Introduction of Round-Robin Test
The purpose of the Round-Robin Tests is to enhance the recording/playback compatibility of DVD-R/RW related devices and systems in order to maintain their stability and quality the market.
# History of RRT

<table>
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<tr>
<th>Year</th>
<th>Stage</th>
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<td>W1(Writer)</td>
<td>R1(Recorder)</td>
<td>P1(Playback)</td>
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<td>M5</td>
<td>W3</td>
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Organization of JRT - Joint Round-robin Test

RWPPI

RRT

DVD-R/RW

Physical WG
Writer WG
Recorder WG
Playback WG

CWG

DVD-RAM

SWG1
SWG2
SWG3

RDVDC

October 19th, 2004

Introduction of RRT
JRT Joint Meeting

- The world's largest joint compatibility test in the recordable DVD industry confirmed compatibility among 133 products of 52 participating companies.

- These tests were for recordable DVD products, including 4x DVD-R, 2x DVD-RW, and/or 3x DVD-RAM. The test results were reported to their test participating members in a joint meeting on June 16, 2004.
Progress of RRT

Number of RRT Participants

- **Stage 1**
  - Ph. WG Media: 10
  - Ph. WG Writer: 2
  - Writer WG: 15
  - Recorder WG: 2
  - Playback WG: 3
  - RRT Total: 26

- **Stage 2**
  - Ph. WG Media: 15
  - Ph. WG Writer: 5
  - Writer WG: 10
  - Recorder WG: 3
  - Playback WG: 2
  - RRT Total: 35

- **Stage 3**
  - Ph. WG Media: 20
  - Ph. WG Writer: 5
  - Writer WG: 10
  - Recorder WG: 3
  - Playback WG: 2
  - RRT Total: 45

*October 19th, 2004*
Background of Stage 3

- CWG/RDVDC and RRT/RWPPI started Joint Round-Robin Test (JRT) September ‘03
- The JRT allowed most of the worldwide manufacturers of DVD-R/RW devices and systems to work together in Stage 3
- Participants’ worldwide market representation:
  - DVD-R/RW Disc: about 76%
  - DVD-R/RW Writer: about 92%
  - DVD-R/RW Recorder: about 89%
Purpose of Stage 3

- To check and improve the actual compatibility of our products/pre-production products related to 4x speed DVD-R and 2x speed DVD-RW through the test of physical and logical based items
Results of WG Activity

- Physical Format WG – Test M5
  - Histograms of jitter and PI error are regarded as a very useful method of overall quality monitoring.
  - More than 95% of above items regarding both DVD-R and RW has achieved the passing level of physical properties.
  - The results of devices containing pre-production samples were regarded as sufficiently good.
Results of WG Activity

- Logical Format Writer WG – Test W3
  - Most of the major functions – append, border-close, finalize, quick/full-format, and overwrite – were evaluated by four kinds of tests as Test W3.
  - Almost 100% of the test items has reached the successful levels through Test W3-1 and W3-2.
  - Although the number of combinations increased greatly, the results were very excellent compared with previous tests as Test W1 and W2.
Results of WG Activity

- Logical Format Recorder WG – Test R3
  - Most of the major functions of both Video format and VR format – playback, random access, append, overwrite and edit – were evaluated by two kinds tests as Test R3.
  - 100% of test items reached successful levels through Test R3-1 and R3-2, including not only finalized mode, but also intermediate mode among recorders and authoring software.
Results of WG Activity

● Playback Compatibility WG – Test P7
  ● The discs made by Logical Format Recorder WG as Test R3 were offered for Test P7, and evaluated major playback functions such as normal play, random access, playlist playback, etc.
  ● 23 companies, 19 hardware companies, and 4 PC software companies joined Test P7 as evaluators, and approximately 98% of test items reached the successful levels of Test P7.
Summary of Stage 3

- We have finally achieved the very high ratio of successful applicants of each WG through the 9 months-activity of Stage 3 Round Robin Test.
- Some useful evaluation methods and means for common understanding were introduced.
- JRT with CWG/RDVDC was recognized as very beneficial to improving and maintaining compatibility among worldwide DVD-R/RW devices and systems.
Benefits of RRT

- **Manufacturer**
  - Highest and Widest Compatibility
  - Cost Saving for Compatibility Test
  - View own products Objectively
  - Latest Technical Information
  - Communication with other engineers

- **Consumer**
  - Increasing Consumer Confidence
Thank you!

RWPPI Round-Robin Test