Exhibitors
Record high number of exhibitors took part
Companies leading the way in broadcasting technology across the globe were all assembled under one roof. A wealth of technology aimed at future business to follow the digital revolution was on display, presenting the new possibilities of broadcasting business.

Number of exhibitors: 871 (record-high)
Number of overseas exhibitors: 491 (record-high)

Trading Visitors
Visited by business users from diverse fields
In line with the expansion of exhibition categories, visitors from new fields took part in the exhibition along with existing visitor groups, and discussed new technology with exhibitors. Press coverage was also extensive, widely introducing the exhibition both in Japan and abroad.

Registered visitors: 31,857
Number of news media representatives: 343

International
Leading-edge technology under the global spotlight
In addition to interest from abroad in the 4K/8K technological revolution, there are now signs of next-generation broadcasting technology developed in Japan, such as One-seg broadcasting and IP data broadcasting, being adopted in emerging countries.

Overseas exhibitors: 35 countries/regions
Overseas visitors: 35 countries/regions
Exhibition Category

Professional Audio

Sound that resonates in the heart is reproduced with technology

Many visitors were able to experience firsthand digital audio workstations and IP technology. On display was equipment that can be easily used in a variety of workplaces, and new products that meet needs for product downsizing and lightening as well as cost reduction.

Audio Equipment


Production & Post-Production

Creativity evolves seeking further value

4K video production technology attracted the most interest as well as cameras that stood out for their original technology. Workflows ranging from highly-versatile filming to editing and exporting attracted a lot of attention.

Production

- HDTV Systems, Studio Cameras, VTR-Pack Cameras, Camcorder, 4K Cameras, Digital Cinema Cameras, 3D Cameras, Crane Cameras, Lenses, Other Related Peripheral Equipment, Video Servers, File Server System, DVD Systems, BD Systems, VTRs, Memory Cards, Memory Devices, Optical Disks, Video Tape, Data Compression Technology, Video Monitors, Multiple Monitor Displays, Projectors, LCD/PDPLED/LCD Displays, Promoters, Other Related Peripheral Equipment

Post-production


Lighting Equipment


Distribution & Delivery

Information communicated in a variety of ways

4K content distribution technology attracted a lot of attention. There were also future business presentations including a host of data transmission services and introduction case studies.

Output and Transmission Systems


Broadcasting Equipment


Cross Media

Next generation technology in media assembled

Second Screen demonstrated the potential of new broadcasting business by linking TVs and smartphones/tablet PCs. CG and VFX productions were exhibited and more creators took part in 2012.

- IPTV / Internet Delivery
- Video Compression Techniques, Video Delivery Systems/Services, Data Broadcasting Systems, Video-on-demand Systems, Internet Broadcasting Systems, Software, Other Related Techniques/Products/Services
- Mobile TV
- Video Editing Systems For Mobile, Video Delivery Systems For Mobile, Mobile Contents/Applications, Mobile Terminal Equipment, Wireless Systems, Wi-Fi/FTTH, LTE, Other Related Techniques/Products/Services
- Digital Cinema
- Digital Signage
- Digital Signage Editing/Control Systems, Image Receiving Systems, Video Content Delivery Systems, Communication Network Services, Advertising Media Services, Other Related Techniques/Products/Services
- 3D Image
- 3D Image Output Systems, 3D Image Editing Systems, 3D Image Receivers/Terminals/Systems, 3D Screening Systems, 3D Contents, Other Related Techniques/Products/Services
- Next-generation Video Technology
- 4K, 8K Displays, Glasses-free 3D Technology, Motion Sensor Systems, Interactive Systems, Virtual Realities, Augmented Reality, Panoramic Image, High-Definition Surveillance Video Systems, High-Definition Medical Image Systems, Other related techniques/produktservices
- Digital Contents
- Live-action Contents, Animations, Computer Graphics, Other Related Techniques/Products/Services

Forum & Symposium

Latest trends shared and responses to a variety of needs

Forum and symposium content featured case studies using leading-edge technology, an introduction to next-generation broadcasting technology and overseas industry trends. Additionally, creators from Japan and abroad, responsible for originating new forms of entertainment, gave business pointers to users from a wide variety of fields.

Conference
- Inter BEE Content Forum, Inter BEE Tutorial Sessions, Asia Contents Forum, Cross Media Theater

Simultaneous event

49th Symposium of Broadcast Technology
Outline

Name
International Broadcast Equipment Exhibition 2012
(a.k.a. Inter BEE 2012)

Period
Wednesday, November 14th - Friday, November 16th (3 days)

Exhibition hours
November 14th and 15th 10:00 a.m. to 5:30 p.m.
November 16th 10:00 a.m. to 5:00 p.m.

Location
Makuhari Messe
2-1, Nakase, Mihama-ku, Chiba City,
Chiba Prefecture 261-0023, Japan

Organizer
Japan Electronics and Information Technology Industries Association

Supported by
Ministry of Internal Affairs and Communications (MIC)
Ministry of Economy, Trade and Industry (METI)
Japan Broadcasting Corporation (NHK)
The Japan Commercial Broadcasters Association (JBA)
The Association of Radio Industries and Businesses (ARIB)

Partners
ALL NIPPON PRODUCERS ASSOCIATION
Association of Media in Digital Camera & Imaging Products Association
Digital Cinema Consortium of Japan
Digital Content Association of Japan
Digital Signage Consortium
IPDC Forum
JAPAN AD CONTENTS PRODUCTION COMPANIES ASSOCIATION
Japan Association of Audiovisual Producers, Inc.
Japan Association of Lighting Engineers & Designers
Japan Association of Professional Recording Studios
Japan Audio Society Japan Cable and Telecommunications Association
Japan Cable Television Engineering Association
JAPAN POST PRODUCTION ASSOCIATION
Japan Satellite Broadcasting Association
JAPAN STAGE SOUND BUSINESS COOPERATIVE
Japanese Society of Cinematographers
JSL
Mobile Broadband Association
MOTION PICTURE and TELEVISION ENGINEERING SOCIETY of Japan, Inc.
National Thaetrical & Television Lighting Industrial Cooperative
Specified Radio microphone User’s Federation
Stage Sound Association of Japan
The Association of Japanese Animations
Theatre and Entertainment Technology Association, Japan
3D Consortium
Ultra-Realistic Communications Forum
VFX-JAPAN
Visual Industry Promotion Organization

Global Partners

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A belief in spirited production that continues to grow and expand through awe-inspiring VFX

Ms. Zoe Cranley
DOUBLE NEGATIVE SINGAPORE CG Supervisor

Interviewer
Takashi Yuki
Director of Asia Contents Forum
Devotion to details and human resources leads to high-quality images

Double Negative has worked on VFX for numerous Hollywood blockbusters such as “Harry Potter and the Deathly Hallows”, “Iron Man 2”, and “The Dark Knight Rises”. The company specializes in minute and photo-realistic VFX that could be mistaken for on-the-spot filming, and its production has earned an excellent reputation including winning an Academy Award for visual effects with “Inception”.

Double Negative was established in 1998. It started out as a post-production studio based in London’s Soho, a place with a large concentration of CG productions. At the center of this was Matthew Holben (CEO) as well as Alex Hope (MD), who was working at a different studio at that time. Their goal was to work on movie VFX, and the first movie they were involved in was “Pitch Black”.

The company then steadily expanded but the real turning point was its involvement with the Harry Potter movie. This revitalized the VFX industry itself in London and led to the major growth of Double Negative. In fact, while the company had a staff of 150 people back in 2005, it has now expanded to a company of over 1,000 employees. It then expanded into Asia in 2009 and opened an office in Singapore. Led by Dneg’s Creative Director, Nathan McGuinness (former Head of Asylum VFX), Dneg Singapore works seamlessly with Dneg’s London office on such major releases as Bourne Legacy, Total Recall, Les Miserables and Cuban Fury.

Ms. Zoe says there are two things behind the rapid progress of Double Negative. “The first is quality. Whether its match moving, modeling, texture or lighting, we are among the best in the world. This is because we have an artist’s eye and are governed by the idea that if we notice an insufficient cut we correct it. To create images that people find realistic, it is vital to focus on fine and subtle details, such as small spots in people’s eyes and how a building will explode.”

This leads to quality production and also builds up the reputation of the studio. The company has also focused its efforts on technical work and R&D, and one of its strengths is developing software in-house. It has created a pipeline based on software such as Maya and RenderMan, but the lighting and shooting is its own creation. It has also developed fluid simulation in-house.

“The other one is people. Using talented and experienced artists is crucial. We want them to work for the company long-term rather than just a single project. In fact, we have a lot of people who have worked for the company for over 10 years. Of course, we also welcome people without experience and have provided a place to nurture talent such as through the organization of career programs.”

Focusing on both human and technical aspects has given rise to finely-detailed images that cannot be imitated by competitors.
Company growth by nurturing brilliant artists

Ms. Zoe, who is currently working as a CG supervisor, joined the company after graduating university and has worked her way up from a junior position.

“I loved art, mathematics, science and computing. I thought that VFX would let me do all of those, but there weren’t any many universities at that time offering such courses. Bournemouth University had a well established course on computer animation and visualization so it was a perfect choice.”

It was through taking lectures at university that Ms. Zoe got to know about Double Negative. That’s because Bournemouth University has a close relationship with the movie industry and people inside the industry gave lectures there. Also, the fact that Double Negative gives opportunities to new graduates in an industry where mainly experienced workers are hired was a key reason behind her joining the company.

Ms. Zoe joined the company in 2005 and got involved in basic parts such as technical assistant, render assistant, and match moving, and progressed to her current post through the positions of technical director, lighting director, sequence leader, and sequence supervisor. She claims to have learned by constantly taking on new challenges.

My first role within Dneg, which was a great experience, was working with the render farm as a render assistant. Working day and night shifts was tough, but I got to know a lot about the backbone of CG with the film VFX industry. Also, by experiencing various parts working on different shows and different departments, I was able to grasp the basics and got to know from an early stage the VFX supervisors I’m currently working with.”

A strength of Double Negative is that it values artists. It nurtures people with passion and talent and provides an environment for them to work at the company for as long as possible. It holds training classes and has a system whereby younger workers are supported by senior level “buddies”. This is said to be behind the non-stop creation of videos that only Double Negative could produce.

It has also led to the development of generalists, which has greatly contributed to the growth of the company.

“Even if we employ a brilliant artist, if that person can only do modeling work then they will only be involved in the initial stage of the project. If that person can do texture and lighting work, then they will have a long-term involvement in the job. Of course we have specialists, but the reason the company has been able to expand steadily is because we have many generalists.”

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district is becoming a vibrant area similar to London’s Soho of yesteryear.
Moreover, having an office in the future economic powerhouse of Asia is also a significant factor.
The most typical reason for this move, as far as Double Negative is concerned, is that it fits their approach to human resources. In other words, attracting artists with a cultural background unique to Asia will generate new and original video and stimulate existing staff.

“Hollywood wants diverse and new approaches on areas such as how to express ideas. Having face-to-face discussions between people from different cultures enables a variety of interesting ideas and approaches. It has been 11 months since I moved from London to Singapore and some really excellent people have joined us from the Asian region including Singapore. They see things in a totally new way to me and their attention to detail is second to none.”

Because the most important thing to artists is creating, Double Negative employs people even if English is not their first language. Their bold way of thinking is that as long as the results are good, language barriers are irrelevant.

“No country is dominant and we all work on completely the same terms. What’s more, we have staff from at least 30 to 40 different countries, so the office is really lively (laughs)”. 

Aiming for a more exciting market and acquisition of new staff

As Double Negative continued to expand while nurturing brilliant personnel, it cast its eyes to Asia or more specifically, Singapore. Three objectives were behind this: “expanding outside of London”; “entering the Asian market”; and “discovering new artists”.

VFX is not an industry tied to a specific place and can be performed anywhere. Several studios such as ILM have opened branches in Singapore and its One-North district is becoming a vibrant area similar to London’s Soho of yesteryear. Moreover, having an office in the future economic powerhouse of Asia is also a significant factor.

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A The number of staff in the Singapore office is currently 170 people, which is virtually the same number of staff at Double Negative when she joined. Ms. Zoe says that the reason she moved to Singapore is because she “wanted to share her experience with others.”

“During my early days at DNeg I got the opportunity to learn from very talented and experienced senior members of the team. I’m now enjoying doing the same thing for junior artists here in Singapore. I get a real buzz from nurturing new talent as well as continuing to learn from all the other very talented artists and supervisors we have here in Singapore. It’s a very vibrant and fruitful place to work and an exciting time for us as we are forever expanding and growing our knowledge base.”

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New collaborative partnership between Inter BEE and SET Broadcast and Cable to further strengthen the Japanese and Brazilian broadcasting industries

The Japan Electronics Show Association (JESA) has formed a collaborative relationship with the Brazilian TV-related academic society, SOCIEDADE BRASILEIRA DE ENGENHARIA DE TELEVISAO (SEB), and Certame Display Montagens e Locacao de Equip. Suc Ltda, the company managing the SET Broadcast and Cable Brazilian broadcasting and communications equipment exhibition.

The three parties will provide each other with information on exhibition and academic society conferences in the future and help to notify such information to people and organizations in the industry of their respective countries. Specifically speaking, they will translate information into their own languages and mutually create press releases and advertisements, and exchange booths.

On November 14, the first day of the Inter BEE 2012 exhibition, a signing ceremony was conducted at the International Conference Deluxe Suite of the exhibition venue, Makuhari Messe. The ceremony was performed by SET President, Mr. Olimpio José Franco and JESA Director and Secretary General, Takashi Ohyama.

■ “20-year relationship of trust between both countries built through ISDB-T”

The SET President, Mr. Olimpio José Franco, who came especially to Japan for the signing, spoke as follows about this tie-up.

“This is my first visit to Inter BEE and I’m very pleased because I have been able to meet Japanese and other foreign colleagues. Being here has reminded me of the international nature of the Inter BEE exhibition.”

The Brazilian TV engineering academic society, SET, has been established for 24 years as of 2012. It is a non-profit organization but members include TV studios and manufacturers as well as participants from academic fields. Its many activities include holding conferences five times a year in Brazil as well as conferences in the U.S. It is also actively involved in international exchange, participating frequently in NAB (U.S.) and IBC (Europe) sessions.

SET also has a long history of exchange with Japan. It has exchanged information on the standardization of terrestrial digital broadcasting with Japanese manufacturers, engineers and researchers for over 20 years. Via close information exchange over a long period, the ISDB-T Japanese terrestrial digital broadcasting standard was adopted as the base of the Brazilian terrestrial digital standard. In recent years, the “Brazil-Japan DTV Promotion Symposium” (hosted by the University of São Paulo) has been held on an annual basis since 2010 by Japan and Brazilian broadcasting and communications engineers and researchers, and Liliana Nakonechny gave a lecture last year when she was still the President of SET.

■ “Development of a closer relationship in the broadcasting market”

Mr. Franco spoke with anticipation regarding the partnership between these three companies.

“The relationship between our countries has become very close. A wealth of information has been exchanged and shared over the past 20 years on standardization. We have learned a lot from Japan and I feel that by exchanging this memorandum, there will be extra opportunities between our countries. I hope that it will yield results quickly.”

“When we asked Japanese companies as well as the Japanese embassy and consulate to participate in the Brazilian exhibition last year, we got a response from many companies. We got some basic questions regarding marketing and promotion in Brazil, showing many companies are interested in the Brazilian market.”

Hideichi Tamegawa, a professor at the Graduate School of Joshihi University of Art and Design, participates as a member of the steering committee of the “Brazil-Japan DTV Promotion Symposium”, where he introduces Japanese broadcasting technology and invites symposium speakers from Japan. Mr. Tamegawa assesses the significance of this collaboration as follows.

“Because Brazil is a very distant country geographically-speaking, movement and transfer is seen as burdensome and there wasn’t a very strong connection between our countries in terms of broadcasting and communications. However, since Japanese ISDB-T has been used as a Brazilian digital broadcasting standard, Japanese associated companies have started to frequently visit Brazil to participate in exhibitions and conduct business, and my impression is that Japan is now extremely close to Brazil.”

“Several Japanese manufacturers are already active in Brazil, and I believe that Japanese companies play a large role at the SET exhibition. A Japanese pavilion was created at this year’s event, which I think will lead to a wide variety of tie-ups. I hope that collaboration with SET in the future will bring the industries in both countries closer together.”

■ “Wisdom of both countries and time are vital for development of next-generation broadcasting technology”

Mr. Franco also showed an interest in the technologies of Japanese manufacturers at the exhibition venue. He maintained a cautious stance about the possibilities of introducing new media at the coming 2014 FIFA World Cup and 2016 Rio de Janeiro Olympics.

“Brazilian growth has continued for 10 years, but it now has to solve infrastructural problems. Communications infrastructure is still inadequate and there is a lot to do as far as road network and airports improvement is concerned. While there are a lot of problems to overcome, at the same time I believe there are a lot of opportunities.”

“I think that Japan really possesses a lot of advanced technology. This goes for audio and video, but I feel that there is some highly precise filming and recording related peripheral equipment. I am also interested in 4K and super hi-vision technology. I believe that technology is undoubtedly heading in that direction for the near future.”

“The major events of the World Cup and Olympics may be an opportunity to apply such new technology. We must therefore think about economic validity, rights handling, and business structures in addition to technology, and I believe that entering into closer discussions is required to achieve that.”

“I think that financial investment should be handled over time carefully, step by step. International standardization and various definitions are necessary and it should take 10 years to evolve via announcements at demonstrations and seminars, and meetings such as academic conferences and briefings.”

“Future technology will require such procedures, but first I would like current Japanese technology and products to participate in our exhibition. By doing so, there will be chances to meet a wide spectrum of clients and customers at the venue and exchange views. I have a much hope that small and medium sized companies from Japan will be able to take part.”
Broadcasting systems based on the “ISDB-T” standard for terrestrial digital television created in Japan have been adopted in 12 countries across the world at present. In Brazil, the first country to adopt this method, Sao Paulo University’s Dr. Marcelo Zuffo has played an important role in determining and designing the ISDB-Tb system - the Brazilian transmission standard for digital terrestrial broadcasting. Dr. Zuffo has been holding the “Brazil-Japan DTV Promotion Symposium” since 2010 to promote exchange between researchers from both countries for next-generation digital broadcasting.

Dr. Zuffo finds his participation in Inter BEE to be the highlight of his trips to Japan and this year again he could be seen walking energetically around the venue in his time off from having meetings with associates and giving lectures.

Using the World Cup and Olympics to popularize terrestrial digital broadcasting

Brazil will be holding the FIFA Confederations Cup in 2013, the FIFA World Cup in 2014, and the Olympics in 2016. Needless to say the country wants to use these major events to popularize terrestrial digital broadcasting, and researchers including Dr. Zuffo believe that it will provide an opportunity to showcase new technology.

Watching with astonishment at the advancements of 4K/8K at Inter BEE, Dr. Zuffo says, “I got the impression that 4K related products will increase and that we are on the verge of a new market. I also got glimpses of 8K wherever I went.” He says that he hopes Japan and Brazil will work together on the production of contents using such technologies at the two major soccer events and the Olympics. He praised Japanese efforts, saying, “I want to express my utmost respect to all manufacturers that have advanced 8K in connection with the NHK Science & Technology Research Laboratories. I’m glad I came again this year.”

All eyes are on IP data transmission as a disaster-time information delivery method

The South American region is subject to a variety of natural disasters, and Dr. Zuffo says that broadcasting plays an extremely important role from a civil defense perspective. Talking about the importance of transmitting warnings via broadcasts, he says, “Brazil lost a lot of people only recently to flooding and Chile sustained damage from a tsunami caused by the earthquake in 2010. It is broadcasting that can simultaneously send important messages at times like these.” At Inter BEE there was an exhibition of IP data broadcasting and this was of particular interest to Dr. Zuffo as “something that connects the worlds of communications and broadcasting.” This broadcasting received attention as a new platform to transmit information to protect people’s wellbeing rather than simply something that will enhance broadcasting content. Musing about the way it should be used, Dr. Zuffo says, “Transmitting information loaded on IP packets via digital broadcasts would be an efficient way to send information in emerging nations where broadband is still not fully developed.”

Fixing his attention on the course of adoption in emerging nations, he says, “there will surely come a time when tablet PCs can be picked up cheaply. If One-seg and IP data broadcasts can be received via a tablet PC, digital broadcasts can be delivered to those groups unable to afford digital TVs.”

Inter BEE is a place for new encounters and reunions

Another reason for Dr. Zuffo never missing Inter BEE is the opportunities it provides for “new encounters”. He says, “Inter BEE is an exhibition teeming with new innovations in a physical form, so it gives me a great buzz just to touch them. Plus, my friends from across the world come so it’s a great chance to meet up with them again.” He also says that, like other exhibitions, it’s not too big and it hasn’t been totally taken over by marketing. He sees it as the perfect event to glimpse the future of broadcasting and contents. He says, “Academic exhibitions on Japanese and Brazilian technology have cemented friendly relations. I hope that both countries will deepen their collaborative partnership for next-generation broadcasting technology.” And with those words, Dr. Zuffo left on the late-night flight back to Brazil.
Bringing every day to the theater

Mr. Daisuke Suzawa
Producer
P.I.C.S Co., Ltd.

Mr. Teruhisa Uchida
ETC PIGI JAPON DIV.
SC Alliance Inc. Media Entertainment

Mr. Daisuke Moriuchi
Chief Producer
Planning Development Center, Head Office
NHK Enterprises, Inc.
Using revived Tokyo Station as a giant screen

“Tokyo Station City” is a train station redevelopment program undertaken near the Marunouchi Central Exit of the Tokyo Station that started in 2007. An event called “TOKYO STATION VISION” was held on both 22nd and 23rd September to commemorate the completion of the program’s most eye-catching work – the preservation and restoration of the Tokyo station redbrick building. TOKYO STATION VISION was a large-scale projection mapping event using the entire restored redbrick station building as a screen.

Projection mapping refers to elaborately designed projection that treats a building or something similar like a screen to reflect images onto it and use visual tricks to make the building itself look like it is moving dynamically. This event attracted a lot of visitors and attention because the station building itself looked like it was really jumping and lyrically drawn images were reflected. However, these were achieved after an unimaginable amount of effort....

We wanted to try our hand at an unexplored project. But “work was in progress” at the site....

The red-bricked Tokyo station building was created by Kingo Tatsuno, who worked on many buildings such as the Bank of Japan’s head office. The station is a historical building built 98 years ago, but part of it was burned down in an air raid during the war, and it had been managed up to the 21st century with makeshift repairs.

As a part of the station’s redevelopment by the East Japan Railway Company, a project to restore the station building to its original form got underway.

Upon discovering that the redeveloped station building would open in October 2012, after many years of work, Mr. Morinuki proposed a projection mapping event to the East Japan Railway Company to commemorate this event. This took place back in April 2011.

Because we were dealing with the restoration of an historic building, this was really the chance of a lifetime. I felt that projection mapping could be an interesting way to promote the regeneration and development of the station building."

Talks went smoothly and the work was scheduled to start at the end of September soon after station building restoration work was completed. This period was chosen because the building was due to open the following month and the Tokyo Station Hotel built inside the building was to open for business at that time. The light coming from the hotel windows would hamper the projection map. Therefore, the event took place in the short period just after the work finished and right before the building opened.

However, there was one problem with this timing. Because the event was due to be held straight after completion of the building work, preparations had to be made while the work was ongoing. Projection mapping doesn’t simply mean installing a projector. Various complex problems have to be cleared such as where and how to install the dozens of projectors and then establishing images. At the site where the work was taking place, places to set up the projectors had to be explored and then the projectors had to be actually installed and tested. It was also necessary to explore places and viewpoints where the audience could see the most beautiful images. The building itself had not been completed, so it was not possible to focus closely on intricate images.

The Technical Director, Mr. Uchida, said “We conducted tests when it was raining in July. The station building is a dark-red brick building, so we found that a lot of illuminance was needed for the projected images. We used a 35,000 lumen projector, but to be honest the effect was not what we wanted, so weren’t sure whether to go ahead or not.”

They wanted to achieve 100 lux of illuminance on the project plane, but it was necessary to combine several projectors to achieve this. Also, due to spatial circumstances in the premises and the fact that projectors had to be located 77m from the project plane, it was necessary to calculate how many projectors were needed to get that illuminance and cover the entire station building.

There were many hurdles that needed to be physically cleared such as the number of equipment that can project either in 16:9 or 4:3, and the number of projectors that could actually be secured.

Eventually, the foundations were put in place by projecting images in ten sections of two rows and securing 46 20,000-lumen projectors.
Difficulties of using the restored building as a screen

With projection mapping, images must be created in line with the building that will act as the screen. Mr. Moriuchi said that the most important thing, therefore, was to first decide on the format.

For this project, images were produced to overlap with the Tokyo Station building, which had been created by CG based on design drawings. A projection experiment was then conducted using a 1:200 scale model. In the case of animation, things seen on a screen and things projected as a three-dimensional object create a very different impression. If a project experiment using a 1:200 scale model is not conducted with a firm grasp of spatial concerns, then good images will not be created.

However, this presented a variety of problems. The design drawings and actual Tokyo Station building were very different.

“A 3D scan of the building was necessary rather than basing the images on drawings, but that could not be done because the station building itself was under construction. In the end, images were created based on drawings, and minor adjustments were made to the final results while making adjustments at the station itself” (Mr. Suzawa).

Adjusting the colors was also hard work. The black, white and red were disordered - black roof, dark-red brick wall, white wall joints and white window frames and curtains.

“Thanks to the red brick and white joints, it looked stripy ruining its stereoscopic effect. So we assembled a team to create a color collect program.” (Mr. Morinchi)

“Specifically, we created a color mask to make red parts brighter and white parts darker. This was done with AfterEffects.” (Mr. Suzawa)

In addition, other problems were discovered two weeks before the event, such as colors changing when projected and the CG looking unnaturally, conversely, when the content was too detailed.

“Near-4K images were created at a frame rate of 29.97fps and they had to be revised. Other things happened like the creator losing interest and going home.” (Mr. Suzawa)

What images should be used? The significance of the project

Now that the “TOKYO STATION VISION” project had overcome a variety of difficulties, a lot of thought also went into the expressed images.

Considering that the station is Japan’s main terminal station, Mr. Morinchi initially envisaged images that would unravel the station’s history spanning from its national railway to JR history. Famous trains and the development of the station’s surrounding area were also considered. However, as discussions with the East Japan Railway Company progressed, talk turned to content that would “appeal to many people of all generations”, so they aimed for something that everyone would enjoy and entertainment that would show what projection mapping means.

Based on the idea that Tokyo Station has many different faces as far as commuters are concerned, it was decided that five filmmakers would be given carte blanche to contribute their own film. The only theme they were set was a “journey through space and time.”

Mr. Morinchi and Mr. Suzawa based the selection of the artists themselves on the following criteria: “someone who can put their own hallmark on the work” and “someone who can not only direct but also create a film themselves and adapt to sudden changes in circumstances.” They selected Mr. Isao Nishigori (SMALT), Mr. Masatsugu Nishigori (E W), TAKCOM (P.I.C.S.), Mr. Takumi Shiga (caviar), and Mr. Taisei Iwasaki (N□E□W), TAKCOM (P.I.C.S.), Mr. Masatsugu Nishigori (SMALT), Mr. Takumi Shiga (caviar), and Mr. Taisei Iwasaki (N□E□W).

We also applied this to the music. “Projection mapping, in a word, is really difficult. If it is done just as a visual gimmick, then it’s nothing more than a show. Personally speaking, I want to focus more on the fusion of technology and culture. Combining historic buildings and regional culture with projection mapping allows people to become more familiar with and to rediscover their local area. I hope that such rebranding will contribute to regional revitalization in the future.”

Looking back at the project, Mr. Morinchi speaks as follows.

“Projection mapping, in a word, is really difficult. If it is done just as a visual gimmick, then it’s nothing more than a show. Personally speaking, I want to focus more on the fusion of technology and culture. Combining historic buildings and regional culture with projection mapping allows people to become more familiar with and to rediscover their local area. I hope that such rebranding will contribute to regional revitalization in the future.”
“Video Technology Exchange Meeting” where video production professionals from various disciplines get together

Community problem-solving in the middle of a digital technology revolution

Information-exchange taking in a wide variety of opinions

As a trial initiative at Inter BEE 2012, a rest area with a “Technology Exchange Café” was provided for the first time for the “Video Technology Exchange Meeting.”

The “Video Technology Exchange Meeting” is a gathering of video production professionals exchanging experiences and knowledge gained on-the-job in relation to rapidly progressing and changing video production technology. It has over 60 members.

Since it was established last year there have been six meetings. In addition, proposing ideas for themes and exchanging information in real-time is carried out energetically via SNS. The main themes handled previously include 4K, Thunderbolt, and Color Correction. Information-exchange and review meetings have been held on specific products. There is a wide variety of participants including post-production editors and colorists, filming and lighting engineers, and CG and VFX artists. A characteristic of this meeting is that it differs to private showings held by manufacturers or user groups for specific tools because users with diverse views get together to exchange a wide variety of opinions.

One of the founding members of the “Video Technology Exchange Meeting”, Mr. Shinsuke Ichikawa, a MotionWorks VFX Artist, says “it was established to promote a closer relationship between filming location and post-production professionals”. Communication is actively carried through SNS and there was apparently a gathering of approximately 20 people in July. “This is the first Video Technology Exchange Meeting was held.”

Mr. Ishikawa says, “it has become a very beneficial meeting to raise everyday technical problems and devise solutions with everyone. Up to now there have been about six meetings. The aim is to provide an opportunity for everyone to speak freely and to spur action among the members.”

• Period of closed information is over

One of the meeting’s founding members is Mr. Masaru Suzuki, who is a director of the systems department at Shurogumi and built the SNS with Cyboum. Mr. Suzuki is in charge of system surroundings such as facility and license management, and he currently conducts total system management of a range of workflows from filming to finishing.

Mr. Suzuki says, “the aim of the Video Technology Exchange Meeting is to solve problems by everyone exchanging opinions, whether they be CG production or post-production, and build high-quality and lean overall workflows by combing our strengths. Each has their own specialized role and we collaborate by bringing these points together. The period of closed information is over. There is no longer anything to prevent information being shared.”

The SNS site is extremely active. It has a variety of categories relating to technology and each has lots of posts. He says, “when a question is posted, there is always a surprisingly large response. It is kind of like a font of ideas. There are often new discoveries, such as other creators knowing things that I thought that only I knew or the large amount of methods that I don’t know. We should share information for mutual improvement. I think that pooling everyone’s opinions and incorporating it into the software is possible.”

Talking about the expansion of his booth at Inter BEE 2012, Mr. Suzuki expressed the following hope: “I thought that it would be good to communicate the interesting nature of communication. If people from regional areas embraced this opportunity and such movements started even in regional areas, then Japan as a whole would become a more interesting place.”

Diversity of themes such as pre-visualization, finishing and grading

The sessions were held over three days and featured the following schedule.

• Case studies of pre-visualization in Japan and Hollywood reports
  - introduction to pre-visualization case studies in movie production. The ACW DEEP representative and pre-visualization supervisor, Mr. Akira Yamaguchi, gave a lecture on real-time pre-visualization techniques to check filmed scenes in real-time rather than the commonly known CG movie simulation.

• Small-production finishing environment
  - Knowledge on working efficiently in small-scale production while avoiding risks and continuing to create high-quality works was displayed. Combining tool superiority from an online editor viewpoint, tool selection from the viewpoint of Adobe After Effects users with AE and CG workflows from launching XML using Autodesk Smoke as a hub were introduced.

The lectures were held by Mr. Masaki Mizuno and Mr. Inaba. Mr. Mizuno synthesized and edited CM and PV mainly using flame / smoke at the IMAGICA Nagata-cho studio. After that he went freelance from 2007 and then established the “Shirogumi” studio in 2012. Via a split at IMAGICA PLUS, Mr. Inaba is currently active in a wide variety of finishing processes such as CG, composite and editing.

• Introduction to grading workflows
  - Interceptor’s video production director, Mr. Genta Tamaki, and digital colorist. Mr. Yumi Hirakawa, were invited to introduce the fun and flexibility of grading by round-trip between DaVinci Resolve 9 and Final Cut Pro using materials shot with Blackmagic Cinema Camera.

• Ways to use Thunderbolt effectively
  - Mr. Masaki Kobayashi, an editor/system manager for WINK2, introduced the Thunderbolt product focusing on storage-related products. He introduced a lineup of computers operating SSD by expansion chassis from video devices and explained ways to use and gave tips on operating the DAS of the subject product - Thunderbolt.

• Monitor calibration report meeting
  - Mr. Naoya Sugita of MARZA ANIMATION PLANET and Mr. Kazuhiro Yamada, an editor in the editing technology department of the Technomax Video Center, reported on monitor calibration inspections conducted by MARZA ANIMATION PLANET as well as examples of use by the same company.

Production professionals gave lectures at sessions on a wide variety of topics
Record high 871 companies exhibit at Inter BEE 2012 and number of visitors rises to 30,000 mark

On the first day of the Inter BEE 2012 exhibition on November 14, the Opening Ceremony was held at the central entrance of the Makuhari Messe Exhibition Hall just prior to the venue opening at 10 a.m. Representatives from the Ministry of Internal Affairs and Communications (MIAC), Ministry of Economy, Trade and Industry (METI), Association of Radio Industries and Businesses (ARIB), and IABM were invited as guests to the Opening Ceremony. At this ceremony, the significance of the event together with a rundown of Inter BEE 2012 was explained by Mr. Tatsuo, the Operating Officer of the host organization, the Japan Electronics and Information Technology Industries Association (JEITA).

There were also speeches by guests-of-honor from MIAC and METI, which have become supporters from this exhibition, and they added some words about expectations for Inter BEE in the current Japanese economic climate. This was followed by an opening declaration by the International Broadcast Equipment Exhibition 2012 Organizing Committee Chairman, Takanori Kurama, and Inter BEE got off to a splendid start with a tape-cutting ceremony performed by hosts and guests-of-honor.

“Asia’s largest broadcasting equipment exhibition in response to media diversification”

Hisanori Tate, the Operating Officer of the host organization, Japan Electronics and Information Technology Industries Association (JEITA), started the ceremony by standing up to give an opening address. In this address, he pointed out that Inter BEE, now in its 48th year, will see a record high number of exhibiting companies at 871, including 491 overseas companies from 35 countries and regions. He stated that, “on a similar level to NAB in the U.S. andIBC in Europe, Inter BEE is Asia’s largest broadcasting equipment exhibition, where world-class video, broadcasting, audio and lighting equipment are all showcased under one roof.”

“Over the following three days we will be welcoming a wide variety of visitors exceeding 30,000 people. For exhibitors and visitors alike, this year’s Inter BEE will fulfill its role as a place for information exchange and business creation, so I hope that you will use make good use of this one-time-a-year opportunity and get the desired results.”

Mr. Toshiyuki Minami
Deputy Director-General, Informatin and Communications Technology Bureau, Ministry of Internal Affairs and Communications

“New services making use of digital technology”

To continue the proceedings, Mr. Toshiyuki Minami, the Deputy Director-General of the MIAC and Mr. Toru Nakayama, the Deputy Director-General of the METI, who took part in the opening ceremony as guests-of-honor, delivered a congratulatory speech.

Mr. Minami stated that Inter BEE “showcases the world’s most advanced broadcasting, video and audio equipment all under one roof, and I hope it will provide a golden opportunity to create new business chances through the exchange of diverse information generated by encounters with new technology.” He also came up with the keyword, “post-digital” when he said that “I hope that each and every one of you will decide with your own eyes what technology is most likely to be “post-digital”. Regarding the significance of broadcast digitization, he indicated that “developing an environment to create new services enabled by digital technology” would be the next challenge for broadcasting digitization. He said, “I want to devote energy to developing an environment that enables the delivery of new services utilizing the merits and characteristics of digital technology and, particularly, services that link communications and broadcasting services, and I want these services to be delivered to the nation as soon as possible.”

Mr. Minami then referred to the “Investigative Commission on the Upgrading of Broadcasting Services” established by the MIAC (chaired by Sudo Osamu, professor of the Tokyo University Graduate School). Talking about his ambitions for the Commission, he stated, “There are two issues – one is how to exploit Japan’s strength, being high-definition technology or in other words, 4K/8K. The other is establishing the rules for merging and giving way to a host of new content services.”

Towards the end of his speech, Mr. Minami voiced some concerns: “while there may be a tendency to think we are being impatient that area is changing and evolving at breakneck speed. If we don’t take action now based on a full grasp of “post-digital” 10 years from now, we will be too late.” He wrapped up his speech by saying, “I hope that we can develop a clear roadmap while borrowing wisdom from those around us.”

Mr. Nakayama then stated that “the METI is investigating next-generation TV” through its Investigative Commission on Next-generation Television (chaired by Kaniyuki Asahime, a specially appointed associate professor of Keio University) established in partnership with JEITA. He explained about the government and the people working together to create a new international market: “the MIAC is participating in our Commission and we at the METI are participating in the MIAC’s own investigative commission on broadcasting services. Through such total collaboration, we are striving to examine the future with a belief that making equipment and contents is entwined with broadcasting business.”

“Fusing and diversifying ways to enjoy broadcasting and communications”

He then went on to talk about the “extremely difficult business and economic climate facing all companies”, particularly TV companies in the Japanese electrical industry, due to factors such as the “backlash against the household appliance eco-point system and demand for TVs due to conversion to terrestrial digital TV” as well as the “historically strong yen”. Despite these problems, he expressed his hopes about Japanese “monozukuri” or total manufacturing: “I believe and have total faith that Japanese monozukuri, including contents, design and sensibilities in addition to manufacturing, has been in no way compromised and remains at a world-class level even in the middle of these circumstances.”

Mr. Nakayama spoke as follows about experiencing such technology firsthand at the CEATEC exhibition in October. “As well as being impressed at the picture quality of the 4K-like high-definition displays, I thought that it would be great in the near future to enjoy contents at home that make full use of such a clear picture. Similarly, I am very much looking forward to new and diverse ways of enjoying communications and broadcasting when the Internet can be accessed from the TV, and such technologies merge and give way to a host of new content services.”

Mr. Nakayama then stated that “the METI is investigating next-generation TV” through its Investigative Commission on next-generation Television (chaired by Kaniyuki Asahime, a specially appointed associate professor of Keio University) established in partnership with JEITA. He explained about the government and the people working together to create a new international market: “the MIAC is participating in our Commission and we at the METI are participating in the MIAC’s own investigative commission on broadcasting services. Through such total collaboration, we are striving to examine the future with a belief that making equipment and contents is entwined with broadcasting business.” Expressing his desire to realize this, Mr. Nakayama said, “Demonstrating the future at an early stage through such commissions will lead to the revitalization of the industry and creation of new industries. I hope we can advance this while listening to your opinions.”

Following these speeches, the International Broadcast Equipment Exhibition 2012 Organizing Committee Chairman, Takanori Kurama declared the exhibition open. To conclude the ceremony, a tape-cutting ceremony was performed by representatives from the MIAC, METI, ARIB, IABM, JEITA, and the Organizing Committee.
Quest for and development of new broadcast service business models in this new era ushered in by the complete shift to terrestrial digital broadcasting in 2012

A reception was given from 6 p.m. on the opening day of the exhibition on November 14. This was the first time in four years that a reception had been given at Inter BEE, so we invited top management from partner organizations, NHK, commercial broadcasting stations, and exhibiting companies who had been supportive in the holding of Inter BEE, and treated the event as an opportunity for B2B exchange. This was followed by an opening address from Takashi Kurama, the International Broadcast Equipment Exhibition 2012 Organizing Committee Chairman, and then Keiichi Kubota, the Managing Director, Executive Director-General of Engineering of one of our supporting organizations, the Japan Commercial Broadcasters Association (JBA), to stand for a toast.

Mr. Kubota started by stating that total conversion to terrestrial digital broadcasting in Japan was completed in March this year after the three Tohoku prefectures, both Mr. Kubota and Mr. Kimura heralded this year as the dawn of a new broadcast service.

He observed that the complete shift to digital broadcasting would open the doors to a new era of broadcast service development and adoption.

He stated that “broadcasting station side” changes due to the digitization of broadcasting include “changing broadcasting workflows such as new program production style and coverage systems”, and expressed hopes that “high-quality TV content production equipment that will clearly exceed resolution such as 4K and 8K could be seen at Inter BEE. I think that manufacturers have finally started to invest effort into the realization of next-generation broadcast systems”.

Referring to movements to improve product and picture quality in TV technological development, “Mr. Kubota commented, “I strongly feel that the golden era of TV will come again”, and informed us that public viewing in super hi-vision at the London Olympics was favorably received. He stated that “we have received urgent requests for this TV and we are hurrying development along to meet these demands.”

Exemplifying the use of super hi-vision in areas other than broadcasting, such as digital signage, digital cinema, medical, museums and art museums, he closed his speech by saying “we want to advance this further, and believe that utilizing such technology through the cooperation of many people, we can think that super high resolution and super high definition video is a strength of Japan, and I believe that advancing this further will enrich broadcasting culture as well as strengthen Japan’s international competitiveness.”

New era ushered in by complete shift to terrestrial digital broadcasting

This was followed by an address by Keiichi Kubota, the Managing Director Executive Director-General of Engineering at one of our supporting organizations, NHK.

Mr. Kubota started by stating that total conversion to terrestrial digital broadcasting in Japan was completed in March this year after the three Tohoku prefectures had introduced it after delays caused by the Great East Japan Earthquake of the previous year. He observed that the complete shift to digital broadcasting in Japan was finally started to invest effort into the realization of next-generation broadcast systems.

At the end of the reception, Shinya Kimura, the Executive Director of the supporting organization, the Japan Commercial Broadcasters Association (JBA), took the rostrum. Similar to Mr. Kubota, Mr. Kimura took up the subject of the complete shift to terrestrial broadcasting in his speech. He stated that “the reporting of last year’s earthquake, I got to strongly appreciate the social mission held by commercial broadcasters. I also think, at the same time, that broadcasters should think together with manufacturers about the new shape of broadcasting and what sort of contents would be suitable for digital. I hope Inter BEE will give some ideas about the increased sophistication and diversification of broadcasting leading to new business models, which hasn’t been mentioned for a long time, and the future of broadcasting from a private perspective.”

New high number of exhibitors at Inter BEE, Asia’s major broadcasting equipment exhibition

The reception was opened by an address by Mr. Takashi Kurama, Chairman of the International Broadcast Equipment Exhibition 2012 Organizing Committee.

“Inter BEE 2012 will see a record high number of exhibitors at 871 companies and organizations, and among these, there will be a record high number of 491 companies from 35 countries and regions overseas, demonstrating the great interest in this exhibition from both Japan and abroad. A variety of Japanese and foreign companies and organizations will be presenting their multitalented booths at the exhibition venue indicating the present and future of the media industry. These include 4K and 8K ultra high definition video technology and the potential of new media, such as second screen and smart TVs, as well as new business models including the effective use of radio waves such as VLow, digital signage, and projection mapping. In the Cross-Media category, which is newly established last year, a new cross media theater has been set up to hold sessions of varied presentations on the diversity and potential of media and contents given by top creators and professionals at the forefront of their respective fields. In addition, leaders from Japan and abroad in the fields of video and music have been invited to give presentations on themes such as next-generation contents and reliability and creativity at the forever-popular Inter BEE Content Forum, provoking debate on latest trends in content business.”
Panasonic proposed its future vision of broadcasting and office AV equipment enabled through an IP Network link-up of “P2HD” Series, “AVCCAM” Series and HD System devices. The company exhibited the new addition to its P2HD Series, the “AG-HPX600” memory card camera recorder, and the “AG-AC90” memory card camera recorder from its AVCCAM Series. Panasonic also exhibited its “AK-HC3800” multi-format camera as a studio camera system, as well as the IP video distribution-compatible “AW-HE60S/H” HD integrated camera as a remote camera system.

Camera recorders were also introduced together with new recording media. This was the first time that the “microP2 card” (32GB/64GB) semiconductor recording media to be used with the P2HD Series for new broadcasting was exhibited in Japan. This microP2 card helps to vastly reduce media costs by changing the form factor to an SD memory card. Improving the durability of RAID system adoption and internal substrate configuration also ensures high-speed transmission and high reliability similar to that of existing P2 cards. During the exhibition, live transmission was performed with these devices from the Ustream studio in the company’s booth, promoting a new form of video distribution. We asked Minoru Namikawa, the Marketing Project Team Director of Panasonic’s Professional AV Business Unit, Digital Imaging Business Group, about the reaction of visitors to its exhibition as well as the role of the Inter BEE exhibition.

Enhancing camera equipment network functionality to propose a “future vision” of video use
Enhancing network functionality by focusing on cloud link-ups

What things did you particularly want to promote at this exhibition?

“Our new ‘AG-HPX600’ memory card camera recorder, which is a new addition to our P2HD Series, and the new recording media, the ‘microP2 Card’. The AG-HPX600 now allows camera images to be viewed in a smartphone and tablet PC by enhancing network functionality. It also supports file base searches based on metadata. Basic editing is also possible, so edit and transfer workflows can be carried out straight after capturing images. This enables the amount of equipment used at locations to be reduced, helping to improve work efficiency.”

What is Panasonic’s “vision of the future”?

“The networking of a series of workflows including video capture, editing and transfer, but we are focusing first on cloud link-ups. Our exhibition this time did not give any definite answers, but rather ideas that make use of clouds as already seen in Europe and the U.S. By connecting to clouds, video production and use workflows change dramatically. The AG-HPX600 wireless editing system with its enhanced network functionality is something that lays the groundwork for this vision.”

Increasing needs for network distribution

How did visitors respond to your exhibition?

“Investment in terrestrial digital broadcasting has reached a saturation point, so interest in the filming equipment has increased. In particular, many customers are interested in network distribution. While we focused mainly on exhibits aimed at broadcasting stations in the past, we have increased the number of low-end solution exhibits in recent years. This is because it has become an important challenge to achieve an attractive video service on a restricted budget.”

What are the challenges and what improvements can be made to your exhibition in the future?

“While there are needs for solutions exceeding HD, such as 4K-compatible cameras, there are also increasing needs to improve work and cost efficiency at video production locations. It is vital to improve on previous efforts by enhancing our lineup of products supporting customers’ wide and varied needs.”

Inter BEE’s significant role as one of the world’s four major broadcasting equipment exhibitions

What is the role of the Inter BEE exhibition?

“Inter BEE is one of the world’s four major broadcasting equipment exhibitions and the biggest in Japan, so for that reason it is hugely significant. Its role is to provide a golden opportunity to promote and provide information on new products and ideas to a wealth of customers. Another large merit is that it allows companies to directly see and hear customers’ reactions and opinions.”

What are your future hopes for the Inter BEE exhibition?

“It would be great if it could attract more visitors from overseas, particularly from Asia. I would like Inter BEE to actively distribute information to people overseas and encourage them to visit.”
Continuing on from a theme of “Continuous Innovation”, FOR-A exhibited a large number of innovative camera products such as next-generation file-based solutions. With these file-based solutions, a variety of materials can be saved to a server in an MXF file, and workflows including editing, exporting, and archiving are converted to a file base. “MediaConcierge” manages the entire operation and its editing and exporting operability and usability have been improved with the addition of new functions. Its archiving system includes a new-type high-capacity LTO server that enables high-speed transmission.

With regard to its camera products, FOR-A unveiled for the first time in Japan its “FT-ONE” high-speed camera, which is capable of recording at full 4K (4096 x 2160 pixels) up to 900 frames per second, enabling super-slow motion photography. Up to 9.4 seconds of RAW data can be saved on the internal memory, and the available memory can be further increased with external SSD cartridges. FOR-A screened a demonstration of footage shot in 4K super-slow motion at a specially erected theater inside the booth.

FOR-A displayed a host of new exhibits and products. Its live production related products included the all-in-one live production system, ‘SmartDirect’, and its video switchers were comprised of two new “HANABI” products (“HVS-390HS” 2M/E model and “HVS-4000HSA” 2M/E - 3M/E model). We asked Takayuki Shiratori, Director of the Planning and Public Relations Group in FOR-A’s Planning Office about the reaction of visitors to its exhibition and his thoughts about the future role of Inter BEE.

Feeling of new possibilities and markets expand as movie and CM industry visitors increase
Unveiling the "FT-ONE" full 4K high-speed camera for the first time in Japan

Tell us about your main exhibits at this exhibition

"Next-generation file-based solutions and the ‘FT-ONE’ full 4K high-speed camera were the main exhibits on display at this exhibition. We started providing file-based solutions from 2007 and we have continued to advance our products while incorporating the views of customers. As a general overview of this technology, this year we strongly advocated the merits of file-based workflows that integrate and manage operations ranging from ingesting to editing, exporting and archiving materials.

"In addition, the FT-ONE camera is a product into which we have invested a lot of effort. It is equipped with the newly-developed ‘FT1-CMOS’ full 4K resolution/ high-sensitivity global shutter method CMOS color sensor, enabling super-slow motion photography at full 4K resolution and up to 900 frames per second. It can also record up to 9.4 seconds of RAW data at a full 4K resolution and 900 frames per second, and save it in the included standard internal memory. It supports simultaneous recording and playback of sports and live broadcasts. In addition, the camera is equipped with 2 HD output systems - the 3G-SDI 4 system and a HD output system for the viewfinder. Aimed at post-production work, this product allows data to be retrieved by SSD cartridge and it exhibits great power in shooting special effects for movies and so on. Incidentally, the ‘FT-ONE’ was exhibited for the first time in Japan at Inter BEE 2012."

Great interest in migration from base band to file base

What ideas did you come up with to display your exhibits?

"Placing emphasis on the conversion to file base for local broadcasting stations, we gave specific file-based solution proposals as to what converting from base band to file base will change and what kind of management methods are required."

"We cooperated with our group company, EXA International, and produced a demonstration film about the FT-ONE. At a specially erected theater in our booth, we screened 4K super-slow footage that had been color graded.

How did visitors react to your exhibition?

"I strongly feel that customers’ interest in file-based solutions is increasing every year. We therefore focused on immediately usable solutions this year rather than merely concepts. It seemed to help customers form a definite image and many shared our opinions."

"I also get the feeling that we had more visitors from the movie and CM industries rather than just broadcasting stations due to the improvements made to our camera product lineup. Many cameramen working in the field visited our booth, which was a large increase on the small number that came previously."

"More visitors than average came this year. Due to requests to actually try out our products and to see demonstrations, I got the impression that these will lead to more concrete demands compared to normal years. We hope that such positive developments will turn into actual business negotiations."

Inter BEE provides a valuable opportunity to directly hear the opinions of customers

What role does Inter BEE play as far as your company is concerned?

"Inter BEE is the most important exhibition in Japan. I believe that it provides a golden opportunity for companies to promote a variety of their latest products to customers involved in the video industry. Being able to get opinions directly from customers is a big advantage. Developers who rarely get a chance to come into contact with customers also take part as staff, so they get to hear requests and improvements straight from customers working in the field. That feedback is incorporated in development work, enabling us to create even better products."

What are your future hopes for the Inter BEE exhibition?

"I have the impression that Inter BEE has actively distributed information via the Internet and social media. There is a limit to the amount of information we can distribute ourselves, so we are extremely grateful for this. We hope that Inter BEE will continue these efforts in the future. Providing there is a demand, we would be grateful if Inter BEE could strengthen information distributed to overseas to encourage more foreign customers to visit the exhibition."

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Fuji Film exhibited a wide variety of its much-awaited new lens products including the “ZK4.7×19”, which was met with a favorable reception when announced at the 2012 NAB. It also unveiled the “ZK3.5×85” telephoto lens for cinema cameras at Inter BEE 2012.

The ZK4.7×19 lens has a focal length ranging from 19mm to 90mm, while the ZK3.5×85 is a high-performance PL mount lens that can support a focal length from 85mm to 300mm. Both are equipped with an attachable electrical drive unit. This enables zoom and focus functions to be operated electrically, increasing the scope of fields of operation.

One of Fuji Film’s showpieces is the “XA99x8.4BE”, which can zoom in by 99 times. This is a “zoom in and zoom out” high power broadcast lens that supports the world’s largest wide-angle of up to 8.4mm from a distance of 832mm. Renewing the mechanism and control circuit improved the performance of its “optical vibration control mechanism” and, as a result, enhanced video filming time stability.

In addition, an abundance of diverse products that widen the scope of video production and use were exhibited. These included the “FinePix REAL 3D W3” 3D digital camera and “FinePix REAL 3D V3” 3D & 2D digital photo frame, the “IS-100” color management system for digital video film locations, and 6th generation LTO tape, which achieves maximum compression capacity of 6.25TB. We asked Hiroyuki Hosaka of the Fujifilm Optical Business Device Division, about the reaction of visitors to its exhibition and the role of the Inter BEE exhibition.

Improving performance and usability to speed up digital capability of video equipment
Equipping PL lens with an electrical drive unit

What were your main products at this exhibition?

“The latest cinema lenses. We particularly put a lot of effort into PL lenses this year. The major features of the ZK4.7×19 and ZK3.5×85 are to pursue high optical performance and attempt to improve operability. In addition to being smaller and lighter, they are equipped with an electrically controlled drive unit, which can smoothly operate zoom and focus functions. It fully displays high optical performance and its scope of image expression will surely expand. The ZK4.7×19 is a product that garnered a large reaction when it was unveiled at NAB in 2012. This Inter BEE exhibition was the first time this product was exhibited in Japan and it also hosted the Japanese debut of the ZK3.5×85.”

Increasing number of visitors outside the industry

What were your main visitors to your booth?

“Previously most visitors were from broadcasting stations, but the number of visitors from the movie and CM industries has increased over the last few years. Customer needs are changing and they don’t really discriminate between equipment for movie and TV uses any more. A cause of this may be growing support for high picture quality. There has been a move toward an emphasis on the true performance and potential of equipment.”

- Including a drive unit in PL lenses is achieved by adding a broadcasting lens accessory to movie lenses, which is a sign of the advancing fusion between these two lenses. Irrespective of occupation type, customers requiring high picture quality and ease-of-use are increasing, so we believe that realizing such needs is our responsibility as a manufacturer.”

Inter BEE is a vital point of contact with customers

Tell us about the role of the Inter BEE exhibition

“NAB in spring and Inter BEE in the fall make up a dual cycle of major exhibitions. Inter BEE, in particular, is the largest broadcasting equipment exhibition in Japan and we consider it to be a vital point of contact with customers. While we have the opportunity to make contact with customers in our daily sales activities, chances to deal with customers from various occupations at the same time are rare. In this sense, Inter BEE plays a significant role.”

What requests and hopes do you have for Inter BEE?

“We want to see and study other company trends, such as exhibition content, display method and booth layout, but we can never leave our booth for the entire exhibition period. It would be great, for example, if InterBEE could provide at least 1 hour prior to opening the exhibition on the first day for us to visit other booths.”

“It would also help if InterBEE could be held at a slightly earlier period. The reason being is that some customers make up their budgets a little earlier than Inter BEE. If the exhibition started earlier, exhibition content could be designed to appeal to companies’ compiling their budget for the next financial year.”

What ideas did you come up with to highlight your exhibits?

“For our lens products, we set up a temporary studio at the booth similar to last year. We devised lighting that enabled visitors to experience firsthand expression ability and ease-of-use in an environment similar to an actual studio. Cameras were arranged so that the lens faced outside the booth, enabling the telephoto lens to capture more distant subjects.”

Fujifilm announced the conclusion of sales of film for filming and screening the other day, so what was the reaction of visitors?

“Concluding sales of film for filming and screening is part of the business transition to deal with the digitization of movie filming, production and storage processes. However, we have worked on the digitization of equipment from an early stage, so there was no marked change from customers.”

“Fujifilm has worked hard to exploit the merits of digitization in our products. This is evident, for example, in the inclusion of drive units in PL lenses. We improved usability by adding digitally controlled driving parts in analog-type optical devices such as lenses. We were able to successfully combine digital elements with the good qualities of analog and provide an improved product. This is a large step in the direction we are taking.”

Who were the main visitors to your booth?

“Previously most visitors were from broadcasting stations, but the number of visitors from the movie and CM industries has increased over the last few years. Customer needs are changing and they don’t really discriminate between equipment for movie and TV uses any more. A cause of this may be growing support for high picture quality. There has been a move toward an emphasis on the true performance and potential of equipment.”

- Including a drive unit in PL lenses is achieved by adding a broadcasting lens accessory to movie lenses, which is a sign of the advancing fusion between these two lenses. Irrespective of occupation type, customers requiring high picture quality and ease-of-use are increasing, so we believe that realizing such needs is our responsibility as a manufacturer.”

What ideas did you come up with to highlight your exhibits?

“For our lens products, we set up a temporary studio at the booth similar to last year. We devised lighting that enabled visitors to experience firsthand expression ability and ease-of-use in an environment similar to an actual studio. Cameras were arranged so that the lens faced outside the booth, enabling the telephoto lens to capture more distant subjects.”

Fujifilm announced the conclusion of sales of film for filming and screening the other day, so what was the reaction of visitors?

“Concluding sales of film for filming and screening is part of the business transition to deal with the digitization of movie filming, production and storage processes. However, we have worked on the digitization of equipment from an early stage, so there was no marked change from customers.”

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Proposing total digital audio solutions that fully demonstrate the Group’s combined power

Yamaha exhibited a variety of new products including its new CL series of digital mixers, the NEXO speaker system, and Steinberg music production software.

Yamaha’s latest CL series combines digital mixer technologies accumulated over 25 years. Features include a touch panel that can be intuitively operated and an effector equipped with ‘premium rack’ functions created in collaboration with Rupert Neve Designs.

The STM series was exhibited as a new NEXO product that can handle events aimed at hundreds to tens of thousands people. It is easy to handle, rigging can be carried out by a single person and the angle of the grand stack can be fixed. This series also supports the construction of large-scale systems that arrange main and bass modules into a double array and triple arrays.

Another new product in addition to the CL series was the advanced production system, “NUAGIE”, which was co-developed with Steinberg. This is a DAW solution equipped with control parts, such as a fader and master unit, as well as an audio interface.

In addition, the combined merits of NEXO and Steinberg becoming group companies were promoted at this exhibition. Because these new products are compatible with the ‘Dante’ digital audio network, digital audio-related total solutions integrating all brands were displayed.
Displaying a lineup of products compatible with Dante

What was the concept behind your exhibition this time?

“The concept behind our exhibition was “All to the NEXT”. In addition to the Yamaha, CL series, NEXO and Steinberg brands, we proposed Yamaha Group total solutions. Specifically, we demonstrated that the world of digital audio has reached a new stage by connecting these new products to the “Dante” digital audio network and monitoring and controlling audio via a network.”

What kind of exhibition did you set out to provide?

“We devised ways to expertly demonstrate the combined strengths of the Yamaha Group. We expanded the number of segments from 20 to 25 this year and stopped dedicating segments solely to one brand. We thought that by doing so, we could present a clearer overall picture of workflows through total solutions. We demonstrated that by showing the overall picture, we can meet a wide range of needs from recording to music production and live venue use.”

World debut of the “NUAGE” DAW system

Which of your exhibits got a particularly good reception?

“The Dante-compatible total solutions obviously got a good reception, and among these the Yamaha-Steinberg co-developed NUAGE system solution for post-production was extremely well-received. This is the first joint product between us since Yamaha incorporated Steinberg as a group company, and it made its debut on the global stage at this Inter BEE exhibition. Because of a lack of large special purpose controllers in the past, I feel that there are strong needs for a system for business use.”

What do you think visitors are looking for?

“Rather than thinking about video and audio separately, recently there has been greater demand for solutions combining both and, in fact, NUAGE is a product that meets such needs. While its main function is audio editing, editing can be performed while synchronizing with video. We gave a demonstration of audio editing together with video at the booth.”

“Such needs have intensified because ways to combine audio and video have increased. For example, some live music club customers not only stage concerts, they also record the concert and sell it as a package product or distribute the music with a video via a network. Thinking of the various ways this could be developed, there is a need for systems to integrally process audio and video.”

Hopes for application methods that bring out the attractiveness of audio equipment

What do you think is the role of Inter BEE?

“It is the dominant exhibition in Japan. We are very grateful because it allows us to directly hear the opinions of people from various positions ranging from individual users to corporate customers. It is a valuable exhibition because we can get a real feel for customers’ reactions and product evaluation.”

What hopes do you have for Inter BEE?

“While there are a lot of video equipment exhibits aimed at the broadcasting industry, audio is also a crucial element of increasing the attractiveness of video contents. We were considering how to display exhibits that give visitors a feel for their performance and quality, but there are sound pressure regulations regarding indoor booths so expanding the booth in that way is difficult. We have exhibited speakers in a soundproofed and sound insulated booth to demonstrate their performance, but when the speakers are large their appeal is not fully demonstrated in small places. I hope that Inter BEE will examine ways for exhibitors to demonstrate the potential of professional audio equipment.”
The Professional Information Site for Audio, Video and Communications

Inter BEE Exhibition Report

Online Magazine Headline

Inter BEE Online articles (excerpt)

CTC LABORATORY SYSTEMS Corporation 2012.10.22UP

Exhibit High Speed File Transfer Software ‘Aspera’

CTC Laboratory Systems (#3203) will exhibit its high speed file transfer software solution Aspera, a tool that enables the high speed movement of massive files in file-based workflows via WANs. Aspera has already proven itself in use at major broadcast companies, sports leagues and government agencies around the world as well as Hollywood studios.

What makes Aspera special is that it eliminates bottlenecks by using CTC’s new file technology instead of FTP or HTTP. Since the API is open it is possible to integrate Aspera into existing systems.

"Though today we have..."

Sigma IT Co., Ltd. 2012.10.22UP

Exhibiting LTO Dubbing System, a LTO-S video archive control device for file-based workflows

Sigma IT (#6104) will exhibit the LTO Dubbing System as an archiving system targeting the growing demand for file-based digitization of broadcast media. By remotely controlling its LTO-S video archive recorder, the system allows users to partially automate the process of VTR tape filing. A write-out function also allows for saving onto external recorded media storage, VTR tapes, and other formats. Used in conjunction with the company’s SHAV-201 alarm aggregation terminal, users can continuously monitor and collect information from VTR deck playback.

DSP JAPAN Ltd. 2012.10.22UP

Exhibiting Products Including Newest Audio Processor Horus by Merging Technologies, MC-Pro Sound-Field Automatic Corrector from French Company

DSP Japan (#4602) will exhibit its newest audio processor, Horus. Also on display will be the MC-Pro Sound-Field Automatic Corrector manufactured by the French company Trinoris. The MC-Pro is garnering notable popularity for its high-speed processing and accurate audio correction.

In addition, the fully handmade high-fidelity M-series speakers from the Swiss company PSI will be exhibited, as well as the ES-series small mixers from the Swiss company Sonartec, a company which has earned the complete trust of professional audio users.

Mizuho Information & Research Institute Inc. 2012.10.22UP

Next Generation HEVC Stream Analyzer Tool

Stream Analysis of Next Generation Video Coding Standard HEVC

Mizuho Information & Research (#8005) will display and provide in-booth demonstrations of its HEVC Stream Analyzer, a tool for analyzing next generation video bitstream as a new answer for imaging solutions.

On October 16, Mizuho announced the development of an HEVC assessment tool called the ‘HEVC Stream Analyzer’, which consists of software that assesses the characteristics of the signal (bitstream) as it has been compressed and encoded under the HEVC standard which is displayed in a waveform.

PHOTRON LIMITED 2012.10.22UP

Photron reproduces workflow used at the Summer Olympics broadcast center, presents the latest in file-based sports production systems using AVS products

Photron (#5408) will reproduce the system used for the Summer Olympics in London, which ties in to an AVS sports server and production setup. The company will be demonstrating the latest in sports production workflows at its booth. A total of 52 users with over 1,000 cameras and 300 AVS servers were used to produce live coverage of 43 live events (Olympics).

Frontiers Co., Ltd. 2012.10.22UP

Exhibiting its latest digital signage devices, including ‘Sound Signage’, a system based on European-made Penguin System, an advertisement display system

Frontiers Co., Ltd. (#7402) will exhibit a range of products geared to indoor and outdoor events, program advertising, and live on-location feeds.

Frontiers Co., Ltd. offers a lineup of unique products intended to assist in digital signage and IP transmission of video data. The Frontiers Co., Ltd. booth is slated to offer a range of products catering to

Mitubishi Kagaku Media (#5205) will exhibit its recently announced BD-X, a professional 1080i BD-R archive disc. This direct-read after scribe Blu-ray disc is intended for long-term (50+ year) archival storage and is to be used for storing electronic documents, government files, and other critical data such as that stored by libraries and corporations. The disc meets OPARG (Optical Archive Group) standards. The disc is specially designed...
Inter BEE Exhibition Report

Exhibiting BD Drives for Long-Term Storage; Capable of Data Archival for 50+ Years

Compliant with OPARG (Optical Archive Group) Products

Pioneer (#5205) will exhibit the BD-R PRIM and BD-R PRMA industry-use BD writers for digital archives, which enable high-quality recording on special archival discs. Both devices are compatible with Mitsubishi Kagaku Media’s 100GB BD-R archival disc, the BDXL, which is specially designed for professional-use archiving. This enables high-quality recording and long-term data storage, allowing users to protect valuable data for prolonged periods of time. Mitsubishi Kagaku Media’s BD-RE archival disc, the HD-RE, will also be exhibited.

HD video transmission solutions

HD video transmission solutions for multiscreen delivery, and MPEG-DASH and HEVC next-generation format streaming displayed for the first time at Inter BEE 2012

Envivio’s new encoder for multi-screen video delivery solution for broadcasters at the booth of its partner company Ntech Cable System (#6402).

With its own software-based encoding technology, Envivio has the industry’s only solution that allows encoding for live and on-demand streaming with a single hardware.

Netwell Corporation

Exhibiting noncompressed, no delay, HD video transmission solutions

Netwell (#4604) will exhibit solutions for multiscreen delivery, transmitted by noncompressed, no-delay encoders for HD video cameras. The system is composed of the VL300 series (RX300, TX300) uncompressed wireless HD 1.485Gbps HD-SDI video transmission system made by U.S. company, Vubiquity, and the Niagara4100 encoding system made by U.S. company, Viewcast. Isao Katsuno, head of Netwell’s wireless camera department, will explain.

Solid State Logic Japan K.K.

Exhibiting its latest broadcasting console models

Solid State Logic Japan (#4604) will exhibit its broadcasting consoles including the ‘C10HD’ and ‘C100HD’S’, which have an extensive track record of installations in broadcasting, post-production and recording, and other studios around the world. Visitors can experience their brand new functions first-hand at their booth.

Solid State Logic Japan #4604

The Compact and Powerful ‘C10HD’
The ‘C10HD’ is an all-in-one digital console, which is the first large console format with a processor built into the console. It is a great HD digital console suitable for a large broadcasting, post-production and tracking. A track record of installations in ’C100HDS’, which have an extensive track record of installations in broadcasting, post-production and tracking. This HD console features 48ch simultaneous mixers, 16 Aux + BMTX + 27 bass, 650 channels, with a maximum 6FX and a maximum 28th GEO. The control panel is equipped with DSP power supply, 24 analog inputs, 24 analog outputs, 2 AES inputs, and 3 AES outputs.

Miharu Communications Inc.

Presenting Example Installations of Miharu’s Emergency Backup Equipment and Area Broadcast Systems

Miharu Communications (#2206) introduces the latest in broadcast tools and equipment, which often new functionality derived from digital broadcasting, including emergency backup equipment and area broadcast systems for use by broadcast stations. This very important exhibit includes an overview of how broadcast stations actually deploy and make use of emergency backup equipment and area broadcast systems.

1. Emergency Backup System for Broadcasting Stations

Fujifilm Corporation

Displaying Full 4K High Speed Cameras and Many Other New Products

Fujifilm (#5306) will be exhibiting a number of new products and services in the Electronic Imaging section of its booth. Systems and services will be featured for printing 3D images on paper media, as well as systems and services that support the use of 3D in video expression. Fujifilm wants to encourage a broader enjoyment of the possibilities of 3D imaging.

Canon System Co., Ltd.

Demos of products that expand the possibilities of video expression and displays showing examples of use; demos of next-generation camera systems for video distribution

The main attractions of Carina system (#6301) include the ‘SXH-360 Series’ Slot-In Camera, the main attractions of Carina system (#6301) include the ‘SXH-360 Series’ Slot-In Camera, the new version of its live encoding recorder ‘MEDIASYNERGY NEX’ which is currently in development, and more. By exhibiting a demo using these products, Carina aims to illustrate how they enable one to achieve a unique video expression.
Multiscreen Broadcasting Study Group to announce at InterBEE as an entry model that is optimized for cost graphics & 3D CG animation, this product is scheduled to be your individual storage needs. It is also available in a dual structure of your choice, and can be customized in various ways according to aluminum panels (tie-dyed materials). It can accommodate IECSC48C from a combination of aluminum die casting, aluminum frames, and interfere with internal equipment, 19 inch rack’ which does not interfere with internal equipment/sound. British company exhibit the ‘WL40V’ wireless microphones. This product is a mobile relay system with demonstrated success in the TV relay field Soliton Systems is to hold a joint exhibit with TBS showcasing the ‘Smart-telecaster HD’ from its mobile relay system ‘Smart-telecaster’ product series, the ‘Smart-telecaster for Android’ which works with the Android OS, as well as yet-unannounced new products. Smart-telecaster is a system that allows anyone to easily relay high-resolution video using a video camera and dedicated tablet PC. It can also be used to check on progress at disaster locations or high-resolution video using a video camera and dedicated tablet PC. It can also be used to check on progress at disaster locations or high-resolution video using a video camera and dedicated tablet PC.
**HOEI SANGYO CO., LTD.**

Demonstration of BTO (Build to Order) computer manufacturer products specialized for image editing purposes.

Intel will hold an exhibit featuring high-end computers specialized for professional image editing, demonstrating the merits of BTO (Build to Order) computers. You can experience the benefits of customizable shop-brand BTO computers that are made to meet your needs and handle diverse workflows. The imaging industry is increasingly using group production through a network environment, and requires computing resources that can handle the increasing load of production media with high image quality, high levels of detail, and cross-media support.

**ASACA CORPORATION**

Exhibiting video audio filing (VAF) SSD server "AVR-800/801PV," which is suited to broadcast mastering and uses JPEG 2000.

Asaka will exhibit its new "AVR-800/801PV" VAF (Video Audio Filing) SSD server which is suited to broadcast mastering and uses the JPEG 2000 video codec. It builds RAID1 with SSD, and has a recording capability of 2 hours of video, 10,000 still images, or 5 hours of sound. It can output up to two channels. Asaka will also exhibit other products for material and content storage and management. These include the AVR-8027 - a new AV file device that uses the JPEG2000 codec.

**HOOK UP, INC.**

Demo of products including Universal Audio, a production environment with Thunderbolt connection.

Hookup will be exhibiting in partnership with Antelope, and will be focusing on Universal Audio’s Thunderbolt products. Universal Audio’s Apollo is a high-resolution professional audio interface equipped with a comfortable workflow which uses analog recording and sound. It can be connected through 18 in 24 out, FireWire, or Thunderbird, and through its uncompromising design it allows the highest quality 24b/192kHz recording in its class. It can also use the powerful UAD plug-in in real time. It is able to perform multi-source emulations in both Mac and Win systems.

**KOMAMURA CORPORATION**

Demonstrating a number of its latest products, including a stabilizer built by edelkrone, and a DSLR follow focus.

KOMAMURA Corporation (#9214) will be demonstrating a variety of their new products, including digital camera stabilizers, Cine Base, lenses and lens mounts, and isolators. Beginning in September, KOMAMURA became the only licensed dealer of edelkrone products in Japan. They will introduce these ultra lightweight, ultra compact single reflex digital camera rigs at the exhibition. In addition, they will present an abundance of established products including Schneider lenses.

First ever exhibition of edelkrone stabilizer.

**LIVEGEAR Inc.**

Exhibit of stage sound/lighting equipment, including the KZ10 K-Array line array speaker, weighing 90g, and the LIZ 100W power-miser LED lighting products.

LIVEGEAR (#4512) will showcase its wide variety of sound, lighting, and stage fit products used in performance and concert halls. Among these are the highlighted new sound and lighting products. In sound equipment, “KZ10” and “LIZ002” speakers will be the latest additions to the the K-Array Red Line series. In lighting equipment, the new LIZ 100W power-miser LED lighting will debut.

MediaCast’s data broadcasting provides three types of solutions: for raising profits; improving ratings; and ensuring greater safety and security.

MediaCast (#5501) will be exhibiting 3 data broadcasting solutions; “for Business,” which increases profit through data broadcast; “for Interactive & Multiuser,” which increases viewer ratings through data broadcasting and “for Emergencies,” which is a safety and security solution.

Mr. Takaharu Sugimoto, MediaCast’s representative director, commented on the exhibition contents at this year’s InterBEE, “Up until now, we have focused on appealing to data broadcast equipment customers. This year, our focus will be on the home market.”

**FT MediaCast Co., Ltd.**

Exhibiting a multi-function, multi-input, 7-inch field monitor with wide-viewing angle IPS panel, and a 9.7-inch 2K field monitor reference exhibit.

ADTECHNO Inc. will be displaying their 7-inch 3G-SDI field monitors CL765B and CL7692H, which use IPS panels and include multiple inputs and outputs. Also available for viewing will be their 9.7-inch 2K field monitor with IPS panel and multiple inputs and outputs. The IPS panel, also called a TFT active matrix LCD, has a wide viewing-angle and is particularly known for having little chromatic shift or change in color tone. It is used in retina displays found in video monitors in the future.
Harmonic Japan G.K.
Exhibiting digital content workflow solutions: state of the art equipment for data transmission, highly functional servers, and transcoders for multiscreen devices.

Continuing from last year, Harmonic Japan will exhibit its digital content workflow solutions. The company exhibits end-to-end solutions for content creation and distribution from encoding to recording, editing, transcoding, transmitting, and consumption on multiscreens. Harmonic will introduce its technology for each stage of the workflow process at separate booths for: ‘Contribute Distribution & Delivery’; ‘Production & Playout’; ‘Monitoring & Delivery’; ‘Mediagateway’; and ‘Synergy’.

Kenko Professional Imaging Co., Ltd.
LED lighting demo in makeshift studio: exhibits include variable angle camera support system, lighting fixture that turns white walls into green screens.

Solutions for studio lighting using all Camlight LED Lights. Kenko Professional Imaging (KPI) is participating with Kenko Tokina and Sima. A temporary studio in the booth is used to demonstrate studio lighting using Camlight LED lights from CKJ Hong for all lighting. Besides displaying new products such as the multifunction camera support system ‘Matteves HD DC Slider and Dedolight’ (HD1500) (HMI light head with B001200W).

NTF CORPORATION
Exhibiting waterproof housing/parts and waterproof/dust proof equipment such as LED lighting equipment and LED lights for underwater imagery, underwater fixed-point cameras, and custom-built waterproof housing.

NTF (K5712), a company that deals in everything related to waterproof housing/parts and waterproof/dust proof equipment—from planning and design to manufacturing and sales—will be exhibiting their products with the aim of expanding their business. The main products that will be exhibited are:

- Waterproof/dust proof LED lighting equipment
- Waterproof LED lights for underwater imagery
- Underwater fixed-point cameras
- Custom-built waterproof housing

Vinten Japan K.K.
‘Q-Ball’Pan/Tilt Camera System with Ultra-Compact Remote Control Camera

Vinten Japan K510 is displaying their 1cm spherical ‘Q-Ball’ ultra-compact pan/tilt camera system. It weighs approximately 1 kg. It is equipped with a 10x optical zoom lens and 2 megapixel CMOS camera sensor.

Vinten Japan is also displaying their “Vision blue 5” camera control system that is compatible with the latest digital portable video cameras, and is equipped with a perfect balance stepless adjustment system, LF drag system, and weighs only 2.4 kg. In addition, they are showing their “ABHDXR” wireless transmitter/receiver.

Autodesk Ltd.
Autodesk Smoke with Integrated Editing and Visual Effects

Autodesk K516 is exhibiting their Autodesk Smoke with integrated editing and visual effects. In the latest 2015 version, the UI, performance, and functions have been greatly enhanced. Autodesk FX includes functions for high-end users. It costs only $5,000 yen. It is planned to be released in December. There is a demonstration of the latest version, and user case examples are given.

Information about the pre-release version, which has already been downloaded 35,000 times throughout the world, will be released.
Audio-Visual Fusion Products at the Shared Booth with Avid

Sunmuse Corp.

Sunmuse, which is sharing a booth with Avid (64617), is introducing their "UNIVEL" HD color correction and signal focusing plug-in software by Zynaptiq GmbH, which is sold by Sunmuse. Compatible with formats such as Pro Tool RTAS (Real-Time AudioSuite), AAX (Avid Audio extension), and VST (Steinberg's Virtual Studio Technology).

Avid is introducing their A/V integrated products such as the latest version of their Interplay PAM (Production Asset Management), and "VanCryst" ATEN video brand including their HDMI matrix switcher, which is planned to be released at the beginning of December, and an HDMI extender that uses optical fibers.

In addition, there are demonstrations of ATUSen brand products such as a matrix KVM switch commonly used for transmissions such as broadcast systems, and an Over IP KVM switch that can be operated remotely.

VC7 Series Multi-Format Standard Converter

Shibasoku Co., Ltd.

Shibasoku (K7202) is exhibiting their VC7 Series of TV format converters. Features include motion compensation, cleaning jaggyness even when conversion is done for different frame numbers. Size (2U, 7 kg) and cost have been dramatically reduced. Because it is compact, it is easy to use at relay points and shooting locations.

Compact Device, Simple Real-Time Superimposing

ALVIX Corporation

ALVIX (#6001) is displaying their new "OVS-105" product for superimposing single SDI signals. With the software, typed text can be displayed in real time. 256x256 dot logos can also be displayed. The "OVS-109" model is compatible with 9 channels.

First Prototype in Japan of the Chrosziel “Multicage Plus”

GIN-ICHI CORPORATION

GIN-ICHI (#6208), which handles overseas products, is displaying various camera support and accessory products including new Steadicam products for HD video (Steadicam Tango, Steadicam Zephyr HD). Several sliders made by the new brand Cinevate, Multicage Plus by Chrosziel, filters made by Tiffen, and monitors made by Marshall. A prototype of the Multicage Plus by Chrosziel is exhibited for reference.

Self-Developed FM Transmission Equipment / Can Be Used for Broadcasting from Evacuation Areas during Emergencies

Fuchu Giken Inc.

Fuchu Giken (#6110) is displaying many self-developed products including transmitters and transponders for FM broadcast stations. "SA300 Series" FM transmitters and transponders, "SA-030-5S" variable frequency type community FM transmitters, and "SA-001-5S" mini FM transmitters for variable frequency type broadcasts, and more.

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Digital/Film SLR Cameras with Full HD Video and Professional Features

NIKON IMAGING JAPAN INC.

Nikon Imaging Japan (K7307) is appealing their latest D800 and D800E digital film SLR cameras, and the video functions (D-Movie) of Nikon FX format at Full HD 1920x1080/30p. They are exhibiting their latest D800 and D800E cameras, and “SA-001-SS” mini FM transmitters and transponders, and “SA-030-5S” variable frequency type community FM transmitters, and more.

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When converting is done for different frame numbers, Size (2U, 7 kg) and cost have been dramatically reduced. Because it is compact, it is easy to use at relay points and shooting locations.

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Live Video Demonstration of the “PMW-F55” 4K Camera

Sony Corporation/Sony Business Solutions Corporation

The Sony Business Solutions (K6211) exhibition is based on their three pillars; "4K", "File-based solutions", and "Live base." Their “PMW-F55” 4K camera with the newly developed 4K sensor is capable of 4K live broadcasting. At their booth, they demonstrate live broadcasting to a 4K monitor. They also are exhibiting their new AVS-3000 and 6500 switchers along with their existing 7000X. The 3000 and 6500 switchers are part of a compact and low-cost product line. It is mainly assumed to be for live usage, but the 6500 can also be used for editing. The 7000X includes two switcher processors for both formats.

Multi-Format Standard Converter

Shibasoku Co., Ltd.

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Nikon Imaging Japan (#7307) is appealing their latest D800 and D800E digital film SLR cameras, and the video functions (D-Movie) of Nikon FX format at Full HD 1920x1080/30p.

The D800 series in particular has necessary professional features including an HDMI mini terminal interface, ability to output video to both the rear body LCD monitor and an external monitor at the same time, and ability to shoot uncompressed video.

In addition, there are many "NIKOR Lenses" (transforming lenses) that can be used for the D800 optics.

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The New "Ventura" from Nevion that can Transmit Uncompressed SDI Signals or JPEG2000 Over IP

NETWORK ELECTRONICS JAPAN (45814) is displaying the Ventura optical fiber transceiver from Nevion, which has 1Gbit/sec, a new TRU size touch panel LCD control panel, Flashlink optical fiber transmitters, various video and audio processing, SDH/IP transmission carrier class image transmitters, and more.

JVC KENWOOD Corporation

4K2K Camera Recorder Necessary for 4K Workflow

JVC KENWOOD (#8104) is exhibiting their 4K2K camera recorder. They are also displaying business-use LCD monitors and camera recorders for release in November.

Their 4K2K camera recorder is exhibited for reference equipped with their original next generation image processing engine “FALCONEIRD”. It is compact and features 4K2K resolution for progressive recording. In addition, they are also exhibiting area 16x16 system that can perform 16x16 broadcasting over a limited area for reference.

Sakura Eiki Co., Ltd.

Exhibition of the nonlinear system the “PRUNUS Zero” which is scheduled to be released next spring: Greatly enhancing the processing functions of video, such as chroma key

Sakura Eiki (#7513) exhibited PRUNUS Zero which is scheduled for release next spring. This enhances processing functions while still keeping the real time ability and operability of their existing product. Another feature is the design that has been even further refined. Processing will be possible by the 3D of OpenGFX. It is possible to implement timelines in real time.

FS-NET, Inc.

“My Announcer” Voice Synthesis Announcement System that can Transmit Voice according to a Schedule

FS-NET is exhibiting their "My Announcer" voice synthesis announcement system. The "A Talk II" voice synthesis engine by AI Inc. is used. When text is input such as writing an email on a computer, it is converted to a natural voice. "My Announcer Pro" (59,800 yen) can schedule announcements. "My Announcer Mate" (48,000 yen) can play voice files from USB, etc. with the player.

Inter BEE Exhibition Report

Online Magazine Headline

JVC KENWOOD Corporation

The New “Ventura” from Nevion that can Transmit
NETWORK ELECTRONICS JAPAN CO.

4K2K Workflow

METAL TOYS

Dolly with Tires that can be Replaced in 30 Seconds and “Beetle” Compact Dolly with a Maximum Load of 200 kg

METAL TOYS (#6510) is mainly exhibiting rails and dollies at their booth. They are introducing a dolly with 8 air tires that allows one person to replace the tires in just 30 seconds.

In addition, with their light, compact “Beetle” dolly, the height can be adjusted. Their rails are foldable and light for carrying, but strong enough to hold up to 200 kg.

S. C. ALLIANCE INC.

High-Speed AXIA IP Console Using a Unique Protocol of the IP Audio Network

S. C. ALLIANCE (#44616) is exhibiting their AXIA IP console. It uses a unique IP Audio network protocol called “LiveWire”, which allows for transmission of linear PCM audio (48KHz, 24bit) audio signals for 420 stereo signals using a single Category 6 Ethernet cable. In addition, program data, control signals, and clock signals can be transmitted together. This allows for installation costs, time for updating equipment, and required studio space to be reduced.

HITACHI & Hitachi Global Solution

“GEMINI” Camera Car and Virtual CG System

HITACHI & Hitachi Global Solution is exhibiting GEMINI which is a camera car and virtual CG system. It is ideal for newsflashes, live sporting events, weather forecasts, traffic information, mobile broadcast relays (motorbikes, cars, and trains), and broadcast relays for material transmission.

SANSIN ELECTRONICS CO., LTD.

Live Video Transmission System Using Mobile Lines

SANSIN ELECTRONICS (47213) is displaying a live video transmission system by LiveU that uses mobile lines. The LiveU series includes video transmitters with good portability, and multiple mobile lines are used together thanks to their original RF technology. Stable video transmission is possible. It is ideal for newsflashes, live sporting events, weather forecasts, traffic information, mobile broadcast relays (motorbikes, cars, and trains), and broadcast relays for material transmission.

Circle Co., Ltd.

“SCORPIO'23” 7m Crane and Virtual CG Combination

Circle Co. is exhibiting their "SCORPIO'23" 7m Crane and Virtual CG Combination. The broadcast rental company CIRCLE (#65109) is strengthening their sales of rigs and cases for various types of cameras. They are focusing on selling cases that are compatible with smaller cameras. At their booth, a "SCORPIO'23" 7 meter camera crane provided by their department in charge of special equipment contracting, and CG virtual images are combined to configure a collaboration system that synchronizes crane movement with CG produced by the group company AIDCA, which produces CGI for movie and TV programs. It will be sold starting from November. At the location, a composite video with CG made by their newly developed VHF digital wireless devices (three models) “FALCONBRID” can be viewed.

NextoDI Co., Ltd.

Exhibiting NVS-AIR, a backup device for memory card data

NextoDI (#6106) is showing the NVS-AIR memory backup device. This product backs up data securely and reliably and therefore enables memory card re-use. The backed up data can be saved onto an external drive. The selling point is the cost reduction that it can realize, as it eliminates the cost of purchasing expensive large capacity memory card products.

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Agai Trading Corporation

Products by Kobold of Germany “Cobalt HMI” Lightweight Splash-Proof Compact Lighting System

Agai Trading is exhibiting an all-weather type HMI metal-halide light by Kobold of Germany. It is possible to continue shooting even if it rains suddenly, the power does not go out. At the location, it is possible to try the actual products anytime.
**GLD** Digital Mixer System by the British Mixer

"GLD" is Studer’s digital mixing console designed specifically for live sound and broadcast applications. It features a powerful processing engine, intuitive interface, and a wide range of connectivity options.

- **Versatility**: The mixer can have up to 48 inputs and 24 physical outputs, and it supports 3G/HD/SD-SDI, or AES/EBU signals.
- **Sound Quality**: Measured signals are audio signals that are superimposed to displacement can be displayed on a chart. Values for Longterm, Short Term, and Momentary Modes can be displayed.
- **Ease of Use**: The build-in DSP amp built by Amcron of the same company makes it easy to configure as a cardioid or vocal pickup.
- **Compact Design**: The S28 uses carbon fiber, which reduces weight and makes it easier to handle and transport.
- **Reliability**: The mixer is rugged and designed to withstand the rigors of live sound and broadcast environments.

STUDER JAPAN BROADCAST LTD.

**VISTA 1** Console for Mobile Broadcasting

"VISTA 1" is Studer Japan Broadcast’s mobile console designed for broadcast and television production. It features a compact and lightweight design, making it ideal for mobile applications.

- **Design**: The console is compact and easy to operate, making it ideal for mobile applications.
- **Functionality**: There is a six-layer desk, and one action is possible to switch between all layers. "FaderGlow", which applies color to the fader styling, is equipped as a standard feature.
- **Connectivity**: There are eight color display options for easy viewing.
- **Ease of Use**: The console is easy to use and can be configured for various applications.

STUDER JAPAN BROADCAST LTD.

**LEADER ELECTRONICS CORP.**

LV5838 Audio Monitor that can Measure Loudness for Up to 12 Hours

The LV5838 audio monitor is designed to meet the needs of broadcasting engineers and audio technicians who require accurate loudness measurement.

- **Advanced Features**: Measured signals are audio signals that are superimposed to displacement can be displayed on a chart. Values for Longterm, Short Term, and Momentary Modes can be displayed.
- **User-Friendly**: Using the display function, it is possible to display the loudness measurement, level, and sound conditions individually or together.
- **Confidence**: The LV5838 is fully compatible with industry-standard loudness measurement systems.

LEADER ELECTRONICS CORP.

**HIBINO CORPORATION**

JBL’s "VTX" Series of Large-Size Line Array Speakers

The JBL "VTX" series of large-size line array speakers is designed for professional audio applications in live sound and recording environments.

- **Performance**: The "VTX" series has a 3-way line array speaker design, with the "VTX-A28" subwoofer designed to provide an even frequency response.
- **Flexibility**: Two compression drivers are coupled into a single chassis, and the frequency response is smooth without distortion.
- **Design**: The appearance is compact, with aluminum used for the front and back, and carbon fiber used for the rest of the cabinet.

HIBINO CORPORATION

**YUASA CO., LTD.**

"QUMU" In-house Video Distribution Solutions

"QUMU" is YUASA’s in-house video distribution solution designed to support outside broadcasting vans that support heights of up to 15m.

- **Functionality**: The "QUMU" module type image file is possible to view, search, and preview the file server easily from a browser.
- **Optimization**: VIDEOTRON is exhibiting products such as the "LDC-70HDSD" loudness controller, which is composed of "MF-70V" movie file device, and "CK-93HD" 3ch color super with an up conversion function.

YUASA CO., LTD.

**RIMAGE JAPAN**

"REMAGE Producer IV 8200N" On-Demand Optical Disc Creator with Blu-ray Copying Function and "QUMU" In-house Video Distribution Solutions

RIMAGE Japan is exhibiting their 4-driver on-demand optical disc creation solution “REMAGE Producer IV 8200N” and video streaming solution “QUMU Video Controller Center” for business use.

- **Innovation**: "REMAGE Producer IV 8200N" is the highest product in the RIMAGE Producer series, considered as the optical disc publishing standard device for industrial use.
- **Functionality**: The "Blu-Loc" copy protection function for Blu-ray is included. As a new function, the "Blu-loc" copy protection function for Blu-ray is included.

RIMAGE JAPAN CO., LTD./Qumu, Inc.
**Inter BEE Exhibition Report Online Magazine**

**Headline**

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**World's First 4K 60fps Uncompressed Video Card Compatible with HDMI**

Rohde & Schwarz has released their "DVS Atomix HDMI" HDMI video card with the world's first 4K uncompressed signal (up to 60fps) output. Since 2010, DVS company products are under the Rohde & Schwarz umbrella. There has been 4K output using SDI, but this is a first using HDMI. HDMI terminals are included with PC-based video cards, and there are 4 HDMI output connector systems that are compatible with HD-SDI specifications. An expansion unit allows for output to four HD-SDI systems. It is possible to output HDTV resolution signals that are 1/4th of 4K2K video simply.

**ASK CORPORATION**

"Space" Network Storage by the British Company GB Labs that is Inexpensive and has Good Connectivity - Product Demonstration from 12:30

ASK (#8407) is exhibiting "Space" network storage by the British company GB Labs. High-speed and shared storage. All terminals at the ASK booth and each AJA terminal are connected and there is a space of 8TB. Space storage is connected via a normal gigabit Ethernet network. No drivers or additional software is required. Material can be shared and played easily by entering the IP address on a Mac or Windows computer. Capture and editing are also easy.

**Media**

VILLAGE Island, Ltd.

"D'TA-251" RF Capture by Dektek from the Netherlands and "Digital Mobile News Gathering" Remote Broadcast Relay Transmitter by AVIWEST of France

VILLAGE Island is exhibiting the "D'TA-251" RF capture by Dektek from the Netherlands, and "Digital Mobile News Gathering" remote broadcast relay transmitter by AVIWEST of France. Recording is possible for terrestrial digital broadcasts and RF signals. Normally, it costs 2,000,000 yen to 5,000,000 yen, but with the capture functionality it is less than 200,000 yen.

"The Digital Mobile News Gathering" remote broadcast relay transmitter by AVIWEST of France is an RF capture equipment. The data flow amount and file transferring is visualized, and a terminal equipment. A stable network with 100% frequency levels can be applied to file signals. It is possible to input/output basebands from each terminal equipment, and the IP video router becomes the core equipment. In the IP routing system, control is possible based on priority. Baseband signals can be set as the highest priority, and 7 different priority levels can be applied to file signals. This data flow amount is approximately.

**Media**

EDIEN Co., Ltd.

V-Low Multimedia Broadcasting System / System Proposal from Real Time Encoder to Modulator / Compatible with Switching to Emergency Broadcasting

EDIEN is exhibiting their V-Low multimedia broadcasting system. Digital radio broadcasting is performed using available analog channels. System from encoder to modulator is provided. Voice is encoded to the transport stream (TS) using a real time encoder, which is then converted to DVB ASI by IP transmission equipment via LAN, is modulated to a digital radio signal by the "model 350-18" digital radio station modulator, and is received by emergency radio receivers.

**CAMPING WORKS**

'*Gstream2800' Power Generator for Hiace***

CAMPING WORKS is exhibiting their "Gstream2800" power generator for vehicle use. It is exclusively for the Hiace. Output is AC100V/28A, and an inverter controlled sine wave can be output. Compact with sound insulation. The power generator can be installed in the location where the spare tire goes under the floor of the Hiace, and the muffler is installed next to it. The inverter unit for output control is installed inside of the vehicle. A special muffler is made from stainless steel and is an original product with excellent rust resistance. Generator equipment does not need to be installed internally. SpaceSSD is connected via a normal gigabit Ethernet network. All terminals at the ASK booth and each AJA terminal are shared storage. All terminals at the ASK/AJA booth share storage. All terminals at the ASK/AJA booth share storage. All terminals at the ASK/AJA booth share storage.
**Inter BEE Exhibition Report Online Magazine**

**Magazine**

**KOHKEN COMPANY, LTD.**

**Shooting Demonstration with Lens Adapter for iPhone**

The KOHKEN group is demonstrating shooting with their lens adapter for iPhone. In addition, they are exhibiting their new "KE10T/PK101P/R" twist pair cable extension for panel type HDMI. It can be embedded into electronic facility boxes. The main body is compact, so it does not take up much space for installation. It can be utilized for upgrading systems in conference rooms and classrooms.

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**TOYO Corporation**

**Exhibition of the "TM3-3G": A new SDI input-output touch panel loudness monitor**

TOYO Corporation exhibited the "Touch Monitor TM3-3G." This is a new loudness monitor made by RTW being introduced into Japan for the first time.

This is an SDI input-output type monitor that is compatible with embedded audio. The TM3 has adopted a touch panel display from the beginning. This makes it possible to freely layout the loudness meter, peak meter, value meter and start/stop/reset buttons in accordance with the operating environment. It is possible to layout the system easily because ten patterns are installed in the device in advance.

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**KYOSHIN COMMUNICATIONS Co., Ltd.**

**Exhibition of carefully selected solution products: Proposals for NAS-centered multi-application environments and 4K high-definition digital signage**

KYOSHIN COMMUNICATIONS exhibited products carefully selected from various solutions handled by the firm. In the Contents Production Corner, they introduced multi-application environments, such as Adobe, Apple, more, centered on two types of NAS shared servers: AVID’s "IS 5000" and GB Labs’ "SPACE." In ingest systems in production environments and in Telstram’s pipeline series, new products were exhibited.

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**Panasonic Corporation**

**New P2HD Product AG-HPX600 Memory Card / Memory Recorder**

The Panasonic Group (P7308) is exhibiting their concept of "Link together Link to the future -Lincing AvC World." - A future vision of the broadcasting / business use AV equipment with IP network collaboration is proposed through their P2HD series, AVCAM, and HD system equipment. The AG-HPX600 memory card / camera recorder is on display as a new product in the "P2HD" series. Also, in the "AVCMA" series, many solutions are introduced including the AG-A90 memory card / camera recorder. As its lens mount is 2/3, so existing lenses can be utilized. The new body weight is less than 3 kg.

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**Yamaha Corporation**

**Exhibition of the latest CL series digital mixers that are an accumulation of 25 years of technology and expertise**

Yamaha exhibited their CL series which are the latest digital mixers. In the operational format, intuitive operations are possible with a touch panel as a product that has brought together the digital mixing technologies of YAMAHA that have been accumulated over 25 years. This follows the MD series. The effect editor comes with functions from collaboration with New that is called the premium rack.

There was also a display of the ST4...
Inter BEE Exhibition Report

DataDirect Networks Japan, Inc. 2012.11.18UP
Exhibition of high speed shared storage for professionals: Experience of connection with applications and a smooth environment

DataDirect Networks gave an exhibition and demonstration of high speed and high performance shared storage for professionals as a storage vendor in the United States. In the demonstration, an MXF server and various editing applications were operated with it being possible to experience the operation and control states of video editing connected to each application.

The connected storage was the latest SFA10K, SFA12K and others. Online and offline editing can be carried out.

Inter BEE Exhibition Report

Laguna Hills, Inc. 2012.11.19UP
Exhibition of the projection system "WATCHOUT" manufactured by the Swedish firm DATATON which allows large and seamless videos to be displayed on an unlimited number of screens

Laguna Hills exhibited "WATCHOUT." This is a wireless multi-projection system manufactured by DATATON in Sweden.

This is a system for multi-screen displays that presents high-quality multi-images in union with digital images, video and graphics through the latest computer technology. It is possible to display large and seamless images, so it can support most devices that are capable of being connected to computers.

Inter BEE Exhibition Report

Hitachi Kokusai Electric Inc. 2012.11.20UP
Demonstration of digital radio broadcasting at 90MHz-108MHz with a V-Low multimedia transmitter: Realization of a compact and high performance power amplifier

Hitachi Kokusai Electric exhibited a V-Low multimedia transmitter. This is a new digital broadcasting system that utilizes the vacant space of analog television broadcasting. In the demonstration there was an exhibition in which new AM-FM radio digital broadcasting, road information and disaster prevention information was given in the 900MHz-1080MHz bandwidth that corresponds to VHF channels 1-3. Three 400W power amplifiers (PA) were used to increase power up to 1.2KM for the broadcasts. In the days of VHF channels 1-3. Three 400W power amplifiers (PA) were used to increase power up to 1.2KM for the broadcasts.

Inter BEE Exhibition Report

FORUMiB Co., Ltd. 2012.11.20UP
Exhibition of the cloud-based virtual reality system 'VR-Cloud' and 6K signage system

FORUMiB exhibited the cloud-based virtual reality system 'VR-Cloud' and a 6K signage system. Virtual reality can be displayed at a resolution of 6K. There was a demonstration of the VR software "UC-win/Road Ver. 8" projecting VR data for which a noise analysis had been carried out.

"VR-Cloud" realizes "UC-win/Road" in a cloud. Videos is delivered to PC screens with commands sent to the server in real time. VR can be achieved even on low-cost PCs. The latest version 4 also supports Android devices.

Inter BEE Exhibition Report

DX ANTENNA CO., LTD. 2012.11.21UP
Exhibition of many next generation information transmission solutions, including the "Digital Transmission System" through IPDC and the industry's first "Milli-wave Transmission System"

DX ANTENNA exhibited a great number of next generation information transmission solutions, including the "Digital Transmission System" through IPDC and the industry's first "Milli-wave Transmission System" that is the first in the industry to be able to transmit high definition broadcast signals wirelessly, the high resolution "Fuj-LHR 'High Resolution System'" and the "Gap Filter System 109".

Inter BEE Exhibition Report

Grass Valley K.K. 2012.11.21UP
Introduction to workflow from photography and ingest to delivery in the product lineup of this firm

Grass Valley makes it possible to have complete coordination between their products, from ingestion to material compilation editing and sending. There was a showcase in their booth of this workflow.

The "LDX" series camera STRATUS (media workflow) EED system that has adopted a CMOS sensor is a product which was announced at this year's IBC.

CMOS has been adopted as a new chip that will contribute to the definition of the system.

Inter BEE Exhibition Report

FUJI XEROX Co., Ltd. 2012.11.27UP
Exhibition of two models of optical transmission cables that deliver HDMI and DVI digital signals up to 1km without degradation

FUJI XEROX exhibited a 4K-compatible optical DVI HDMI extender. This extends DVI HDMI signals up to 1km without degradation for extension with an active repeater. It is possible to extend without degradation by converting digital signals to light unchanged. This is a device that makes use of the laser technology of the laser printers of Fujixerox.
Why didn't you eat the other half of this chocolate?
Exhibition of the independently developed electric dolly “Samurai” that makes use of the control technology of astronomical telescopes and supports digital control

YOSHIMI CAMERA exhibited a time-lapse photography electric dolly called “Samurai.”

In addition to the analog control that was released one year ago, there was a display of a digital control electric dolly and time-lapse dolly from December. The feature of these products is that they can be controlled by computer and control is also possible with a 0.1 millisecond pitch by the application of the control technology of astronomical telescopes.

The “IS-100” has already been used in the shooting locations of the movie No Otoko (Brain Man). Equipped with multiple monitors and a camera matching function, the “IS-100-100” and “IS-100 mini” use in the shooting of the movie No Otoko (Brain Man). Equipped with multiple monitors and a camera matching function.

FUJIFILM Corporation PHOTO IMAGING PRODUCTS DIV. exhibited the “IS-100” and “IS-100 mini” which are color control systems for digital and television locations. The “IS-100” was a reference exhibit.

The “IS-100-100 mini” is a system that matches the shooting location monitor and the post-production monitor color contrast. The “IS-100 mini” has the functions of “monitoring”.

The “SDR9130” is a 32×32 matrix switchers: Realization of miniaturization to 1U by the adoption of a DIN connector.

The “DSR9130” and “DSR9030,” new 32×32 matrix switchers.

The “DSR9130” is able to reduce the size to 1U by the new adoption of a DIN connector. The depth is also shortened and this is suitable for confined spaces, such as outside broadcasting vans. The price is also lower than existing models.

The “IS-100” has been standardized with the purpose of supporting multi-channels and this has been extended to support multi-channels and this supports up to 700mSEC.
2012 was the year of the quadrennial Olympics. A session entitled, “Audio System Construction for Large-scale Sports Events such as the Olympics” was held at the Inter BEE Content Forum 2012 to coincide with the Olympic year. In addition to being the world’s largest sports festival, broadcasting the Olympics requires the construction of the most complex and advanced audio production system in the world.

Mr. Dennis Baxter was in charge of sound design at the London Olympics. Mr. Baxter went independent after being in charge of Olympic broadcasts at NBC, and has worked as a sound designer at large-scale sports events including the Olympics.

He has served as a sound designer at 8 Olympics including Atlanta (1996 Summer Olympics), Sydney (2000 Summer Olympics), Salt Lake City (2002 Winter Olympics), Athens (2004 Summer Olympics), Turin (2006 Winter Olympics), Beijing (2008 Summer Olympics), Vancouver (2010 Winter Olympics), and London (2012 Summer Olympics). He has also worked as a sound designer for hundreds of sports events, such as the World Cup and NASCAR, and he has won 5 Emmy Awards for sports program audio engineering. He is the No.1 sound designer for sports outside broadcasting.

At the session Mr. Baxter introduced sound systems he designed for the London Olympics. In addition, problems that actually arose at events and their solutions were discussed, and a wide variety of sports event presentation techniques were described in detail.

The interviewer, Mick Sawaguchi, has served as a TV drama mixer for NHK and has overseen a wealth of internationally-acclaimed works that have won awards such as the Arts Festival Grand Prize, HBB Award, IBC Nombre d’Or Award, and Vatican Hope Award. He has worked hard to develop surround sound and held many workshops, seminars, and technical presentations mainly at the AES Convention. He served as the Director of the Program Production Engineering Center in 2003.

Sawaguchi: “Tell us about your previous work experience.”

Baxter: “I have worked as a freelance engineer in the broadcasting industry or to be more precise, sports broadcasting, for about 35 years. I have had the honor of doing this great job all over the world. In particular, my work with the Olympic Committee has lasted for about 20 years. I started fully operating as a sound designer for Olympic projects from the Atlanta Olympics in 1996, so Sochi will be my last.”

Sawaguchi: “You have gained vast experience at the Olympics ranging from analog to 5.1 surround. What events led to your involvement with sound for sports programs?”

Baxter: “I worked as a mixer for outside broadcasting programs at NBC and was in charge of outside broadcasts at the Seoul Olympics for NBC in 1988. From the next Olympics at Barcelona in 1992 a new management structure and organization was put in place and I started working full-time for Olympic broadcasts. At that time I was introduced to Mr. Manolo Romero, who was in charge of Olympic broadcasts, and it was then that I felt that was the job for me.”

At the Atlanta Olympics in 1996, the Olympic Committee started recruiting large numbers of specialists in areas such as video & lighting and sound to improve and increase the scale of Olympic broadcasts. TV viewers and sponsor companies applauded the move. Efforts made at that time set the standard for Olympic broadcasts.”

Sawaguchi: “What difficulties did you undergo at first?”

Baxter: “Because I had been in charge of outside broadcasting in the beginning, I didn’t really understand what was required for the Olympics. All of a sudden I was made the planner and just the act of going to the office was hard. When I first started working for Olympic broadcasts, I was really surprised at the number of events – there are 60. So, to begin with I had to learn about these events. I watched previous Olympic video archives and analyzed the main points of each event.”

The biggest challenge at first and something that was very important was working together with sporting organizations including FIFA and FIG (International Gymnastics Federation). Each sporting event has many restrictions when it comes to broadcasting, so it was necessary to get approval from each sporting organization when filming these events. For example, attaching a single microphone required approval. Building a good relationship with sporting organizations enabled me to get approval smoothly. I spent a lot of time at first building good relationships with sporting organizations, broadcasting people, and audio crew.”

“I actually felt, at that time most of the 60 events hadn’t been broadcast on TV. Also, different sports are popular in different countries – for example, judo is big in Japan, archery in Korea, table tennis in China and so on. It could be said that the Olympics is a place to present and make such sports more popular internationally. Sound design has an extremely important role in bringing the best out of such events.”

“At the London Olympics we got complaints from gymnastic organizations that the sound of each athletes’ actions when competing was overly-quiet. However, I rejected this saying that it was what the viewers wanted. Viewers don’t watch the broadcasts at home but rather indoors from places such as the living room, kitchen, and bedroom, so I explained that they want to hear all those intricate sounds from the athletes’ breathing, shaking hands, and expressing emotions. It is my job to present those intricate sounds for the sake of sound expression. It sounds from sports events can be relayed so precisely, a commentator will be superfluous.”

Bringing out the best of all 60 Olympic events through sound

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The biggest challenge at first and something that was very important was working together with sporting organizations including FIFA and FIG (International Gymnastics Federation). Each sporting event has many restrictions when it comes to broadcasting, so it was necessary to get approval from each sporting organization when filming these events. For example, attaching a single microphone required approval. Building a good relationship with sporting organizations enabled me to get approval smoothly. I spent a lot of time at first building good relationships with sporting organizations, broadcasting people, and audio crew.”

“I actually felt, at that time most of the 60 events hadn’t been broadcast on TV. Also, different sports are popular in different countries – for example, judo is big in Japan, archery in Korea, table tennis in China and so on. It could be said that the Olympics is a place to present and make such sports more popular internationally. Sound design has an extremely important role in bringing the best out of such events.”

“At the London Olympics we got complaints from gymnastic organizations that the sound of each athletes’ actions when competing was overly-quiet. However, I rejected this saying that it was what the viewers wanted. Viewers don’t watch the broadcasts at home but rather indoors from places such as the living room, kitchen, and bedroom, so I explained that they want to hear all those intricate sounds from the athletes’ breathing, shaking hands, and expressing emotions. It is my job to present those intricate sounds for the sake of sound expression. It sounds from sports events can be relayed so precisely, a commentator will be superfluous.”
Introduction of digital sound for the London Olympics

Sawaguchi: “What will your future role at the Olympics be?”

Baxter: “In addition to sound design work, which I previously did at the Olympics for a long time, I have worked alone in sound production as well as the numerous jobs involved with its related technology. However, I increased the number of staff for the London Olympics because the workload has continuously increased. For the London Olympics I concentrated my efforts solely on sound production. I was able to look at the overall picture by focusing on high-quality Olympic sound that will take us to the future.”

“At the London Olympics we used nothing but digital outside broadcast vans and peripheral equipment for the first time. One person commented that it was the best sound they had ever heard at the Olympics.” I replied that “that’s because the high-quality sound was all created digitally.”

“Now that the London Olympics has finished, I am in the process of coming up with some good ideas for the next Olympics in Brazil. While watching the Olympics in close detail, I got a clear vision of what I want to do. To achieve that vision I will be working on technical improvements and computer program enhancements while building a collaborative partnership with various sporting organizations. I will also present some new ideas on broadcasting improvement to sporting organizations.”

Sawaguchi: “What has inspired you to carry out sound design over many years for large-scale sport events such as the Olympics?”

Baxter: “I love a challenge. I knew it wasn’t going to be simple and it took me a long time to understand the reason for this. I have carried out broadcasting jobs by using methods that suited me and were an improvement on previous methods, and I continue to feel like this towards the Olympics. This has made me the person I am and I still get a buzz from doing things in a fresh and unusual way.”

“The Olympics is a special event to many people. One of the things that has developed with the Olympics is sound. However, while video has developed at an astonishing rate hand-in-hand with the Olympics, the evolution of sound is lagging behind. Consequently, sound is now attracting a lot of interest. Producers need to recognize that sound is crucial to make better programs.”

Deepened trust of Olympic work through Audio-Technica collaboration

Sawaguchi: “Do you collaborate with Japanese manufacturers?”

Baxter: “I was introduced to a company called Audio-Technica by a contact from Panasonic in 1997, and I have been working with them ever since. That meeting was a great opportunity for both of us. I am very grateful for and proud of this excellent relationship.”

“When I suggest something they give me the immediate go-ahead and think about how they can help me.” We worked together at the Atlanta Olympics and also at Sydney. For example, if I request more stereo microphones, they have them prepared for me one year later. Audio-Technica has a great deal of trust in my vision.”

It is the family watching TV at home that is the real valued “customer”

Creating sound that will satisfy the viewers at home

Sawaguchi: “What point did you most want to make at the Inter BEE 2012 session?”

Baxter: “An important point is that we mustn’t forget the viewers at home. The TV viewers at home make up a large proportion of viewing figures. The actual situation, however, is that most people’s audio equipment is disorganized and that equipment setup such as matching equipment is not carried out. We professionals should always keep these people in mind. I haven’t been able to set about achieving a perfect surround sound for such an environment.”

“What I am proposing is a 4.0 mix which can be effective in such an environment. LFE is often misinterpreted. The real meaning of LFE in movies is “low frequency effect.” It is not “low frequency enhancement” as it is sometimes misinterpreted by people in the TV industry. Although there seems to be a negative opinion of LFE, I think that sound development has progressed beyond 4.0. As long as the sound expresses even the most intricate sounds, one does not have to sit in the best place to enjoy it.”

“I think that we should return to the past and have stereo 3D sound that uses DSP. And then change that to a surround format. Adding devices to the back of speakers would expand sound and create a theater-like effect. This would enable an extremely well-balanced sound wherever one sits.”

“Although there are opinions refuting this logic, I think that this technique would reduce the restrictions caused by viewing positions. If everyone is in a theater environment this would not be necessary, but the situation is different in actual households. We must never forget our real customers – the general viewers.”

Sawaguchi: “That’s a very important point.”

Baxter: “Ordinary families watching TV at home are my real customers. If customers are happy then it’s all good. I do my mixing work for viewers and I intend to do whatever I can for their enjoyment.”

“I think this is a highly artistic and creative job like that of a painter or artist. A different color can be drawn by using a different microphone. My wife is an artist and it was she who compared sound to a color. It could be said that we are ‘soundscape’ creators who are working with a beautiful paint called sound.”
Sharing space development results with images raises staff morale

“I want to show the real space to the nation”

Tamegaya: “Thank you for taking part in the Inter BEE 2012 Visual Symposium. What was your impression of the symposium?”

Grubbs: “I felt that it was a perfect bridge between technology and art. I have worked as an art producer and been involved in content production, but I am now a more technologically-inclined person.”

“At today’s symposium I spoke logically about how technology has been useful. Those of us pursuing technology in a variety of related fields including science, art and education are very grateful for this symposium because I think it is crucial to merge all of these things. I am particularly focusing on ‘real-time’ and ‘live programming’. If this technology continues to progress, we should be able to broadcast live from the space craft in Super Hi-Vision. That would be fantastic.”

“If the technology progresses, cameras and compression technology will evolve. This will enable artists to create spectacular visualization. I was very impressed when I listened to everyone who took the rostrum at the session explain how asteroids, comets, meteors and everything in the solar system interact by using actual and visual data. If we had more time, I would have liked to talk about my involvement with film-making and how I have contributed to other peoples’ excellent works over the past few years.”

Tamegaya: “You’re in the visual department at NASA where you’re trying to communicate visually with the tax-paying general public as well as children. Is it important to approach this from a certain angle in order to appeal to viewers?”

Grubbs: “Yes. It’s the same for Japan, but American taxpayers are paying for everything we do including spacecraft and staff. So, it is important to give them something for their money.”

“The NASA charter reads ‘Everything created by NASA is the property of the American public.’ Therefore, we must share something that the American people can actually relate to rather than an abstract thing. And at the same time, we help to improve the work of scientists and engineers.”

“It’s a great honor to be involved in the space program because I can make a contribution to scientific progress and education while providing taxpayers with something for their money.”

Tamegaya: “I saw a video on YouTube of the space shuttle being carried on a road near Hollywood. The American people really like the space shuttle don’t they. What do you think about that?”

Grubbs: “When seeing a space shuttle of that magnitude so close-up, it must make people wonder how such an enormous object can fly up to space. In a sense, it would be deeply moving seeing it close-up in something like high-definition video. By seeing it close-up, one would feel for the first time the incredible power of this enormous shuttle that travels to and from space.”

“This scene reminded me how great it would be to show real space to people because they are really interested.”

“The number of launches and launch sites increase with private participation”

Tamegaya: “I saw a shuttle launch at Cape Canaveral a long time ago. I was very impressed at the godlike light generated by the shuttle. Many people want to see the shuttle launch from tourist locations as well. What do you think about the future visual system of NASA?”

Grubbs: “I think that NASA space crafts will continue to be launched from Cape Canaveral in the future. And I think that rockets will continue to get bigger, meaning that people will have to be positioned even further away from launch sites. As a result, Hi-Vision images or Super Hi-Vision will become extremely important. The larger the ship the greater the danger. Rockets will become larger than Saturn V.”

“Commercial space craft from companies such as SpaceX, Orbital Sciences and Virgin Galactic will soon be launching from private bases and facilities in Texas, New Mexico and the coastal areas of Virginia & Delaware. By doing so, there will be a greater opportunity for many people to see space craft launches. They will be able to witness firsthand the power of the real thing and its awe-inspiring light. It’s hard to describe to someone who has never seen it with their own eyes. It’s a spectacular scene.”

The Visual Symposium, “Feel the Mysteriously Beautiful Universe! – Evolution of Visual Technology with High Sense of Realism –” was held on November 15, the second day of the Inter BEE exhibition. It introduced the latest space visual technology such as the NASA space visual system and visualization of image data sent back from the JPL (Jet Propulsion Laboratory) Mars Rover.

Rodney Grubbs, the NASA Digital Television Program Manager came to Japan to introduce NASA activities to the general public with images using valuable photographic materials and CG.

Mr. Grubbs defined such activities as “sharing things that the nation can actually relate to while helping to improve the work of scientists and engineers. He also pointed out that introducing advanced technology via images “contributes to scientific progress and education.”

The interviewer for the interview will be Mr. Hideichi Tamegaya, a Professor of the Joshibi University of Art and Design Graduate School who acted as the Visual Symposium coordinator. While holding a post at NHK he was responsible for Hi-Vision video production, which was the most advanced broadcasting technology at that time. He also pioneered program production techniques with leading-edge video technology, such as the latest program production that makes use of technology synthesizing Hi-Vision CG and photographed images. Due to suggest applied by Mr. Tamegaya, NASA included Japanese-made hi-vision cameras in its space shuttle. While keeping his feet on the ground, he has contributed to the vivid images of our planet beamed back from space.

Mr. Tamegaya, who has forged a close relationship with NASA in visual production over a long period, asked Mr. Grubbs about the role of visual communication at NASA and Japanese visual technological capability focusing on future NASA activities and Inter BEE exhibitions.
"Uniting the world through international joint development on space"

Tamegaya: “When will NASA launch its next rocket?”

Grubbs: “A large-scale rocket is under construction and we are currently thinking about the mission details. I’m only guessing, but I think that it is inevitable we will return to the Moon and Lagrangian point. We will construct a spaceship to go to the Moon, Lagrangian point and Mars. I think that Mars is an inevitable destination, however, I don’t think that the U.S. will do this alone. It will be a joint project with numerous countries. I think this will be an international spaceship.”

"The reason being is solar system space exploration will be done on a global scale and I don’t think that the government of one country alone could afford to do this. I don’t think there will be lunar surface pictures taken solely by NASA any more. Spacewalks will probably be carried out in partnership with Russia, the EU, China and various other countries such as Japan.”

“Tamegaya: "I am 46 but I still have the desire to go into space. Of course I would have more chance to go if I was 26. Unlike war, joint space exploration could unite the world.”

Tamegaya: "That’s right" - "Fully-equipped TV program production environment in NASA Centers"

Tamegaya: “Is there a group in NASA in charge of visual programs?”

Grubbs: “We have a Public Affairs Department. Each NASA Center has a fully-equipped environment to make TV programs. This mainly includes programs about science and engineering at each center, but educational programs are also made.”

“Tamegaya: "To give you an interesting example, I could talk about the transit of Venus. It is a very rare, fantastic event, so many people from various centers including the Jet Propulsion Laboratory, Marshall Space Flight Center, and the Goddard Space Flight Center got involved. We placed a camera at the peak of a volcano in Hawaii, filmed it in 4K in real-time, and showed it via a live stream on NASA TV. This video was distributed with a story while switching regions across the world. This illustrates how a story can be composed in real-time while adding scientific data there and then in real-time.”

"Special educational programs can also be produced"

Tamegaya: "Your department is linked to the media group, NASA TV, isn’t it? How do you communicate with each other?"

Grubbs: “All NASA TV producers hold a weekly conference call to tell each other about ongoing advancements. People on the technical side organize the necessary technology and infrastructure based on this. For example, going back to the transit of Venus I just mentioned, my team secured the Internet environment weeks beforehand and setup the satellite time. With all systems in place, our live show was able to switch between every place.”

"Content producers and technical people also communicate once a week. We can, therefore, identify major events weeks or months in advance.”

“Tamegaya: "We also have special education programs that we document live such as robot and moon buggy contests.”

Grubbs: “Sometimes. Technical people have progressed further than content-related items. For example, we are focusing on 4K and HEVC. We are looking beyond the issue of content production.”

“Tamegaya: "By looking into the future, we have been able to propose techniques for good products such as better infrastructural facilities and cameras. This means that content providers will follow.”

“Tamegaya: "We must move forward at NASA. Official people rarely take the lead and come and say, "I want to do something like this." Normally, we make proposals by saying "can we do this by doing it like so".”

“Transit of Venus shot in 4K and broadcast live on NASA TV in real-time"

"We frequently work in partnership with Japanese manufacturers and broadcasting stations"

Tamegaya: “Have you developed some new system for collaborating with Japanese industries?”

Grubbs: “We often collaborate with the Japanese industry. On the subject of the 3DA1 camera that flew into space, we had discussions with Panasonic about whether we could make slightly more interesting content with 3D. We decided to make it the authorized camera for our journey into space after discussing what would happen if we took a 3D camera to the space station. This was our collaboration with Japanese companies.”

“Tamegaya: "Such collaboration is extremely beneficial and has continued for many years. We have worked in partnership with Japanese companies carrying out technological developments including Panasonic, JAXA, NHK and Sony.”

“Tamegaya: "So it is a really great opportunity for us to be able to take part in events such as Inter BEE that allow us to calculate the future.”
Inter BEE Forum Report
Programs

Inter BEE Content Forum 2012
Venue: International Conference Room, 2F International Conference Hall,
Organizer: Japan Electronics Show Association (JESA)

Next Generation Content — Reliance and Creation —
Welcoming a presenter who is a leading authority in the fields of film and music both here and abroad, latest user experience-shaped content business trends were discussed.

Special Sessions

10:00-11:00
THE VISION OF DOUBLE NEGATIVE SINGAPORE
British VFX Studio DOUBLE NEGATIVE. The 14-year history of this company was traced, during which time they have worked on a number of major Hollywood projects including Harry Potter and Batman Begins. In 2009, they penetrated into Asia and established DOUBLE NEGATIVE SINGAPORE. The vision of this company, including productions in Asia and collaboration with talents in Asia were also revealed.

Mr. Martin Coleman
Executive Director, Double Negative Singapore

11:20-12:00
The Broadcast and Media Industry Business & Technology Outlook

The IABM is an organization represented by around 300 companies in the broadcasting and media industries. The IABM understands the supply and service sector in their own way through its members. The many activities the IABM include market research and studies, and they try to understand business, technology dynamics, and trends through these activities. During this session, data was verified from a business viewpoint in order to determine technical promotion factors that have the greatest impact.

Mr. John Iye
Director of Business Development & Technology, IABM

11:14 (Wed.)
Super Hi-Vision in London Olympic

During the London Olympic, in collaboration with the OBS (Olympic Broadcasting Services) and BBC (British Broadcasting Corporation), public viewings of sporting events in Super Hi-Vision were held in Japan, the UK, and the United States. These were held to accelerate the development of new media with large covers, high-definition, and realistic sensations, for promoting diffusion and development in Japan, the United States and Europe by collaborating with overseas broadcasting organization and for research/development and verification of transmission technologies via IP networks. Technical contents were reported.

Mr. Masayuki Sugawara
Executive Research Engineer, Advanced Television Systems Research Division, NHK Science and Technology Research Laboratories

13:00-14:00
Audio System Construction in Olympic

Mr. Dennis Baxter is a leader in the Olympic sports broadcasting field, which requires complicated and advanced sound production system configuration. He gave details about issues and solutions related to sound system configuration during the London Olympics, and also explained various technologies.

Mr. Dennis Baxter
Sound Designer

10:30-11:30
Satellite Interference!...and the Carrier ID

Satellite interference caused by unnecessary satellite uplinks from other stations occurs continuously. Carrier IDs were standardized so that by 2015, it should be possible to identify sources by adding IDs to satellite uplinks. Mr. Coleman from sIRG, which promotes Carrier IDs, introduced the history of Carrier IDs, tests conducted prior to the London Olympics, and future trends.

Mr. Martin Coleman
Executive Director, sIRG

11:15 (Thu.)
Feel the Mysteriously Beautiful Universe! — Evolution of Visual Technology with High Sense of Realism—

"The earth viewed from space is really beautiful." Every time we see images taken from space, we feel romanticism or a dream. We introduced the latest space image technologies such as the NASA's space imaging systems as well as the imaging technology by JPL (Jet Propulsion Laboratory) of pictures sent from the Mars explorer of very popular programs of NHK、“The Cosmic Shores” allowed us to experience the magnificent space high definition image technologies using ultra high sensitivity HD cameras and computer graphics (CG). Space is a complicated existence. By recreating high-definition video using the latest technical developments and content production is essential for bringing footage of the universe to people that fulfills their hopes and dreams. This forum was held in hopes of becoming a bridge between future technologies and content.

Mr. Rodney Grubbs
Digital Television Program Manager, NASA

11:40-12:00
THE VISION OF DOUBLE NEGATIVE SINGAPORE

The 14-year history of DOUBLE NEGATIVE Singapore was traced. During which time they have worked on a number of major Hollywood projects including Harry Potter and Batman Begins. They introduced the history of DOUBLE NEGATIVE SINGAPORE and the vision of this company, including productions in Asia and collaboration with talents in Asia were also revealed.

Mr. Zoe Cranley
Executive Director, DOUBLE NEGATIVE SINGAPORE

14:00-17:00
International Symposium, Visual Production
Japanese / English simultaneous interpreting available

14:00-15:00
Panelists

Mr. Rodney Grubbs
Digital Television Program Manager, NASA

Mr. Hideichi Tamegaya
Professor, Graduate School, Joshibi University of Art & Design

Mr. Hirobumi Kurata
Senior Program Director/Production Center 1, Science Programs Division, Program Production Department, Japan Broadcasting Corporation

Mr. Taro Ishii
Senior Program Director/Production Center 1, Science Programs Division, Program Production Department, Japan Broadcasting Corporation

Mr. Seiji Kunishige
Director, A Member of Executive Board, NHK Art Inc.

Mr. Hideichi Tamegaya
Professor, Graduate School, Joshibi University of Art & Design

Mr. Shigeru Suzuki
Member of technical staff, Instrument Software and Science Data Systems Section, Jet Propulsion Laboratory, California Institute of Technology

Mr. Hideichi Tamegaya
Professor, Graduate School, Joshibi University of Art & Design
Audio Construction in Large-scale Sports Production

With the full deployment of terrestrial digital broadcasting, the style of sound creation for sports relays is also changing dramatically. Audio specialists in Japan in the field of sports relay were assembled to introduce latest information and to hold a discussion. This session could not be missed by people who are participating in or who wish to participate in sporting event broadcasting for broadcast stations, CATV, satellite sports channels, production, etc. Large-scale sports productions require audio production, various communication system configurations, return video between actual sites, and complicated production, etc.

Lecturers and instructors who are active in the industry will provide instruction on trends in leading edge technologies, making the best use of the latest equipment and systems, as well as content production methods, to neophytes in the broadcasting, audio and video industries, as well as students who are planning to work in the industry. This will help to enhance the development of human resources in the industry.

Session A

Latest trend of audio production and measurements by mobile tools

With the diffusion of mobile terminals with PC functions, sound measuring and creation devices that have been large and expensive until recently have become less expensive, provide higher precision and become available on a mobile terminal. This fact was verified from viewpoints such as digital domain, analog domain, operability, portability, and applications that can be used for business were introduced. Technologies that are used and examples of applications were also explained.

Session B

Current Situation of File-base Audio/Visual Production

Video and audio systems are changing from conventional tape media to a production and transmission systems that utilize digital data and a PC server network. This lecture looked back the history while introducing examples of the present operation system and introduced the prospect will be shown for establishing a total file-based system in the future.

Session C

Development of New Visual Expression in Television ~ Application of the Latest Shooting Equipment ~

Shooting techniques were explained for the digital devices such as digital SLRs, high-speed cameras, underwater high-speed cameras, and high-sensitivity cameras that were used for producing the video expression program "Niyodogawa – Mysterious Blue", which is about the cleanest river in Japan based on average chemical constituents. Cameras, underwater high-speed cameras, and high-sensitivity cameras that were used for producing the video expression program "Niyodogawa – Mysterious Blue", which is about the cleanest river in Japan based on average chemical constituents. This lecture looked back the history while introducing examples of the present operation system and introduced the prospect will be shown for establishing a total file-based system in the future.

Session D

Shooting Techniques in Human Documentaries

After the Great East Japan Earthquake, many news and information programs have been produced. A news photographer who has been reporting about disaster victims based on behind-the-news themes such as "Loss of Livelihood" and "Suffering and Sorrow", gave analysis of news reports according to psychology, shooting equipment, and shooting techniques. Videos of news reports according to psychology, shooting equipment, and shooting techniques. This lecture looked back the history while introducing examples of the present operation system and introduced the prospect will be shown for establishing a total file-based system in the future.
Asia Contents Forum Powered by DigiCon6

Venue: Cross Media Theater, Exhibition Hall 8, Makuhari Messe
Special Collaborator: TBS DigiCon6
Moderators: Mr. Takafumi Yuuki, Asia Contents Forum Director
Mr. Akira Sakamoto, Asia Contents Forum Deputy Director

Collaboration between Inter BEE and “TBS DigiCon6”, which is a shooting contest by TBS that began in 2000 with a goal of “Discovering and Developing Creators”, and is now held in ten regions throughout Asia. Creators who are active on the front lines of new content production fields and young creators in Japan and overseas gave discourses about their pieces.

Special Session 1
15:00 - 16:30
Changing times: from viewing to experience — Projection Mapping takes you to the futuristic style of “images”

Main staff of “TOKYO STATION VISION” event held at Tokyo station Marunouchi building in the last September explained behind-the-scenes of Projection Mapping production and possibility of experience-enhanced image based on the making of that event.

Mr. Daisuke Moriuchi
Business Headquarters Project Develop Department
Chief Producer, NHK ENTERPRISES

Mr. Teruhisa Uchida
ETC P3D JAPAN DVL
Media Entertainment, S.C. ALLIANCE Inc.

Mr. Daisuke Suzawa
Producer, P.T.E.C., Co., Ltd.

DigiCon6 Top Creator Session

The Thai movie director Adisorn Tresirikasem, who won the best director award at the Shanghai International Film Festival for the film, “My Girl”, and Toshihiro Nagoshi who is the top creator in the Japanese gaming field and is responsible for the “Yakuza” series and “Monkey Ball” series gave special guest discourses where they talked about content production environments based on their experiences.

Mr. Adisorn Tresirikasem
Movie Director

Mr. Toshihiro Nagoshi
Director & Chief Creative Officer (CCO), SEGA Corporation

Session 1
15:00 - 16:00

Session 2
13:30 - 14:30
16:00 - 16:30

Introduction of excellent works at 14th TBS DigiCon6 (DigiCon6 Asian Creator’s Talk)

Mr. Yasuo Koga
CG director, Omnibus Japan Inc.

Ms. Juahaidah BINTI JEOMIN (Malaysia)
Mr. John Alistaire Cruz FELICIANO (Philippines)
Mr. Takeyuki ONISHI (Philippines)
Mr. TAN PANG REN (Singapore)
Mr. Teo Say Kiam Raymond (Singapore)
Mr. Pidok MOOMUENSRI (Thailand)

The 14th TBS DigiCon6 Award Winner list


Table: The 14th TBS DigiCon6 Award Winner list

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<thead>
<tr>
<th>Title</th>
<th>Name of the winner</th>
<th>Country</th>
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<tr>
<td>Golden DigiCon6 Award</td>
<td>display - tag</td>
<td>Japan</td>
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<tr>
<td>Silver DigiCon6 Award</td>
<td>SURF</td>
<td>Japan</td>
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<tr>
<td>Bronze DigiCon6 Award</td>
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<td>DigiCon6 Creativity Awards</td>
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<td>SAGAR KADAM</td>
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<td>India</td>
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In 2012, "CrossMedia Theater" was newly established as a place for cross media and digital content. Content production/management and distribution/purchasing in new industry fields has drawn attention from various quarters, and new business areas were proposed.

Cross Media Theater
Venue : Exhibition Hall 8, Makuhari Messe

IPDC Forum Symposium 2012  
Sponsored by : IPDC Forum

10:30~12:00  
Conference 
Venue: Room 101, International Conference Hall, Makuhari Messe

Trend of second screen and possibility of deployment of IPDC in overseas countries  
In terms of second screen services that many of foreign countries are seriously considering their introduction, the session reported exhibitions in overseas countries and latest situation of consideration in Japan. Also, introduced consideration progress about possibility of application for domestic terrestrial digital broadcasting or ISDB-T in overseas countries based on the affinity between IPDC and second screens.

Part 1: A close-up of trend in overseas countries for second screen that is becoming a global trend
Mr. Yasushi Kato  
Business Development Consultant, TV entertainment

Mr. Yuuki Tanaka  
IT consultant / Researcher

Mr. Seiichi Takagi  
Chief senior technician, Carrier Network Business Unit, NEC Corporation

Part 2: Expectation of ISDB-T-adopted countries toward IPDC
Mr. Seiichi Takagi  
Chief senior technician, Carrier Network Business Unit, NEC Corporation

Mr. Koji Sugimura  
Ph.D., National University Industrial Engineering department / Editorial writer at Eon-Shibunkei

Mr. Marcello Zuffo  
Professor, University of Sao Paulo’s Laboratory of Systems Integration

13:30~14:30  
Talk session 
Venue: Makuhari Messe Exhibition Hall 8 *Cross Media Theater*

All about IPDC!  
Introduction of IPDC technologies: from introduction cases to solutions for operational challenges
This session features all about IPDC which many people know it only superficially including basics such as confirmation of its advantages, summary of challenges for actual introduction to actual solutions by experts that utilize IPDC and sharing of knowhow for those who are considering introduction of IPDC to the broadcasting field.

Part 1 IPDC technologies and previous instances
Mr. Shin Hamaguchi  
Director, System Management Strategy Room, Matsui Broadcasting System, Inc.

Mr. Yuuki Sakanashi  
Director, Technology Promotion Department, Broadcast Promotion Bureau, Kansai Makuzyo Corporation

Mr. Shinichiro Toneoka  
Senior manager, Management Planning Department, media inc.

Part 2 Future of digital broadcasting and IPDC
Mr. Hidekazu Imatani  
Deputy Director, MEdia Sevices/TV Division, Dentsu Inc. Kansai

Mr. Tomoyuki Okamura  
Managing Director, Digital Technology Promotion Section, Fuji Television Network, Inc.

Mr. Hiroshi Saito  
Manager, Management Strategy Room, Matsui Broadcasting System, Inc.

Mr. Masahiro Otsuka  
Technology strategy director, Technical Bureau, RDC Co., Ltd.

Pre Visualization (Pre-Visu) session

13:00~14:00  
Introduction of “Pre-Visualization” cases in Japan and Hollywood report
Introduces actual examples that utilized Pre-Visualization in film production. The topic was the real-time Pre-Visualization method that checks scenes being filmed on the real-time basis not by more popular method, simulation with CG movies. This technique is extremely effective to carry out Pre-Visualization for movies or other works that contain a number of scenes. We strongly encourage visitors to view and take advantage of this opportunity to inspire your film production. Also, latest information was reported for Hollywood, the U.S., one of leading Pre-Visualization countries. It’s a can’t-miss event.

11.16 (Wed.)

11.14 (Fri.)
The 49th Symposium of Broadcast Technology

November 14 (Wed.) to 16 (Fri.)
Venue: 3rd Floor, International Conference Hall, Makuhari Messe
The Japan Commercial Broadcasters Association (JBA)

Special Program

Will broadcasting and communications collaborations give rise to new ideas?
~ What comes next after digital? ~

11.15 (Thu.)
10:30 ▶ 12:00
Room 301, International Conference Hall

Symposium of Broadcast Technology

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<tr>
<td>Room 301</td>
<td>10:30 ▶ 13:30 Network Linkage / Communication</td>
<td>13:30 ▶ 16:00 Special Program</td>
<td>10:30 ▶ 15:55 Broadcast Operation</td>
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<tr>
<td>Room 302</td>
<td>10:30 ▶ 12:10 Information Technology / Network</td>
<td>13:00 ▶ 15:55 Pictorial Image Technology</td>
<td>10:30 ▶ 15:05 Datacasting / Digital Services</td>
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<tr>
<td>Room 303</td>
<td>10:30 ▶ 16:20 Production Engineering</td>
<td>10:30 ▶ 12:10 Production Engineering</td>
<td>10:30 ▶ 15:05 Sound Broadcasting / Audio</td>
</tr>
</tbody>
</table>

Result: Visitor Profile

Visitor Profile - Age Group

- 20's: 28.6%
- 30's: 25.4%
- 40's: 25.0%
- 50's or over: 19.7%

Visitor Profile - Type of occupation

- Production: 12.2%
- Technical: 11.9%
- Management: 11.3%
- Other: 30.5%

Visitor Profile - Job title

- Business manager: 11.0%
- Department manager and above: 12.2%
- Sectional manager: 13.4%
- General: 14.2%
- Sectional: 15.4%

Visitor Profile - Objectives

- Purchasing: 9.3%
- Technical interest: 7.0%
- General interest: 8.6%
- Other: 7.2%

Visitor Profile - Breakdown of registered visitor number

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of countries &amp; region / Number of visitors</th>
<th>Breakdown of visitors by country &amp; region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>1 country / 31,107</td>
<td>Japan: 31,107</td>
</tr>
<tr>
<td>North, Central and South America</td>
<td>7 countries / 64</td>
<td>U.S.A: 48 / Brazil: 8 / Peru: 3 / Chile: 2 / Uruguay: 1 / Costa Rica: 1 / Paraguay: 1</td>
</tr>
<tr>
<td>Oceania</td>
<td>2 countries / 2</td>
<td>Australia: 1 / New Zealand: 1</td>
</tr>
<tr>
<td>Middle East / Africa</td>
<td>7 countries / 13</td>
<td>Zimbabwe: 3 / Mozambique: 3 / Angola: 2 / Israel: 2 / Congo: 1 / Turkey: 1 / Botswana: 1</td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>36 countries &amp; region</td>
<td>31,857</td>
</tr>
<tr>
<td>Type of Business</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>State-run Broadcasting Station</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>Commercial TV Broadcaster</td>
<td>8.8%</td>
<td></td>
</tr>
<tr>
<td>Radio Station</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>Post production</td>
<td>7.5%</td>
<td></td>
</tr>
<tr>
<td>Production House</td>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>Film and Video Production Company</td>
<td>5.5%</td>
<td></td>
</tr>
<tr>
<td>Video Software Production Company</td>
<td>1.5%</td>
<td></td>
</tr>
<tr>
<td>Recording Company</td>
<td>0.7%</td>
<td></td>
</tr>
<tr>
<td>Related PA Equipment</td>
<td>4.1%</td>
<td></td>
</tr>
<tr>
<td>Related CATV</td>
<td>2.8%</td>
<td></td>
</tr>
<tr>
<td>Related Staging, Art and Lighting</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>Related Contents Publishers</td>
<td>2.6%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interest</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio Equipment</td>
<td>32.9%</td>
</tr>
<tr>
<td>Video Equipment</td>
<td>53.4%</td>
</tr>
<tr>
<td>Microphone</td>
<td>9.9%</td>
</tr>
<tr>
<td>Mixer</td>
<td>11.5%</td>
</tr>
<tr>
<td>Speaker</td>
<td>10.8%</td>
</tr>
<tr>
<td>Camera</td>
<td>26.5%</td>
</tr>
<tr>
<td>YMD, Memory Card, Optical Disc</td>
<td>11.6%</td>
</tr>
<tr>
<td>Servers, Storage</td>
<td>10.6%</td>
</tr>
<tr>
<td>Lighting Equipment</td>
<td>9.3%</td>
</tr>
<tr>
<td>Electronic Display</td>
<td>14.0%</td>
</tr>
<tr>
<td>Editing and Production Equipment</td>
<td>20.5%</td>
</tr>
<tr>
<td>Multimedia System</td>
<td>8.6%</td>
</tr>
<tr>
<td>Production Management System</td>
<td>3.9%</td>
</tr>
<tr>
<td>Output System</td>
<td>8.2%</td>
</tr>
<tr>
<td>Relay System</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

**Visitor Questionnaire result**

**What was your goal in coming to “Inter BEE 2012”?**

- To obtain the latest information on products and technologies: 64.0%
- To get a handle on industry trends: 19.4%
- To make a preliminary examination concerning introduction of devices and technologies: 6.1%
- General interest: 4.4%
- To interact with and improve friendly relations with business partners: 2.9%
- To obtain rival company information: 1.3%
- To develop a new business route: 0.8%
- Business Meeting: 0.7%
- Other: 0.4%

**How satisfied to accomplish your goal?**

- Very satisfied: 77.9%
- Satisfied: 16.0%
- Hard to say: 4.7%
- Unsatisfied: 0.5%
- Somewhat unsatisfied: 4.1%
- Somewhat satisfied: 3.4%

**How satisfied to attend to Conference and simultaneous events?**

- Very satisfied: 27.0%
- Somewhat satisfied: 45.1%
- Hard to say: 24.0%
- Unsatisfied: 0.5%
- Somewhat unsatisfied: 3.4%

**To what degree are you involved in the process of purchasing products/services in your company?**

- Involved in the purchase and introduction: 80.2%
- Authorized to make purchase or introduction decisions: 26.1%
- None of these match my criteria: 19.8%
- Asked for opinion or doing training for making a purchase or introduction: 29.5%
- Hard to say: 24.0%
- Unsatisfied: 0.5%
- Somewhat unsatisfied: 3.4%

**How much is annual budget you are involved in the process of purchasing products/services?**

- Less than 2.5 million yen: 20.5%
- Between 2.5 to 5 million yen: 7.2%
- Between 5 to 10 million yen: 12.0%
- Between 10 to 50 million yen: 7.9%
- Between 50 to 100 million yen: 3.9%
- More than 100 million yen: 2.5%
- Not involved: 29.8%
- Unknown: 16.2%

**Do you plan to visit Inter BEE 2013?**

- Definitely plan to visit: 64.3%
- Undecided: 5.4%
- Plan to visit: 30.0%
- No plan to attend: 0.1%
### Exhibitor Questionnaire Result

- **What were your main objectives for exhibiting at Inter BEE 2012?** (Multiple answers accepted)
  - 80.4% Marketing new products and technologies
  - 79.7% Sales promotion of products and/or technologies
  - 68.5% Seeking new clients in Japan
  - 62.9% Collecting information from visitors
  - 44.8% Strengthening relations with business clients
  - 23.1% Achieving business agreements
  - 10.5% Creating new overseas clients

- **How satisfied to accomplish your goal?**
  - 79.7% Very satisfied
  - 25.9% Satisfied
  - 4.2% Somewhat satisfied
  - 15.4% Hard to say
  - 0.7% Unsatisfied

### Experiencer’s Profile

**Exhibitors:**

- **Total:** 871 companies (Record-high)

### Breakdown of exhibitors

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of countries / region</th>
<th>Number of exhibitors</th>
<th>Breakdown of exhibitors by country &amp; region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>1 country / 380 companies</td>
<td>Japan 380</td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>4 countries &amp; region / 53 companies</td>
<td>380</td>
<td>Taiwan 19</td>
</tr>
<tr>
<td>North and South America</td>
<td>4 countries / 193 companies</td>
<td>USA 175</td>
<td>Canada 18</td>
</tr>
<tr>
<td>Oceania</td>
<td>2 countries / 14 companies</td>
<td>Australia 13</td>
<td>New Zealand 1</td>
</tr>
<tr>
<td>Middle East</td>
<td>2 countries / 5 companies</td>
<td>Israel 4</td>
<td>Turkey 1</td>
</tr>
<tr>
<td>Africa</td>
<td>1 country / 1 companies</td>
<td>South Africa 1</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>20 countries / 225 companies</td>
<td>Germany 82</td>
<td>United Kingdom 60</td>
</tr>
</tbody>
</table>

**TOTAL:** 36 countries & region | 871 companies

**Number of overseas exhibitors:**

- **Total:** 491 companies (Record-high)

### Targeted type of business

- **Multiple answers accepted**
  - Commercial TV Broadcaster: 85.3%
  - State-run Broadcasting Station: 78.3%
  - Films and Video Production Company: 51.0%
  - Production House: 44.9%
  - Postproduction: 43.4%
  - Government office, Organization: 37.8%
  - Radio Station: 36.4%
  - Video Software Production Company: 32.2%
  - Equipment Manufacture: 30.1%
  - Telecommunications Carrier: 27.3%
  - Related Contents Publishers: 26.6%
  - Trading Company: 25.2%
  - Content Delivery Network: 24.5%
  - Other User: 22.3%
  - Facilities and Stores: 22.4%
  - Related Staging, Art and Lighting: 18.9%
  - Related Film Equipment: 16.8%
  - Related Internet Business: 16.8%
  - Recording Company: 11.9%
  - Student: 8.4%
  - Ad Agency: 5.6%
  - Other: 4.2%

### Targeted Occupation

- **Multiple answers accepted**
  - Engineering: 84.6%
  - Production: 60.8%
  - Management: 25.9%
  - Other: 4.9%

### Result: Publication and Promotion

1. Distribution of press releases
   - Notification of start of exhibitor recruiting: 9/9
   - Notification of start of pre-admission registration: 9/10
   - Attracting interviewers: 11/8
   - Information announcing the event: 11/13
   - Setup press room: 11/14-11/16
   - Reported completion: 11/16

2. News Media Representatives
   - **Total:** 343 people
     - Before the show: 80
     - During the show: 27
     - After the show: 66
   - **Total:** 175

3. Number of articles in the printed media
   - **Before the show:** 80
   - **During the show:** 27
   - **After the show:** 66
   - **Total:** 175

4. Newspapers and Magazines Articles in Japan
   - Automation Review
   - Broadcast Engineering
   - Dempa Shim bun
   - Dempa Times
   - Eizo Shim bun
   - Fujisankei Business i. (Osaka)
   - Fujisankei Business i. (Tokyo)
   - Nikkan Kogyo Shimbun (Osaka)
   - Nikkan Kogyo Shimbun (Tokyo)
   - Nikkei Sangyo Shimbun (Osaka)
   - Nikkei Sangyo Shimbun (Tokyo)
   - NIPPON CAMERA
   - OPTCOM
   - PRONews
   - Sound & Recording Magazine
   - Tele-Cable Newspaper
   - VIDEO JOURNAL

**Result:** Publication and Promotion

**Newspapers and Magazines Articles in Japan**

- Automation Review
- Broadcast Engineering
- Dempa Shim bun
- Dempa Times
- Eizo Shim bun
- Fujisankei Business i. (Osaka)
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- Nikkan Kogyo Shimbun (Tokyo)
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- Nikkei Sangyo Shimbun (Tokyo)
- NIPPON CAMERA
- OPTCOM
- PRONews
- Sound & Recording Magazine
- Tele-Cable Newspaper
- VIDEO JOURNAL
5. On-air media

<table>
<thead>
<tr>
<th>Region</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>TBS Television (CS) 1600</td>
</tr>
<tr>
<td></td>
<td>Fuji Television Network</td>
</tr>
<tr>
<td></td>
<td>New Weekly Fuji Remarks</td>
</tr>
<tr>
<td>Europe</td>
<td>NTN 24</td>
</tr>
<tr>
<td></td>
<td>Informativo NTN</td>
</tr>
<tr>
<td></td>
<td>CT Salud Ciencia et Tecnologia</td>
</tr>
<tr>
<td>U.S.A</td>
<td>NBC Sports Network</td>
</tr>
<tr>
<td></td>
<td>“Hard Drive”</td>
</tr>
<tr>
<td></td>
<td>MAV TV</td>
</tr>
<tr>
<td></td>
<td>“Hard Drive”</td>
</tr>
<tr>
<td></td>
<td>TUFF TV</td>
</tr>
<tr>
<td></td>
<td>“Hard Drive”</td>
</tr>
<tr>
<td></td>
<td>Wealth TV</td>
</tr>
<tr>
<td></td>
<td>Wealth International News</td>
</tr>
<tr>
<td></td>
<td>MundoFox</td>
</tr>
<tr>
<td></td>
<td>“Noticias” (daily newscast)</td>
</tr>
<tr>
<td>Canada</td>
<td>CAVE TV</td>
</tr>
<tr>
<td></td>
<td>“Hard Drive”</td>
</tr>
<tr>
<td>Central &amp; South America</td>
<td>NTN24</td>
</tr>
<tr>
<td></td>
<td>Informativo NTN (repeat)</td>
</tr>
<tr>
<td></td>
<td>CT Salud Ciencia et Tecnologia</td>
</tr>
</tbody>
</table>

6. List of publication (Domestic)

- Broadcast Engineering
- CG World & Digital Video
- Dempa Shimbun
- Dempa Times
- Eizo Shimbun
- Full Digital Innovation (FDI)
- Hose Journal
- Journal of Professional Lighting (JPL)
- MU
- Motion Picture and Television Engineering
- NEW MEDIA
- Nikkei Sangyo Shimbun
- PRO SOUND
- Sound and Recording Magazine
- Stage Sound Journal
- Telecommunication
- Video Journal
- Video Salon

7. List of publication (overseas)

- ABU Technical Review
- Asia Pacific Broadcasting
- Broadcast Engineering
- Broadcast India
- Broadcast & Production
- IBC Daily
- International Broadcast Information
- JLI
- Korea electronic newspaper
- PA (Pro Audio)
- Panorama Audiovisual Brazil
- Panorama Audiovisual Latin America
- Tele-Satellite Cable
- TV Technology
- Video Plus

8. Inter BEE Official Mail Magazine

Inter BEE sends News Center information, such as Inter BEE highlights and articles posted on Inter BEE Online, in e-mail magazine form to target visitors from the Inter BEE Visitor Database.

Approx. 64,000

9. Inter BEE Online Magazine

Inter BEE has provided year-round newsy information related to Inter BEE exhibitors, domestic and international exhibitions and the latest industry news in the form of the Online magazine(s) and Inter BEE TV (movie).

- Inter BEE 2012 exhibitors articles:
  - Inter BEE TV: 160
  - Online Magazine: 51
  Total: 211

- Related exhibitions articles: 40

- Latest industry news: 133

10. Creation of Printed PR Tool

- Poster: Distributed to exhibitors and concerned parties
- Invitation ticket, Leaflet and envelope (J, E): Distributed to exhibitors, concerned parties and the media
- Exhibition Information: Distributed to all attendees during the show

11. Media Partners

Relevant industry magazines/papers support Inter BEE as media partners

12. Inter BEE Official Website

- Official Website Page Views:
  5,431,980

- Social Networking

We created a Inter BEE Facebook page from which we distributed exhibitor’s information and articles on official website. We also posted photos of events to tell the 2012 exhibition in real time.

- Facebook (Japanese / English)

[Activities]
- Distributed exhibition information consisting mainly of latest Online Magazines
- Uploaded photos from the exhibition venue
- Allowed official Twitter account tweets to be viewed