

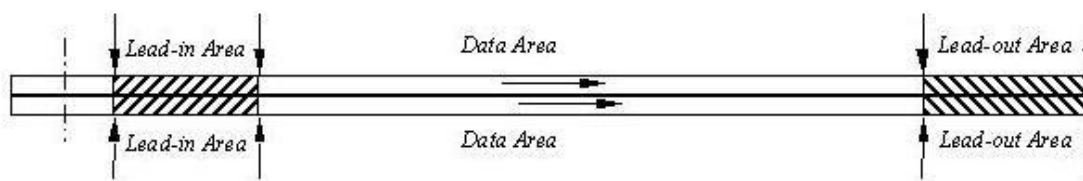
Technical conditions and recommendations for DVD9

DVD9 is a format of a double-layer, one-sided medium with a capacity of 8.5 GB. The arrangement of layers is in two forms from the perspective of recording and subsequent reading, named PTP (parallel track path) and OTP (opposite track path).

PTP

The layers are oriented as with CD format, in which each has its lead-in area, program area and lead-out area. The orientation of the recording and reading is from the middle of the disc to the edge.

Dual Layer disc (PTP)



OTP

The program begins with its lead-in area situated on the first layer at the edge of the disc, continues through the data area and ends in the so-called middle area. The second layer then continues from the middle area through the data area to the lead-out area.

Dual Layer disc (OTP)



Use

Use of PTP or OTP then depends on the nature of the content we wish to place on the data carrier. Each method naturally has its advantages and disadvantages.

PTP is suitable for random accesses within the framework of the entire disc and is suitable rather for applications of the DVD-ROM type.

OTP is basically a method of sequential recording, and thus more suitable for DVD-Video.

Failure to respect these principles results in highlighting of the artefacts which are connected with DVD9, primarily with video recording.

Some films cannot be placed on one layer because of the requirement for space due to their length or due to the maximum use of differentiation capacity given by the data flow, and have to be divided between 2 layers.

This division of picture material may cause a certain jumping or imperceptible halting of the picture. It is not possible to completely remove this, but it is possible to eliminate it to the largest possible degree. If the character so allows, we can try to find such a place, in the area close to the border of the capacity of the layer, where the data flow is the smallest and if possible without sound accompaniment. In the case of the picture it is possible to perform this as a sharp cut, where the scene changes and the uninitiated viewer does not perceive this. However, if the sound background is on a certain level this cut is perceptible.

The above-mentioned property is an integral feature of the format and cannot be completely removed but only eliminated.

Recommendation

- In the case of DVD-Video use DVD9 type OTP
- For DVD-ROM the PTP type is better
- Set the cut of the picture material sensitively both with regard to the capacity and also primarily with regard to the nature of the recording and its data flow on the basis of the above-mentioned matters.