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VICTOR COMPANY OF JAPAN, LIMITED  
12, 3-CHOME, MORIYA-CHO, KANAGAWA-KU,  
YOKOHAMA, KANAGAWA 221-8528, JAPAN  
TELEPHONE : +81-(0)45-450-2951, 2952  
TELEFAX : +81-(0)45-450-2959  
URL: http://www.jvc.co.jp/english/

For the Japanese Market Only:

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Victor Company of Japan, Limited

*World's First<sup>※</sup> single-sided dual layer DVD-RW disc capable of large storage (8.5GB) and continuous rewriting*

**JVC Releases VD-W85A single-sided Dual Layer (DL) DVD-RW Disc for Data**

*“Inverse stack” fabrication process ensures superior quality and stable recording layers*

Victor Company of Japan, the first company in the world to develop a single-sided Dual Layer rewritable DVD disc, today announced the release of single-sided Dual Layer DVD-RW disc for data capable of storing large amounts of data through continuous rewriting.

The new products have a single sided recording capacity of 8.5GB, which is similar to the single-sided Dual Layer DVD-R discs and 1.8 times recording capacity of conventional single-sided DVDs. In addition to the space saving advantages provided by the new DVD-RWs, superior operability is attained through deletion and rewriting of data. The new DVD-RW discs are both economical and environmentally friendly as they can be reused repeatedly.

Product name	Model name	Popular name	Description	Label surface	Supported recording speeds	Storage capacity	MSRP	Release date
Single-sided Dual Layer DVD-RW disc for data	VD-W85A	RWDL	Single disc pack	Silver	2x-speed	8.5GB (single-sided Dual Layer)	Open	Late August in 2007

\* Can be recorded or played on devices supporting “DVD-RW for DL Ver.2.0”.

※ For a rewritable DVD disc, as of July 3, 2007. Result of JVC survey.

**Major Features**

**1. JVC’s own “Inverse stack” fabrication process ensures superior quality and stable rewriting single-sided dual recording layer**

JVC’s own “Inverse stack” (opposing layer bonding) fabrication process ensures superior quality and stable rewriting performance from the Dual Layer. Based on world-leading related technologies developed by JVC such as the data recording area U groove formation technology, precise bonding technology for the “Double-sided rewritable DVD-RW disc”, and commercialization of the “high-speed rewritable DVD-RW discs”, JVC has further answered consumer demand by employing superior level high precision stamper fabrication, formation of recording layers and layer bonding processing in developing this product.

**2. Complies with “DVD-RW for DL” system 2x-speed continuous rewriting**

Based on the “DVD-RW for DL Ver.2.0” standard. Through the use of the newly developed high precision phase change recording layer, optimization of the laminated structure and composition, and high precision stamper technology, the high quality of recorded data playback and reliability are ensured for the single-sided Dual Layer DVD-RW discs, designed for use in the more rigorous conditions required for Dual Layer data

recording. 2x-speed continuous rewriting of large amounts of data ensures the ideal level of operability of the discs.

\*A device that supports “DVD-RW for DL” is required to record, rewrite and delete data from this product.

\*A device that supports “DVD-RW for DL” is required to playback contents recorded onto this product.

### 3. 1.8 times capacity of conventional (single-sided single layer) discs suitable for continuously saving large amounts of data

Compared to conventional single-sided single layer DVD-RW discs, this JVC disc has a storage capacity of 8.5GB, approximately 1.8 times storage space of conventional single-sided single layer DVD-RW discs. This enables the continuous storage of data onto one side of a DVD disc, far more than was previously possible on conventional DVD discs, thus enabling space saving. And as the product can be used for a wide range of purposes and is reusable, it is economical and friendly to the environment.

\*Can be rewritten approximately 1000 times with normal handling (use/storage).

### 4. HG Series – “100 fold guard against scratches” excellent for repeated rewriting or long term data storage

Proprietary high performance hard coat treatment means that discs are protected against scratches, dust, and dirt that interfere with disc reading or writing, making the discs perfect for long term storage of important data.

- 1) 100 fold increased protection against scratches when compared to a DVD not treated with Hard Coat (measured using internal testing standards).
- 2) Superior effectiveness of electrification prevention, preventing static build up and dust particle build up.
- 3) Optimized surface lubricity prevents oily dirt marks such as fingerprints, and makes it easier to clean the discs.

### 5. Produced in Japan for superior quality and high reliability



VD-W85A single-sided Dual Layer (DL) DVD-RW Disc for Data

## Development Concepts

At present, the demand for recordable DVD discs is steadily increasing, with world forecasted demand in 2007 to increase by 21% from the previous year to 5,727 million for write-once DVD discs, and an increase of 21% to 495 million rewritable DVD discs, with the prediction that total demand for recordable DVDs in general will exceed the demand for recordable CDs in 2008. (Based on data released by the Japan Recording-Media Industries Association in November 2006.)

Recently, due to the increasing popularity of camcorders that can record in digital High-definition and digital cameras photographing in over 10 million megapixels, the amount of data used by individuals is growing in accordance. Furthermore, with the progression towards electronic documentation from government offices to general businesses has meant that the size of electronic files being used has greatly increased. Due to these changes, the need for recordable DVD discs that can continually record up to 8.5GB large amounts of data by using double layers on one side of the disc (single-sided Dual Layer DVD-R etc) has also greatly increased. (Comparisons of the corresponding month-of-last-year domestic sales from June 2006 to May 2007 reveal a continuous 150% increase in demand. Based on GfK Marketing Services Japan Ltd. survey.)

However, DVD-R discs can only be recorded once, and cannot be rewritten. It can therefore be forecast that the realization of a rewritable disc would provide a reusable high capacity storage disc with further increased convenience and economy.

Responding to these needs, JVC has developed and released the "VD-W85A", the world's first single-sided Dual Layer DVD-RW disc capable of recording and rewriting large amounts of data. Formal standards for the basic specifications of the "DVD-RW for DL" method were decided by the DVD forum at the end of 2006, and rewriting and playback can be performed using a combination of a compatible drive and disc. It is predicted that these standards will be adopted as the standard specifications for recordable DVD drives in the future, and that use of the technology will expand globally.

### <Major Specifications>

Model name	VD-W85A
Product name	Single-sided Dual Layer DVD-RW disc for Data (Complies with "DVD-RW for DL Version 2.0" standard)
Product description	Single disc pack (silver label)
Recording capacity	8.5GB(Single-sided dual layer recording)
Diameter	120mm
Hole diameter	15mm
Thickness	1.2mm(0.6 mm x 2)
Substrate material	Polycarbonate
Recording material	Phase change recording material
Format	Single-sided dual layer recording format, phase change rewriting format (can be repeatedly rewritten)
Supported recording speed	2x-speed (Recording speed : 22.16Mbps)
Usage environment	5°C ~ 60°C / 3% ~ 85%(R.H.) (When operating) ※No condensation
Manufacturing site	Japan

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For further information, please contact:  
 Toshiya Ogata, Senior Staff Manager, or  
 Akiko Sakakibara, Manager  
 Public Relations Office  
 Corporate Communications Department  
 Victor Company of Japan, Limited (JVC)  
 Tel: +81-(0)45-450-2951, 2952  
 Fax: +81-(0)45-450-2959  
 E-mail: ogata-toshiya@jvc-victor.jp  
 sakakibara-akiko@jvc-victor.jp  
 URL: <http://www.jvc.co.jp/english>

## Technical Reference

### Fabrication Technology Used for Single-Sided DVD-RW Dual Layer (DL) Disc

#### 1. New “Inverse stack” fabrication process for high reliability and stability

JVC drew upon its proven technology in manufacturing recordable DVD blank media to develop the JVC Intelligent Disc Producing System–Dual Layer (JIPSDL) fabrication process\*. At the heart of this process is JVC’s own “Inverse stack” fabrication process. The result is a disc that offers superior quality and high reliability with excellent stability for production.

##### A. High reliability from precision recording layer forming technology

JVC uses recording layer forming technology of the highest industry standards to achieve multiple recording layers each formed to an optimal material distribution and thickness. JVC’s new “Inverse stack” fabrication process prevents jitter that can degrade video quality, ensuring low error and high reliability. (For more details, read about PCDL and JM-form technology below.)

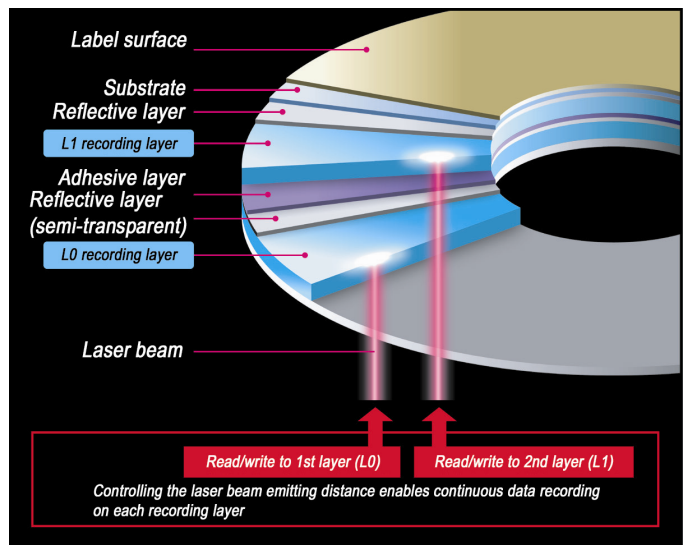
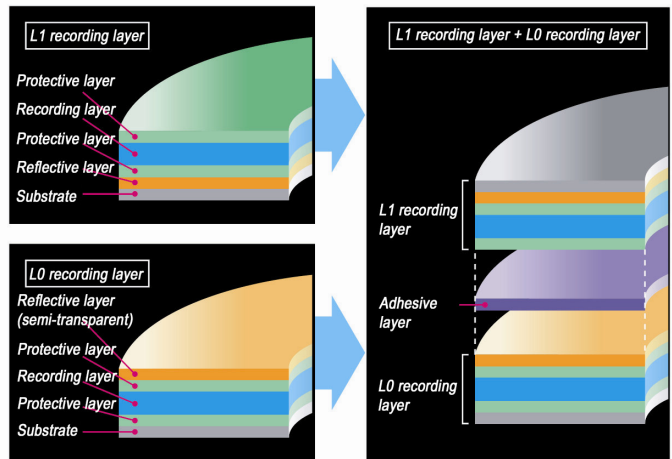
##### B. Precision warp prevention technology for high reliability and excellent compatibility

Warping after lamination is minimized through the use of JVC’s own precision disc laminating technology, which is combined with temperature control technology used in the recording layer forming process. The manufacturing process ensures rotational stability and minimal deflection at high rotational speeds for superior playback compatibility on most DVD players.

##### C. Precision stamper technology and forming technology for stable rewriting and playback characteristics

JVC’s own precision cutting technology and disc forming technology is used to form a narrow 0.74 micron track pitch that is evenly optimized throughout the entire disc recording surface. Stable recording and playback characteristics are achieved by boosting the precision forming of the disc recording layer as well as the track width and depth. (For more details, read about M2 Stamper technology below.)

\* JVC Intelligent Disc Producing System–Dual Layer (JIPSDL) is a proprietary disc fabrication process optimized for high-speed dual layer recording. It is based on JVC’s proven JIPS disc fabrication process.

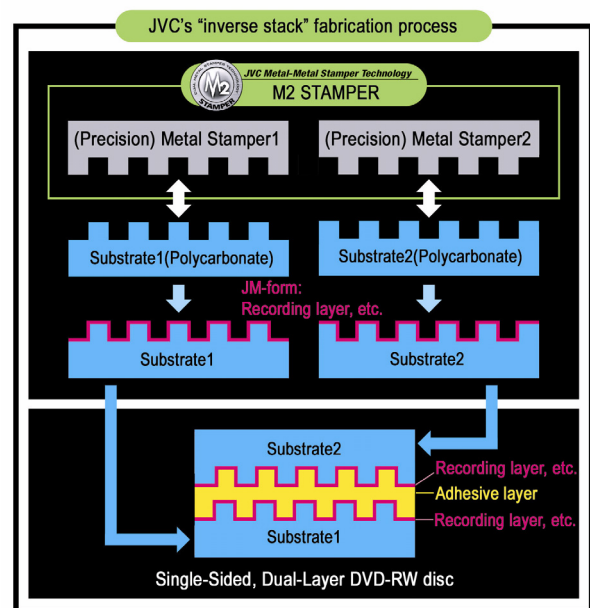


## 2. JVC's own high efficiency recording media "PCDL" and recording layer fabrication technology "JM-form" enable dual layer rewriting

JVC has developed a new highly efficient phase-change recording media "PCDL (Phase Change for Dual Layer)" that features high sensitivity and high durability. Both recording layers achieve stable phase change recording and preservation properties.

JVC has developed new recording layer fabrication technology "JM-form for PCDL" that is perfect for dual layer rewritable recording. Through this technology, JVC has achieved a uniform recording layer formation that has very low characteristic dispersion over the entire recording surfaces of both layers.

Through the combination of the highly efficient recording media "PCDL" and recording layer fabrication technology "JM-form for PCDL", coupled with optimization of construction and composition of the recording layer perimeter, JVC has demonstrated excellent jitter characteristics (fluctuation of signal time axis) even at 2x-speed dual-layer rewriting, and has enabled stable rewriting and playback characteristics across the whole disc surface thereby achieving a low error rate.



## 3. Use of metal mastering "M2 Stamper" exclusively for dual layer recording DVDs

By harnessing the achievements of JVC's mastering technology, JVC has developed the unique "M2 : Metal & Metal Stamper (precise die mastering for fabricating recording grooves)" exclusively for use with dual layer recordable DVD discs. High-precision optimization of the width, depth, and configuration of the grooves on the recording faces enable stable recording and playback characteristics even at high speeds.

### A. Realization of stable jitter characteristics and high precision recording playback

In order to write and read the overlapping layers in a dual layer recording disc, it is necessary to form a higher precision recording mark when recording. JVC has created a high precision data recording area "U-Fine Groove" for the recording data. Through this technology, the perfect size and shape of recording mark is formed, resulting in excellent jitter characteristics.

### B. Optimization of the recording layer configuration for excellent recording playback

Important elements that influence recording disc performance include recording characteristics, as well as tracking, focus, and other servo controls. JVC has optimized the groove width, depth, and configuration that are connected with servo control for dual layer recording, achieving stable traversing and address reading even for high speed dual layer recording.

### C. Stable recording and playback across the full surface of both recording layers

JVC's own "M2 Stamper" maintains a stable substrate configuration even during mass production, making it possible to maintain high precision on the recording surface. This technology enables homogeneity throughout the total recording surface of the disc, enabling recording and playback with very few errors.

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