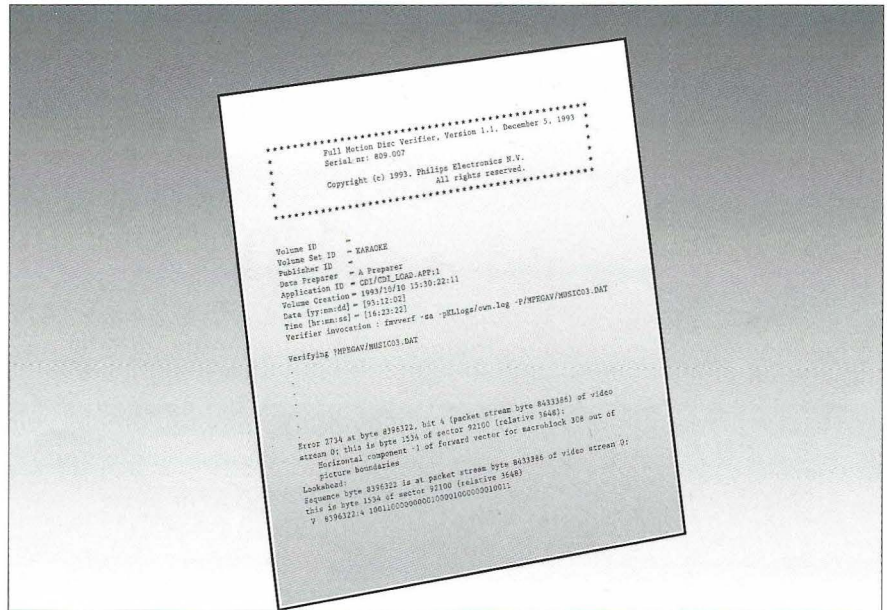
All the disc verifiers run on a CD-i player equipped with a floppy disc drive and using CD-RTOS 1.1 or later (e.g. Philips CDI 605, configured with a terminal (e.g. Philips PG 5060). The MPEG stream verifiers run on the platforms specified.



PHILIPS

Optical Disc Verifiers

What happens when you have built a disc structure or an application, and put it on WORM - and it doesn't work? It could take weeks to find out why. But with the proper disc verifier, you can usually find the answer in minutes or hours, and in any case faster than by any other method.



Sample output FMV disc verifier.

Perhaps your disc runs perfectly on your player. Great. But can you be sure it will run on all players with which it should be compatible, both now and in the future? Not being sure could mean missing deadlines, or losing both money and reputation. Once again, the proper disc verifier is the answer.

Remember that, while verification without the proper tools may be possible, it will inevitably be time-consuming and expensive - and not necessarily reliable.

Philips disc verifiers tell you whether your disc will run in all allowed circumstances. And if not, they tell you why, so that you can quickly put things right.

You may never know how much you have saved. But you'll never need to worry about it.

All Philips Optical Disc Verifiers examine the Format and structure data (but **not the application and its data**) on an interactive-type Compact Disc or hard disc against the relevant standards. The

examination report is sent to standard output and (optionally) to a log file. Error messages are given for each departure from specification.

Optionally, recommendation violation messages can be given for each departure from the recommendations in the specifications, and oddity messages for any inconsistencies found between checks and specifications.

Command line options allow the checks performed and the contents of the reports to be adapted to suit specific situations. Time can be saved, for example, by skipping checks judged to be unnecessary, rather than reading every sector on a disc. Reports can be abbreviated, with no actual information loss, by declaring only the first one, five or ten deviations of the same type.

Two typical examples

1. "Disc does not start".

A large number of errors could cause this condition, and fault-finding could be time-consuming. Within a second, the verifier showed that the

Application Identifier in the Primary Volume Descriptor (Disc Label) did not point to the executable on the disc.

2. "Disc has an error in one picture on one player, but not on another player". This fault could be very difficult to find because of its obscurity. The verifier quickly showed that the picture had a

negative forward vector, putting the MPEG macro block outside the picture boundary.

FMV disc verifier

Checks for compliance with the MPEG1 (ISO11172) standard and the Full Motion Extension of the CD-i Full Functional Specification.

Verifies MPEG, Karaoke and Video-CD discs. Partially verifies CD-i, CD ROM-XA, CD Bridge and CD-WO discs.

- Verifies MPEG streams for a whole disc or specified file;
- Optionally checks compliance with Video CD or Karaoke CD specification;
- Optionally generates dump (disassembly) of an MPEG stream in whole or part.

CD-i disc verifier

Checks for compliance with the CD-i Full Functional Specification, including the Full Motion Extension.

Verifies CD-i, CD-i Ready*, CD-WO and MPEG discs.

Checks:

- Table of Contents (TOC);
- System Area and Disc Label;
- CD-i File System for presence of all mandatory files, absence of prohibited

files, and consistency with TOC;

- MPEG1 sequences;
- All Sectors for general requirements and internal consistency;
- Presence of Post Gap.

Video CD disc verifier

Checks for compliance with the Video CD specification.

Verifies Video CD, Karaoke CD, CD-ROM XA, CD_Bridge, CD-WO and MPEG (ISO11172) discs.

Checks:

- Table of Contents (TOC);
- System Area and Volume descriptor;
- Video CD File System for presence of all mandatory files, absence of prohibited files, and consistency with TOC;
- Structure of special Karaoke CD files;
- Structure of special Video CD files;
- MPEG1 sequences;
- All Sectors for general requirements and internal consistency;
- Presence of Post Gap.

The current version of this verifier supports Video-CD 1.0 and 1.1 versions.

Photo CD disc verifier

Checks for compliance with the Photo CD specification.

Verifies Photo CD, CD Bridge, CD-WO and CD-ROM XA discs.

Checks:

- Table of Contents (TOC);
- System Area and volume descriptors for all sessions;
- Photo CD File System for presence of all mandatory files, absence of prohibited files, and consistency with TOC;

- Structure of special Photo CD files;
- All Sectors for general requirements and internal consistency;
- Presence of Post Gap.

The current version of this verifier is based on preliminary version 0.97 of the Photo CD standard.

MPEG stream verifier (PC/SUN)

The 3 modules of the MPEG stream verifier let your input quality control check all incoming MPEG material for compliance with the MPEG1 (ISO 11172) specification.

- Module EVSVerf checks video sequences;
- Module EASVerf checks audio sequences;
- Module MMSVerf checks interleaved video and audio sequences.

Current versions

22SW1696/02 FMV disc verifier

22SW1697/42 CD-i disc verifier

22SW1698/40 Video CD disc verifier

22SW1699/42 Photo CD disc verifier

22SW1702/00 MPEG stream verifier for PC

22SW1702/06 MPEG stream verifier for SUN

*Against "Application Note CD-i READY DISC", Philips and Sony, October 1991.

The products and services described here are not necessarily available in all countries. Due to continuous product improvements this specification is subject to change without notice. Printed in the Netherlands. 02/94 3122 321 5482

If you have any questions,
remarks please contact:
Philips Consumer Electronics B.V. IMS,
Eindhoven, the Netherlands.
Fax +31-40-735932

Philips Interactive Media Systems
P.O. Box 80002
5600 JB Eindhoven
The Netherlands



PHILIPS