### **Business Segment Overview**

### Consumer Electronics

The consumer electronics segment derives the majority of its earnings from the development, manufacture and sale of audio and visual products. Products in this segment account for about 70% of total sales. Overseas markets account for more than 80% of segment sales, reflecting the popularity of JVC products outside Japan. Consumer electronics performed well in fiscal 2003, achieving an operating margin of 3.7% and making a significant contribution to JVC's return to profitability.

#### JVC's Primary Growth Driver

JVC has prioritized developing products that incorporate higher levels of added value for some time. The benefits of this strategy began to show through in fiscal 2003. Large sales increases were recorded by relatively new products such as high definition TVs and plasma display panel (PDP) TVs. At the same time, well established products such as digital video cameras, car AV equipment and other audio products, all of which have high profit margins, turned in a strong performance. This led to operating income in this segment of ¥25.3 billion. As part of a global program to realign manufacturing bases over a number of years, we positioned the Yokosuka Plant in Japan as the nucleus of all consumer electronics production, what we at JVC call the "mother base" of manufacturing. Its primary mission is making "Only One" products-items unique to JVC. As we enact more structural reforms, we will continue introducing strategic products that take JVC to the next phase of growth.

### **Competing Against Time in Multiple** Geographies

An October 2002 reorganization gave the consumer electronics segment an operating structure based on product category, with eight separate management units for each product category. Our previous system had centered on two business units, each responsible for a number of audio or video product categories. This new system means we can conduct all development, manufacturing and sales for each product within each of these new units, allowing us to respond to shifts in market trends much more rapidly and save time in product development. Another advantage is managing operating results in smaller units. As a semiautonomous profit center, each of the eight units has its own management and operating targets. To save costs, we have also centralized the units' common administrative functions. This gives JVC's consumer electronics segment the optimal structure for allocating resources and executing strategies. We are now using this structure to build a more powerful product portfolio, based on the objective of developing products that rank among the top three in their respective categories in all five of JVC's major markets: Japan, the US, Europe, Asia and China.

### **A Commanding Market Presence** Through "Only One" Products

Two elements are essential for creating "Only One" products that stand out in the market. First are core technologies. Second are supplier partners that recognize the value embodied in these products. JVC will actively disclose its future product line and technology strategies to form closer ties with numerous partners in a dispersed, specialized supply chain. As part of creating "Only One" products, we also revised our previous strategy of offering a full model selection in each category. Our new approach focuses resources on carefully chosen products.

Today, camcorders, displays and DVD decks make up JVC's core product categories. Clear strategies exist for each. In camcorders, our goal is to be number one worldwide in Mini-DV.



### **DVD Recorders**

Superior picture quality and multi-format recording and playback capabilities



### Plasma TVs (PDPs)

Incorporating unique JVC DIST/DET technology to realize high-resolution picture quality by making scanning lines almost invisible



#### D-VHS High-Definition Digital Video Recorders The world's first high-definition video recorder fo

the consumer market



High-Definition Digital Video Cameras High-definition video cameras for the consumer market, another world first for JVC

In displays, we aim to boost market share with high-definition display products. And in DVD products, we are moving into the DVD recorder market to spur growth. We have a major advantage as the only company in the world to offer consumers equipment for viewing, recording and creating highdefinition material. We collectively promote this strength as JVC's "Digital High-definition Universe." Success will depend on further refining sound and picture quality, two traditional JVC strengths. Equally vital is forming partnerships. The high-definition and partnership strategies are already yielding results. The GR-HD1 high-definition digital video camera, which debuted in March 2003, was extremely well received. We had another hit with our recently introduced Plasma TVs (available in 35-inch and 42-inch models). Their superior picture quality clearly give them an edge in the market, indicating these TVs will further lift segment sales and earnings in fiscal 2004. We injected distinctive technology in all these recently launched products to give them new levels of value. At the same time, we created an even more profitable operating structure by making significant improvements in three crucial areas: manufacturing costs, product quality and logistics.

## Transferring the "Only One" Concept to Established Products

As JVC puts more emphasis on new value-added, high-margin products, we are also applying the same themes to established products. We are reducing output of low-end models that contribute little to earnings by halting or, in a minority of cases, outsourcing production to other companies. However, in mature markets certain JVC products retain a clear competitive edge and contribute to earnings. Car AV products are a prime example. Although competing in a mature market with intense price competition, we achieved double-digit growth in this product category in fiscal 2003. This was achieved by stressing the outstanding audio quality and stylish design of our products, inspired by the core qualities of the JVC brand. Another example are VHS-DVD combo decks. As we reduce manufacturing expenses and promote these products' dual-functionality in order to create new sources of demand, we expect these VHS-DVD combo decks to continue contributing to segment earnings.

By implementing the "Only One" strategy and other core initiatives, the consumer electronics segment plans to further enhance the value of the JVC brand and boost sales and earnings.



Eichi Tsuchiya

President, AV & Multimedia Company







DVD Digital Home Cinema Systems
The ultimate experience in home entertainment



Car Navigation/CD Receivers
A combination of turn-by-turn navigation and music
CD enjoyment in a single compact package



Pure Digital Micro Systems
High-powered and compact, the digital amplifier
combines with the direct drive pole speakers to
create a sound field of astounding quality

### **Professional Electronics**

This segment develops, manufactures and sells cameras, video decks, audio equipment, displays and a range of other audio and visual equipment for professional users. Business activities also extend to designing and providing complete systems made up of this equipment. In fiscal 2003, segment sales were down year on year due to delays in introducing some new products and other factors that impacted on sales. As a result, the segment posted an operating loss, while segment sales fell to 7% of total sales.

### Rebuilding and Refocusing

The professional equipment segment struggled during fiscal 2003. At the heart of the problem was a strategy out of synch with market trends. To correct the problem, we launched a three-year program that will tightly focus resources on newly rebuilt business domains. We already announced our intention to establish solid positions in the security and presentation markets. In conjunction with this decision, we are consolidating the domestic manufacturing of these products at a single location and increasing overseas production. In another move to boost profitability, we cut the number of professional equipment models we supply from 2,200 to 1,100.

### Security Systems

We believe security systems represent the next growth opportunity for our professional equipment. One reason is that demand for surveillance systems continues to expand. Another is that our superior audio and video technologies dovetail well with requirements for security systems. This market is diversifying as systems incorporate more advanced data management technology, become network integrated, and adopt a range of other new functions to meet user demands. To succeed, we

must offer products backed by core technologies that meet each of these demands, including the ability to function as an integral part of a network. One such product is our 16-channel digital video recorder, which features MPEG2 compression technology, a JVC strength, and high-resolution image storage. Another is a digital camera, scheduled for release later in 2003, which can generate clear images even when shooting in strong light conditions. Supported by this initial progress, we will develop more products and systems that clearly set us apart in the surveillance equipment market.

### Presentation Systems

We have a high profile in the presentation equipment market. Our flagship product is the D-ILA projector, an "Only One" product boasting outstanding resolution and vivid color imaging. New projector products launched in March 2003 generated sales well above our forecasts and were well received by the market. Other operating highlights included market share gains by two important products: digital signal encoding/decoding systems for broadcasters, a traditional JVC strength, ahead of the rollout of digital terrestrial broadcasting in

Japan at the end of 2003; and DV video camcorders due to a broader lineup. With digital broadcasting now becoming a reality in Japan, local governments, universities and other institutions are looking into adopting sophisticated, interactive video systems. Another promising growth market for these systems is online education, which makes use of fiber-optic LAN technology. This form of education is currently being promoted by two Japanese Government ministries.

In both the security and presentation markets, we plan to set ourselves apart from our rivals by supplying products built around sophisticated technology, as well as by offering total system solutions that incorporate our new products. The current fiscal year will see an upgraded product line, making possible even more attractive solutions for application-specific systems and, ultimately, driving a turnaround in this segment.



Toyoharu Wonda

Toyoharu Honda

General Manager, Professional Products, Systems & Network Sector



### Preset Dome Color Cameras

Easy-to-install, high-resolution security cameras offering comprehensive manned or automatic surveillance of indoor environments



### **High-definition Digital Camcorders**

The first affordable high-definition professional camcorder on the market. 720/30p HD recording on Mini-DV tape; 1080i/720p/NTSC playback; XLR x 2 audio inputs



#### D-ILA Ultra-High Resolution (QXGA) Projector

The world's first projector able to deliver the longawaited ultra-high resolution images that match the depth and true-to-life presence of film



Professional DV Camcorders
Superior performance and a comprehensive range of specifications make these camcorders the new standard for professional image capture

### Components & Devices

The development, manufacture and sale of electronic components and devices accounts for 5% of JVC's total sales. The segment reported another loss in fiscal 2003 as the extended downturn in the IT industry and the cost of restructuring measures to build a profitable operating base held back performance. With the benefits of these actions now showing through, this segment is on the path back to profitability.

## Specializing in the Development and Manufacture of Key Devices

Until recently, this segment mainly manufactured products for external customers. Although these activities remain important, from now on the segment will almost exclusively supply key devices needed to create distinctive, value-added JVC products. JVC will sell these devices to other companies when they become accepted as the industry standard. We decided to cease manufacturing and selling components where we don't have a competitive edge. This included withdrawing from the magnetic head and crystal quartz device businesses. What remains is a portfolio of profitable and competitive products that includes deflection yokes for highresolution computer monitors, highdensity build-up multilayer printed wiring boards, motors for optical and hard disk drives, and optical pickups.

## Poised for a Return to Profitability in the Current Fiscal Year

We are currently making our key device business more cost-competitive. In deflection yokes, for instance, we are realigning manufacturing bases and

paring back fixed costs to make this segment more competitive. Although LCD technology is rapidly becoming the de facto standard in the PC monitor market, demand for high-resolution CRTs is certain to remain for some time. By rigorously controlling expenses, we are determined to remain a leading supplier of deflection yokes as market contraction leaves only a few surviving manufacturers. We expect substantial growth in high-density build-up multilayer printed wiring boards. Originally used mainly in mobile phones, these boards are now found in digital still cameras (DSCs) and digital video cameras (DVCs). We are confident that through the above steps, we have established a profit structure that will benefit directly from closing unprofitable operations and investing in key device categories to become ultimately more cost competitive.

### Investment in Next-Generation Key Devices

Opto-electronics components for Bluray Disc equipment is an attractive new field for JVC. With exclusive technology for optical pickups, we are in an excellent position to develop "Only One" products in this field. Sales to external customers could become a major earnings source going forward. Another new technology poised to create future "Only One" products is the fluid dynamic bearings of our HDD motors, produced using an exclusive and trusted JVC technique. We are now investing in additional production capacity to begin full-scale motor production in the following fiscal year. At this early stage, investing in these key devices has yielded no immediate returns. We are confident though that this investment will translate into substantial earnings as the segment's key devices play a growing role in JVC's new products.



Tetsuo Kashiwagi
President, Components & Device Company



### **HDD Motors**

Ultra-high precision bearings and assembly technology result in low noise, long-life, shock resistant HDDs



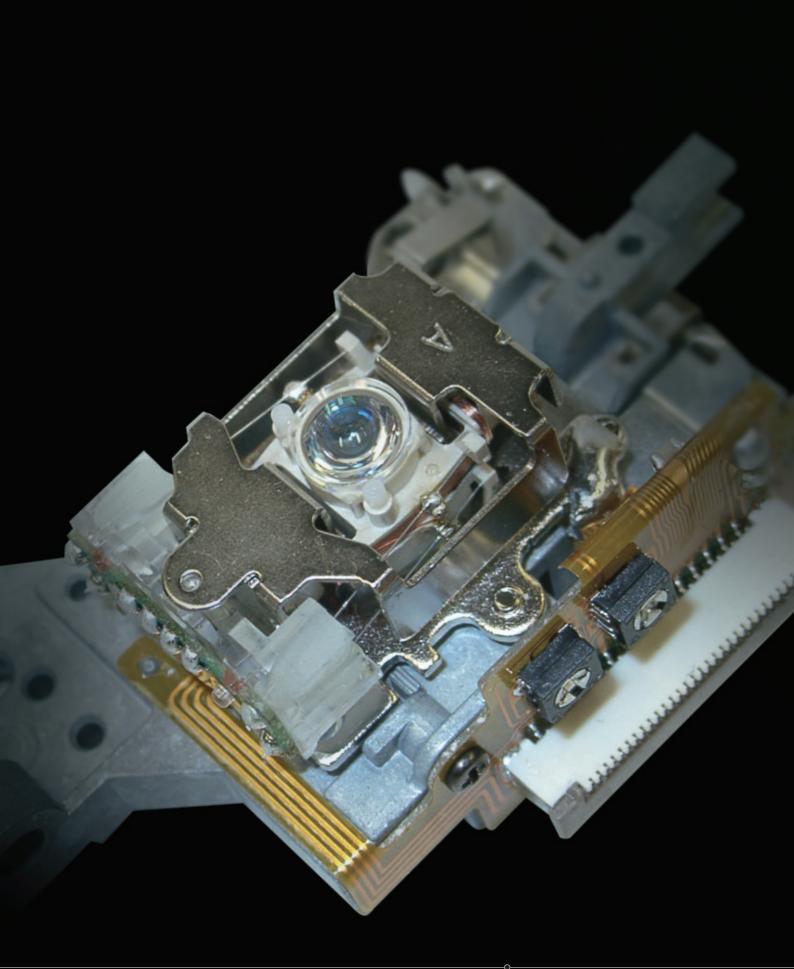
### M-VIL High-density Build-up Multilayer PWBs

JVC's advanced manufacturing techniques have not only helped to increase the density and reduce the size of volume production PWBs, they have also led to enhancements in semiconductor and component mounting quality



### Deflection Yokes

JVC's deflection yokes are ideal for high-resolution CRTs such as PC monitors, thanks to their high-speed scanning capabilities and environmentally safe design



Optical Pickups
JVC's optical pickups, key components in optical
disk drives, have gained a reputation for reliability
in the industry

### Software & Media

With expertise in areas from artist development to the manufacture and sale of recorded media, this segment boasts a complete and integrated value chain. The media business mainly manufactures and sells recordable media and prerecorded software such as CDs and DVDs. The software business primarily identifies and develops promising artists, and also produces, distributes and sells content. The Software & Media segment accounted for 17% of total fiscal 2003 sales. Weakness in Japan's market for music CDs caused segment sales to decline 5% and dragged operating income down by 59% during the year under review.

In the software business, JVC withdrew from the movie business and divested its game business to improve profitability. We are now concentrating this business on music content to boost earnings.

### **MEDIA BUSINESS**

## Renewed Focus on Core Strengths and Growth Strategies

Our main media business activity is manufacturing and selling blank recordable media and recorded media on CD, DVD and tape formats. Recorded media contgent includes material owned by JVC as well as material acquired through deals with content partners.

Our DVD-RW discs have earned a reputation for reliability in Japan and overseas, thanks to their extremely low error rate during playback and recording. In Japan, we have a market share of about 60% on a shipment basis. To cement our DVD products as the de facto standard in the domestic market, we are now investing in additional capacity that will raise monthly DVD output from the past fiscal year's 450,000 units to one million units this year. Mini-DV tape is another important product in this business. This tape, a global product, is currently the only cost-efficient media capable of high-definition recording and playback. We expect growth in demand for this tape as our digital video cameras capture a growing share of the camcorder market share and we make further technological advances in the DVC format. We also started developing new media for technologies such as Blu-ray Discs and advanced optical discs. Sales in the next year or two will depend on the market acceptance rate for related hardware devices.

In recorded media, we make the most of our powerful value chain in the content business, applying our exclusive Digital K2 audio technology from the mastering stage onward to deliver sound quality incredibly close to the orginal. We also quickly adapt technology and distribution techniques to changes in customer needs.

### Structural Reform and Cost Reduction Benefits

Falling sales prices for recordable media and recorded media exert increasing pressure on profit margins. Survival requires a constant search for further cost savings. During the past fiscal year, we took a number of steps, including closing a U.S. disc factory to consolidate all disc production at a single location, and initiating employment structure reform. At media

factories, we reduced the level of defects and established a highly flexible manufacturing system. For example, we now produce small volumes of recorded media at a profit, which is certain to lead to higher earnings. In audiotape, a market with a dwindling number of players, we cut costs to the point where we benefit as one of the few remaining manufacturers.

The emergence of new forms of media offering even higher recording speeds and densities presents numerous opportunities for JVC's media business. Having completed the groundwork to capitalize on these trends, we now look forward to using these new technologies to generate higher sales and earnings.





**Hiroshi Fujisawa** President, Media Company



Highly functional digital cassette tape using

technology unique to JVC





Mini-DV Digital Hi-Vision Tapes Realizing high-definition recordings on Mini-DV tape

# DIE

**D-VHS Tapes**The digital version of the de facto VHS standard invented by JVC



### **DVD-R Discs**

Reliable and durable, the ideal choice for permanent image storage

Annual Report 2003

### **SOFTWARE BUSINESS**

Victor Entertainment, Inc., a wholly owned subsidiary, is the nucleus of JVC's software operations. This company's mission is to make people happy through music by nurturing a "human network" that creates dreams and excitement. The company's stable of performers includes many wellknown Japanese artists. Maximizing its library of music content, Victor Entertainment produces and promotes highquality, highly marketable products. To increase earnings from content rights, the company actively searches for promising artists and nurtures their development.

## Raising Earnings by Leveraging Software Rights Assets

The majority of sales and earnings in the software business are derived from music sales through various channels. Selling our own content is just one part of this business. We are also Japan's leading distributor of music and video software, thanks to our extensive library of JVC-produced content, as well as deals with content partners to supply independently produced material. For many years, marketing activities for the software business were structured to support mega-hits that break through the one-million mark. We are currently

changing this approach. Our goal is to create a structure that generates earnings from a large number of mediumscale hits by accurately managing the breakeven point for each release. Accomplishing this will depend greatly on our ability to acquire content rights to generate future profits. This is why we plan to increase investments in Japan and overseas for locating promising artists at an early stage in their careers. Mentoring their development will give us a growing range of rights to distribute, a process that will directly translate into higher sales and earnings. Our unique JVC corporate culture gives us enormous advantage here. We offer artists the support of a globally respected brand, a producer of recorded and recordable media, and a manufacturer of quality audio and visual products. We will make full use of these attributes to heighten Victor Entertainment's profile as a source of total entertainment that creates dreams and excitement for people worldwide.

### Our Objective: Becoming a "Matrix Music Company"

During the past fiscal year, Victor Entertainment established a more profitable operating structure by lowering the breakeven point. The main factor was a change in the company's

employment structure to enhance productivity. Also, with a greater degree of concentration on music content business, we rely less on sales of other prerecorded software. Now we are shifting to matrix style operations to boost earnings. Here, the greater proportion of earnings come from content created by a "human network" of professionals and artists we manage as well as their JVC-controlled publishing rights. We maximize these assets in many ways: sales of compilation albums and other recorded media featuring our own artists; Internet music distribution services; artist management; music publishing; and much more. Opportunities for new businesses exist as well. Through alliances and joint ventures, we will create new markets and effectively demonstrate our diverse strengths.



Toshiaki Shibuya

1. Shih

President & Chief Executive Officer, Victor Entertainment, Inc.



**Movie Release**Dawn of a New Day—The Man Behind VHS
How JVC invented the VHS video



Hit CDs (from left) SMAP: MIJ Keisuke Kuwata: Top of the Pops MINMI: Miracle



Popular DVDs (from left) SMAP: Clip SMAP Keisuke Kuwata: Keisuke-san Video mo Iroiro to Taihen ne UA: Sora no Koya

