

JVCKENWOOD Group

CSR Report 2013

Corporate Social Responsibility Report



About this Report

The world today has come to judge corporations by not just their financial performance, but also by their activities in regards to their corporate social responsibility (CSR).

The JVCKENWOOD Group presented its activities in the arena of social responsibilities and the results of these activities in its Social and Environmental report, its annual report (a report on financial performance), and other formats. In 2013, we changed the name of this report to the CSR Report, and will be reporting on our corporate governance and accomplishments within our communities in terms that all our stakeholders can easily understand. Detailed information on our financial status is available in our Annual Report.

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● Online publications

You can also access this report from our homepage.
<http://www.jvckenwood.co.jp/csr/index.html>

● Scope of this report

This report covers the activities of the JVCKENWOOD Group around the world.

● Period covered by this report

This report is for the period of FY2012 (April 2012 to March 2013), but includes some details for FY2013.

● Published

August 2013 (Next publication scheduled for August 2014.)

● Reference materials

GRI Sustainability Reporting Guidelines, G3
Environmental Reporting Guidelines from the
Japanese Ministry of the Environment (FY2012)

Corporate Vision



Concept of Corporate Social Responsibility

While businesses provide people with useful products, services, and employment opportunities, they also create burdens on society. Environmental and social problems are closely related to businesses, particularly for manufacturers, because of the waste, pollution, massive consumption of resources and energy, and population concentrations that are associated with the manufacturing process.

However, our society would no longer exist if we got rid of businesses.

The JVCKENWOOD Group is aware that the mere existence of businesses has an impact on society. So we are providing excitement and peace of mind as one part of our corporate activities to reduce our impact on and contribute to society according to our corporate vision.



Redesigning lifestyles of people around the we support communities

New mid-term management plan creates new value

The JVCKENWOOD Group aims to be a business that is widely trusted in society, to face the challenges of achieving profitable growth, and to provide customers with excitement and peace of mind as a global specialized manufacturer, according to its corporate vision of “Creating excitement and peace of mind for the people of the world.”

As the electronics industry experiences its most radical period of transformation since WWII, in November 2012, we established our new mid-term management plan defining the fields of smart AV and smart safety as the business areas in which we can continue to prove the strengths of our core competencies of audio, video, radio, and entertainment. In our first step towards continued growth, we have announced “Re Design” as our mid-range vision. Working with a sense of intensity and speed, our entire group is recreating itself as we have begun to redesign the lifestyles of people around the world with a flood of products that deliver excitement and peace of mind.

world with excitement and peace of mind as



ReDesign

To build a beautiful global environment

As overconsumption of energy and resources along with global greenhouse gasses continue to increase, we must face the threat global warming poses to continued growth in the world's economy. Fiscal 2013 is the first year of the low-carbon community action plan. This is the new campaign instituted by the group of four electronics' associations to be completed by the year 2020. We are promoting environmental management, and fully implementing plans set out in our Eco Promotion Plan 2020 to lower environmental impact by reducing consumption of resources and energy to create a more beautiful global environment.

In conclusion

Through our CSR activities, and by listening to what people have to say, the JVCKENWOOD Group is boldly facing these challenges to achieve our corporate vision of "Creating excitement and peace of mind for the people of the world."

The JVCKENWOOD Group is using the profits from these efforts to strengthen financial foundations and invest for continued growth to return a reliable profit to stockholders as we bolster quality in products and services to improve the quality of our business activities and leverage the strengths of our operations to contribute to society. At the same time, we are working at the grassroots level to help local communities and we are strengthening efforts to preserve our environment for future generations. Based on lessons from the East Japan Earthquake and flooding in Thailand, we are also strengthening our systems for business continuity and handling various risks, which would have major effects on business operations if they were to occur.

JVCKENWOOD Corporation President,
Representative Director, and CEO

Shoichiro Eguchi

江口 祥一郎

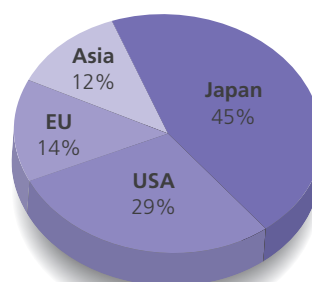
Group Overview (Current as of July 1, 2013)

Company Overview

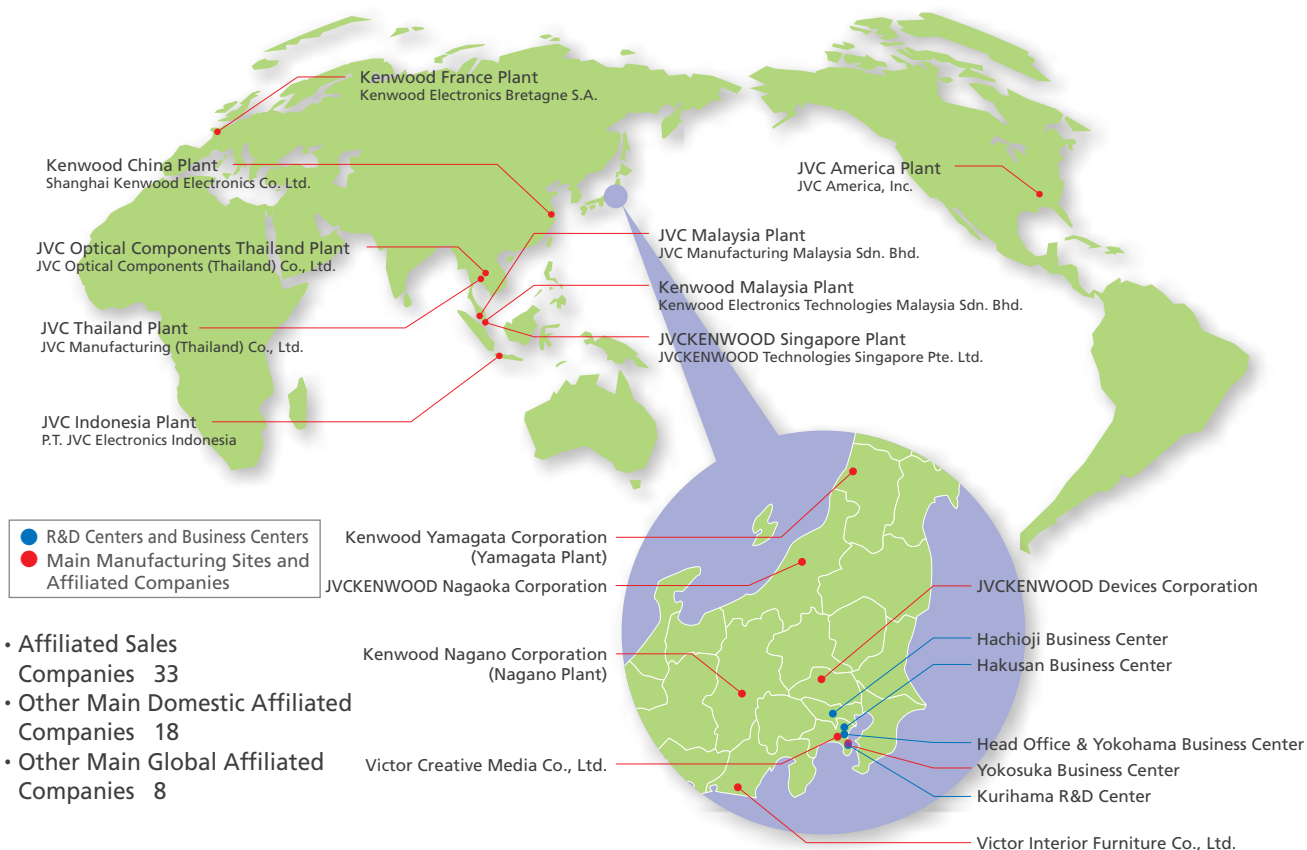
Name	JVCKENWOOD Corporation	Head office	3-12 Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa Prefecture
Established	October 1, 2008		
Capital	10 billion yen	Employees (consolidated)	12,781 (current as of March 2013)

Major management indicators (Current as of March 2013)

Sales	306,580 million yen (consolidated)
Operating profits	9,603 million yen (consolidated)
Net profits	1,146 million yen (consolidated)



Percent of sales per area



Visit the JVCKENWOOD Group website for details.
<http://www.jvckenwood.co.jp/corporate/index.html>

Business Introduction

Car Electronics Segment

Leading the car AV market with products that enable all media to be enjoyed with the highest quality sound



Professional Systems Segment

Supporting customer business and safety with high reliability and service



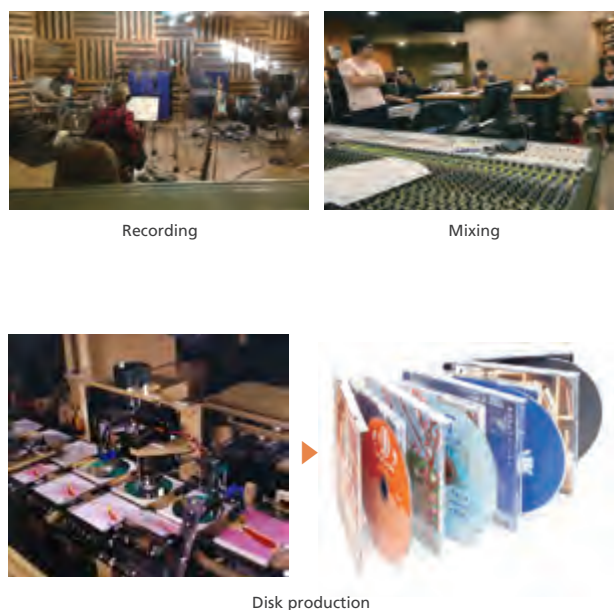
Optical & Audio Segment

Presenting a space and time filled with sensations through high quality video and audio technologies cultivated over many years



Entertainment Software Segment

Contributing to culture by offering dreams and emotions through numerous high-quality products across a wide range of video and music software genres.





Challenges in New Designs

Installation ambiance creates sense of forest in sounds and images

~ Presented at DESIGNTIDE TOKYO 2012 ~

A Walk in the Forest

With our designs, we produce products and services that are both exciting and a pleasure to use. The JVCKENWOOD Group participated in DESIGNTIDE TOKYO 2012* with an exhibit at its JVCKENWOOD Marunouchi showroom with a theme of creating added value. Our installation presented a sense of the forest in sound and images.

*A DESIGNTIDE TOKYO 2012 Extension

This celebration of design presented exhibits of a variety of genres ranging from interiors, products, architecture, graphics, textiles, fashion, art and much more at Tokyo Midtown Hall's main venue, as well as other shops and galleries, for four days from November 1 to 4, 2012.



Design makes dream of the forest a reality Theme: A Walk in the Forest - Forest of Sensations

We created a woodland ambiance using sound and images, through our theme of A Walk in the Forest - Forest of Sensations, in Marunouchi, the middle of the metropolis, where trends are born and news is made. At the venue, our installation comprised three zones, Walk the Forest, See the Forest, and Hear the Forest, with images to feel the sigh of breezes in the trees, sounds of birds calling as they circled the sky above, the aroma of a range of trees providing calm. We created a place where the energy of the forest could be felt, where people worn by the city could find a moment to refresh.



JVCKENWOOD Marunouchi Showroom, location of the exhibit

Walk the Forest to sense its intimacy, See the Forest to stimulate your five senses

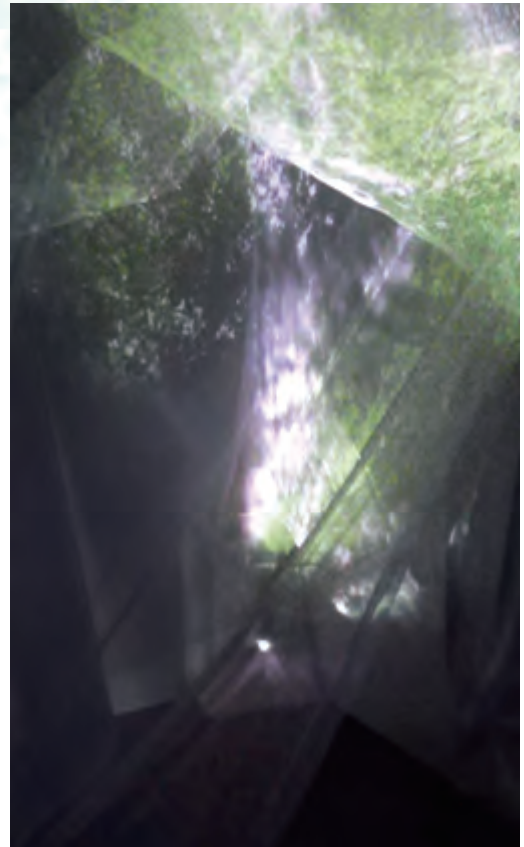
Our latest developments in projectors and AV systems created a mystical space evincing a passage through to the forest.

In the Walk the Forest zone, we draped the screens with sheer translucent fabric, creating an image with a sense of layered depths of trees swaying in the forest.

In the See the Forest zone, our theme was the natural forest and sky, where people experienced the serenity of nature. We created a whimsical environment, where the position of projected images shifted from wall to ceiling synchronizing elements as though part of the natural world.

These shifting images were able to present a new realism not possible with conventional fixed screen systems. Through our production, people visiting the exhibition experienced the feeling of walking through the forest, where looking up they saw sun filtering through the trees and looking out they saw the forest spread before them.

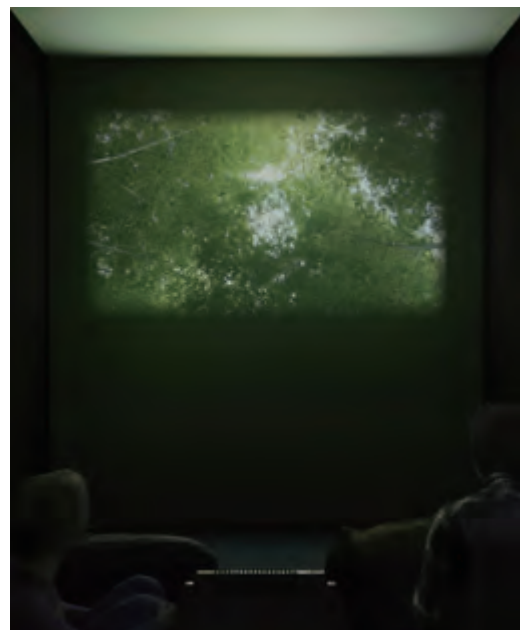
The synergy of sound and images allowed our visitors to enjoy a time of serenity.



Walk the Forest



The YG-H1 projector AV system can change the direction it projects



See the Forest



Hear the Forest is a real time connection

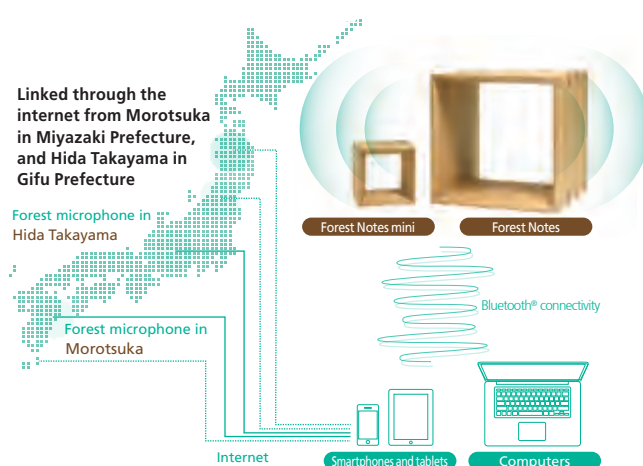
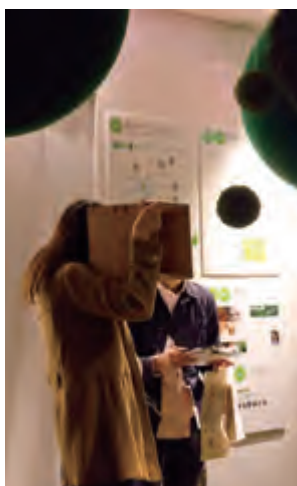
We linked forests to the city with Forest Notes, our wireless active speakers, creating an environment in which visitors listened to the voice of the forest in real time.

People enjoyed the delightful experience of not just listening to birds chirping, but the wind in the trees in an atmosphere of fresh air.

Our idea was to send a message that could, in some small way, express a feeling of verdancy, to allow us, people with little chance to enjoy nature, to listen to

the living voice of the forest (natural sounds). Many people from a wide swath of lifestyles visited our exhibition and told us how much they liked it.

Forest Notes, designed to appear as boxlike artwork that is a door to the forest, is created using traditional craftsmanship from trees carefully nurtured in the forests of Japan. Our visitors were surprised and excited because they forgot Forest Notes were speakers.

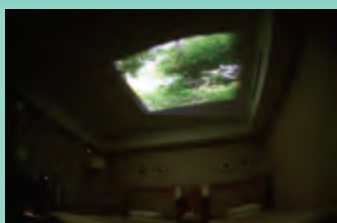


Exhibitions in local areas

We exhibited our projector AV system YG-H1, and wireless active speaker Forest Notes YGFA30HV and YG-FA2HV at various events other than DESIGNTIDE

as we were bringing them to market, which allowed us to see at firsthand the reactions of the public.

Projector AV system YG-H1



Tokyo Dome Hotel Monitor Plan
June 1 to 30, 2012



Community Center in Musashino Hachioji
November 21, 2012



Eco Products 2012 (Tokyo)
December 13 to 15, 2012



International Hotel and Restaurant Show (Tokyo)
February 19 to 22, 2013



Development Manager
Image-Optical Device Division
Hybrid Products Business Department
Hironobu Fukutomi

Wireless Active Speaker Forest Notes YG-FA30HV and YG-FA2HV



Home Earthquake Protection Exhibition,
Yamagata Prefecture booth (Miyagi Prefecture)
September 23 to 24, 2012



22nd Forestry Festival in Yamagata
Prefecture (Yamagata Prefecture)
October 13 to 14, 2012



Tsuruoka Industrial Fair 2012 (Yamagata
Prefecture)
October 20 to 21, 2012



Eco Products 2012 (Tokyo)
December 13 to 15, 2012



Design Manager
JVCKENWOOD Design Corporation
Consumer Design Studio
Hiroki Yaginuma



Challenges in New Markets

Radio transceivers developed for emerging markets

The JVCKENWOOD Group is expanding operations into the markets of emerging nations that have large capacity for growth. After thorough evaluation of the Indian market, which is experiencing very fast growth, we developed a radio transceiver that fits the Indian lifestyle.



Radio transceivers needed in India

In India, mobile phones are increasingly being used as an everyday means of communication. The police and fire departments, and other government agencies, are the main users of radio transceivers, which have not yet spread to more common usage. Nonetheless, in India, where power outages occur regularly, and typhoons, tsunamis, and other natural disasters often threaten the southern areas, radio transceivers used for communications can save lives and protect property in emergencies.

Our challenge was to develop a radio transceiver that would be easily accepted by mobile phone users, so we thoroughly researched the Indian lifestyle, and analyzed the Indian demand for functions, performance, operability, and price.



Communications Equipment Division
Product Management Operation
Shoji Ota



New radio transceiver
PKT-03 developed for India

Development of new radio transceiver to match the infrastructure of India

The results of our extensive research into the lifestyle of the Indian people and the environment in which the radios are used helped us to develop a radio that is smaller and lighter than a regular mobile phone, easy to hold, with simple operations, and a speaker output that is loud and easy to hear.

Our research into clothes and fashion, such as the traditional sari, demanded that we make the radio small and light enough to be carried on a neck strap. Plus, we equipped it with a bright LED flashlight for

dark areas.

Mobile phone battery chargers and USB cables can be used as is, and USB mobile battery packs or hand-cranked chargers can be used, just in case of a power outage.



Clay mockups used to research ease of handling



Flashlight is useful in dark places



USB connector allows mobile phone charger to be used for charging



Attaches to a neck strap for easy carrying, so conventional belt holsters are not needed

Opening Indian market is first step in our challenge to expand to new markets

We are working to expand sales and cultivate markets by leveraging the convenience of radio transceivers to penetrate the markets for communications at large malls and retailers, factories and warehouses, and security at schools and other facilities.

Our success in India, the largest country in Southern Asia with a population of over 1.2 billion, will be our foothold as we face the challenge of opening more markets in emerging countries.



Yasunobu Warita (center), working in India, is joined by the staff of the sales office



Challenges in New Automobile Technologies

Developing new technologies to make driving safer and more fun

In cooperation with groups and affiliates in the industry, the JVCKENWOOD Group is developing a new service by researching specifications for relevant on-board devices and specifications for services related to ITS^{*1} technology, which links people, cars, and road conditions through information.



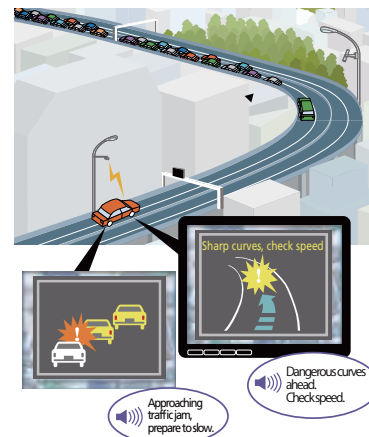
ITS Spot Service providing the next generation of road information^{*2}

In 2011, about 1,600 ITS Spot Service locations were set up on the nation's highways, to start this new service that provides information on road conditions. Compared to the existing VICS^{*3}, this service promotes safer driving and is easier to understand with directions in synthesized speech and still images. JVCKENWOOD is providing



Car navigation MDV-Z700 that supports the ITS Spot Service

this new safe driving support service through its MDV-Z700 car navigation systems that support the ITS Spot Service, which went on the market in February of 2013.



Still images and speech provide information about road conditions on the highway

*1 ITS: Intelligent Transport System

*2 ITS Spot Service: Visit the web site of the Ministry of Land, Infrastructure, Transport and Tourism for more information. http://www.mlit.go.jp/road/ITS/j-html/spot_dsrc/index.html#top1

*3 VICS: Vehicle Information and Communication System

Development of new ITS Spot Services

JVCKENWOOD is participating in proving tests for the new ITS Spot Service, testing its ability to make payments for parking and at drive-thrus.

Paying parking fees

By combining an onboard DSRC device (hereafter onboard device) with a car navigation system to communicate with a roadside DSRC device (hereafter roadside device) that is installed at the entrance to a parking lot, cars can enter and exit without stopping, the same as the ETC gates on highways. The parking fee appears on the screen of the car navigator and payment is done by the IC credit card inserted into the onboard device. This also saves resources by eliminating the need for parking tickets and it works with either left or right hand drive vehicles.

* DSRC: Dedicated Short Range Communication
...Spot communication (narrow band interactive communication)



Participants in the proving test from the Car Electronics OEM Division, CE Strategic Business Planning Operations

Paying at drive-thrus

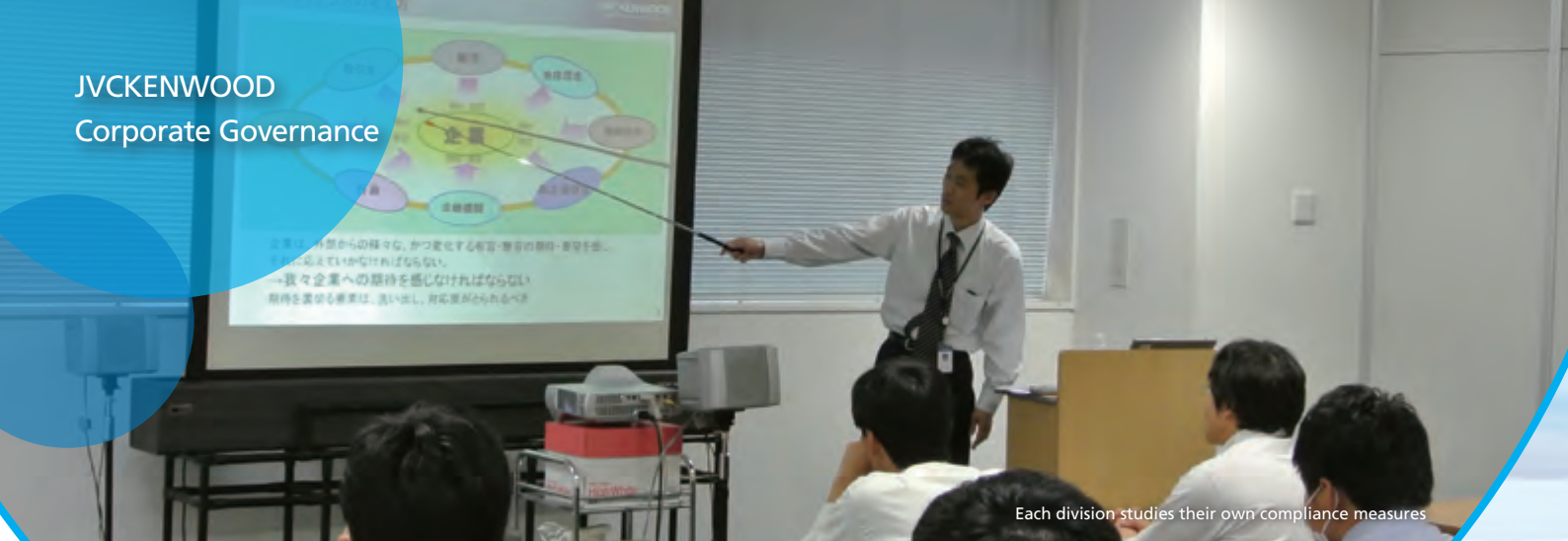
We participated in cooperative research with a hamburger franchise to do proving tests of this new service during normal operation of an actual shop. With this service, the roadside device and the onboard device mounted in the vehicle communicate with each other automatically when the vehicle enters the shop's parking area, recommended products appear on the screen accompanied by an audio description.

The guests enter their orders on the car navigator's touch screen, and the order is transmitted to the shop as the vehicle enters the drive-thru lane. Payment is made via an IC credit card, the same as when paying for parking, and when the transaction is finished, digital coupons can be transmitted too.

These proving tests were well received by the hamburger franchise, as a new channel for advertising and as a way to keep the customers from having to wait.



Menu for ordering at a drive thru appears on the screen of the car navigator



Each division studies their own compliance measures

Maintaining the trust of the community

The JVCKENWOOD Group is setting up internal control systems and enhancing corporate governance to promote higher transparency in management and to become a company that our communities can trust.

Compliance

The Heart of CSR is Compliance

The JVCKENWOOD Group is promoting compliance activities through its Group Governance Operation and Compliance Committee, chaired by the CEO,

to respond to the needs of society in light of its corporate ethics and moral responsibilities based on adherence to legal regulations.

Specific Promotion System

Compliance Activity Standards

The JVCKENWOOD Group Compliance Activity Standards were established in March 2010, using the business merger as an opportunity to unify the compliance policies of both companies.

These standards were circulated to all group employees in a booklet and via our intranet (in three languages) and our compliance supervisors (the presidents of affiliated companies, in principle) at all affiliated companies.



Responsible for training as a compliance trainer,
Image-Optical Device Division
Hybrid Products Business Department
Hidehiko Taniyama

Compliance education and in-house trainers

To understand compliance, it is important to exchange ideas in discussions, so participants can study perspectives and approaches to hypothetical situations requiring compliance, in addition to e-learning and other forms of study. Since fiscal 2011, we added compliance education in group discussion formats led by the CEO, in which 1,583 employees, including those in affiliated companies, participated in 29 lessons at 14 locations (as of March 2013). From the end of fiscal 2011 at JVCKENWOOD, we selected and trained 11 compliance trainers from various divisions and our head office so that starting this year, we can implement even better compliance education.

Internal Whistleblower System

In our Group, the Auditing Informer System allows people to report financial or managerial suspicions to the Auditing Office. Other suspicions are reported using the Helpline set up by the Unified Legal Department. Reports are made to appointed personnel over a specialized communication system to protect the privacy of the reports (informers).

Our Auditing Informer System is working to detect and correct activities that do not adhere to our standards of conduct and the demands of society through a combination of our Compliance Committee and Corporate Audit Office, Helpline, and Auditing Committee, which audits internal controls independently from management.

Risk management

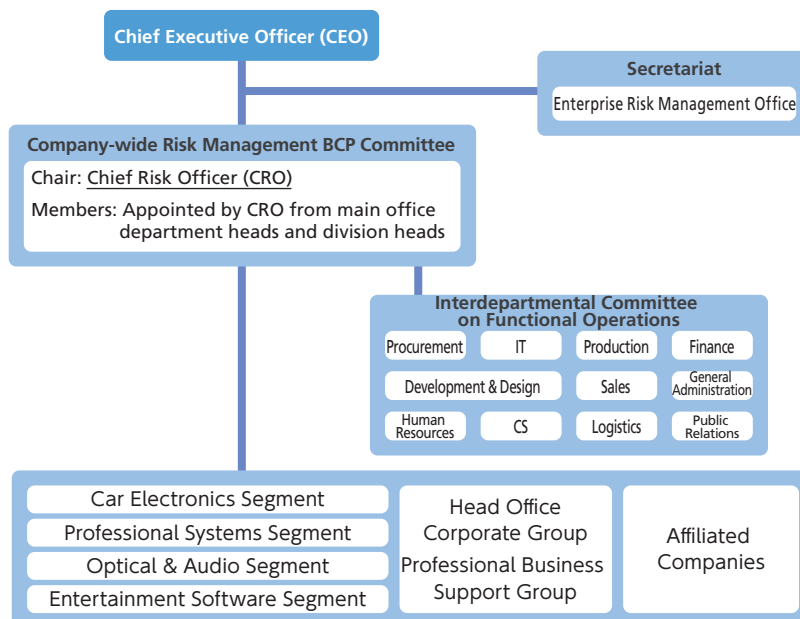
Establishing Enterprise Risk Management for all Group Companies

The JVCKENWOOD Group believes that, there are a variety of risks threatening us through mutual connections and repercussions that could hinder the success of our business plans. Because of this, we periodically search out the risks facing our operations all around the world. We analyze and understand these risks in their totality, encompassing their importance, reciprocity, and characteristics, from the point of view of all companies

in the group. This allows us to promote activities across departments for more effective countermeasures. We are implementing strategies to resolve mutually shared risks, which have been brought to the fore as fundamental issues for management, by strong initiative at the management level. In this way, the JVCKENWOOD Group considers risk management and management strategies to be intrinsically linked when it comes to achieving business plans.

Risk Management System

We have built a system to promote risk management throughout all our companies based on the strong initiative of our Chief Risk Officer. The CRO chairs the Company-wide Risk Management BCP Committee, at the executive level, to make determinations on various important matters related to risk management. This committee also directs the activities of the Interdepartmental Committee on Functional Operations, which comprises representatives from operations, to comprehensively promote systematic efforts against risks that affect the management of the JVCKENWOOD Group.



Business Continuity Plan (BCP)

The JVCKENWOOD Group holds that during a disaster or emergency that human life is the first concern. The second concern is the social responsibility to continue providing our products and services for our customers and other stakeholders. The basic policy of our BCP is to recover business activities quickly after a disaster occurs to support a safe and secure society through continued operations.

Based on this policy, we are promoting step by step establishment of BCPs in each field of our operations by building on the know-how developed from previous BCPs to upgrade reserves for emergencies, disaster prevention systems, and safety confirmation systems for our employees and their families. At the

same time, we are working to further embed our BCPs by using a variety of simulations to teach people correct first responses, as well as improving rules and manuals according to what we learn through this training.



Representatives from all operations participating in a joint training simulation of a BCP

Corporate governance

Basic concept of corporate governance

JVCKENWOOD management believes that increasing the efficiency and transparency of decision making through enhanced corporate governance is crucial to improving corporate value. To achieve this, it is fundamental to strengthen and expand corporate governance by implementing a group-wide internal control system. We established a system to separate the operations and management functions, employed external directors and auditing and supervisory board members, and improved the ability to make checks through an internal auditing division.

Role of the Board of Directors

The board of directors makes fundamental and strategic decisions, and they are responsible for supervising the execution of operations. They meet once a month, or more in special cases, to deliberate and vote on the basic policy of management and other important matters, and monitor and supervise the state of corporate affairs. The members of

the board are given one year terms, which keeps responsibility clear and management agile. Innovation and governance are the guiding principles, and clarity in decision making is achieved through the proactive appointment of external board members.

About external directors and auditing and supervisory board members

Based on the directives of the TSE, in principle, JVCKENWOOD selects and appoints external director candidates and auditing and supervisory board members by checking that they have not worked in the business operations of any of our major stockholders or major business partners in order to assure independence and eliminate the risk of a conflict of interest with general stockholders. They must also have viable abilities in supervisory management based on their experience, track record, and expert outlook and perceptions.

Role of the Executive Officer System and the Operating Officer System

JVCKENWOOD instituted an operating officer system, splitting off the business operation functions to clarify responsibility for management and responsibility for business operations.

The board, focusing on innovation and governance, mandates the chairman of the board and auditing and supervisory board members, who are full time board members, to operate the business by making decisions based on discussions with the operating officers/executives. The Representative Director of the Board, a member of the board, is the CEO, with the responsibilities for both operational and supervisory management. The CEO, accepting the decisions of the board, leads the Board of Executive Officers and holds responsibility for the actions taken. Also, the CEO has direct control of operations managers, allowing these managers to proactively control promotion of integration of their operations with other operations, while the CEO presides over lateral development and inter-related developments with the entire company in mind. This strengthens the correlated functions of corporate staff, which speeds up decision making and energizes the company's

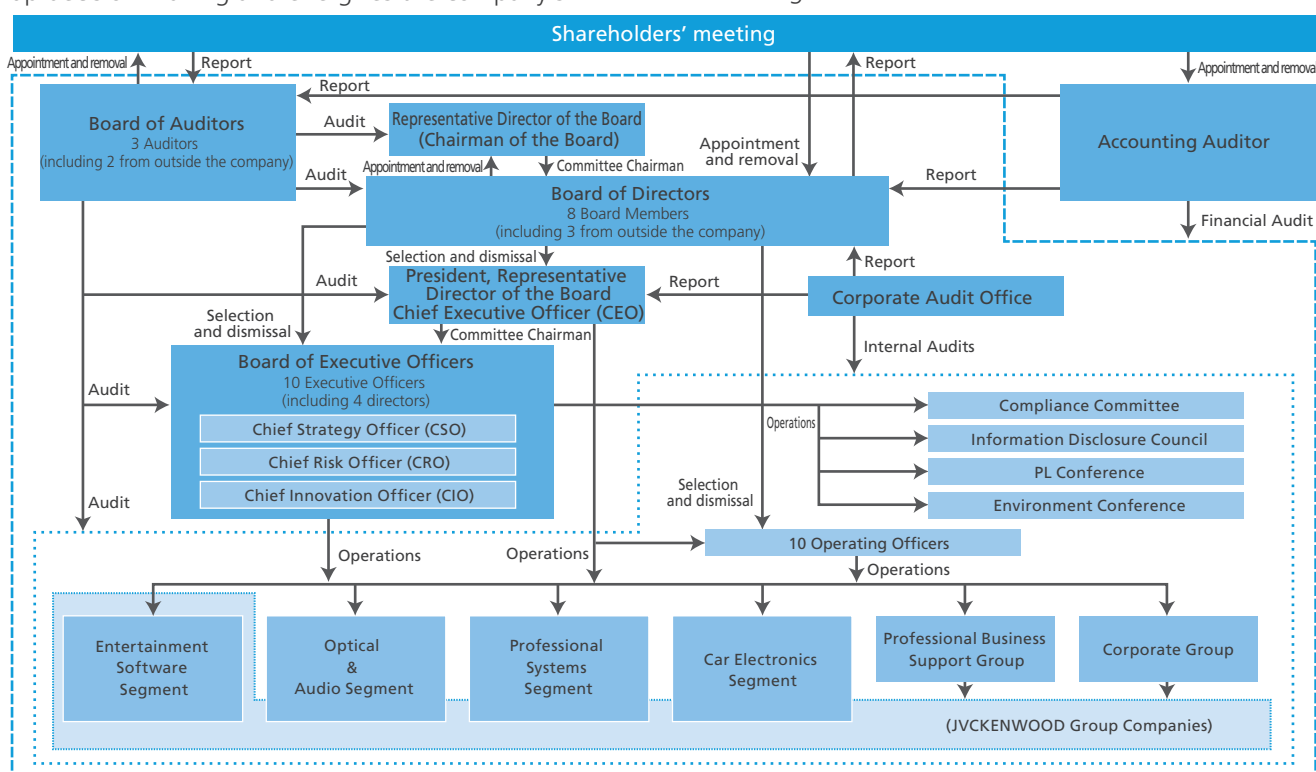
entire organization. The CEO leads the heads of important operations, the presidents of important sales companies, and other important leaders to promote operational growth.

Role of the Board of Corporate Auditors

JVCKENWOOD established an auditing committee, and the auditors attend board and other important meetings, and also convene auditors' meetings, and implement the duties of the board, audit the work implemented throughout the JVCKENWOOD Group, and audit the accounts, and function as corporate auditors. The Board of Corporate Auditors meets once a month or as necessary.

Role of Internal Auditing

JVCKENWOOD has established a corporate auditing office, and implements on-site inspections far and wide, including at companies and affiliates within the JVCKENWOOD Group, and by monitoring the implementation status of internal controls uniformly, strives to promptly discover any problems from a perspective different from workplace values, and so improve the ability to prevent problems from occurring.



Corporate governance system diagram (as of June 25, 2013)



Customer support center staff interfacing with customers

Bringing excitement and peace of mind to our customers

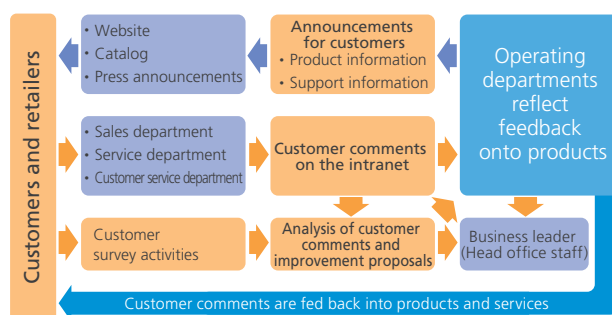
The JVCKENWOOD Group is communicating with all its stakeholders to promote manufacturing processes that provide excitement and peace of mind based on feedback from our customers.

Connecting with customers

Customer comments are reflected into products and services

Every day we organize and categorize the opinions of customers that visit our customer support and service departments and the thoughts and ideas of our registered users and deliver this feedback through our in-house customer feedback system to operating departments and any related departments. This allows us to facilitate improvements in products and services based on customer feedback as we work to provide full product information and support information to

our customers.



Basic policy on product safety

In order to provide safety and peace of mind to customers, the JVCKENWOOD Group established its basic policy on product safety and posted it for the public on the JVCKENWOOD Group website. To put this into practice, the JVCKENWOOD Group created a Voluntary Action Plan for product safety to organize and carry out measures in an effort to continuously improve. If an accident related to a product occurs, JVCKENWOOD confirms the actual situation quickly

and investigates the cause. If we determine there is a safety problem, or even just the risk of one, we recall the product and implement measures to prevent further occurrence or spread of the danger. We then use the proper channels to swiftly provide information to customers and other people involved. We have posted Using Products Safely on our web site. This information is easy-to-understand and explains how customers can use our products safely and with confidence.



Consult our website for our basic policies relating to product safety.
<http://www.jvckenwood.co.jp/safety/index.html>



Kenwood brand products:
<http://www2.jvckenwood.com/cs/safety/index.html>



JVC brand products:
<http://www3.jvckenwood.com/support/info/safety/index.html>

Focusing on the human side of designs - To keep customers happy

We investigate the situations in which customers use our products so we can design services and products that have an ease-of-use that customers enjoy. In this way, the JVCKENWOOD Group is proactively advancing human centered design through its design departments.

We are using various methods to investigate and analyze the situations in which customers are using our products and services to clearly understand their true feelings about any problems and using this information to envision the products that will bring joy to our customers.

Case study of development of Sports Cam ADIXXION

The development of a sports camera is different from developing a conventional video camera. To propose uses for this new camera, we had to ask, "What exactly is fun about making videos while doing sports?" With this as our theme, we created scenarios about having fun making videos doing extreme outdoor sports. Then, we analyzed this and injected our findings into our product concept.

In addition to this, we are verifying that the things we create are actually operating in the way customers expect them to, and reflecting this information back into our workflow. This is our human centered design process.



Strategic Design Division
Certified HCD Professional
Rika Waida

We are putting all our efforts into human centered design as we move forward, to bring each and every one of our customers an exciting and fun story in which they are the star.



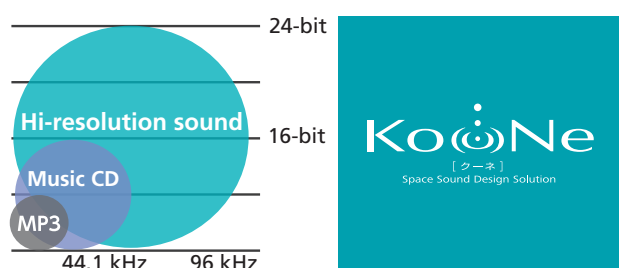
Sports Cam ADIXXION



Scenarios

Providing an environment of sound to soothe our customers - Hi-resolution sound produces spatial acoustic

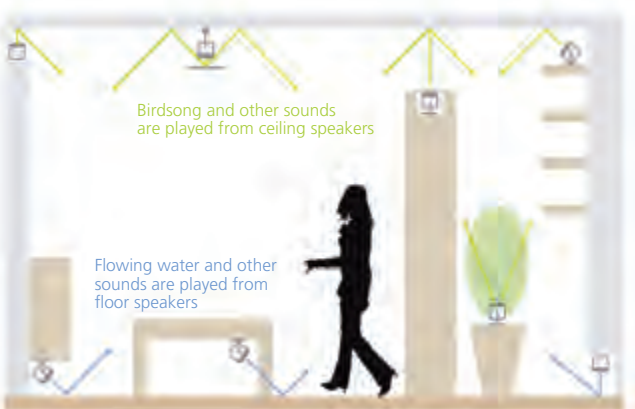
Victor Entertainment is developing its KooNe™ spatial acoustics design business to create comfortable and soothing spaces for our ears. We are building indirect acoustic environments for listening to more natural audio using specialized equipment for high resolution sound to reproduce richer more natural audio.



High resolution sound: High-quality broadband audio source has triple the capacity of a CD at 96 kHz/24-bit

Medical

In cooperation with Doctor of Medicine Tomohiro Umeda of the Social Cooperation Center at Nara Women's University, we exposed 29 people, some who were working, to the high resolution sound of KooNe™. By measuring the condition of their nervous systems, we were able to confirm that their sympathetic nerves were at rest, and their parasympathetic nerves were optimized, which indicates they were relaxed.



Indirect sound environment: Sounds coming from the speakers are bounced off the walls, floor, or ceiling to reach our ears indirectly

Like having your office in the forest of Yakushima

The high resolution sound provided by KooNe™, which reproduces extremely realistic three-dimension natural sounds (forest, river, ocean, and others), enriches the alpha (α) waves that invigorate our brains to promote the feeling of relaxation that brings serenity. Producing these kinds of spaces creates the feeling of being deep in the mountain forests, even though you may be in your office. We expect them to increase productivity in businesses by generating effects that increase communication, improve mental health, and other salutary effects.



On Yakushima, assistant engineer **Yoshikazu Nagai**, from Victor Studios, records the sounds of nature on specialized recording equipment



Celebrated for its inspiring scenery, Yakushima holds a wealth of natural sounds



The ability to revolutionize the way we work is being tested in the Shinkawa 2nd Building of Uchida Yoko Co., Ltd. KooNe was installed to improve intellectual productivity

Involvement in new businesses that use elemental technologies

GazeFinder developed to help diagnose developmental disorders

At JVCKENWOOD, we are cooperating with the United Graduate School of Child Development* to develop the GazeFinder, a developmental disorder diagnosis system, to be able to test children for autism with high accuracy in a short time frame. In Japan, about one or two children in a hundred, and their families, live



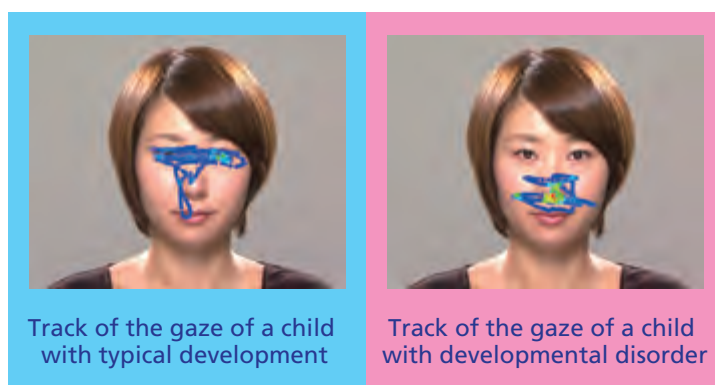
with autism. Analyzing the eye movement of infants watching images displayed on a monitor, during their health examines when they are from 18 to 36 months old, makes early detection of autism and early remedial education possible. This is also helpful because there are so few specialized physicians.



Development Manager
Innovative Research and
Development Division
Innovation Center
Koichi Nakajo

*Graduate School of Child Development

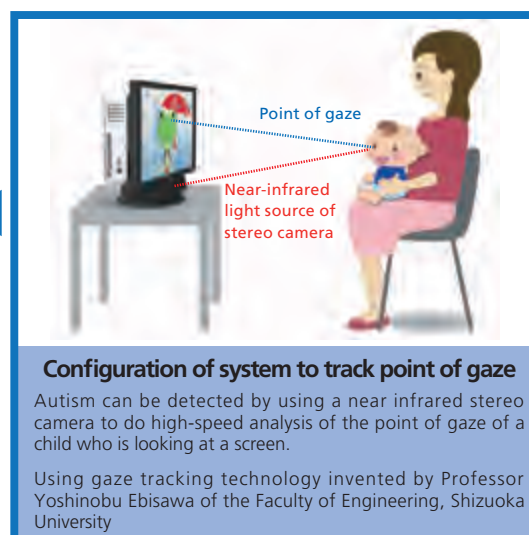
Comprised solely of independent post-doctoral researchers at national universities: Osaka University, Kanazawa University, Hamamatsu University School of Medicine, Chiba University, and Fukui University



Track of the gaze of a child
with typical development

Track of the gaze of a child
with developmental disorder

Children developing typically will track a person's eyes, but there is a strong tendency for children with developmental disorders to track away from the eyes



Configuration of system to track point of gaze

Autism can be detected by using a near infrared stereo camera to do high-speed analysis of the point of gaze of a child who is looking at a screen.

Using gaze tracking technology invented by Professor Yoshinobu Ebisawa of the Faculty of Engineering, Shizuoka University

Comments from a joint researcher

We are hoping to support the objective diagnosis of developmental disorders by introducing this system for diagnosis. Of these disorders, children with autism, starting in infancy, exhibit tendencies to not

look at other people's eyes and to look for repetitive patterns and designs rather than people.

United Graduate School of Child
Development, Research Leader
Osaka University, Professor
Taiichi Katayama



Volunteering with the projector AV system YG-H1

Contributing to communities on a local scale

The JVCKENWOOD Group is helping throughout local communities with a variety of activities to bolster exchanges and connections within communities.

Volunteer activities

Volunteer activities using the specialties of an audio and video manufacturer

In England on November 21, 2012, JVCKENWOOD collaborated with Masumi Sakoma, an aromatherapist who is an IFA (International Aromatherapist Association) leading practitioner of aroma-touch. We helped support handicapped people by visiting the Social Welfare Agency Musashino-kai Hachioji Practical Living Center to volunteer by providing handicapped people serenity through aromatherapy, sounds, and images.



Projector AV System YG-H1 used for the volunteer work and the head of planning from the Image-Optical Device Division, Hybrid Products Business Department
Tadahiro Akagi

People experienced a time of calmness wherein their hearts connected through scented backrubs using aroma-touch massage by aromatherapist Masumi Sakoma and volunteers and a production of aromas combined with soothing music and beautiful images of southern isles, constellations, the earth and more provided by JVCKENWOOD.



Providing a realm of calm through images and music



Masumi Sakoma applies aroma crafts

Support for social welfare groups' activities

Every week the staff at Nagano Kenwood donate empty milk cartons and other things from their homes to support jobs for the handicapped through the Ina Yuimaru Group, which was established by the Nagano Prefecture Social Welfare Agency.



Participating in local cleanup campaigns

The JVCKENWOOD Group participates in a wide variety of volunteer activities in cooperation with local communities. We are also participating in local beautification efforts near our plant by picking up litter.



Clean-up work at Shanghai Kenwood Electronics

Reading Dr. Seuss at elementary schools

Employees from JVC America volunteered to read Dr. Seuss, a children's author popular in America, to more than 300 young students at the nearby Arcadia Elementary School during the Read Across America Day campaign.



Helping rebuild after the East Japan Earthquake

On June 23, Yamagata Kenwood participated again, as last year, in rejuvenation activities to support the Shiogama Urato Islands and Sabusawajima Island in Miyagi Prefecture. People helped to cut-back grass and clear debris away from the homes of the elderly.



Training to be prepared for disasters

At the Kenwood France Plant, employees train cardiopulmonary resuscitation and AED so they will have the basic skills and know-how should disaster strike. In 2012, 36% of the employees received emergency training.



Helping out by donating blood

For more than 20 years, Kenwood America sales companies have been donating blood to the American Red Cross. Ongoing donations such as this are greatly appreciated by the Red Cross, and they have given us the best-in-class platinum award several times. We received it again in March 2012.



Donations

Donating sports equipment and scholarship funds

On January 13, the JVC Optical Components Thailand Plant employees donated 10,000 baht for a scholarship fund and sports equipment to local elementary schools to help the children grow into adults with promising futures.



Charity activities via e-commerce

Italian sales companies started operating their own e-commerce website www.kenwoodstore.it in 2009, and every year they contribute 0.8% of sales to three charities (Animals Asia Foundation, Child Protection in African Countries, and Italian Cancer League).



Banner introducing the donation recipients on the website for Kenwood in Italy

Christmas food and toy drive

In December of 2012, the employees of three sales companies for Kenwood and JVC in Canada participated in the Salvation Army's food and toy drive to donate toys and food to the poor in local areas.



Donations at Halloween party

Every year, Zetron, a group company, donates funds collected at its Halloween party to the Children's Miracle Network, a foundation for pediatric hospitals. In 2012, we donated \$1,219.90.



Activities to support sports, culture, and art

Supporting cultural advancements in Yokohama

JVCKENWOOD provides ongoing support for the Culture and Art Promotion campaign in Yokohama. We were one of the main sponsors of the Dance Dance Dance@YOKOHAMA dance festival staged in Yokohama from July 20 to October 6, 2012.



The Middle School Rising Sun Project was one of the programs at Hakkeijima Sea Paradise

Organizing and supporting youth soccer tournament

In May 2012, union volunteer staff from Japan and employees from the Kenwood Malaysia plant volunteered to administrate the Johor Bahru youth soccer tournament, which is sponsored every year by the Kenwood Group Union. Sixteen U-17 teams played.



Activities to support education

Outreach Training

The JVCKENWOOD Group has implemented outreach training in elementary and junior high schools using teaching materials as a specialist audio and visual manufacturer on the concept of contributing to social development by supporting the academic abilities of children.



Drawing images of the forest that come to mind while listening to the voice of the forest in the Soundscape Program

Implementing 5S education at elementary schools

On January 29, 2013, employees from JVC Electronics Indonesia joined with people from 12 other Japanese companies to implement 5S education at the elementary and junior high schools at Kutamekar Village.



Accepting interns from universities and technical colleges

Students from universities and technical colleges are interning at the Kenwood Malaysia Plant. These experiences are directly related to their university majors and specialized knowledge, which they can apply to their careers in the future.



Supporting education for elementary school students

Kenwood Electronics UK supports the education of girls in Senegal through an international NGO that promotes local development in developing nations. Because of this, children can attend the school that they love.



Sponsorship of handicapped racer

Italian sales companies are continuing their sponsorship of Fabrizio Macchi, a Paralympic medalist in bicycle racing who is known around the world. The way Fabrizio Macchi faces his difficulties is an example on which we should model our own lives.



Competitor in the Paralympics bicycle races Fabrizio Macchi

Supporting the WTCC as an official series partner

JVCKENWOOD is supporting the FIA World Touring Car Championship (WTCC*) as an official series partner.



*World Touring Car Championship



Auditing suppliers in Malaysia

Building partnerships with business partners

With equality and balance from a global point of view according to the laws and ethics of society, the JVCKENWOOD Group is working with parts procurement partners and sales partners to build mutually beneficial relationships through shared trust and transparency.

Working with parts procurement partners

Partnership with suppliers

As a basic policy to build interactive partnerships with suppliers, we are working to integrate with them to bolster product development. We are receiving many types of proposals from our suppliers and we aim to keep win-win relationships with suppliers by promoting the reformation of procurement practices related to quality, environment, delivery time, and costs. Also, we are developing products in alignment

with the suppliers' development of parts based on the JVCKENWOOD Group's development road map.



Environmental activities

We are constantly working to reduce the environmental load throughout the life cycle of our products, from production to sales, with an eye on environmental concerns in all business activities. One method that we think is very important is to place priority on procuring materials and parts that have a low impact on the environment. Specifically, we investigated the chemical breakdown of the materials we are procuring and evaluated them based on our Green Procurement Guidelines to support REACH*, which is leading a trend to control chemicals internationally. Green procurement evaluations are a self-evaluation of chemical control systems and the conditions under which they are implemented.

The evaluations aim to have suppliers establish and maintain systems to control the chemicals in their parts and to continuously make improvements. Green procurement auditing is done based on these results and tied to the creation of a system to reduce the environmental impact of parts and materials and to establish environmental management systems at suppliers.



Green Procurement Guideline



Consult our website for information about our green procurement guidelines.
<http://www.jvckenwood.co.jp/csr/green/index.html>

*REACH regulations: Registration Evaluation Authorization and Restriction of Chemicals
Law for controlling chemicals in the EU determined by EC regulation No. 1907/2006

Declaration of disclosure regarding conflict metals

The JVCKENWOOD Group respects Article 1502 of the Dodd-Frank Act when procuring resources. Due to the inhumane activities surrounding the production of the four conflict metals (tin, tantalum,

tungsten, and gold) produced in the Democratic Republic of the Congo and surrounding areas, it is our policy to not use them in our products.

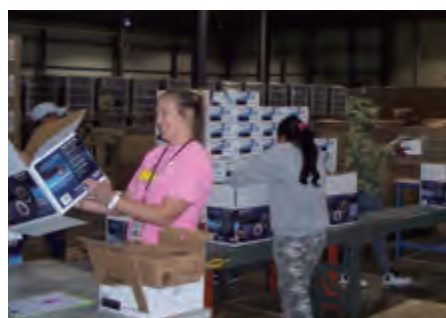
Working with production partners

Providing a wide range of packaging services

One of the main operations at JVC America is the packaging of CDs and DVDs in production. We are increasing our productivity by subcontracting processes from product packaging to shipping to our outside production partners. We are expanding the services we offer customers beyond just CDs and DVDs to include other producers' game software, peripheral devices, and more.



Production partner company employees package car audio equipment



Maintaining high quality through the excellent skills of our production partners.

Working with sales partners

Interactive communication with sales agents

On November 22, 2012, the Car Electronics Consumer Division held a convention of sales agents from across the nation.

The sales agents that cover the retail stores all over Japan are very important business partners for us. We introduced JVCKENWOOD's new system and new technologies, brand strategies, and product strategies to target goals and we were able to strengthen relationships and interactive communications with our sales agents. Everyone also



President Eguchi talks at the convention of sales agents



Dinner party after the sales agent convention

had a great time as this was our third consecutive annual convention.



Cool It Festival 2012 at the Head Office & Yokohama Business Center

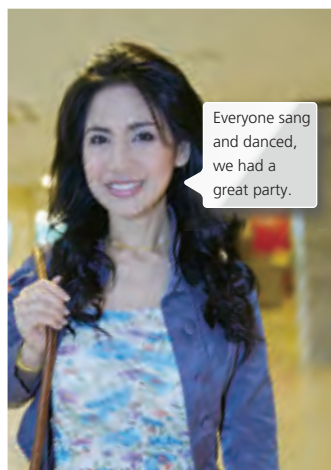
Work environments that are safe and easy to work in

The JVCKENWOOD Group is making efforts to create workplaces that are safe and pleasant, and to provide each employee with support in their growth through education and training systems.

Working with our employees

Family events for employees and their families

At JVCKENWOOD plants and offices around the world, we hold family events for employees and their families every year to show our appreciation for the employees hard work and to thank the families too. The families and staff both enjoy these events, which may be beer parties, barbecues, or trips that are unique every year. At the JVCKENWOOD Autumn Festival held at the Yokosuka Business Center on



Everyone sang and danced, we had a great party.

Pemika Norachetdecha, of the General Affairs Department, led the MCs for the New Year party at the JVC Optical Components Thailand Plant

October 12, 2012, about 600 people came, including our neighbors, employees, and families. And then, on December 15, JVC Optical Components in Thailand held a New Year party at which more than 1000 employees

participated. A great time was had by all thanks to employees doing folk and other types of dancing.



Neighbors and families enjoying the Autumn Festival Yokosuka Business Center



All employees look forward to the New Year party JVC Optical Components Thailand Plant

Supporting career and skill development

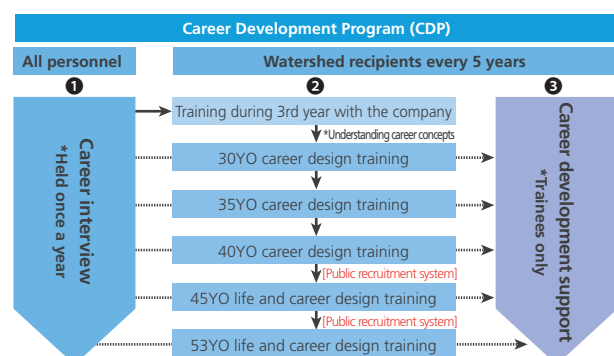
Multi-level training



New employees who started at JVCKENWOOD in April 2013

At JVCKENWOOD, we have systematized and implemented training to improve the skills necessary for implementing personal roles, and training to manifest personal skills within the organization. In April of 2013, our new employees started work. Training for new employees is a five month program that includes instruction in the internal organization and basic rules of our company and then hands-on-training in sales and production. We aim to quickly increase the skills of our new employees after they are assigned to their positions with programs that focus on education, such as OJT and independent technical study.

Our career development program-comprising career interviews, career design training, and a career development support system-helps people become what they want to be in the future, based on personal employment history and experience.



① Career interview

Employees meet with their superiors once a year to discuss their career vision (what they want to be in the future) and career development themes to integrate individual motivations and company expectations. This is the most fundamental of the three pillars.

② Career design training

In these training sessions, employees review their current work habits while planning what they want to attain in the future (career vision) and by considering the actions necessary to attain their goals, become aware of many things. Further, this is an opportunity for participants to consider comprehensive work/lifestyle balance comprised of personal development to reach future goals and links to family life and the region, while discussing their career visions.



Career design training

③ Career development support system

This system provides employees support of both time and money to take on further challenges by applying what they have learned from their new self-awareness. This system is used for various purposes to achieve career visions, such as distance learning courses, participation in outside seminars, and the obtaining of qualifications, and is effective not only in personal development, but also in in-house invigoration.

Helping support harmony between work and family life

JVCKENWOOD is steadily bolstering support of a balance between work and family life (work life balance: WLB) by accepting the diverse lifestyles and work habits of employees.

Supporting childcare and nursing

We have established a variety of ways, for childcare and nursing, to support our employees both at work and at events in their lives. We have made this system more easy to use by extending the time period in which children are applicable for the childcare support system from the “period ending at the end of March following the child’s ninth birthday” to the “period ending at the end of March following the child’s twelfth birthday”, starting in fiscal 2013.

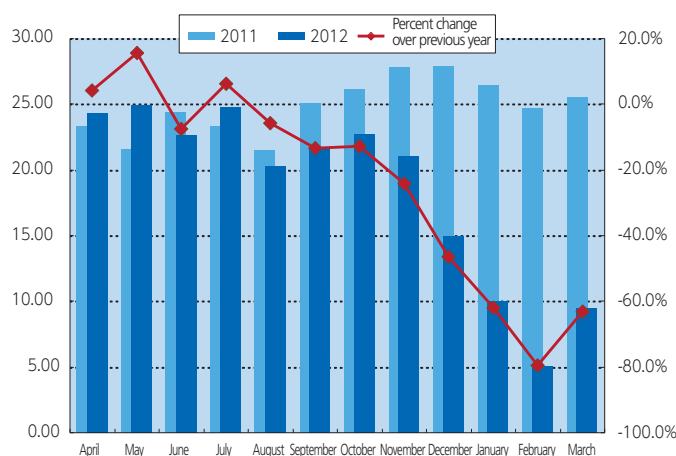
Name	Explanation	People using the system in 2012
Childcare leave	Leave can be taken until the end of April following the child’s first birthday or the end of the month in which the child reaches 18 months	Currently used by 11 people
Reduced working hours for childcare	During the period ending at the end of March following the child’s twelfth birthday, it is possible to reduce work time up to two hours per day as provided by law for childrearing	Currently used by 18 people
Pregnancy leave for spouses	Three days holiday are allowed to attend the birth of a child	59 people overall, 150 days taken
Sick/injured childcare leave	During the period ending at the end of March following the child’s twelfth birthday, five days holiday per year are allowed for nursing care (ten days if there are multiple children)	—
Nursing leave	A cumulative maximum of one year leave is allowed for each family member who requires nursing	—
Reduced working hours for nursing	Together with nursing leave, it is possible to reduce work time up to two hours per day for a cumulative total of one year	—
Nursing days off	Five days holiday are allowed to care for a family member who requires nursing (ten days if there are multiple family members)	1 person overall, 7 days taken
Limitation of overtime work and night work	If an employee is raising a child, until the end of March following the child’s twelfth birthday, and the employee nursing a family member requiring nursing care so requests, work at night will not be required and overtime work will be limited to a maximum of 24 hours per month or 150 hours per year	—
System to register retirees for reemployment	An employee who quit because of pregnancy, childbirth, childcare, nursing care, or a spouse being transferred will be registered for reemployment	Currently used by 1 person

Reduction in overtime work

We are continuing to make efforts to reduce overtime work every day as a way to promote a work life balance.

Specifically, we are setting one day a week as a no-overtime day. On this day, we urge employees to go home on time in building wide broadcasts asking them to adjust work schedules so they can go home at the end of the regular workday. We are posting the performance of each department’s efforts on our in-house portal site to raise awareness about overtime work. Also, we are developing measures intended to have employees independently manage their own time as they work.

These measures resulted in a 25% year on reduction in overtime hours, from a monthly average of 24.8 hours per person in fiscal 2011 to 18.5 hours in fiscal 2012.



Comparison of monthly overtime hours in fiscal 2011 and 2012

Encouraging workers to have a day off

In addition to lowering overtime hours, we are encouraging employees to use their annual holidays. To promote taking days off, we are promoting efforts such as spreading the idea through the various work sites, of setting a goal of a certain number of days to

be taken during a proposed month in a joint effort with labor unions. Starting from the previous fiscal year, we are surveying each workplace and setting detailed goals, to follow up on whether all employees are taking their days off.

Health and safety

Supporting people returning to work after a long absence

We continue to provide seminars on mental health issues so that all of us are aware of and understand the reality of mental health issues, so we can treat our colleagues with thoughtfulness and prevent such issues in the workplace.

We have also established a return to work support system to allow people to return to work without stress when returning to the job after a long absence. This system is, in principle, a three month program that introduces work responsibilities on a trial basis, increasing the workload and working time in stages, to a state of normal full time work after a return from a long absence or period of not working. When

returning to full work after finishing the trial work stage, a returning to work evaluation meeting is held with those people involved,

such as the industrial physician, medical staff, and supervisors, where everyone involved evaluates considerations surrounding the return to work and the support system.



Mental health training

Countermeasures against overwork

Long working hours lead to overwork, and this is an important social problem that cannot help being linked to health problems.



Industrial physician providing advice on proper health care

We are striving to prevent damage to the health of people and reduce long working hours. We do this by reducing overtime and using interviews, guidance, and medical questionnaires by industrial physicians. Further, we have also established days when people leave work on time, and the safety and health committee is reducing work hours as part of our proactive efforts.

Health and safety at work

Our Safety and Health Committee is focusing its efforts on safety and health measures to establish a corporate culture that gives top priority to the health and safety of its employees.

Regarding safety, we aim to go from zero accidents to zero risks by implementing such measures as finding potential risks in the workplace, establishing risk assessment to minimize them, and regular inspections of workplaces by the Safety and Health Committee. As for health, we are supporting



Health care advice is easy to get in healthcare offices

employee healthcare with healthcare offices that provide advice on health, and measures to follow through on periodic health checks done in association with industrial physicians.

We are also promoting the creation of comfortable work environments by setting up rooms for relaxation and rejuvenation in our work facilities and completely separating smoking areas.



Lounge that can be used by employees to rest or do other things
Photo is at Head Office & Yokohama Business Center

Conserving the world's through our

Countries and regions across the globe are working to solve the problems of depletion of resources that face the planet on which we live. The JVCKENWOOD established our Eco Promotion Plan 2020 based on our Environmental Vision management of chemicals so we can help preserve the world's environment

Environmental vision

We will contribute to society as an eco-promoting company active in efforts focused on reducing environmental impact.

Environmental policies

To preserve global environments and resources and prevent pollution, we will manage our business activities, our product development, and our services through ongoing improvements with a full awareness of our environmental impact.

1. Prevent global warming by promoting the reduction of CO₂ emissions throughout the product lifecycle, including business activities, by developing technologies and products that reduce environmental impact.
2. Use limited global resources effectively to create a sustainable society by reducing the resources we use within a framework of 3R activities and progressive usage of eco-friendly materials.
3. Manage chemicals that affect the world's environment and biosphere, continue reduction in consumption, and switch to eco-safe materials.
4. Recognize the effect on biodiversity of all business activities, product development, and services to comprehensively reduce our environmental impact in harmony with the natural environment.
5. Comply with environmental legislation and other requirements with which we agree.
6. Educate employees on the environment to cultivate greater environmental awareness.

beautiful environment business activities

global warming, pollution from hazardous substances, loss of biodiversity, and Group is optimizing its response to these large-scale global trends. We have and Policies, to promote energy conservation, 3R activities, and appropriate to leave the next generation with beautiful environments across the planet.

Eco Promotion Plan 2020

① Energy conservation

- Energy conservation in offices and manufacturing sites
- Development of energy-saving products (using LCA)
 - Reduction of energy consumption in products both during usage and when in standby
 - Miniaturization and weight reduction (reduction of transportation energy)
- Development of elemental technologies that contribute to energy savings



Reducing the impact of global warming on plant and animal ecosystems

② 3R activities

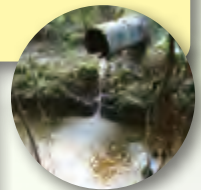
- Development of products designed for recycling
 - Adoption of ecological and recyclable materials
 - Company-wide rollout of 3R design methods (disassembly, resource conservation, and more)
- Reduce and recycle waste
 - Maintain zero waste emissions at Japanese production and business bases
 - Zero waste emissions at global manufacturing sites



Reducing the impact of excavating mineral resources on ecosystems

③ Appropriate management of chemicals

- Promotion of green procurement
 - Improve the green levels of suppliers
- Reduction of hazardous substances in products
 - Encourage switching to safe substances
- Company-wide promotion of alternatives to and the appropriate handling of chemical substances



Reducing the impact of air and soil pollution on ecosystems

④ Maintenance of biodiversity

Recognize the effect on biodiversity of all business activities, product development, and services to comprehensively reduce our environmental impact in harmony with the natural environment.



Environmental Conference April 2013

Promoting environmental management throughout our companies

The JVCKENWOOD Group is promoting environmental management in all its companies to produce verifiable results linked to development of products with no environmental impact and the promotion of business and production operations with no environmental impact.

Environmental promotion organization

Environmental Conference

The environmental management activities of the JVCKENWOOD Group are implementing environmental management and spreading the policies and measures decided by the Environmental Conference, management's top-level decision making body.



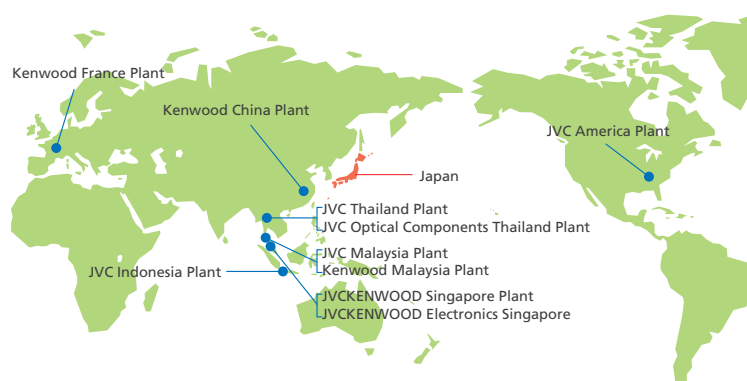
Environmental management system

The JVCKENWOOD Group set up an environmental management system based on the ISO14001 standard and maintains its certification for group companies in Japan and all manufacturing sites overseas. Since fiscal 2012, we started integrating



Felicia Gross is in charge of environmental management at JVC America where she also works proactively in local support activities

the environmental management systems of JVC and Kenwood. We are working to acquire certification for all offices, non-manufacturing facilities, and affiliated companies throughout Japan based on a unified environmental policy.



	Consolidated certification	Number of sites
Japan	Business centers	5
	Affiliated companies	9
	Non-manufacturing sites	41

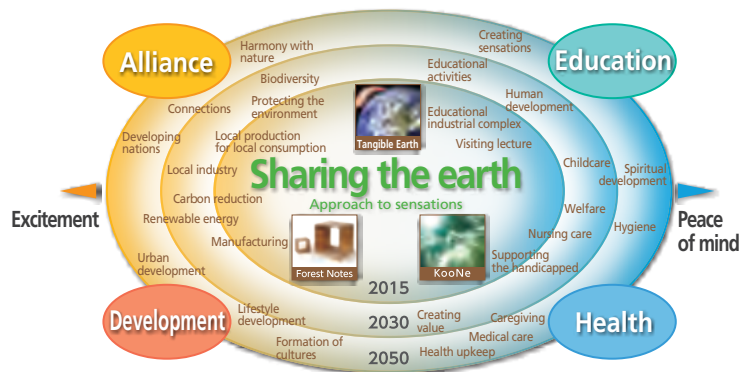
Overseas	Independent certification	Number of sites
	Manufacturing companies	10

Environmental communications

Exhibition at Eco Products 2012

- Theme: Feeling the Earth -

The JVCKENWOOD Group is using the core audio and video technologies which have been cultivated over the years to advance the development of products and services that provide excitement and peace of mind as stated in our corporate vision and we are working to achieve a society that can live in harmony within the world environment. At Eco Products 2012, we exhibited the results of our efforts to spark the true feelings of people, to allow them to feel a closeness with the planet, through a perspective of our lifestyles in the year 2050.



How JVCKENWOOD expects to be involved with society by the year 2050



JVCKENWOOD booth

Theme: Feeling the Earth



Tangible Earth

Visitors experienced the feeling of the living earth by using the prototype Tangible Earth, our second generation digital globe, produced by Professor Shinichi Takemura of Kyoto University of Art & Design.



Forest Notes speaker systems

This speaker has the finish of a beautiful piece of art built with Japanese craftsmanship. Visitors experienced the sound of the forest transmitted live from microphones situated in Hida Takayama and other locations.



Theater of sharing the earth

Visitors experienced a pleasing space blending the projection of beautiful images and high-resolution sounds in a spatial acoustic design of the high-quality sounds of nature (forest, river, sea, and other sounds).

Environmental accounting

Analyzing environmental preservation costs

The JVCKENWOOD Group aims for transparent and highly refined environmental management through actively publishing information and by introducing environmental accounting in line with the Ministry of Environment's guidelines. Investment for environmental protection in FY2012 totaled 141 million yen in new plants and equipment and 701 million yen in expenditures. Investment in new plants and equipment increased over last year, a major factor in this was investments related to protecting the global environment, such as rebuilding air conditioning facilities overseas. Other large changes from last year are increases in expenditures for recycling resources as part of business area internal costs; increasing expenditures for green procurement in up and down stream costs; and reducing chemical management costs as part of management activities costs. A major factor was the increase due to activities to reduce environmental impact within internal business costs, which are overall increases in expenditures and capital investment. In terms of environmental results, an increase in profits from recovering valuable materials from waste and energy savings through capital investment in 2012 greatly increased compared to last year. In the future, we will promote activities to reduce the environmental impact and ensure environmental results by optimizing application of environmental preservation costs.

JVCKENWOOD environmental preservation costs: Equipment investment and costs for environmental preservation activities (Unit: Million yen)					
Activity		Explanation	Equipment investment	Expenses	Total
Business area internal costs	Pollution prevention	Costs and investment required to prevent air and water pollution	8.40	87.82	96.22
	Global environmental costs	Global warming prevention and ozone layer protection costs	117.87	27.40	145.27
	Resource cycle	Waste material reduction, recycling, and reuse costs, etc.	14.82	102.23	117.05
Subtotal			141.09	217.45	358.54
Upstream and downstream costs		Eco product and green procurement costs, waste household electric appliance countermeasures, and packaging and container recycling, etc.	0.00	151.15	151.15
Management activities costs		Environmental management costs, ISO certification, maintenance, training, and staff costs	0.10	331.17	331.27
R&D costs		Eco product development, energy conservation, and hazardous chemical substances replacement technology development costs	0.00	0.00	0.00
Social activities costs		Amenities, contribution and support costs, and information publication, environmental advertising, and environmental exhibition costs	—	0.88	0.88
Environmental damage costs		Soil contamination countermeasure costs, indemnities, fines, and other costs	0.00	0.55	0.55
Total			141.19	701.20	842.39

Environmental results	Reduction of amount of electricity used and waste processing costs through environmental maintenance activities	Sum (Million yen)	
		FY2012	Past cumulative total
Reduction	Energy-savings at plants	71.74	89.34
	Reduction of waste disposal costs	2.14	2.14
	Reduction of water and sewer service costs	20.70	20.70
	Reduction of packing materials and logistics costs	1.15	1.15
Income	Profits from sales of recycled plant waste	126.73	
	Profits from sales of recycled products	0.02	
Total		222.48	240.08

Environmental accounting scope

Period	April 1, 2012 to March 31, 2013
Total scope	JVCKENWOOD Group R&D Centers, Business Centers, Main Japanese Manufacturing Sites and Affiliated Manufacturing Companies Head Office & Yokohama Business Center, Hachioji Business Center, Hakusan Business Center, Yokosuka Business Center, Kurihama R&D Center, Victor Creative Media Co., Ltd., Victor Interior Furniture Co., Ltd., Kenwood Yamagata Corporation (Yamagata Plant), Kenwood Nagano Corporation (Nagano Plant), JVCKENWOOD Devices Corporation
	Global Affiliated Manufacturing Companies JVC America Plant, JVC Malaysia Plant, JVC Thailand Plant, JVC Optical Components (Thailand), JVC Indonesia Plant, Shanghai Kenwood Electronics Co. Ltd., Kenwood Malaysia Plant, Kenwood France Plant, JVCKENWOOD Singapore Plant, JVCKENWOOD Electronics Singapore

Reference guidelines: Ministry of the Environment, Environmental Accounting Guidelines, 2005

Targets and results

FY2012 environmental targets and results

The JVCKENWOOD Group is setting annual targets to reduce our environmental impact while meeting the needs of customers based on a life-cycle viewpoint throughout manufacturing.
The activities results for FY2012 reached initial targets.

Activities	Fiscal 2012 targets (April 1, 2012 to March 31, 2013)	Evaluation
Energy conservation		
Energy-saving products	Targets from assessments of each model were set and implemented	○
Reduction in CO ₂ emissions from business activities	Over 1% (compared to FY2011)	○
3R activities (Reduce/Reuse/Recycle)		
Resource reduction and recyclability	Targets from assessments of each model were set and implemented	○
Waste ① Reduce total volume produced	Over 1% reduction (compared to FY2011)	○
② Zero emissions	Over 99.5%	○
Appropriate management of chemicals		
Green procurement	Evaluation of business partners' green procurement	○
Chemicals at plants	Management of storage, usage, disposal, and transported volume of chemicals used in business activities	○
Environmental risks		
Not using toxic chemical substances	Adherence to Green Procurement Guideline	○
Environmental risks	Fully completed processing to detoxify insulator fluids to remove trace amounts of PCB from our operations	○

Evaluation standards: ○ Target achieved; △ Target partially unachieved; X Target not achieved

Promoting energy savings to help reduce CO₂

The JVCKENWOOD Group is actively involved in reducing our environmental impact by pursuing technologies to reduce product power consumption and standby power consumption, and to make products increasingly compact and lightweight.

Development of energy-saving products

UBZ-EA20R is defined as specified low-power radio equipment and runs on one AA battery for long periods

Part 1: Planning

According to Japanese law, specified low-power radio equipment does not need a license. These radios can simply be used on the day they are bought. The Kenwood brand of specified low-power radio equipment holds over 40% of this market. These Kenwood radios are used in a wide range of applications from work to leisure.



Kiyohiko Itagaki of the System Engineering Group, Engineering Department 1 at Kenwood Yamagata Corporation explains the background of their plan

The long selling UBZ-L series (using 3 batteries) was originally planned and designed for leisure use. However, it found many applications in business too. The market is now demanding specified low-power radio equipment that can perform in work environments*² (is waterproof and durable), and is lightweight and able to operate for long periods on a single battery. One of the motives behind this plan was that it was so difficult to get batteries in emergencies like the East Japan Earthquake.



UBZ-EA20R uses a single AA alkali battery to operate for up to 72 hours*¹

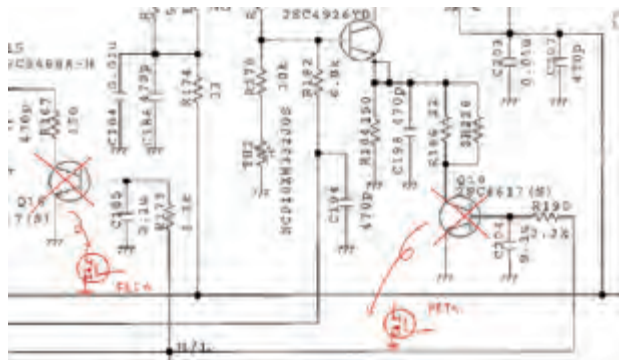
*1 When using the optional clip-on microphone with earphone (EMC-3)

*2 The radio itself has an IP55 rating, so it can readily be used outdoors. The outer casing is made of shock resistant polycarbonate resin that is tough enough to meet the US Defense Department's military standard MIL-STD-810G.

Part 2: Technology

●Patiently revamping existing circuits

As a longstanding radio manufacturer, we have garnered a mass of knowledge from the history and tradition of circuitry, so we were extremely diligent in reworking the electric current consumed by our existing circuits. We studied reductions in current consumption on the scale of a few mA. In revising these circuits, we changed some of the transistors in the transmission, power and other circuits, to FETs.



Circuit designers meet to redesign circuits

●Designing a circuit to operate at low voltage

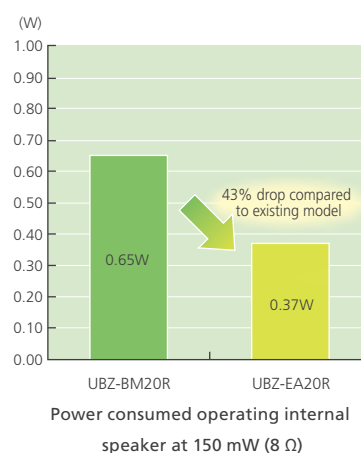
The internal circuits of the existing model had an operating voltage of 3 volts, yet we needed to modify the design to lower the voltage to 2.8, yet keep the existing performance. Lowering the operating voltage increased the efficiency of boosting the battery voltage to 1.5 V and thus power savings.

●Using a D class amp

We greatly reduced the current consumed by the amp by using a D class amp to drive the internal speaker. This gave us a 43% reduction in the power consumed to output 150 mW of sound from the internal speaker, compared to the existing model (UBZ-BM20R).



D class amp



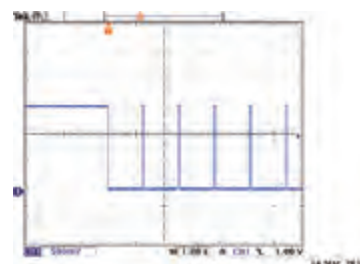
●Software innovations

A new eco mode was included as a battery saving function that suppressed power consumption. With the eco mode, reception level power is used intermittently (turned off and on at very high speed) whenever the radio is waiting to receive. We had to be creative to eliminate any feelings of unease when a signal was received when the power was off.

The results of this are a transceiver that operates for a long time on a single AA battery, about 72 hours under our in-house testing conditions, when using eco mode and the optional clip-on microphone with earphone (EMC-3).



Featuring the new eco mode battery-saving function.

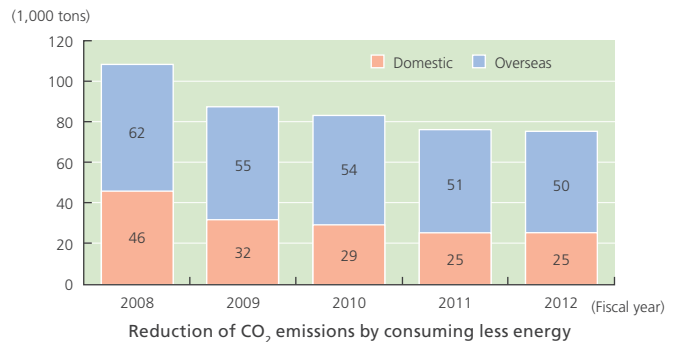


Wave form at reception level when in eco mode

Office activities to save energy

Global activities to save energy

The JVCKENWOOD Group uses such energy saving conventions as turning off lights during the lunch hour, and carefully controlling air conditioners. We are also working to reduce emissions of CO₂, the greenhouse gas with the largest effect on global warming, through activities to improve productivity at factories, increase efficiency in offices, and by installing LED lighting and using inverters for air conditioning, and more.



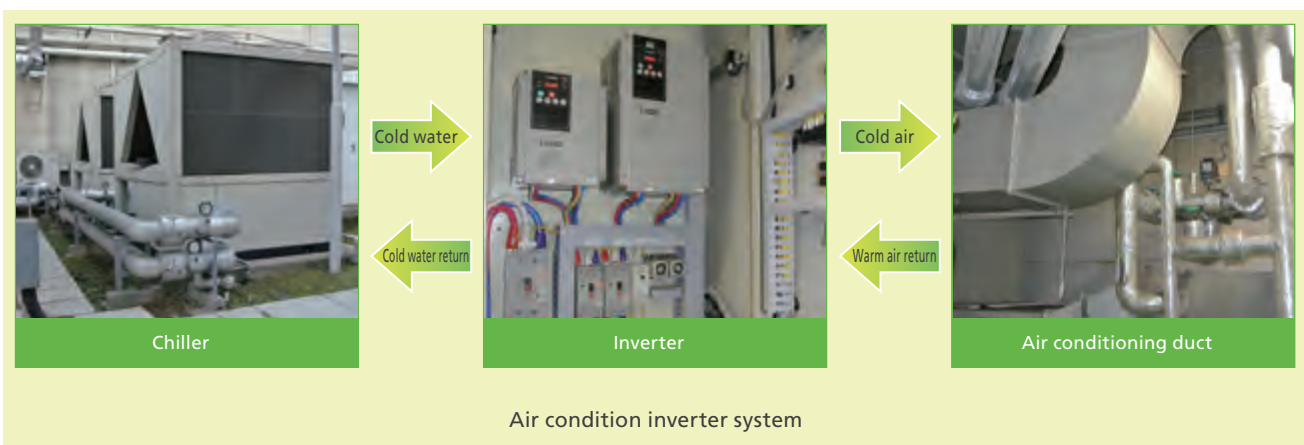
Promoting energy saving air conditioners



Victor Creative Media installed inverters for its air conditioners as a measure to promote energy savings. Inverters are power converters that can flexibly change electrical frequencies to make operation much more efficient and in recent years have been used in many areas. Air conditioners work 24 hours a day, 365 days a year, with no break. Each month they use almost the same amount of power as summer months, when a lot of power is needed for cooling. After installing the inverters, we ran them efficiently according to room temperatures, and cut power consumption by nearly half. Our yearly average was about a 37% reduction, compared to before installation. We successfully saved this energy, a huge 104,000 kWh annual reduction in power consumed.



Hiroyuki Kazaoka of General Affairs Department at Victor Creative Media

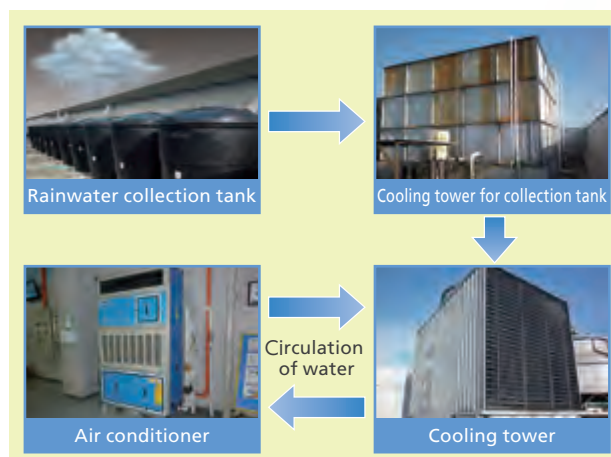


Using rainwater

At Kenwood Electronics Technologies Malaysia, we use very much water for drinking, toilets, air conditioning, and more. Specifically we use about 30% overall for air conditioning. We introduced the effective usage of the rainwater in tropical rain forest environments on the earth's equator. This method involves installing tanks to store rain water, supplying rainwater to water storage tanks for the air conditioners, and combining usage with tap water. The results of this were a 20% to 25% reduction in the amount of tap water used each month.



Mr. Chandran
Engineering Department
Head

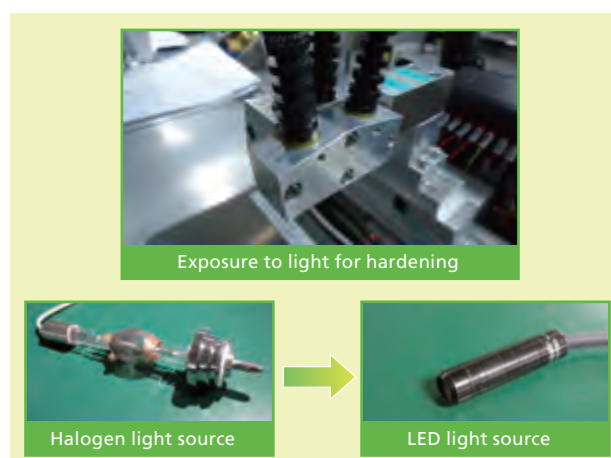


Hardening adhesive with LED lights

At the JVC Optical Components Thailand Plant, we produce pickups for onboard DVD/CD drives. Our production process uses adhesive to attach parts. In the past we used halogen lamps to dry the adhesive. Our new models will use UV adhesive that hardens under LED lights. This allowed us to save a great deal of energy by reducing the power consumed by the lights to about 1/4.



Mr. Surachai
Production Department
Deputy Department
Manager

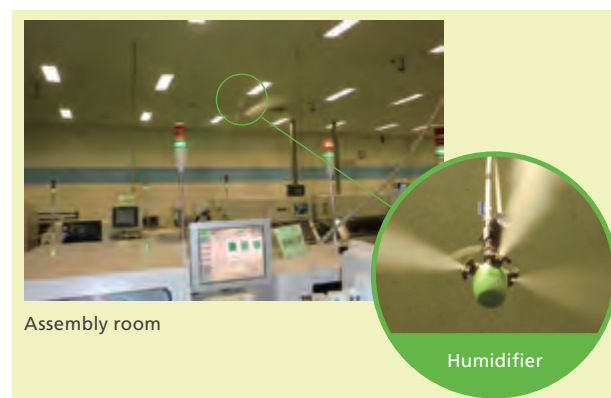


Changing humidifiers improved humidity control and boosted energy savings

At Shanghai Kenwood Electronics, improving the level of humidity management in the assembly room during the winter became a quality issue. To solve this problem, and to boost energy savings even more, we replaced the existing electrolytic vaporizing humidifiers with fine-mist humidifiers. As a result, our efforts succeeded in huge energy savings by reducing power consumption to less than 1/5 while maintaining the humidity required for quality.



Mr. Yutong
General Administration
Manager





Designers examine structures with 3D CAD

Contributing to a sustainable society through 3R activities

The JVCKENWOOD Group considers environmental resources when developing products and promotes the 3Rs to reduce waste and recycle resources to contribute to a sustainable society.

Promoting 3R designs

Car audio systems sold around the world are designed for 3R

Our car electronics business consists of car audio, car AV systems, car navigation systems, CD/DVD mechanisms for on-board equipment, and optical pickups, which comes to approximately 1/3 of the sales of the JVCKENWOOD Group.

We have reached and are holding the top market share in the industry in the car audio and car navigation markets in North America and Europe. We receive large orders from auto makers in Japan, as well as in Europe and America, for our CD/DVD drive mechanisms for onboard devices, for their marketability, cost performance, and the best quality in the industry. Because of the large number of units that we produce and sell through our car



Hiroshi Ino of the Audio Engineering Department, Car Electronics Consumer Division explains the results of 3R designs

electronics business, we are able to really help achieve a sustainable society by promoting the development of products built for 3R processing.



Non-mechanical model CD player is a compilation of 3R design

1. Analysis technology used to reduce size and weight

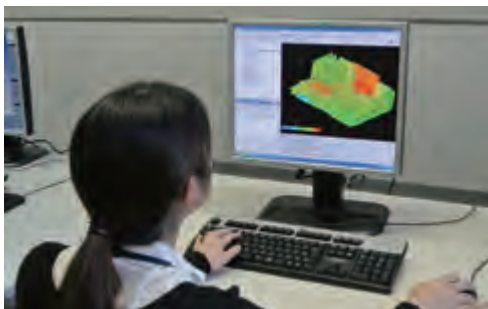
While audio equipment performance increases, size and weight decrease, yet it is still necessary to effectively disperse the heat that is generated from electronic components in the product.

With thermal analysis technology, we can visualize the distribution of heat and flow of air, to design heat sinks to effectively disperse the heat generated inside our products.

We reduced the weight of the heat sink by about 50%, and its size by about 60%, by scrutinizing its shape, the materials used, and production methods.



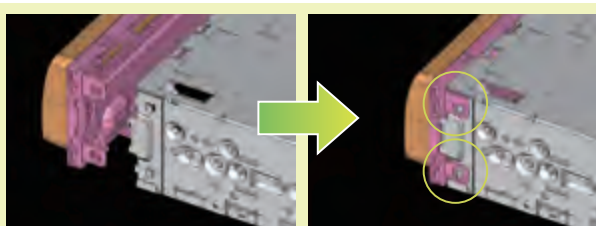
Top : Reduced weight of heat sink by about 50%, and size by about 60%
Bottom: Previous model



Visualization of heat dispersion on heat sink using thermal analysis technology

2. Easy to assemble = Easy to disassemble

At a product's design stage, we consider how to reduce and recycle. In addition to studying how to reduce the total number of screws and their variations, we also eliminate screws by using snap on mechanisms as shown in the diagram. The designs we are advancing make assembly and disassembly both easy and simplify separation of metal and plastic parts.



Snap on mechanism uses hooks

3. Major reduction in weight and number of parts

By developing a non-mechanical CD player especially for digital audio equipment, we were able to reduce the total number of parts. This allowed great reductions in the size of chassis parts and printed circuit boards and weight.

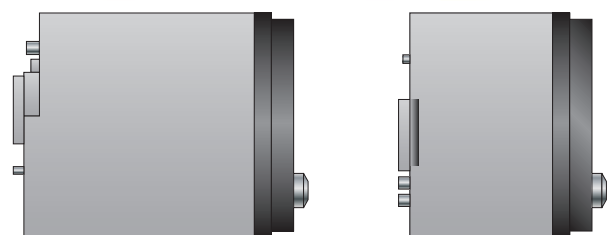
Compared to our CD receiver model, the number of parts shrank about 23% and the weight dropped about 45%.

	Total number of parts	Weight
CD receiver model:	About 950 parts	About 1.1 kg
Non-mechanical model CD player:	About 730 parts	About 0.6 kg

In addition, the more compact product required a smaller package, for a big 30% reduction in volume, which helps to reduce the energy used to ship the product and reducing the weight of the cushioning and cardboard box, which are recyclable, reduces the impact on the environment.



Non-mechanical model CD player

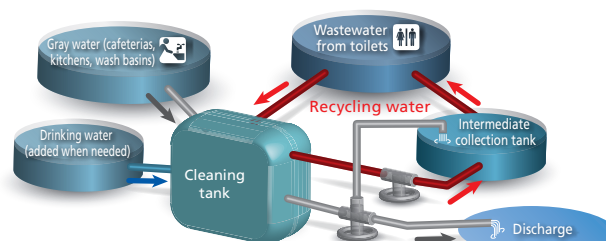


CD receiver (left) and non-mechanical model CD player (right)

Recycling activities

Recycling water

The JVCKENWOOD Group considers water an important resource. In our production processes, we have promoted enhanced efficiency, water leakage countermeasures, and water conservation activities. At our Head Office & Yokohama Business Center, we recycle about 5000 m³ of water annually by cleaning the gray water from our kitchens, cafeterias, and wastewater from toilets to recycle and use it. This helps reduce the amount of drinking water and industrial water that we use.



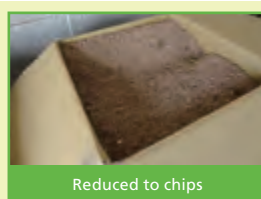
Using recycled water at the Head Office & Yokohama Business Center to reduce water usage

Effectively using even tiny scraps

At Victor Interior, waste from the production of furniture is effectively used by reducing it to chips and using it as fuel for our boiler. This thermal recycling is environmentally friendly because no dioxin is produced when it is burned.



Waste material produced during production



Reduced to chips



Used as fuel for the boiler

Improving collection and recycling of waste electrical and electronic equipment in Europe

The JVCKENWOOD Group is promoting 3R designs to produce products that are easier to recycle and is committed to recycling in full compliance with the EU's WEEE (Waste Electrical and Electronic Equipment) directives.

All of our sales companies in Europe are proactively participating in waste electrical and electronic equipment recycling schemes. For each model of our products, we release information



In Germany, Andre Overbeck supports sales activities and gathers information regarding environmental laws and regulations for Europe.

about the products and procedures needed to dismantle them to recycling companies to satisfy our responsibility as a manufacturer. From February 2014, in all EU member countries, retailers of electrical and electronic equipment at stores 400 m² or larger will be responsible for collecting small household appliances free of charge.

We are helping to create a recycling system that gives greater consideration to the environment so that the introduction of small household appliance collection goes smoothly.



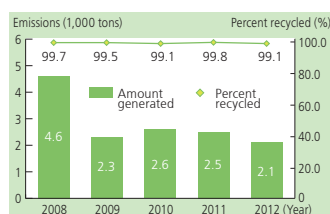
Boxes for collecting small household appliances at a shop in France

Waste reduction activities

Continuously reducing waste through zero emissions

The JVCKENWOOD Group is revising its action plans by resetting the base year to fiscal 2011 and promoting efforts to reuse resources and reduce the amount of waste that is produced in Japan. As a result, we dramatically lowered the volume of waste compared to last fiscal year by 16%, maintained a recycling ratio above 99%, and continued with our zero emissions goals.

In the future, we will continue to work to use resources effectively and to control our waste.



Trends in annual waste generation JVCKENWOOD Group (domestic)

	Amount generated (tons)	Composition ratio (%)
Sludge	255.6	12.1
Paper waste	849.1	40.4
Wood waste	152.6	7.3
Plastic waste	375.9	17.9
Metal waste	333.0	15.8
Liquid waste	37.5	1.8
Other (animal and vegetable residue, etc.)	100.3	4.8
Total	2104	100.0

Breakdown and Composition of Waste for FY2012

Successfully separating and recycling garbage

The Head Office & Yokohama Business Center and Hakusan Business Center received awards from Yokohama City for being Offices with Excellent 3R Activities for 2012. Both centers have been recognized for excellence since 2007, in June 2012 the Yokohama Metropolitan Office of Recycling inspected their sites and recognized them for the sixth year in a row.



Certificates for Offices with Excellent 3R Activities for Head Office & Yokohama Business Center (left) and Hakusan Business Center (right)

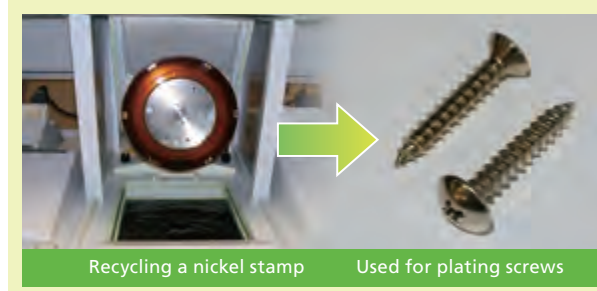
Separating and recycling garbage

At the Kenwood France Plant, the many cardboard boxes used for packaging are compressed and transported to the recycling center. This makes transportation more efficient, which reduces the CO₂ output by the trucks.

At the JVC America Plant, the nickel in old nickel stamps for DVDs and CDs are recycled to extract and reuse the nickel. Nickel has a high resistance to corrosion, which is reused in other products such as screws.



Cardboard is compressed in a press for more efficient transport



Recycling a nickel stamp

Used for plating screws



Promoting lower environmental impact through global chemical management

The JVCKENWOOD Group has established a comprehensive chemical management system to help reduce our environmental impact in compliance with environmental laws in the countries where we produce and sell products.

Comprehensive system to manage chemicals in products

Eliminating hazardous substances to make headphones that can be used with peace of mind

With the popularization of smartphones and digital audio players, people of all ages are using headphones. People all over the world are using headphones from the extensive JVC brand lineup, which ranges from inexpensive models all the way up to models used in studios. We have sold more



Headphones are used directly on our bodies



Masayuki Kano of the Audio Division, Engineering Operation explains the importance of controlling hazardous materials

than 50 million of the inexpensive models all around the world. Headphones come in direct contact with our bodies, so we are trying to eliminate any dangerous chemicals from them right away. Of course, our products comply with RoHS

directives all around the world, and we are actually screening for various types of phthalate esters, and controlling restricted materials to keep them out of our products.

We are eliminating hazardous materials with an intensive control system so that our customers can use JVC brand headphones with peace of mind.



Test to screen for phthalate esters using liquid chromatography

How are chemicals used in products controlled?

Everything on the planet is made up of chemicals, and many of these things have their own special properties.

There are some things that are environmentally friendly and others that may lead to cancer or harm us in other ways.

Products from JVCKENWOOD do not use materials that endanger the environment or may harm people. We provide our customers with peace of mind by controlling the use of these substances so the products we manufacture are safe for people and the environment.



Chua Lay Swee, manager of quality control at JVCKENWOOD Electronics Singapore, verifies the chemical substances contained in our products

System for controlling chemical substances

Determining which chemical substances to control

Environmental awareness is rising in every country around the world, environmental regulations are continuously being legislated and established to determine which chemicals to ban or restrict. These laws are the basis for deciding which chemicals need to be controlled and which prohibited. Also, industry organizations are working to collect information about these laws from around the world as people from different industries discuss how to control chemical substances.



Establishing controls for chemical substances

We provide our suppliers, from whom we purchase parts and materials for our products, with our green procurement guidelines, which define controlled and prohibited materials. The guidelines are also available on our website.

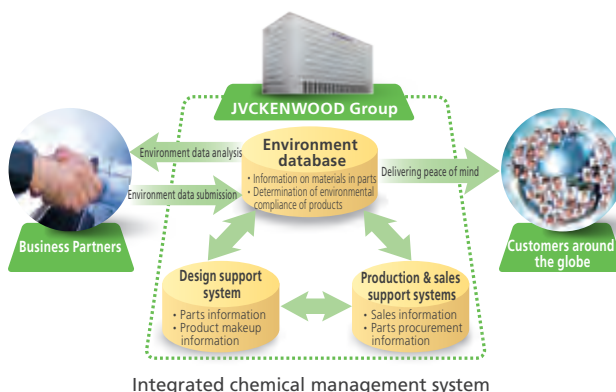
Applied to products

The parts and materials that go into our products are selected, by the suppliers that provide us with them, according to our green procurement guidelines.

System keeps operations reliable

Our suppliers submit reports on the composition of their materials and parts, which we use for systematic controls.

We screen each model of our products for controlled substances to build a system that operates with full reliability.



Reducing materials that have an impact on the environment and minimizing environmental risks at business centers and plants

Detoxification of polychlorinated biphenyls

The JVCKENWOOD Group implemented detoxification measures in March 2013, to remove insulating oil with low density PCBs from heavy electrical equipment, which is all stored at Victor Creative Media. This completed the process to detoxify all insulating oil contaminated with low density PCBs that was stored by the JVCKENWOOD Group. In the future we will continue to work to reduce the amount of chemicals that impact the environment by implementing detoxification of electric equipment



Workers extract oil at the storage facility for low density PCB contamination



Facilities for processing insulating oil contaminated with low density PCBs (incinerated at over 1100°C)

that is contaminated with PCBs at every level of our business.

Emergency response

At Kenwood Yamagata Corporation, a mold opener is used as a quality analysis device, although in only small amounts, fuming nitric acid, a hazardous substance, is used to open molds. Because of this, it is used for periodic training of emergency drills, such as leaks, the results of which are then reflected into the procedure manuals. For the refrigerator where we keep the fuming nitric acid, we are eliminating environmental hazards by separating bottles of reagents stored in the refrigerator to prevent them



Training to handle leaks of fuming nitric acid



Stabilized refrigerator where fuming nitric acid is stored

from falling, and fixing the refrigerator itself in place, in case there is an earthquake as big as the great Eastern Japan earthquake.

Regulations and procedures for preventing accidents and accidents expected to affect the environment

Materials that impact the environment	Accidents expected to affect the environment	Regulations and procedures for preventing accidents
Kerosene	Accidental leak while tanker truck is filling underground tank	Managing operation of environmental facilities (underground storage tank)
Chemicals for water treatment • Polyaluminum chloride • Hydrochloric acid & sodium hydroxide	Accidental leak while tanker truck is filling storage tank	Emergency procedure for transport of chemicals
Industrial waste subject to special control • Waste acid • Waste oil (organic solvents)	Accidental leak while tanker truck is filling underground tank	Emergency procedure for transport of chemicals
Organic solvents (acetone)	Accidental leak of dangerous materials	Rules for emergency response Procedure for emergency response at indoor storage of dangerous materials
Nitric acid	Accidental leak during use	Yamagata mold opener control procedure manual

Control of chemicals

The JVCKENWOOD Group controls the storage, usage, disposal, and transferred volume of chemicals used in business activities. In fiscal 2012, we tested the conditions in which hazardous substances (28 chemical substances) covered by the revised water pollution prevention act were used, and established new facilities specified for usage and storage of hazardous substances. Also, the only chemical

substance we use, that is covered by the PRTR law if more than one ton is used, is nickel, and we are recycling and taking other measures to reduce emissions and amounts that are transferred. In the future, we will minimize environmental risks and materials that impact the environment by promoting continuous improvement in controls.

PRTR: Pollutant Release and Transfer Register

Global Environment Dialogs

Due to the efforts of the JVCKENWOOD Group to reduce overall environmental impact through promotion of energy conservation, 3R activities, and appropriate management of chemicals, we can see the results in a more secure and beautiful global environment.

Participating in "Learning the Blessings of the Forest" (Head Office & Yokohama Business Center)

We participated in "Learning the Blessings of the Forest", which is a part of Yokohama's Green Up Plan (new expansion policy). We were able to help remove introduced plants from the Yokohama Nature Sanctuary.



Tree planting project prevents global warming (JVC Manufacturing Thailand)

Our project to plant trees kicked off after the area was damaged after a big flood in 2011. On August 10, 2012 we planted trees, and all the employees prayed that many trees would grow up.



Planting trees in the Horqin desert in China (JVC WORKERS UNION)

Since 1994, we have been planting trees in the Horqin desert in cooperation with the people at a local NGO in an effort to make China's deserts green.



Clearing brush in the Association Forest (Victor Creative Media Co., Ltd.)

Helping to clear brush in the Association Forest at Yabitsu Ridge as a member of the Kanagawa Prefecture Yamato Association.



Families investigating water quality (Kenwood Nagano)

Researching water quality in the wetlands of the Tenryu River during summer vacation. Locations that are polluted were also reported at a presentation.



Researching water quality and marine-life (Kenwood Yamagata)

Researching water quality and marine-life with children and their parents during summer vacation in the Aka River, Uchi River, and the Shoryuji River, which are rivers that flow through the area. We confirmed that the nine-spined stickleback (*Pungitius pungitius*) a small freshwater fish was alive in the Shoryuji River system.



Environmental picnic in the Tenryu River system (Kenwood Nagano)

Every year employees and their families (especially elementary school age children) gather in three locations along the Tenryu River for environmental picnics in the Tenryu River system to beautify and learn about the environment.



Cleaning up Tobishima (Kenwood Yamagata)

Tobishima is a well-known place in Japan through which migrating birds pass. This island is a very natural location, but a lot of garbage washes up on its shores, so we have been participating in clean-up work since 2003.



JVCKENWOOD

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