# Broadmedia & Entertainment InterBEE







## SEVIEW 2018

### WHAT WILL YOU DO NEXT?





#### **Table of Contents**

#### **Graphic Report**

Topics
DIGITAL CONTENT EXPO
INTER BEE IP PAVILION
INTER BEE 5G
4K8K · · · · · · 10
INTER BEE FORUM
INTER BEE EXPERIENCE · · · · · · · · · · · · · · · · 16
INTER BEE IGNITION · · · · · · · 20
INTER BEE CONNECTED · · · · · · · · · · · · 24
INTER BEE CREATIVE 28
Ceremony Report
Opening Ceremony / Reception Party · · · · · 32
Exhibition Report
News Center Pick up-1 · · · · · · 34
News Center Pick up-2 · · · · · · · 36
News Center Pick up-3 · · · · · 38
News Center Pick up-4 · · · · · · 40
Exhibit Map · · · · · · · 42
Exhibitor List
Forum & Event Programs
INTER BEE FORUM · · · · · · 50
INTER BEE EXPERIENCE · · · · · · 54
INTER BEE IGNITION · · · · · · 55
INTER BEE CONNECTED · · · · · · · · · · · · · · · · · · ·
INTER BEE CREATIVE58
Results
Publication and Promotion · · · · · · · · · · · 60
Visitor Profile · · · · · · · · · · · · · · · · 62
Exhibitor Profile64
Exhibition Outline
Lambidon Outline



Photo by : Shigeharu Yoshihara Akane Inagaki Toshitaka Nakamura KURANO PHOTO Seiji Abe Katsumi Miyasaka





#### Jointly-held DCEXPO DIGITAL CONTENT EXPO 2018

## Jointly held to strengthen Japanese content business competitiveness Creators of VR/AR content and aiming to be VTubers gathered









As a new development of this year, the cutting-edge "Digital Content EXPO 2018" hosted by Digital Content Association of Japan (DCAJ) was held jointly with Inter BEE. Digital Content EXPO (DCEXPO) has introduced the latest Japanese artistic and content technologies over the past 10 years. It also linked up with SIGGRAPH, which is known as the world's largest CG and interactive media event, continuing excellent mutual exchange of content technologies.

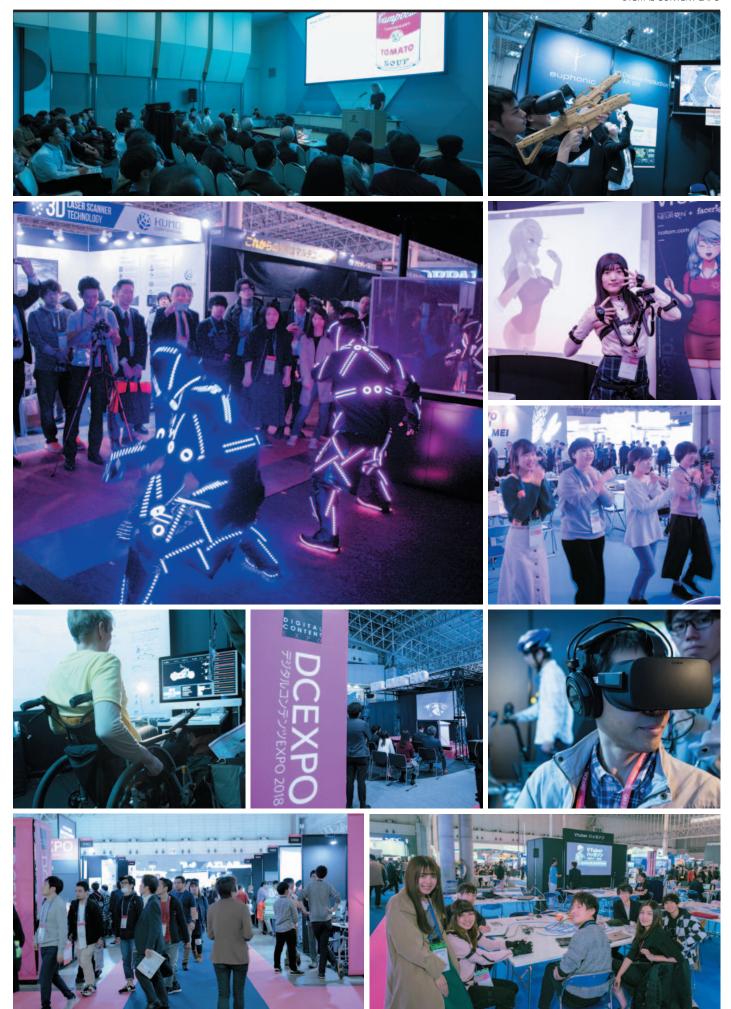
The senior executive director of DCAJ, Mr. Ichihara, talks about the aim to "place emphasis on more practical business matching and hold it at an occasion with a strong B2B tone." "By creators and development partners gaining greater knowledge of leading-edge content technology, this will be a good opportunity to realize business that adopts such technology and strengthen the competitiveness of the Japanese content industry while expanding the market for companies that become development partners."

DCEXPO includes keynote speech and seminar sessions as well as screening of the latest videos and VR works. A wealth of content expression technology covering a wide range of genres such as CG, VR/AR, digital video and games was exhibited. There were also a variety of programs including "Innovative Technologies" to propose and

share research-stage ideas related to content technology, and "BizTech\*Match," the idea-style exhibition to propose business co-creation using content technology, which was held as part of a Ministry of Economy, Trade and Industry project.

As the keynote speech, the telexistence proponent and Professor Emeritus of the University of Tokyo, Prof. Susumu Tachi, took the stage to give a presentation on "Telexistence Today -Toward Virtual Teleportation Industry and Telexistence Society-." The Avatar robot, "MODEL H," which Prof. Tachi has developed over a long time with telexistence technology, also took the stage for a demonstration on "virtual teleportation."

At the sessions, the latest digital animation works, which had been screened at SIGGRAPH's "Computer Animation Festival (CAF)," were shown. The 26th International Collegiate Virtual Reality Contest and the VTuber Hackathon were also held and many young creators who were active on new media gathered at DCEXPO.



### INTER BEE IPPAVILION

## First ever IP model connection demo conducted at Inter BEE! What will IP technology bring? Special exhibitions taking us to the next 10 years





In this current age where IP networks continue to speed up, the "INTER BEE IP PAVILION" presented IP live transmission, which realizes next-generation live video production and distribution, and IP associated companies gave exhibitions along with relay seminar presentations. Additionally, for the first time ever at Inter BEE, an IP model connection demo was conducted.

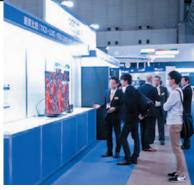
As program production continues to use higher definition images, and multi-media content and multi-device expansion, such as online video streaming, continue to advance, broadcasting stations are increasingly looking to apply IP technology to next-generation facilities. The adoption of IP technology by such stations applies not only to transmitting video footage. A total switchover of program production sites, archives and relay equipment will also be required, and changes will extend as far as machine parts.

Applying IP technology to broadcasting equipment provides many possibilities. Not only will facilities become thinner, but the management of video, sound and metadata can be integrated, and many other advantages brought about by the introduction of new functions can also be expected. However, there will also be a need to verify interconnectivity between equipment, responses to system problems, and the fostering of IP-related technical skills.

The IP model connection demo was conducted at four corners: "SMPTE ST2110 Interoperability", "SMPTE ST2022-6 Interoperability", "ARIB STD B73 Interoperability", and "Image Quality Comparison (JPEG-XS/TICO/LLVC/J2K)". IP machines installed at the "INTER BEE IP PAVILION" in Makuhari Messe International Exhibition Hall 3 were actually connected to IP machines at each exhibition booth, so visitors were able to see the demo from various angles.

Date:	Nov. 14-16
Place:	Exhibition Hall 3
Area:	234 sqm
The Number of Participant Compan	ies
SMPTE ST2110:	14 companies
ARIB STD B73:	7 companies
SMPTE ST2022-6:	6 companies
Image Quality Comparison:	5 companies
The Theme of Keynote Speech:	"IP Live Transmission Standards and Introduction Examples"
The Number of Sessions:	32 sessions
The Number of Audiences:	1,029 Audiences (Total)
The Number of Exhibitors:	38 exhibitors

















INTER BEE FORUM keynote speech 6: "IP Live Transmission Standards and Introduction Examples" was given on Friday 16th November. Future ideas about IP introduction and latest activities such as introduction examples were introduced by NHK, SKY Perfect JSAT Corporation, QVC Japan, Inc., Tokai Television Broadcasting Co., Ltd., Nara Television Co., Ltd., and Mie Television Broadcasting Co., Ltd.

Since it is said that deciding whether to stick with baseband or switch to IP will have a large impact on the following 10 years, the merits and demerits of switching to IP was the basis of discussion at the sessions and panel discussions, and such was the interest that the venue was crammed full of visitors.



### INTER BEE (((5G)))

#### High presence and immersion created by 5G's large capacity and low delay Triggering development of new content business



5G (5th generation cellular mobile communications) pre-service due to start in Japan in 2019 By creating specifications, such as ultra-high communication speed and ultra-low delays, which go way beyond the boundaries of standard mobile communications, there are great expectations for the possibilities 5G holds for the video and contents industries.

At the "INTER BEE 5G" area provided in the exhibition hall, all eyes were on a large-scale demo bus exhibited by NTT DOCOMO INC., allowing visitors to experience a new video space realized by 5G. High-definition video was projected onto 7K (front) and 3K (bilateral) large screens inside with bus with a 4K projector, creating virtual environments such as stadia and tourist locations. 5.1ch audio equipment was also used to create a variety of spaces featuring high presence and immersion. In addition, Sony Corporation projected live images inside the bus from the camera studio in its booth in a joint demo conducted with Sony Business Solutions Corporation.

Fuji Television Network, Inc. and NTT DOCOMO INC. exhibited their jointly-developed "Diorama Stadium 2018" . This uses a tablet to synthesize various data such as outside TV broadcasting video, sports games and races by AR, enabling completely new ways to watch sports. As the coverage area of  $5\mathrm{G}$  expands in the future, it will allow viewers to easily watch live broadcasts when out and about.

Date:	Nov. 14-16
Place:	Exhibition Hall 8
Area:	180sqm
The number of Booth Visitors:	1,134 visitors
The Theme of Keynote Speech:	5G Session 2018
The Number of Speakers:	3 speakers
The Number of Audiences:	590 audiences









At the "5G Sessions 2018" keynote speeches, the three mobile communication giants of NTT DOCOMO INC., KDDI CORPORATION and SoftBank Corporation took the stage to talk about the current status and future of 5G.

All three companies are considering investing their efforts in joint development with partner companies. This included many examples featuring broadcasting stations and video content production companies.











### **4K8K**

Time is ripe for new era of broadcasting brought about by the start of new 4K/8K satellite broadcasting. Representatives from nine broadcasting operators took the stage to talk passionately about starting this new service



This year's Inter BEE will be held two weeks after the start of the new 4K/8K broadcasting service on December 1. 4K/8K broadcasting program production was a hot topic at Inter BEE 2018 sessions, such as keynote speeches, and at equipment exhibitions.

On Wednesday November 14, the opening day of Inter BEE 2018, Mr. Akihiko Chigono, the executive director and chief of engineering of the Japan Broadcasting Corporation gave a keynote speech entitled "New 4K/8K Era Starting: Two Weeks until Broadcasting", in which he introduced NHKS 4K/8K broadcasting programs and explained the increased sophistication of terrestrial broadcasting. In addition, Mr. Toshio Fukuda, the President of the Association for Promotion of Advanced Broadcasting Services (A-PAB) gave a speech entitled "4K/8K Broadcasting Finally Starts", in which he introduced details of support provided by A-PAB.

The keynote speeches were followed by a program entitled "Message from Nine New 4K/8K Satellite Broadcasting Operators", in which nine operators due to start 4K/8K satellite broadcasting from December 1st talked passionately about the start of this service and introduced recommended programs.

#### Representatives from the nine new 4K/8K satellite broadcaster

#### Mr. Akihiko Chigono

Executive Director, Chief of Engineering, Japan Broadcasting Corporation

President/Representative Director, Asahi Satellite Broadcasting Limited

#### Mr. Hiroyuki Aiko

President/Representative Director, BS-TBS Inc. Mr. Ichiro Ishikawa

President/Representative Director, BS TV TOKYO Corporation

#### Mr. Chihiro Kamevama

President/Representative Director, BS FUJI INC.

#### Mr. Yukio Kida President/Representative Director, Tohokushinsha Film Corporation Media Service

Mr. Rvouta Sasaki President/Representative Director, SC Satellite Broadcasting, Inc.

#### Mr. Yuichiro Hanawa

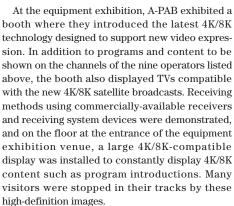
President/Representative Director, QVC Satellite, Inc.

President/Representative Director, SKY Perfect Entertainment Corporation.









In addition to this, a variety of equipment was exhibited at the venue ranging from cameras to 4K/8K program production editing and delivery equipment. Many examples of such equipment being installed by NHK and commercial broadcasting stations were on display. A wide variety of use examples were also introduced including public viewing and digital signage utilizing high-definition 4K/8K images.













### INTER BEE FORUM

## Succession of topics focusing on 5G, Al and e-sports Content business speeding up towards post-2020



40 sessions were held at INTER BEE FORUM during Inter BEE 2018, and continuing on from Inter BEE 2017, there were many times when the number of attendants at a Convention Hall A session exceeded 500 people.

In the keynote speech entitled, "Talking about the Future of Television from the Boundary of Television and the Internet", given at the annually popular, INTER BEE CONNECTED, lecturers who know the difference between Internet and TV cultures, exchanged opinions about the future of television and sent a message to the TV industry. In other keynote speeches given on the same day, a lecture entitled "Form of Broadcasting Services and Changes in Viewing Styles in the 2020s" focused on life after the 2020 Tokyo Olympics and Paralympics.

Similarly, a special session entitled, "Business Chances Seized with E-Sports" attracted a lot of attention on the opening day. The same session was attended by operators from the broadcasting industry involved with e-sports including Nippon TV Group and Tokai Television. Typical for an Inter BEE session, there were extensive discussions about the role of broadcasting in this rapidly rising e-sports business.

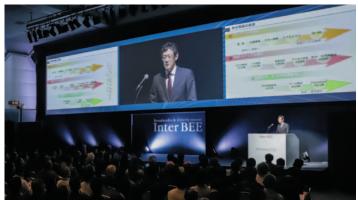
Date:	Nov. 14-16
Place:	International Conference Hall
Area:	1,947 sqm (5 Rooms)
The Number of Sessions:	40 sessions
The Number of Speakers:	111 speakers
The Number of Audiences:	7,355 audiences (Total)





























A keynote speech given on the second day entitled, "Challenge to Smart Broadcast!" developed into an bold session in which the IPTV Chief Director, Mr. Jun Murai, and the Chief of Marketing and Sales Division of the Mitsubishi Research Institute, Mr. Shuji Nakamura, forecast broadcasts in the 2030s. In keeping with the disaster-stricken year of 2018, there was a special session on the topic of "Disaster Information Provision and AI Utilization", which drew a lot of attention. In addition, at the INTER BEE CREATIVE keynote speeches, the movie director, Mr. Shinji Higuchi, who astonished the world with the content for the Japanese-originated "Godzilla", took the stage along with Mr. Shuzo John Shiota, the President of Polygon Pictures. where they talked about the attractions and prospects  $\,$ of Japanese-originated content.

















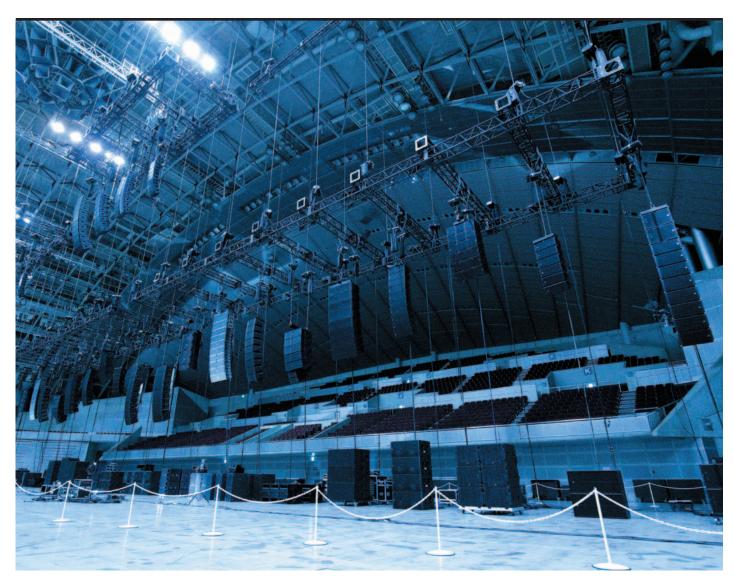


On the third day, when the INTER BEE IGNITION keynote speeches were held, the world-renowned digital art group, the "Moment Factory" took the stage. They introduced world-class entertainment projects and discussed the expandability of new Japanese urban-style entertainment.

The 5G representatives of the three major mobile communication operators (NTT DOCOMO, KDDI and Softbank) took the stage together to hold the keynote speech, "5G Session 2018". The keynote speech, "IP Live Transmission Standards and Introduction Examples", covered the adoption of IP technology in program production environments, a major ongoing issue. These speeches drew large audiences, way beyond the venue's seating capacity, and many people listened to the speeches with great interest.

### INTER BEE EXPERIENCE X-Speaker

#### World-class SR speaker trial listening experience Contest this year between 15 famous Japanese and overseas brand speakers



Continuing on from last year, this year's INTER BEE EXPERIENCE: X-Speaker (SR Speaker Experience Demo) contest was fought out between 15 famous Japanese and overseas brand speakers. 14 line array speakers and one point source speaker held an audio competition over a three day period.

The event hall was fully utilized again this year. All of the competing line array speakers were flown to create an impressive trial listening experience space worthy of being called a world-class event.

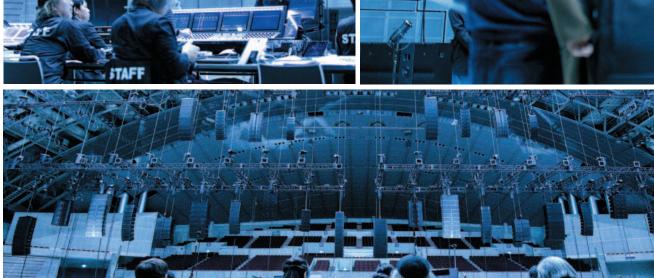
As a characteristic of the recent event, small-scale line array and medium/large-scale line array categories were kept as is and listening areas for adapting various live spaces to confirm their capacity were standardized. The area from the arena to the second-floor seats on the south-side was established as a listening area. Based on the idea of a large-scale hall and event space, small-scale line arrays have evolved year-by-by, and that power together with the real capabilities of medium and large-scale line arrays were promoted while displaying their respective attributes and features to the full.

Throughout the year, many concerts and musical events are held and the live entertainment market is flourishing. As a result, Inter BEE gathered a large number of top-class speakers from the most advanced sound technology areas including Europe, North America and Japan. We hope that more people will experience this firsthand in the future such as established and budding audio professional users, people interested in live entertainment, and foreign users, especially those from Asia.

Date:	Nov. 14-16
Place:	Event Hall
Area:	3,098 sqm (Arena)
The Number of Products Brands:	15 brands
The Number of Presentations:	30 presentations
The Number of Audiences:	4,227 audiences (Total)











### INTER BEE EXPERIENCE X-Headphone X-Microphone Z

## Firmly established as a place to casually and freely experience high-quality sound Six brands participating for the first time making it the largest event ever



Now in its third year, the INTER BEE EXPERIENCE: X-Headphone X-Microphone (headphone and microphone trial listening exhibition) has become a staple event in the professional audio equipment category. This year, we added six new brands. There were 10 headphone brands and 10 booths, and 12 microphone brands and 10 booths, making it the largest event ever. Over the three-day period, it attracted over 4,300 visitors.

The newly introduced Japanese and overseas professional use brands were the hot topic at Inter BEE 2018. The six new participants were SOUNDWARRIOR, STAX and PHONON headphones and Roswell Pro Audio, Ehrlund Microphones, and Mass-Kobo microphones, each attracting a lot of attention.

A wide selection of visitors ranging from audio and broadcasting insiders to students visit X-Headphone X-Microphone every year, and people could be seen making their way around the venue and trial listening in their own ways. This year, it was held jointly with the Digital Content EXPO, so it was visited in large numbers by video production professionals, such as young creators involved with content production, and students aspiring to join that profession.

As video expression continues to diversify and improve in visual quality, such as 4 K/8 K and VR, sound expression, an integral part of video, is also becoming increasingly important. Microphones and headphones are indispensable tools of content production. The venue overflowed with young and budding creators seeking fresh sensitivities and expression, as they came face-to-face with seriously high-quality sound.

Date:	Nov. 14-16
Place:	Exhibition Hall 1
Area:	338 sqm
The Number of Products Brands:	Headphones 10 brands
	Microphones 9 brands
The Number of Visitors:	4,366 audiences (Total)













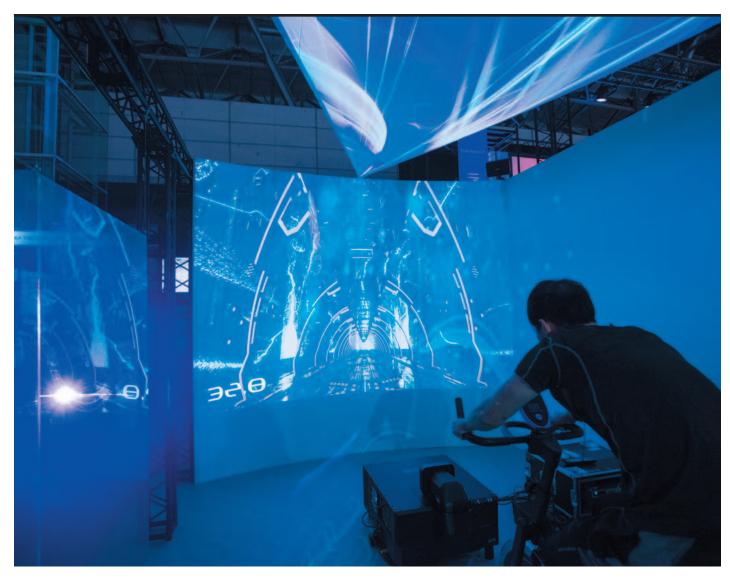






#### INTER BEE IGNITION

### Possibilities created by post-digital natives Evolving expressive world of media and entertainment



INTER BEE IGNITION provides a place to promote the new expressive world of media and entertainment and its evolving front line. Now in its third year, the theme at this event was "After the MUTEK — BLOCK UNIVERSE: Toward an Era of Experiencing Time and Space Through Art". In this current age of accelerating media dispersion and expressive diversification, what possibilities lay ahead of digital natives? It is difficult to approach this straight out, so the true value of INTER BEE IGNITION is to ask questions and promote the possibilities of the current day, which look simple at a glance.

To exemplify this, the stage started by holding the Advanced Imaging Society's "Lumiere Japan Award 2018" commendation ceremony, and with the public recording of J-WAVE INNOVATION WORLD, there was a wealth of content including the possibilities of media and influencers, latest trends in video expression by VR and drones, and the front line of sound and video expressive worlds.

One of the keynote speeches given on the third day of the exhibition was by Mr. Marc-André Baril, the Tokyo Office Director of the Canadian digital art group, "Moment Factory", which has performed at many events all over the world. A keynote speech and panel discussion were held about the "SAKUYA LUMINA" performance held at Osaka Castle, and the expandability of new urban-style entertainment.

The "Awarding Ceremony for ASIAGRAPH2018 Tsumugi & Takumi Awards" and associated projects were co-held with INTER BEE IGNITION at Inter BEE 2018, making this a truly event-packed three days.

Date:	Nov. 14-16
Place:	Exhibition Hall 6
Area:	634sqm
The Theme of Keynote Speech:	"Next multimedia entertainment X Experience design - New urban entertainment that brings people together"
Capacity of main stage:	120 seats
The Number of Sessions:	11 sessions
The Number of Speakers:	36 speakers
The Number of Audiences:	1,007 Audiences (Total)
The Number of Exhibitorss:	10 exhibitors























INTER BEE IGNITION where twenty and thirty -something young editors were greeted as advisory board members and modulators. Combing sessions with members of the digital native generation standing on the front-line of media and entertainment, the stage was taken by expressive people, creators and technologists of various generations and fields over the three-day period.

Following the close of the opening day, an ideathon using Japan Display's fundamental technology as materials was held, and the stage was overflowing with the energy of people from the younger generations.

















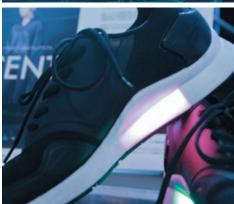






The INTER BEE IGNITION exhibition at Inter BEE 2018 was full of diversity. This exhibition gains more and more interest each time, and the number of visitors coming especially for this exhibition is increasing.

What kind of changes and influence will the latest technology such as VR, AI and robots have on future video expression and entertainment? Epson Sales Japan Corp. exhibited "Experience-style Video Attraction". It introduced a new type of communication in which video is controlled by heartbeat changes and new sensory video where video is connected with people's emotions. Many visitors enthusiastically took part in each of the exhibitions.











### INTER BEE CONNECTED

## Hot space to search for evolution and future of media communication 3-day period to experience that expanse and possibility



How will broadcasting CONNECT to society and the future, and how is media evolving. As an opportunity to disseminate information from the front-line, INTER BEE CONNECTED is now in its fifth year, and all of the sessions were overflowing with more energy than before.

The always popular CONNECTED keynote speeches attracted the interest of many listeners, such as TV station insiders, through efforts to make recommendations for the future of television from the front line of the Internet.

The themes over the three days were clear - the first day was "viewer day", the second day was "distribution day" and the third day was "contents day". On the "viewer day", people at the front line of trial listening data and log use, which currently has a lot of interest, talked and discussed the possibilities of TV from a viewer perspective focusing on young people. On the "distribution day," the current status and possibilities of constantly evolving radiko activities, SVOD services, and sports data distribution were discussed, and short animation distribution was handled as a new topic.

On the "contents day", there were sessions that approached the future of broadcasting content from different angles, such as the current status of owned media venturing into Internet use, the overseas expansion of TV programs, and the possibilities that local content is opening up for local creativity. In the final session, the role of broadcasting media in the future were discussed from a perspective of what TV should do for community problems, and the number of listeners was about twice more than the previous year. This wide area, ranging from viewing data to local creativity, and the energy from each session enabled visitors to really feel the passion of investigating the possibility of broadcasting.

Date:	Nov. 14-16
Place:	Exhibition Hall 7
Area:	594sqm
The Theme of Keynote Speech:	Talking about the Future of Television from the Boundary of Television and the Internet
Capacity of main stage:	200 seats
The Number of Sessions:	13 sessions
The Number of Speakers:	52 speakers
The Number of Audiences:	2,544 audiences (Total)
The Number of Exhibitor's Presentation:	: 11 sessions
The Number of Exhibitors:	13 exhibitors

















From the morning sessions on the opening day, this year's INTER BEE CONNECTED was such a success that it was standing-room only. The venue was constantly full of energy as many listeners packed into the hall over three days to listen to a variety of sessions covering the possibilities and future of broadcasting, such as "At the front line of evolving TV viewing log data".



















"After Hours! The Future of TV from a User Perspective" was conducted for the first time at the end of the second day. Completely different to normal sessions, participants sat around a round table and talked on the stage with a drink in one hand.

To consider the future of TV, there weren't just one-way lecture-like sessions. It was a night full of energy when participants proactively exchanged opinions in response to INTER BEE CONNECTED's ethos of sharing ideas.









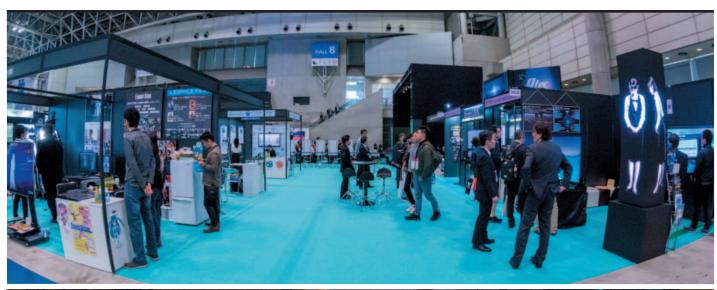






### INTER BEE CREATIVE

## Expanding media and diversifying video creativity Hot-topic sessions ranging from the latest technology to new-generation sensitivities





Welcome to the world of constantly expanding and evolving video creativity. Its destiny lies in an expanding range of people of all positions and generations ranging from professionals to semiprofessionals. INTER BEE CREATIVE attracts a lot of passionate listeners as a place for disseminating the latest information and promoting trends to such creators.

Keynote speeches given at the international exhibition hall on the second day included the movie director, Mr. Shinji Higuchi, who talked about the 2016 "Shin Godzilla", the first Godzilla movie made in Japan for about 12 years, and Mr. Shuzo John Shiota of Polygon Pictures, who talked about the animated version of Godzilla, which was distributed worldwide at the same time. The session was entitled "Japan Content Power Seen in Godzilla".

As media in which video expression and video entertainment are distributed expand from movie to TV and Internet, the INTER BEE CREATIVE stage held a rich variety of sessions at Inter BEE 2018. These covered the latest Hollywood VFX, what goes on behind-the-scenes at movies made by spirited movie makers, CG animation, HDR video, VR video, and video expression by micro drone.

More than previously, movie directors, video makers, millennial-generation video creators, Vimeo creators and many creators from differing positions and generations took the stage over the three-days of Inter BEE 2018, and their respective ideas and creative work left a strong impression. Video production and post-production-related booths, such as that of the Japan Post Production Association, were displayed in the exhibit area. Installed nearby again this year, INTER BEE CREATIVE MEET-UP had 'hands-on booths' displaying video and audio equipment, and these were buzzing with many creators and users.

Date:	Nov. 14-16
Place:	Exhibition Hall 8
Area:	494sqm
The Theme of Keynote Speech:	Japan Content Power as seen from GODZILLA
Capacity of main stage:	118 seats
The Number of Sessions:	19 sessions
The Number of Speakers:	42 speakers
The Number of Audiences:	1,252 Audiences (Total)
The Number of Exhibitors:	7 exhibitors
CREATIVE MEET-UP	
Date:	Nov. 14-16
Place:	Exhibition Hall 8
Area:	748sqm
The Number of Participant Companies:	20 companies























#### INTER BEE CREATIVE MEET-UP

Continuing on from the previous exhibition, INTER BEE CREATIVE MEET-UP was again an event for new ideas. This is now firmly established as an Inter BEE event where creators from varying positions and fields, such as video, gather to openly mix with professionals and amateurs alike.

Ranging from stage sessions disseminating the latest information and messages to exhibitions, experience and exchange activities, this event was visited by many creators at the spacious hall leading from INTER BEE CREATIVE to MEET-UP.

















The original "Video Laboratory (VOOK LABO)" project was established at this year's MEET-UP. It took the latest video equipment and software displayed in large numbers at the Inter BEE venue and held a workshop over the three-day period based on the concept of providing a research place for creators to use this equipment and software from a video producer perspective. The laboratory was full every time with enthusiastic creators.

Following the micro drone session, visitors could fly a video drone for filming and there were also VR bike and VP hang glider content participatory activities, so it was an enjoyable event for visitors.















Inter BEE 2018, the comprehensive media exhibition, was held for a three-day period at Makuhari Messe from November 14 (Weds.) to November 16 (Fri.). At 10 a.m. on the opening day, Inter BEE 2018 got underway with a rousing opening address at the Convention Hall A on the 2nd floor of the International Conference Hall, Makuhari Messe.

#### "Greatly changing comprehensive media event"

"In line with rapidly advancing digital technology, the world is changing greatly. In cooperation with various industries, JEITA is working to realize the Ultra-smart Society 5.0. Inter BEE is no exception. It is changing greatly to a comprehensive media event that covers "make, send and realize" by aiming to create enjoyable user experiences with a focus on contents and not just broadcasting equipment. Jointly holding Inter BEE with the DCEXPO exhibition, hosted by Digital Content Association of Japan, is a part of this."

"4K/8K satellite broadcasting will finally begin next month on December 1st. At this year's Inter BEE, there will be many exhibitions relating to the close-at-hand

4K/8K satellite broadcasting. 4K/8K keynote speeches by top management from various broadcasting operators are also scheduled. I have great hopes that Inter BEE will play a significant role as we sit on the cusp of a new era of broadcasting due to start in two weeks time."



Mr. Masaki Sakuyama Chairman, Japan Electronics and Information Technology Industries Association (JEITA)



#### "Major driving force of overall economic growth"

Mr. Kunishige spoke with great enthusiasm about the start of 4K/8K satellite broadcasts: "On December 1, 4K/8K satellite broadcasting finally gets underway. Viewers will soon be able to enjoy attractive programs made with the precise, colorful and highly-realistic images that only 4K/8K can provide. The eyes of the world will be on the 2020 Tokyo Olympics and Paralympics, so the private and public sectors have to work together to speed up the development of a promotion and receiving environment, enabling many viewers to enjoy it.

He then expressed his hopes for the economic effect of broadcasting, video and communication technologies: "I have heard that this year's Inter BEE will be introducing a wide variety of equipment and services including 4K/8K, Internet distribution, and next-generation broadcasting technology in order to

tell the world about the possibilities of new media. The latest technology and products to lead the global broadcasting market will be a major driving force of overall economic growth rather than just the development of the Japanese broadcasting sector."





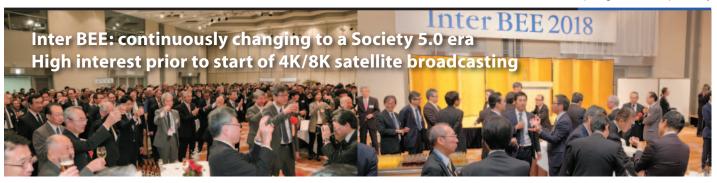
### "20 years since the fusion of broadcasting and communications and linking-up with other industries"

Mr. Yoshida expressed his hopes for a link-up with industries besides broadcasting and communication technology: "Around 20 years has passed since the words 'fusion of communications and broadcasting' were first used. Since then, transmission routes have changed and 4K/8K satellite broadcasting is due to start, and the business environment including smartphones, ICT, IoT and AI has changed the fastest and greatest. The 'connected industries' concept that the Ministry of Economy, Trade and Industry came up with last year is the same for the media industry. Using new technology to link-up with other industries and create new added value has now become really necessary."

He also suggested that a business style revolution is essential for contents

business to succeed: "people must take time off for leisure and short breaks to make contents succeed. And in order to achieve that, a new way of thinking is needed, such as the content itself as well as delivery types and usability".





The "Inter BEE 2018 Reception" was held on the evening of November 14, the opening day of the exhibition, and people associated with supporting and cooperative groups as well as exhibiting companies were invited along. Brimming with people from the broadcasting, equipment manufacturing, and contents industries, this event symbolized the growing excitement concerning the start of 4K/8K broadcasts in December 2018.

### "Towards a new business model aimed at realization of Society 5.0"

This year's Inter BEE was held just before the start of new 4K/8K satellite broadcasting, so it was packed full of industry insiders and a wealth of 4K/8K-related equipment was on display at the exhibition. One could sense the increasing diversification of media in line with the enhanced sophistication of broadcasting and communications.

JEITA was a sponsor of CEATEC in October and Inter BEE in November, and I have spoken about aligning the axes of these two events. The axes I talk about are the very nature of business in the Society 5.0 era. I get the feeling that 'Society 5.0' has finally become a universal phrase. It is a concept of a futuristic society presented by Japan to the world. Continuing on from the information society, Society 5.0 is a new society in which innovation is created by technology such as IoT and AI, and social problems are solved by adapting to each and everyone's needs.

At this year's Inter BEE, there were varying types of camera on display at the entrance, while at the exit there were diverse types of media and business created from the development of display devices, communication and computer technologies. Looking at this from a Society 5.0 angle, it means 'how can these types of media address the tastes of people from differing cultures and with increasingly diverse values in real-time?' Inter BEE is right in the midst of change. This year's event was jointly held with the DCEXPO exhibition

hosted by the Digital Content Association of Japan, and by fusing with contents, Inter BEE became an event that can present business models aligned with each and every person's diversities. Please find a new future-minded business model that will contribute to the creation of an even more prosperous Japanese society.





#### "Maximum effort to popularize 4K/8K"

Looking around Inter BEE 2018 today, my impression was that there are a lot of 4 K/8 K-related exhibits as we sit on the brink of new 4 K/8 K satellite broadcasting. With the advent of new technology such as broadcasting IP technology and the use of AI in broadcasting, I also got the impression that broadcasting technology is much broader than about a decade ago. Around 20 years has passed since the digitization of broadcasting and movements such as the fusion or link-up of broadcasting and communications, and I feel that that era has finally come.

From December 1 in about two weeks time, new 4K/8K satellite broadcasts starts. NHK will start 4K broadcasts on right-handed polarized wave channels with commercial broadcasters and it will be the first left-handed polarized wave channel to start 8K broadcasts anywhere in the world. Being able to welcome in new broadcasts like this is entirely thanks to the untiring efforts of everyone at the Ministry of Internal Affairs and Communications, A-PAB and manufacturers.

Carrying on from the previous year, we prepared a booth with JEITA. Some of you may have already seen it, but we provided a corner that introduces 4K/8K broadcast images on actual receivers, and visitors can see a sheet-type organic EL display developed in the technical research institute and an 8K theater using 22.2 multi-channel sound. We are also promoting the integrated production of 4K and 2K, a big issue at production sites, using a real outside broadcast van, so I hope that people will come and see it.

Even after starting its new 4K/8K satellite broadcasts, NHK will continue to improve its content. I also hope that maximum efforts will be made to popularize 4K/8K.

Mr. Atsushi Haruguchi Director of Engineering Administration Department, Deputy Chief of Engineering, NHK (Japan Broadcasting Corporation)



#### "Importance of many people seeing 4K/8K by 2020"

I toured Inter BEE all day today. In the morning I listened to a session and in the afternoon I saw an exhibition. I felt that the event had more energy than normal years. The thing that left me with the greatest impression with me about the opening ceremony was that the representative of nine broadcasting stations starting new 4K/8K satellite broadcasts all got together under one roof to talk passionately about the start of these broadcasts. Comparing it to a horse-race, it's like asking about the jockey's state of mind after entering the starting gate before the start of a race. I felt the long-awaited passion. Introductions of each company's programs allowed us to see videos with such a sense of presence that it felt like we were actually there. I cannot wait until December 1, now that I know that each company is preparing its own distinctive programs.

The Association of Radio Industries and Business (ARIB) has raised three topics concerning standardization toward 2020. The first is 4K/8K, the second is 5G, and the

third is automatic driving. The first to be realized is 4 K/8K. I think that December 1 will be a milestone towards 2020. It is important that a really lot of viewers see these wonderful programs ready for 2020, and I hope that the industry as a whole will work together to ensure that this happens.



Mr. Fusaki Matsui Representative Director, Association of Radio Industries and Business (ARIB)

### "New 4K/8K broadcasts and extra support for disaster preparations"

This year's Inter BEE was held just as expectations for new 4K/8K satellite broadcasting swelled to a crescendo. Each company starting new 4K/8K satellite broadcasts has constructed broadcasting equipment and tested broadcasting signals by a very tight schedule. I think that this is thanks to the great cooperation and major efforts of equipment manufacturers. I would like to take this opportunity to pass on my sincere thanks. I hope that stations will see it through until the start of broadcasts on December 1.

This year, major disasters struck the whole of Japan, such as the July torrential rain and the Hokkaido Eastern Iburi Earthquake. I would like to express my deepest sympathies to all those affected by disasters.

Despite facing difficult situations such as typhoons, earthquakes and power failures, many commercial broadcasting stations have used their ingenuity to bring information speedily and accurately to viewers while doing their utmost to maintain broadcasting facilities.





#### "Hopes for even more wonderful contents with 4K/8K"

Finally, Mr. Yoichiro Kawaguchi, the Chairman of the Digital Content Association of Japan, which jointly held its DCEXPO with Inter BEE, made the following closing speech.

"Hi-vision and full CG video was produced in 1988 and announced at SIGGRAPH, the American CG festival. Using marine life as a motif, this work showed many people vibrant expressions in high-definition hi-vision images. When I saw 4K/8K images at this year's Inter BEE, I felt that the images were even more beautiful than back then. I hope that if content is produced in 4K/8K, then even more wonderful things can be made."

At the end of his speech, Mr. Kawaguchi then proposed a toast, and a hearty cheer of 'kampai' went up from all the people gathered there.



Mr. Yoichiro Kawaguchi Chairman, Digital Content Association of Japan



Techno House, which has celebrated its 30th anniversary since its establishment as a broadcasting, event and acoustic equipment sales agent, participated in Inter BEE 2018. The company's exhibit was focused on video and event-related products and audio related products for radio stations for which demand is expected toward the Tokyo Olympics and Paralympics in 2020.

We spoke with representatives from Techno House Inc. about their aims at exhibiting at Inter BEE and the products they want to promote this year. We talked with Mr. Yukikazu Takano, Director, Mr. Yasunori Tokudome, Public Relations Planner, Ms. Naomi Shimizu, Assistant Manager of the Engineering Department, and Mr. Haruto Hojo, Manager of the Professional Audio Section in the Information Equipment Technology Department.



Mr. Yukikazu Takano (Left) Director Techno House Inc.

Ms. Naomi Shimizu (Center) Assistant Manager of the Engineering Department Techno House Inc.

Mr. Yasunori Tokudome (Right) Public Relations Planner Techno House Inc.

#### Introduction to 8K-compatible Presentation Switchers and the Latest Mixers for Radio Stations Aimed at New Demand

#### ■ What were your exhibition themes and aims?

We participate in Inter BEE in two categories — the Video Production/Broadcast Equipment floor and the Professional Audio Equipment floor — with a focus on broadcasting equipment products every year. We exhibited the Spyder X80 4K/8K presentation switcher made by Christie as an important product on the Video Production/Broadcast Equipment floor at Inter BEE 2018. This is a product that can be used in public viewings and live viewings (e.g., sports events) for customers whose work is mainly related to events. It is aimed at the new 4K/8K satellite broadcasting which will start on December 1 this year and the Olympics

/ Paralympics in 2020. (Mr. Takano)

In addition, there has also been talk of system updates that include measures against disasters in radio stations. Therefore, we participated in the Professional Audio Equipment floor with a focus on a customized mixer and APT IP ISDN CODEC. The customized mixer is from a German company called DHD.audio and it can be handled efficiently by one person. The APT ID ISDN CODEC is a Hikari Denwa-compatible IP voice codec of a French company called WorldCast Systems. It



performs IP transmission from the broadcasting head offices of broadcasters to transmitting stations. (Mr. Takano)

### ■ We also want to promote our products for purposes other than public viewings

Spyder X80, which is a 4K/8K presentation switcher made by Christie that we exhibited as an important product at this Inter BEE, is equipped with three types of connector per input (DisplayPort 1.2 / HDMI 2.0 / 12G-SDI). It is characterized as being compatible with 4K@60p in all outputs. Camera images and computer images are input and displayed side by side on the same screen in presentations. However, it is also possible to input 4K camera image signals and 4K HDR image signals and then display the images of various signals. (Ms. Shimizu)

#### ■ Exhibit of the MOJOPRO app that turns smartphones into relay cameras

In addition, we also exhibited MOJOPRO on the Video Production/Broadcast Equipment floor. This is an app from a French company called AVIWEST that turns smartphones into relay cameras. It is possible to immediately produce the images of smartphones by downloading the MOJOPRO app even when you encounter a situation in which you need to produce images quickly. (Mr. Tokudome)

It demonstrates its greatest performance in settings where rapidness is required. It is possible

to use this app for free by introducing the Stream Hub of the same company. This Stream Hub is a 1RU server and is a type that is basically installed in company office buildings. Nevertheless, it is also a cloud type. Accordingly, it is possible to distribute on YouTube Live at the same time. We received many questions in the booth under the assumption of using YouTube Live. It attracted a lot of attention from customers. (Mr. Tokudome)

#### ■ Introduction before others to the latest model audio mixer popular in radio stations in Japan

We became the first in Japan to exhibit RX2 on the Professional Audio Equipment floor. This is a new customized mixer from a German company called DHD.audio that was announced at IBC this year. RX2 is the latest model upgraded to be even easier to handle and even more stylish from the 52/RX that has been introduced into many sites in Japan. All modules are equipped with large TFT touch displays to enhance visibility and operability. (Mr. Hojo)

In addition, a motor fader is equipped as standard. This reduces the burden of the operator when building a mixer that includes layers when operating it solo. It seemed that many of those interested in this were customers already using the products of DHD.audio. Many came to see the actual thing at Inter BEE. (Mr. Hojo)

#### ■ Exhibition of the APT IP ISDN CODEC an IP voice codec for which we received the most inquiries

We exhibited an IP voice codec for which we received the most inquiries at this Inter BEE. This IP voice codec is called APT IP ISDN CODEC. It is a Hikari Denwa-compatible IP voice codec from a French company called WorldCast Systems that makes it possible to perform IP transmission between transmitting stations from the broadcasting head offices of broadcasters. It can transmit audio without sound dropouts by using APT's own SureStream voice transmission technology. It is possible to use the EaptX algorithm that enables low delays, low compression and high sound quality. Therefore, it is possible to significantly lower running costs even compared to uncompressed transmission. (Mr. Hojo)





For over thirty years Avid has reimagined content creation and its revolutionary nonlinear editor was the first to digitize video content. It redefined the media industry and is still the gold standard for both video editing with Media Composer and Digital Audio Workstations with Pro Tools.

Avid offers a variety of cloud solutions for creative individuals and media teams to enable collaboration from anywhere, simplify workflow logistics, and maximize efficiency, minimizing the time, cost, and stress of competing in today's demanding media production.

The company recently announced support for creative teams to deliver their best work faster and more efficiently with 4K and 8K media and other demanding formats using an intuitive end-to-end workflow spanning editing, storage, I/O acceleration and asset management.

To better answer changes in the market, Avid now partners with a vast number of 3rd party suppliers whose products integrate with the platform to extend the capability and allow customised solutions, as required.

We spoke with representatives from Avid about its efforts toward changes in the market environment. We talked with Mr. Hisaji Mitsuoka, PRO Video Channel Sales.



Mr. Hisaji Mitsuoka (Left) PRO Video Channel Sales Avid Technology, Inc.

Mr. Toshio Masuda (Right) Pro Audio Sales – North APAC Avid Technology, Inc.

# Dramatic Changes to the Way of Using Works: Editing Software Also Supports Various Changes

#### ■ What were your exhibition themes and aims?

There were a number of core elements to our exhibition at Inter BEE 2018. One of these was the evolution of our Media Composer and Pro Tools. These are basic tools for video and audio production – the basis of the products provided by Avid Technology. We showcased the latest state of our basic tools including support for 4K/8K editing workflows. The second was an introduction to the state of the practical application of cloud services through an exhibit and demo of Avid on Demand that is also scheduled to provide services in 2019. The third was that we made it possible to experience the industry standard Dolby Atmos mixing environment with immersive audio by building a system using Pro Tools.

Avid Technology is a manufacturer. We basically provide video and audio production systems with our in-house manufactured products. On the other hand, the progress of cloud and Internet distribution has diversified the methods of utilizing works. There are increasing opportunities to support individual requirements. We are demonstrating a direction in which it is possible to plug in the products of other companies centered on the products of Avid Technology instead of supplying systems









closed to only our in-house manufactured products to respond to such changes in the situation. This is the Avid MediaCentral platform. We are now pushing product provision as a platform that allows us to respond promptly and at low cost to a variety of demands. (Mr. Mitsuoka)

#### ■Various exhibits of cloud and Al utilization and Dolby Atmos mixing

We exhibited cloud solutions centered on Avid On Demand. This is a software as a service (SaaS) type platform that offers media production functions. It is a system that makes it possible to use media production functions on-demand. It is compatible with 4K/8K. We demonstrated with a demo that it is possible to execute without delay from multiple 4K video production sites via a network. Test introduction of Avid On Demand is progressing close to proof of concept (PoC) and practical application on a global basis. We plan to set the price and make it possible to use it in 2019 in Japan. We demonstrated in the booth that it is possible to smoothly use Avid On Demand even in the Microsoft Azure public cloud service from Microsoft in addition to a private cloud environment installed in an office in Akasaka. We are also jointly verifying with Microsoft technology that automatically extracts meta information by recognizing images and audio from video utilizing the AI functions possessed by Azure. We believe this will lead to improved productivity through AI utiliza-

In the centre of the Avid booth was the Dolby Atmos immersive audio mix demonstration. This allowed visitors to experience the stereophonic sound of 7.1.4 channel Dolby Atmos, which was intuitively apportioned in the mixing stage using Pro Tools | Ultimate. Netflix, a major video streamer, is promoting sound production compatible with Dolby Atmos. Therefore, we believe a Dolby Atmos mixing environment is very important in Internet-based content production in addition to television-based content production. We invited an engineer of Netflix to give a guest talk in the booth of Avid Technology at Inter BEE 2018. This allowed visitors to feel the trends and realities of content production technologies.

We demonstrated 4K/8K editing workflows for video and audio production technologies and made it possible for our visitors to experience 4K/8K editing workflows through the industry standard non-linear editing tool of Media Composer, the media shared storage of Avid NEXIS, the Artist I/O series of DNxIQ, DNxIV and DNxID and MediaCentral | Editorial Management that provides new post-production workflows.

#### ■ Revitalization of the Japanese market by also focusing our efforts on Internet distribution-based solutions

We believe that we are in a position for Japan to take on the driving force and lead the world in

4K/8K solutions. In that sense, we participate at Inter BEE by positioning it as one of the most important exhibitions on par with NAB in Las Vegas in the U.S. and IBC in Amsterdam in the Netherlands.

The focus of attention alongside the spread of 4K/8K is on the rise of Internet distribution services. Even if the basics of content production do not change, the methods of watching and listening to this content are diversifying. We must think how to offer support as a provider of solutions in terms of how it is possible to distribute and monetize. Against this backdrop, we feel that there are an increasing number of IT-related and Internetrelated visitors. We would like Inter BEE to increase the number of IT related and Internet visitors even more to support the uptake in the industry.

We can expect companies and visitors from different genres to further increase with an expansion in the market by becoming an exhibition spread to IT related and Internet related visitors from an exhibition closed to broadcasting and video production. We would like to continue contributing to a mutual expansion in the business of Avid and our customers by our company also proactively introducing overseas cases.



Involved in software R&D such as real-time image processing, AZLAB is a technology development company that does not provide finished products. Rather, it provides the seeds of technology, helping company clients to realize the solutions they need.

At Inter BEE 2018, a world-first 16 K@120 P uncompressed video playback system was exhibited in large scale at the front of the booth, drawing the attention of visitors.

While there were many solutions on display, not all of them will go on to become products. Asserting that AZLAB used the Inter BEE venue as a showroom for the company's technologies, we asked the company's Sales Department General Manager and executive officer, Mr. Isamu Hiyane, about the features and aims of its exhibits.



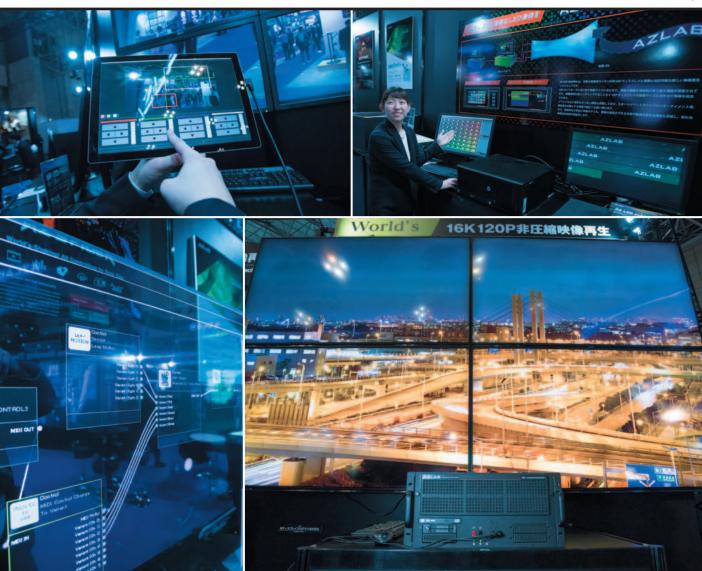
Mr. Isamu Hiyane
Executive Officer
General Manager of Sales Department

# Exploiting the potential of video with a myriad of real-time video processing technologies

#### ■ Exhibition's aims and themes?

"AZLAB is a technological development company that provides technology to partner manufacturers and system integrators (SIer). Rather than working in the front line by, for example, selling products, we play a more back-office role in providing solutions. It could be said that our technological development is characterized by software aiming for real-time performance. In the video sector, video directly input from a camera needs to be extensively processed prior to being shown in a display. By providing software that achieves high-level video signal processing in real-time, we believe that we are extending the possibilities of video."

"High-definition video has various uses. Not held down by broadcasting framework or resolution restrictions, AZLAB provides global as well as national video solutions. We exhibited the seeds of our many technologies at Inter BEE, so we are glad that many visitors were able to find out about how these technologies could work."



#### ■ Diversity of technology ranging from ultra-high-definition video processing to AI visual expression

"What stood out most at our Inter BEE 2018 exhibition was the world-first 16K@120P uncompressed video playback system. Ultra-high-definition video with quadruple the number of pixels of 8K are displayed in a 4-set 8K panel. This enables one to see firsthand uncompressed, 120P high-definition 16K video. A powerful hardware engine and software are required to play 16K content in real-time, and we are promoting the technology to realize that. 16K requires a vast amount of data so it may not be used for broadcasting, but as 16K120P can be played via software, we believe that ideas to use ultra-high-definition video will continue to expand"

"8K@60P real-time blending theater uses four 4K projectors to display 8K video. It calculates in real-time the overlapping parts when 8K video is divided into four 4K videos and projected onto a screen with four projectors, so it can play seamless 8K large-screen video with no visible joints."

"We exhibited an ultra-high-definition nextgeneration video wall. This system combines various videos in an 8K large-screen video wall by combining 16 full-HD displays. Using AI (artificial intelligence), it can automatically detect objects in a video and display video featuring cut-out human figures. In addition, video from over 30 IP cameras and 2K video can be displayed as video upgraded to 4K video and simultaneously displayed in the same video wall. Visitors were able to see firsthand 8K video, which freely laid out multiple types of content identified by the AI video analysis, being generated in a single device."

"As an exhibition of future technology in the making, our demonstration of the "A.I.TOUCH PAINTING", which automatically generates images using AI, was popular. When sky, trees, grass, and water were color coded and input to draw a simple picture, AI took previous oil painting information and automatically drew these elements in a painting-style. I hope that visitors felt that this technology has the potential to expand video expression in the future."

### ■ Aiming to provide a space for visitors to enjoy

"This was the 5th time we have exhibited, but this time we designed a booth as a showroom to showcase our technologies. Drinks and snacks were provided together with tables and chairs, and we took pains to create a space for visitors to feel at ease in. Inter BEE 2018 was a satisfactory exhibition for us. We got a positive feeling from customers and achieved our objectives."

"On the other hand, the many booth erection restrictions at the venue limited our booth design ideas, which was a shame. For example, two-floor booths are not permitted, so we couldn't design for an upstairs café space. Two-floor booths can be

erected at the same venue for different exhibitions, so we would be grateful if the restrictions were loosened a little. We hope that Inter BEE will take on board ideas behind "convivial space" booth creation and allow freer booth erection."

"Video wall customers include government offices in addition, of course, to partner manufacturers and SIer companies. As a result of creating a space to be enjoyed by such B2B visitors, we had many comments like 'this is great'. We very much hope to continue exhibiting as an AZLAB showroom at Inter BEE from next year onwards."





The Panasonic Group (Panasonic Corporation and Panasonic System Solutions Japan Co., Ltd.) put on a solo exhibit of RAMSA, which started as an acoustic equipment brand of Panasonic in August 1979, in the Professional Audio Equipment category for the first time in two years. We asked representatives of Panasonic Corporation and Connection Solutions Company about their participation in Inter BEE 2018 – including their intentions behind a solo exhibit in the Professional Audio Equipment category. We talked with Mr. Shogo Mitsuhashi, Product Marketing Development Market Communication Section, Integrated Marketing Center, Media & Entertainment Business Division, and Mr. Izumi Matsumoto, RAMSA Product Development Manager, Technology Center, Media Entertainment Business Division.



Mr. Izumi Matsumoto (Left) RAMSA Product Development Manager, Technology Center, Media & Entertainment Business Division Connected Solutions Company Panasonic Corporation

Mr. Shogo Mitsuhashi (Right)
Market Communication Section,
Marketing Strategy Development,
Integrated Marketing Center,
Media & Entertainment Business Division
Connected Solutions Company
Panasonic Corporation

# Aims of Promoting the Brand Power of RAMSA and Solo Exhibit in the Professional Audio Equipment Category: On-site Workflow Improvement and Proposals of Solutions for Business Optimization

#### ■ What were your exhibition themes and aims?

The common themes for Panasonic this year were \( \gamma \) advanced technology \( \sigma \) and \( \sigma \) efficient workstyle. J We put on an exhibit focused on spatial acoustics under the concept of  $\lceil Research$  of Advanced Music Sound and Acoustics J derived from RAMSA in addition to these common themes in the RAMSA booth in the Professional Audio Equipment category. RAMSA started as an acoustic equipment brand of Panasonic in August 1979. It is celebrating its 40th anniversary in 2019. Accordingly, we decided to put on a solo exhibit in the Professional Audio Equipment category. The purpose of this was to once again promote its brand power to the industry by exhibiting solutions in a form that combined products and software with the consistent stance of working on making good sounds while incorporating state-of-the-art technology. (Mr. Mitsuhashi)

We once exhibited every year in the Professional Audio Equipment category separate to the Panasonic booth. However, we exhibited RAMSA together with video equipment in the Panasonic



booth in the Video Production/Broadcast Equipment category for 10 years from 2006 and also last year. There is a difference between the customers who visit the Video Production/Broadcast Equipment category and the customers who visit the Professional Audio Equipment category at Inter BEE. Therefore, we wondered whether it would be possible to promote this brand to even more customers in the professional audio industry by putting on a solo exhibit in the Professional Audio Equipment category. This is a brand we built up together with customers on the front line of acoustics. Accordingly, a big part of our intentions for participating at Inter BEE was to exhibit products developed under the concept of being able to contribute to the professional audio industry. (Mr. Mitsuhashi)

# ■ Exhibit of a line array speaker, new amplifier product and acoustic simulation software

In addition to our WS-LA500A series line array speakers we released in 2017, we also exhibited our new WP-DM900 series of in-built DSP digital power amplifier products and our Panasonic Acoustics Simulation Designer (PASD) acoustics simulation software including line array speakers at Inter BEE 2018. (Mr. Matsumoto)

Our new WP-DM900 series of digital power amplifier products has a lineup of three rated output models: 1,200 W  $\times$  4 ch (WP-DM948), 600 W  $\times$  4 ch (WP-DM924) and 300 W  $\times$  4 ch (WP-DM912). These

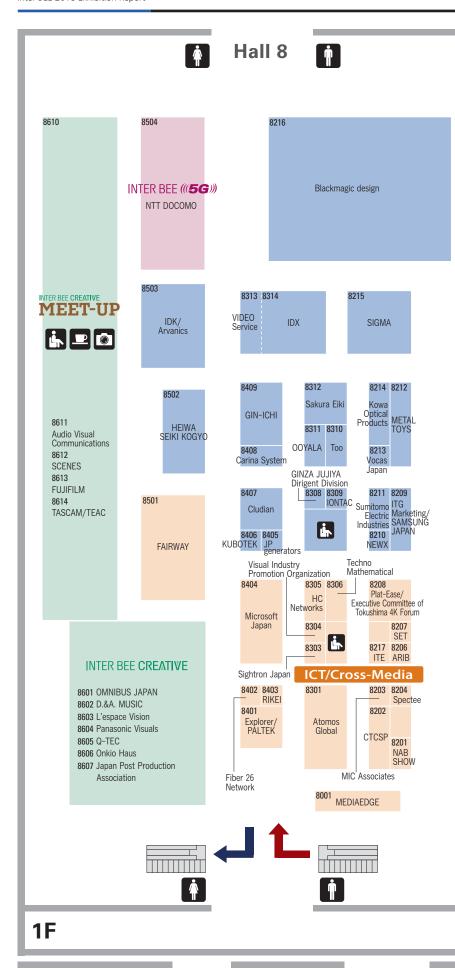
products are four channel digital power amplifiers with inbuilt high-function DSPs. They are compatible with the Dante Audio Network IP transmission protocol developed by Audinate that can transmit digital voice over a Gigabit Ethernet. The PASD acoustic simulation software is used to automatically generate acoustic adjustment parameter values through the LAN port and to automatically adjust the parameter values according to on-site measurements. This makes it possible to efficiently adjust acoustics.

This PASD is equipped with an FIR auto-tuning tool in addition to an array speaker calculator tool and 3D acoustic simulations. This makes theoretical acoustic tuning possible in advance by capturing hall, live performance venue and stadium architecture CAD data. Acoustic tuning data set with this PASD is then transferred to the digital power amplifier. Theoretical assumed acoustic tuning can then be implemented on-site without change. Moreover, differences in the characteristics obtained by actually measuring with microphones at the site are adjusted by the PASD and the adjusted data is then transferred to the amplifiers. The properties assumed to be the ideal acoustic characteristics during the simulation can be adjusted just like that in the actual site. This makes it possible to implement in a short time without occupying the venue for acoustic tuning on-site. Therefore, it is possible to improve working efficiency. Furthermore, PASD makes it possible to raise the efficiency of work from acoustic parameter setting to acoustic tuning by building a WP-DM900 series digital power amplifier network. We provide this PASD acoustic simulation software to customers who have chosen our line array speakers and new in-built DSP digital power amplifier products as their solution. (Mr. Matsumoto)

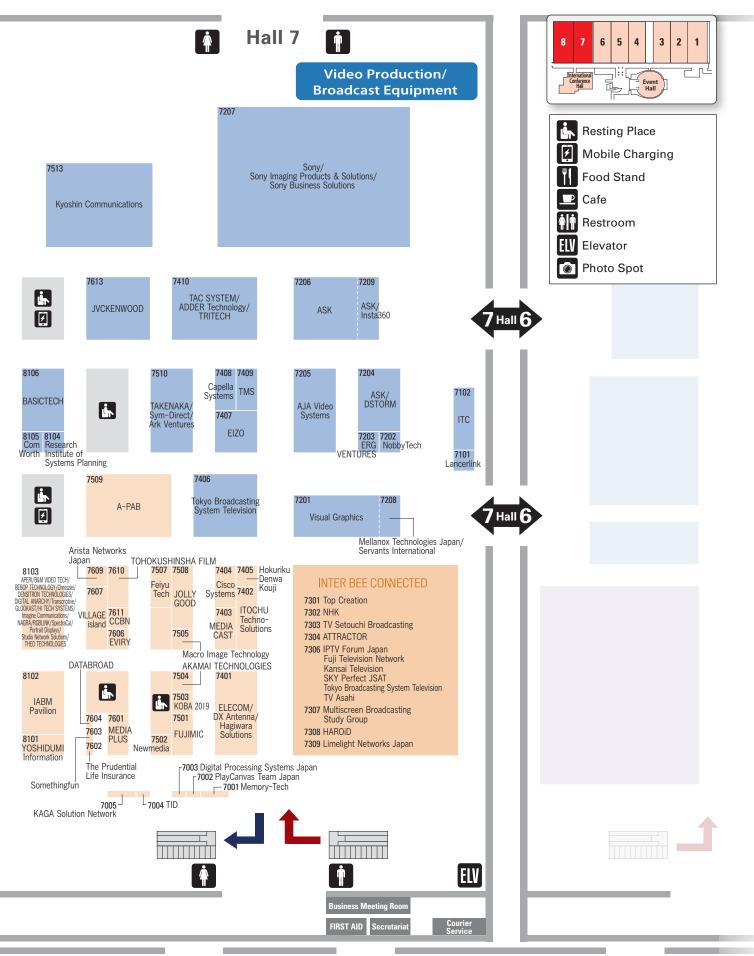
#### ■ Important to allow customers to directly see and experience actual machines

We exhibited the WS-LA500A series of RAMSA line array speakers at INTER BEE EXPERIENCE: X-Speaker this year. However, because it was suspended high up, it was only possible to see it from a distance. Many customers who came to our booth carefully looked at the line array itself together with how to use and connect it. In addition, there were many customers who originally had an interest in our acoustic simulation software and who directly said that they had come to see it. It is possible for our customers to directly see our actual machines in this way at Inter BEE. Furthermore, they can actually operate and experience them. We would like to continue cherishing communication through such exhibitions in the future. (Mr. Mitsuhashi)

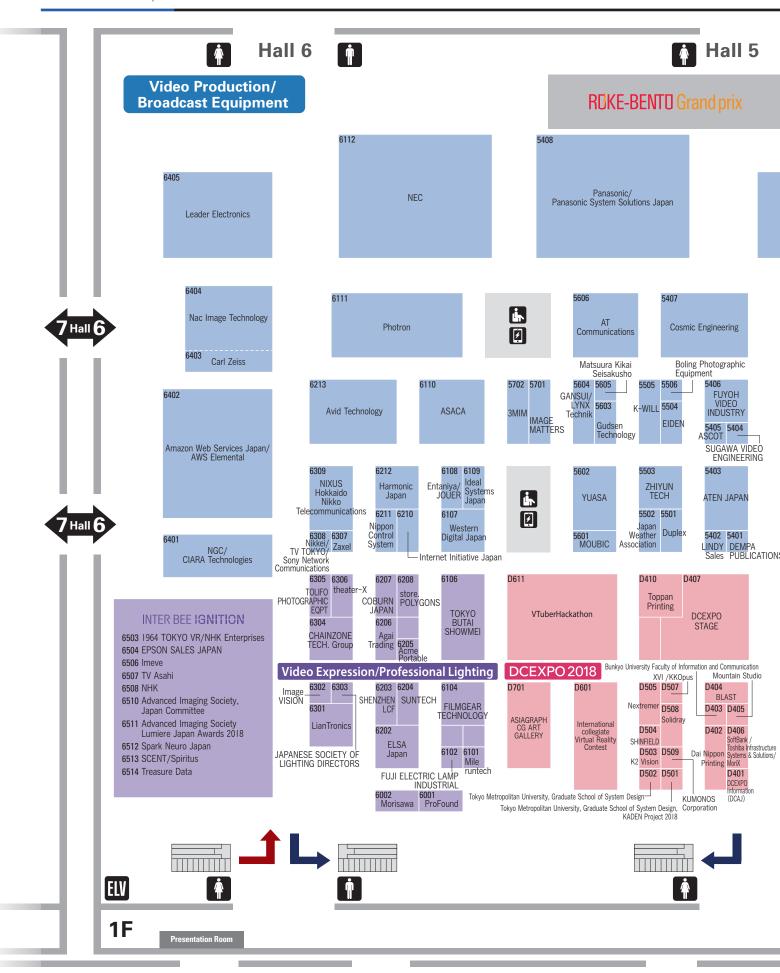




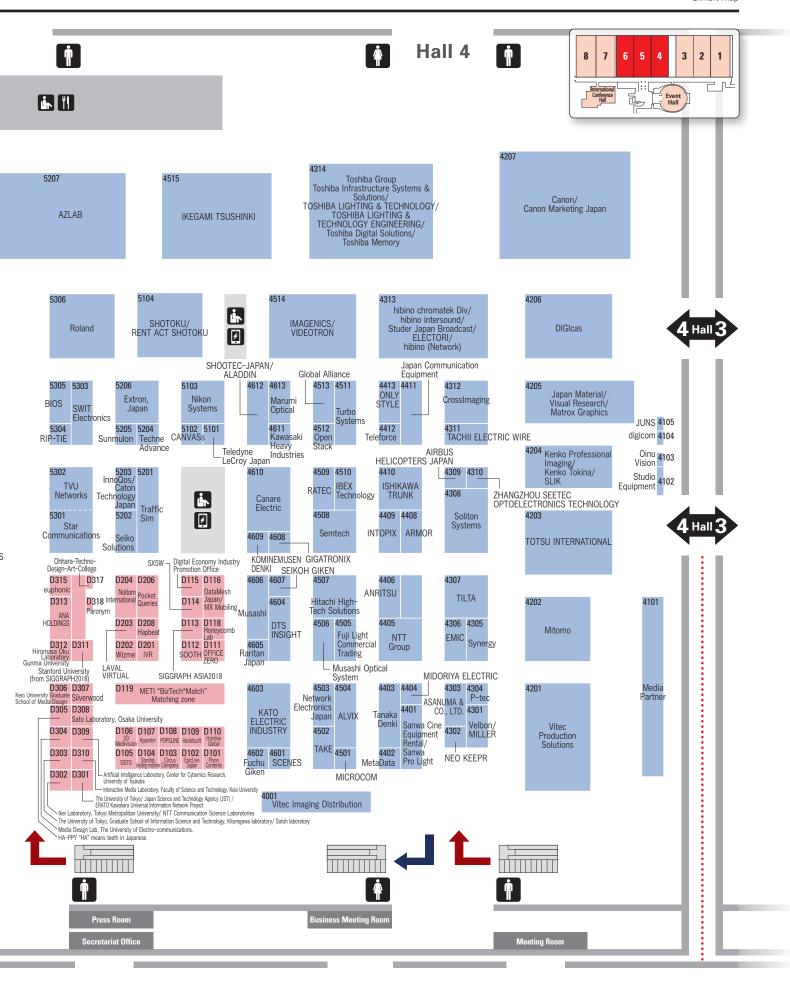
2F

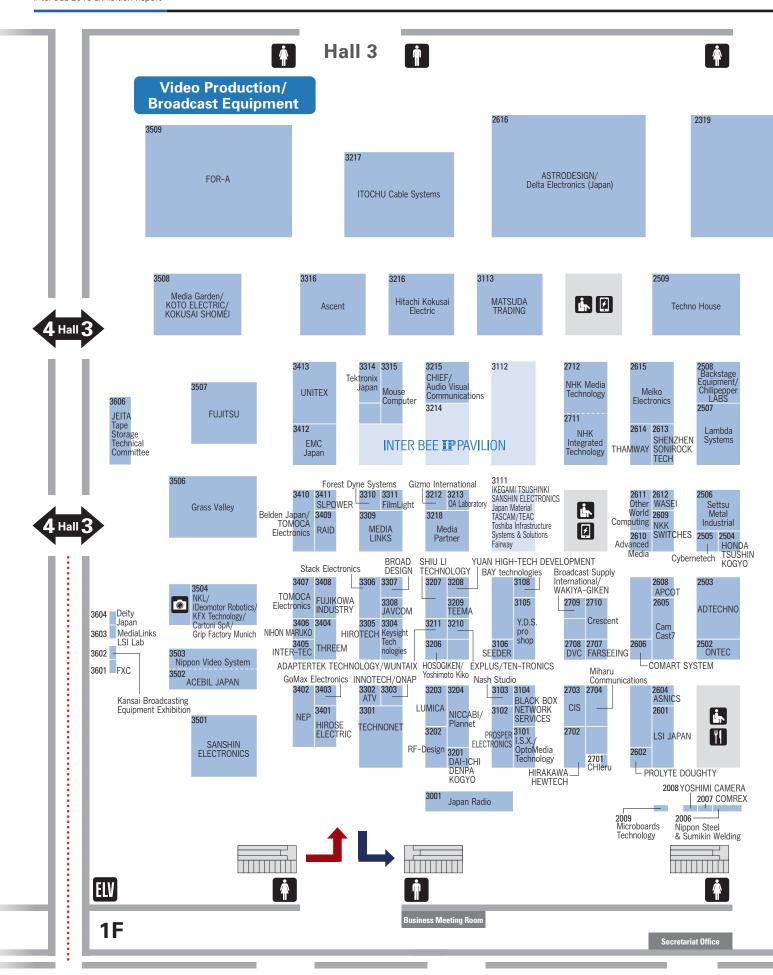


Registration



2F





2F



Registration

Part			_			
10.00000000000000000000000000000000000	Pro	fessional Audio Equipment Hall 1-2	2408 1405	Yamaki Electric Corporation ZOOM CORPORATION		FOR-A COMPANY LIMITED Forest Dyne Systems Corporation
100	1513			X-Microphone		
1988   March 2007   1989   March 2007   1989	2213				2116	FUJIFILM Corporation
2009   MARINES POURS D.   100   May Allaw See   2010   May Allaw See   2010   Marine See   Mar						
2019   April 1995	2209	APPLAUSE SYSTEMS. Co.	1103	Miyaji Music, Inc	5406	FUYOH VIDEO INDUSTRY CO., LTD
100						
100	1412	Audio-Technica Corporation	1104	Sennheiser Japan K.K.	4608	GIGATRONIX LTD
1.00   Control   Control						
150   1900   1	1208	Beetech Inc.			3212	Gizmo International Co., Ltd.
1975   Some State				X-Headphone		
1982   1987	2207	Bosch Security Systems Ltd.			3506	Grass Valley K.K.
100   100						
100   Commission Harmon   Commission Harmon	2107	CAEL WORKS INC.	1110		6212	Harmonic Japan G.K.
150   Commont for fair No.   111   Commont for fair No.   121   Commont for fair No.   121   Commont for fair No.   121   Common for fair No						
Microsoft Control	1514			STUDIO EQUIPMENT CORPORATION		hibino corporation (Network)
March   Marc						
March   Marc			1113	Yamaha Music Japan Co.,Ltd.		
1969   1969					4507	
			Vide	o Production / Broadcast Equipment Hall Z-		
ACRES   ACRE	2311				3206	HOSOGIKEN Co.,Ltd
MITTER COLOR DECIDENC C., Let						
2015   P. C.	1508	EASTERN SOUND FACTORY Co.,Ltd.	2503	ADTECHNO Inc.	6109	Ideal Systems Japan Co., Ltd.
Page						
	2102	FBT Elettronica S.p.A.	4309	AIRBUS HELICOPTERS JAPAN CO., LTD.	8314	IDX Company, Ltd.
Section						
Service   Serv						
MESTATE CL. pt. de   MESTATE CL. pt. pt. de   MESTATE CL. pt. pt. de   MESTATE CL. pt. pt. pt. pt. pt. pt. pt. pt. pt. pt						
Salaw And Carponation						INTER-TEC Co., Ltd.
1900   Believe comparison history on paulis switch IDA   100   Believe Comparison (100   100						
1433   Rebaul Distribution (b. 10.5   1505	1310	hibino corporation hibino pro audio sales Div.	6110	ASACA CORPORATION	8309	IONTAC Inc
1905   100-base   1906   190						
2212   1000000   100000000000000000000	1503	Hokkaido Nikko Denki Tsushin Co., Ltd.	5405	ASCOT Co.,LTD	8209	ITG Marketing, Inc
2505   10-001   10						
2008   MC (100   MC (100   MC   MC   MC   MC   MC   MC   MC	2205	ITOCHU Cable Systems Corp.	2604	ASNICS CO., LTD.	4411	Japan Communication Equipment Co., Ltd.
Modern   March   Mar						
Marent Professional   219   Margen Electronics and Information   618   200E H 10	1406	LIVEGEAR Inc.	5403	ATEN JAPAN CO., LTD.	5502	Japan Weather Association
Martier Austria Jagans Inc.   Earth Principality in National Jagans Inc.   Earth John Principality International Association   Austria Engineering International Intern						
1515   Maria Integration, Inc.   540   20   20   20   20   20   20   20	2318	Martin Audio Japan Inc.		Technology Industries Association	8405	JP generators CO.,LTD
2115         Media Integration, Inc.         597         XVAIL (Copporation         598         Keyn (Lopporation)         2012         May May, Inc.         498         SASTICKER OJ, Ltd         499         KAID (LECTION) (Ltd         491         Kanaal Broadcasting Equipment Enhance (Ltd.         491         KAID (LECTION) (Ltd.         491         May						
Miss						K-WILL Corporation
Mingl Munic, Inc						Kansai Broadcasting Equipment Exhibition
2108         MÖRSON JAPAN LOC, J. LU         5306         BIOS CORPORATION         4204         Kenn's Technologies           1303         MTS & PLANING Co., Lut         8216         Blackmagic design         3304         Krysith Technology           2717         Nath Lithland         5305         Belling Photographic Equipment Company         3308         KOULAS MOMBO C., LU           2718         Nill Lithland         3307         Broke Technology         3408         KOULAS MOMBO C., LU           2711         Nill Lagna Lithland         2305         BROAD-PESSON Co., Lut         4609         KOULAS MOMBO C., Lut           2701         Onlyo Miristing Corporation         4610         Camare Electric Co., Lut         8406         KUBUST K. Corporation           2701         Onlyo Miristing Corporation         4510         Camare Electric Co., Lut         8406         KUBUST K. Corporation           2717         ORATIE Corporation         4510         Camare Electric Co., Lut         2404         Lagnam Hills, Inc.           2717         ORATIE Corporation         4508         Capta System Co., Lut         2701         Lambed Systems Inc.         2501         Lambed Systems Inc.         2501         Lambed Systems Inc.         2502         Lambed Systems Inc.         2502         Lambed Systems Inc. <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
MAC Ltd						
MIS & PLANNING Co., tut.   1876   Blackmapic design   1878   PLANNING Co., tut.   1870   18						
2711   18		MTS & PLANNING Co., Ltd.				KFX Technology
1415   Ninon Onlyo Engineeming Co., Ltd.   2796   Boadcast Stuply International Co., Ltd.   3898   KOTO Electric Co., Ltd.   2401   2712   2						
Dollyon Marketing Cerporation   410	1413	Nihon Onkyo Engineering Co., Ltd.		Broadcast Supply International Co., Ltd.	3508	KOTO Electric Co.,LTD
2004         ONZU I, Inc         5102         CANWASS Co., Ltd.         2404         Lambda Systems Inc.           2217         OTARITEC Corporation         848         Carina System Co., Ltd.         7101         Lambed Systems Inc.           2217         OTARITEC Corporation         6403         Cari Paiss Co., Ltd.         6405         Lead Per DICAL TECHNOLOGY CORP.           1207         Panasonic System Solutions Japan Co., Ltd.         5203         Carton Spontago Japan Co., Ltd.         5402         LURDY Sales Inc.           1302         Ponner DJ. Corporation         2315         CHIEF/Audio Visual Communications Ltd.         2301         LEAP OPTICAL TECHNOLOGY CORP.           1302         Ponner DJ. Corporation         2316         CHIEF/Audio Visual Communications Ltd.         2301         LSJ APAN CO., LTD.           1302         Ponner DJ. Corporation         2303         CHIEF Audio Visual Communications Ltd.         2301         LSJ APAN CO., LTD.           2003         Complis Inc.         2508         Chiller Danie A.         2303         LUMIAC CORPORATION         4613         Martin Communications Graph St. Co., Ltd.           2216         Robert Earlie Line         2401         CLIAR Technologies         4613         Martin						
2741   274   27						
2717   Pansonic Orporation   5408   Carl System Co., Ltd.   6405   Leader Electronics Corporation   5403   Carl Zeins Co., Ltd.   6405   Leader Electronics Corporation   5403   Carl Zeins Co., Ltd.   5402   Carl Zeins Co., Ltd.   5403   Carl Z						
Pamasonic Systems Solutions Japan Co., Ltd.   5204   Catnon Esphare Co., Ltd.   5205   Catnon Esphare Co.	2217	OTARITEC Corporation	8408	Carina System Co., Ltd.	7101	Lancerlink Co.,Ltd.
2203         Penn Fabrication Japan NC.         5203         Caton Technology Japan Co., Ltd         5204         LINDY Sales Inc.           2104         PULSE Co., Ltd.         2701         CHIFER CO., Ltd.         3203         LUMICA CORPORATION           2106         BOURD Iss Inc.         2508         Chilespoeth Als, Inc.         5604         LYM Rechika G.           2106         RANE         6401         CLARA Technologies         4613         Marrum Optical Co., Ltd.           2107         REWIRE INC.         8407         Cloudian KK         3113         Martos Graphics Inc.           2111         REWIRE INC.         8407         Cloudian KK         3113         Martos Graphics Inc.           2116         REVINE INC.         806         COMAREX SYSTEM CO., LTD         5605         MARSUDA TRADING CO., LTD           1518         Rock On         2007         COMREX Corporation         3509         Media Garden Inc.           1519         SAMKEN MICROPHONE CO., LTD.         5407         Cosmic Engineering Inc.         3509         Media Insist IsI Lab Co., Ltd.           150         SAMKEN MICROPHONE CO., LTD.         4512         Crossimaging Inc.         2515         Media Insist IsI Lab Co., Ltd.           150         SEACH LANCE LINC         4512         Cr						
PULSE Co., Ltd.   2009   Chilera CO., Ltd.   5004   LYNX Technik AG   6010   CAIRA Rechnologies   4613   Marrumi Optical Co., Ltd.   4206   RANE escohetz Airfole Inc.   2013   CISC Optration   4205   Matrox Graphics Inc.   4513   Marrumi Optical Co., Ltd.   4814   Rechnologies   4613   Marrumi Optical Co., Ltd.   4814   Rechnologies   4814   Marrumi Optical Co., Ltd.   4814   Marrumi O	2203				5402	LINDY Sales Inc.
2006   ANN E   6401   CANA Carbonius   5004   CANT Rebniuk AG   CAND Carbonius   6401   CANA CARBONIUS   C						LUMICA CORPORATION
2216         Resolvet Airfolde Inc.         2703         CIS Corporation         4205         Matrox Graphics Inc.           2211         RIMPER INC.         8104         Cloudian KK         3113         MATSUDA TRADINGS CO., LTD           2214         Rided Communications GmbH 6 Co. KG         2606         COMART SYSTEM CO., LTD         5605         Matsura Kias Gisakusho Co., Ltd           2410         S.C. ALLIANCE INC.         8105         ComWorth Co., Ltd.         3309         MEDIA LINKS, INC.           1506         SANKEN MIGROPHORE CO., LTD.         5407         Cosmic Engineering Inc.         3608         Media Links, IS La Loo, Ltd.           1201         Sannbeiser Japan K.K.         4312         CrossImaging Inc.         7708         Melianox Technologies Japan KK           2313         SHIZUKA Inc.         3201         DAI-CHI DENPA KOGYO CO., LTD.         8212         METAL TOYS           3314         Singa Systems Engineering Co., Ltd.         2302         datavideo japan/Menax, Inc         4901         Microporatria Rehmology Inc.           4312         SUTHERN ACQUSTICS Co., Ltd.         2616         Dela Electronics (Japan), Inc.         4901         Microporatria Rehmology Inc.           2312         SUTHERN ACQUSTICS Co., Ltd.         2616         Dela Electronics (Japan), Inc.         4901         <	2003	Qonplus Inc.	2508	ChilipepperLABS, Inc.	5604	LYNX Technik AG
Part   REWIRE INC.				CIS Corporation		
File   Rock ON   COMMERK Corporation   S508   Media Garden Inc.						
SAMKEN MICROPHONE CO., LTD.   Saramonic   Sample   Sam						
2710   Saramonic   2710   Crescent, inc   2710   Crescent, inc   2710   Sennheiser Japan K.K.   2720   Sennheiser Japan K.K.   2720   Mellanox Technologies Japan K.K.   2720   Mellanox Technologies Japan K.K.   2720   Mellanox Technologies Japan K.K.   2720   Metaplata   2720	2410			ComWorth Co.,Ltd.		
Sennheiser Japan K.K   4312   CrossImaging Inc.   7208   Melanox Technologies Japan K.K   Shezhen Committe Technology   2505   Cybernetech Corporation   4402   MetaData   4402   MetaData   4403   MetaData   4404   Missan   4404   Missan						
SHIZUKA Inc.   3201						
1404   Sigma Systems Engineering Co., Ltd.   2302   datavideo japan /Melnext, Inc   4501   MICROCOM LTD.						
	1309	Shure Japan	2404	DATATON	2009	Microboards Technology Inc.
271   271						
2005         Studio Equipment Corporation         4206         DiGlacs LLC         4202         Mitomo Co_Ltd           1001         Sunphonix Corp.         4104         digicom Itd.         2401         Mitisui Bussan Aerospace Co., Ltd.           1401         Suyama Dental Laboratory Co., Ltd.         4604         DTS NSIGHT Corporation         5601         MOUBIC INC.           1307         Synthax Japan Inc.         5501         Dujlex Co., Ltd         3315         MouseComputer Co., Ltd.           1205         TACHII ELECTRIC WIRE CO., LTD         2708         DVC Co., LTD         4606         Musashi Co., Ltd.           1410         Tanizawa Seisakusho, Ltd         7407         EIZO Corporation         6404         Nac Image Technology Inc.           1509         TASCAM/TEAC CORPORATION         4313         ELECTORIC C., LTD.         3103         Nash Studio Inc.           1509         TASCAM/TEAC CORPORATION         4312         EMC Japan K.K.         6112         NEC Corporation           1501         Techn House Inc.         4306         EMIC CO., LTD         4302         NED KEEPR           2002         TOA Corporation         6108         Entantiya Co., Ltd.         4302         NED KEEPR           2100         TEATA Corporation         3210         EXPLU	2312	SOUTHERN ACOUSTICS Co., Ltd.	2616	Delta Electronics (Japan), Inc.	2704	Miharu Communications Inc.
Missi Bussan Aerospace Co., Ltd.   Suyama Dental Laboratory Co., Ltd.   Suyama Dental Laboratory Co., Ltd.   Suyama Dental Laboratory Co., Ltd.   Synthax Japan Inc.   S501   Duplex Co., Ltd   3315   Mouse Computer Co., Ltd.   MOBIC INC.   MOBIC INC.						
1307         Synthax Japan Inc.         5501         Duplex Co., Ltd         3315         MouseComputer Co., Ltd.           1205         TACHI ELECTRIC WIRE CO., LTD         4506         Musashi Co., Ltd.         4506         Musashi Optical System Co., Ltd.           1410         TAMURA CORPORATION         5504         EIDEN Co., Ltd.         4506         Musashi Optical System Co., Ltd.           1410         Tanizawa Seisakusho, Ltd         7407         EIZO Corporation         6404         Nac Image Technology Inc.           1509         TASCAM/TEAC CORPORATION         4313         ELECTORI CO., LTD.         3103         Nash Studio Inc.           1517         Techn Holuse Inc.         4306         EMIC CO., LTD         4302         NEC VEFPR           2020         TOA Corporation         6108         Entantiya Co., Ltd.         4302         NEP Inc.           2100         Toray Plastics Precision Co., Ltd.         7203         ERG VENTURES CO., LTD         4503         Network Electronics Japan Co.,           210         UFIAX Corporation         3210         EXPLUS CO., LTD.         8210         NEWX Co., Ltd.           2002         Volt Ampere Inc.         5206         Extron, Japan         6401         NGC Corporation           2110         Ver Riel         7271	1001	Sunphonix Corp.	4104	digicom Ltd.	2401	Mitsui Bussan Aerospace Co., Ltd.
1205   TACHII ELECTRIC WIRE CO, LTD   2708   DVC Co, LTD   4606   Musashi Co, Ltd     1207   TAMURA CORPORATION   5504   EIDEN Co, Ltd     1410   Tanizawa Seisakusho, Ltd   7407   EIZO Corporation   6404   Nac Image Technology Inc.     1509   TASCAM/TEAC CORPORATION   4313   ELECTORI CO, LTD   3103   Nash Studio Inc.     1517   Techno House Inc.   4306   EMIC CO, LTD   4302   NEC Corporation     1517   Techno House Inc.   4306   EMIC CO, LTD   4302   NEC KEPPR     2202   TOA Corporation   6108   Entaniya Co, Ltd   4503   Network Electronics Japan Co.,     1003   Torry Plastics Precision Co, Ltd   4503   Network Electronics Japan Co.,     2110   UETAX Corporation   3210   EXPLUS CO, LTD   8210   NEWX Co, Ltd     2002   Volt Ampere Inc.   5206   Extron, Japan   6401   NBC Corporation     2111   Vamaha Music Japan Co, Ltd   3311   FilmLight KK   2712   NHK Media Technology, Inc.     2112   Vamaha Music Japan Co, Ltd   3311   FilmLight KK   2712   NHK Media Technology, Inc.     2113   Version   Version						
1410         Tanizawa Seisakusho, Ltd         7407         ELZO Corporation         6404         Nac Image Technology Inc.           1509         TASCAM/TEAC CORPORATION         4313         ELECTORIO C., LTD.         3103         Nash Studio Inc.           1517         Techn Flouse Inc.         4306         EMIC CO, LTD         4302         NEC KEFR           2202         TOA Corporation         6108         Entantiya co, Ltd.         3402         NEP Inc.           2100         Toray Plastics Precision Co., Ltd.         7203         ERG VENTURES CO., LTD         4503         Network Electronics Japan Co.,           210         Volt Ampere Inc.         5206         Extron, Japan         6401         NGC Corporation           201         Ver Field         2707         FARSENING CO., LTD         2711         NHK Media Technology, Inc.           2113         Ver Field         3311         Film Light KK         2712         NHK Media Technology, Inc.	1205	TACHII ELECTRIC WIRE CO., LTD	2708	DVC Co.,LTD	4606	Musashi Co.,Ltd
1509         TASCAM/TEAC CORPORATION         4313         ELECTORI CO., LTD.         3103         Nash Studio Inc.           1303         Tech Trust Japan Co., LTD.         4302         MEC Corporation         KEC Corporation           1517         Techno House Inc.         4306         EMIC CO., LTD         4302         NEO KEEPR           2202         TOA Corporation         6108         Entaniya Co., Ltd.         3402         NEP Inc.           2103         Tey Plastics Precision Co., Ltd.         4503         Network Electronics Japan Co.,           2110         UETAX Corporation         3210         EXPLUS CO., LTD.         8210         NEWX Co., Ltd.           2002         Volt Ampere Inc.         5206         Extron, Japan         6401         NGC Corporation           2113         We Field         2707         FASEEING CO., LTD         2711         NHK Integrated Technology, Inc.           1210         Yamaha Music Japan Co., Ltd.         3311         Film Light KK         2712         NHK Media Technology, Inc.						
1517         Techno House Inc.         4306         EMIC CO.,LTD         4302         NEO KEÉPR           2202         TOA Corporation         6108         Entaniya Co.,Ltd.         3402         NEP Inc.           1003         Toray Plastics Precision Co., Ltd.         4503         Network Electronics Japan Co.,           2110         UETAX Corporation         3210         EXPLUS CO., LTD.         8210         NEWX Co., Ltd.           2002         Volt Ampere Inc.         5206         Extron, Japan         6401         NGC Corporation           2113         We Field         2707         FARSEHING CO.,LTD         2711         NHK Integrated Technology, Inc.           1210         Yamaha Music Japan Co.,Ltd.         3311         Film Light KK         2712         NHK Media Technology, Inc.	1509	TASCAM/TEAC CORPORATION	4313	ELECTORI CO., LTD.	3103	Nash Studio Inc.
2202         TOA Corporation         6108         Entaniya Co., Ltd.         3402         NEP Inc.           1003         Toray Plastics Precision Co., Ltd.         7203         ERG VENTURES CO.,LTD         4503         Network Electronics Japan Co.,           2110         UETAX Corporation         8210         NEWX Co., Ltd.           2002         Volt Ampere Inc.         5206         EXTVO, Japan         6401         NGC Corporation           2113         We Field         2707         FARSEEING CO.,LTD         2711         NHK Integrated Technology Inc.           120         Yamaha Music Japan Co.,Ltd.         3311         Film Light KK         2712         NHK Media Technology, Inc.						
2110         UETAX Corporation         3210         EXPLUS CO., LTD.         8210         NEWX Co., Ltd.           2002         Volt Ampere Inc.         5206         Extron., Japan         6401         NGC Corporation           2113         We Field         2707         FARSELING CO.,LTD         2711         NHK Integrated Technology Inc           1210         Yamaha Music Japan Co.,Ltd.         3311         FilmLight KK         2712         NHK Media Technology, Inc.	2202	TOA Corporation	6108	Entaniya Co.,Ltd.	3402	NEP Inc.
2012         Volt Ampere Inc.         5206         Extron, Japan         6401         NGC Corporation           2113         We Field         2707         FARSEING CO.,LTD         2711         NHK Integrated Technology Inc           1210         Yamaha Music Japan Co.,Ltd.         3311         Film Light KK         2712         NHK Media Technology, Inc.						
213We Field2707FARSEEING CO.,LTD2711NHK Integrated Technology Inc1210Yamaha Music Japan Co.,Ltd.3311FilmLight KK271NHK Media Technology, Inc.	2002	Volt Ampere Inc.	5206	Extron, Japan	6401	NGC Corporation
		We Field		FARSEEING CO.,LTD		
	.210	mano oupun od.,Etu.	3311		2/12	

3204	NICCABI CORPORATION	6107	Western Digital Japan		Tokyo Broadcasting System Television, Inc.
3406 6308	NIHON MARUKO CO.,LTD Nikkei Inc.	3211 3105	WUNTAIX CO., LTD. Y.D.S.pro shop. Inc	7302	TV Asahi Corporation Japan Broadcasting Corporation
5103	Nikon Systems Inc.	2008	YOSHIMI CAMERA CO., LTD.	7309	Limelight Networks Japan K.K
6211 2006	Nippon Control System Corporation Nippon Steel & Sumikin Welding Co., Ltd.	3206 3208	Yoshimoto Kiko YUAN HIGH-TECH DEVELOPMENT CO., LTD.	7307 7301	Multiscreen Broadcasting Study Group Top Creation Co.,Ltd
4405	NIPPON TELEGRAPH AND TELEPHONE CORPORATION	5602	YUASA CO., LTD	7303	TV Setouchi Broadcasting Co.,Ltd.
3503 6309	Nippon Video System Co., Ltd. NIXUS Hokkaido Nikko Telecommunications, Co., Ltd.	6307 4310	Zaxel, Inc. ZHANGZHOU SEETEC OPTOELECTRONICS TECHNOLOGY CO., LTD		INTER BEE CREATIVE
2609	NKK SWITCHES CO., LTD.	5503	ZHIYUN TECH	8602	D.8A. MUSIC Inc.
3504 7202	NKL Inc. NobbyTech. Ltd.		INTER BEE IP PAVILION	8607 8603	Japan Post Production Association L'espace Vision Co., Ltd.
3308	NPO JAVCOM	3111	FAIRWAY CORPORATION	8601	OMNIBUS JAPAN INC.
4405 4405	NTT Electronics Corporation NTT TechnoCross Corporation	3111 3111	IKEGAMI TSUSHINKI CO.,LTD. Japan Material Co.,Ltd.	8606 8604	Onkio Haus Inc. Panasonic Visuals Co., Ltd.
3213 4103	OA LABORATORY CO.,LTD.	3111	SANSHIN ELECTRONICS CO., LTD.	8605	Q-TEC, Inc.
4413	Oinu Vision Co.,Ltd. ONLY STYLE Inc.	3111 3111	TASCAM/TEAC CORPORATION Toshiba Infrastructure Systems & Solutions Corporation		MEET-UP Hands On Area
2502 8311	ONTEC CO., LTD. OOYALA			8611 8613	Audio Visual Communications Ltd.
4512	Open Stack, Inc.	Vide	eo Expression / Professional Lighting Hall 6	8612	FUJIFILM Corporation SCENES Co., Ltd.
3101	OptoMedia Technology Inc.	COOL	Asses Destable Com	8614	TASCAM/TEAC CORPORATION
2611 4304	Other World Computing, Inc. P-tec Co., Ltd	6205 6206	Acme Portable Corp. Agai Trading Corporation		INTER BEE 5G
5408 5408	Panasonic Corporation	6304 6207	CHAINZONE TECH. Group Co., Ltd.	8504	NTT DOCOMO, INC.
6111	Panasonic System Solutions Japan Co., Ltd. PHOTRON LIMITED	6202	COBURN JAPAN CORPORATION ELSA Japan Inc.		IABM Pavilion
3204	Plannet Co., Ltd	6104	FILMGEAR TECHNOLOGY LTD	8103	IABM APERI CORPORATION
2602 3102	PROLYTE DOUGHTY Inc. PROSPER ELECTRONICS Co., LTD	6102 6302	FUJI ELECTRIC LAMP INDUSTRIAL CO.,LTD. ImageVISION Inc.	8103 8103	B&M VIDEO TECH LLC.
3303	QNAP Inc.	6303	JAPANESE SOCIETY OF LIGHTING DIRECTORS	8103	BEBOP TECHNOLOGY
3409 4605	RAID Inc. Raritan Japan, Inc.	6301 6101	LianTronics Mileruntech.co.Ltd	8103 8103	Chrosziel GmbH DENSITRON TECHNOLOGIES
4509	RATEC Co.,Ltd	6002	Morisawa Inc.	8103	DIGITAL ANARCHY/Transcriptive
5104 8104	RENT ACT SHOTOKU CORP Research Institute of Systems Planning, Inc.	6001 6203	ProFound SHENZHEN LCF	8103 8103	GLOOKAST HI TECH SYSTEMS LTD
3202	RF-Design Co.,Ltd	6208	store. POLYGONS	8103	Imagine Communications
5304	RIP-TIE INC.	6204	SUNTECH Co., Ltd.	8103	NAGRA
5306 8312	Roland Corporation Sakura Eiki Co., Ltd.	6306 6106	theater-X TOKYO BUTAI SHOWMEI	8103 8103	RGBLINK SpectraCal / Portrait Displays, Inc.
8209	SAMSUNG JAPAN CO.	6305	TOLIFO PHOTOGRAPHIC EQPT CO.	8103	Studio Network Solutions
3501 4401	SANSHIN ELECTRONICS CO., LTD. Sanwa Cine Equipment Rental Co., Ltd.		INTER BEE IGNITION	8103	THEO TECHNOLOGIES
4401	Sanwa Pro Light, Inc.	6503	1964 TOKYO VR/NHK Enterprises	-	NEWPO W WE
4601	SCENES Co., Ltd.	6511	Advanced Imaging Society Lumiere Japan Awards 2018	DC	EEXPO Hall 5
3106 5202	SEEDER Seiko Solutions Inc.	6510 6504	Advanced Imaging Society, Japan Committee EPSON SALES JAPAN CORPORATION		Evila ila ila in m
4607	SEIKOH GIKEN Co.,Ltd.	6506	Imeve Inc.		Exhibition
4508 7208	Semtech Corporation Servants International Corporation	6508 6513	Japan Broadcasting Corporation SCENT/Spiritus	D313 D107	ANA HOLDINGS INC. Apposter Inc.
2506	Settsu Metal Industrial Co.,Ltd.	6512	Spark Neuro Japan, K.K	D701	ASIAGRAPH CG ART GALLERY
2613 3207	SHENZHEN SONIROCK TECH CO.,LTD SHIU LI TECHNOLOGY CO., LTD.	6514 6507	Treasure Data Inc. TV Asahi Corporation	D404 D403	BLAST Inc. Bunkyo University, Faculty of Information and Communication
4612	SHOOTEC-JAPAN Co., Ltd.	0307	TV Asam Corporation	D103	Circus Company INC.
5104	SHOTOKU CORP	ICT	/ Cross-Media Hall 7-8	D402	Dai Nippon Printing Co., Ltd.
8215 4204	SIGMA CORPORATION SLIK CORPORATION	(101	/ Closs-Media Hall I-0	D116 D115	DataMesh Japan Co., Ltd. / MX Mobiling Co., Ltd. Digital Economy Industry Promotion Office
3411	SLPOWER Ltd.	7504	AKAMAI TECHNOLOGIES INC	D102	EpicLive Japan
4308 7207	Soliton Systems K.K. Sony Corporation/Sony Imaging Products & Solutions	7609 8206	Arista Networks Japan Limited. Association of Radio Industries and Businesses (ARIB)	D315 D109	euphonic, Inc. Hanbitsoft
	Corporation/Sony Business Solutions Corporation	8301	Atomos Global Pty Ltd	D110	Holotive Global
6308 3306	Sony Network Communications Inc. Stack Electronics Co., Ltd.	7611 7404	CCBN Cisco Systems	D118 D601	Honeycomb Lab. Inc. International collegiate Virtual Reality Contest
5301	Star Communications K.K.	8202	CTCSP Corporation	D503	K2 Vision LLC
4313 4102	Studer Japan Broadcast Ltd. Studio Equipment Corporation	7604 7003	DATABROAD CORPORATION Digital Processing Systems Japan K.K.	D509	KUMONOS Corporation LAVAL VIRTUAL
5404	SUGAWA VIDEO ENGINEERING CO., LTD.	7401	DX Antenna Co., Ltd.	D203 D405	Mountain Studio, Inc.
8211	Sumitomo Electric Industries, Ltd.	7401	ELECOM CO., LTD.	D505	Nextremer Co., Ltd.
5205 5303	Sunmulon Co., Ltd. SWIT Electronics Co., Ltd.	7606 8208	EVIRY INC. Executive Committee of Tokushima 4K Forum	D204 D317	Noitom International, Inc. Ohhara-Techno-Design-Art-College
7510	Sym-Direct Co Ltd	8401	Explorer Inc.	D318	Paronym Inc.
4305 7410	Synergy K.K. TAC SYSTEM, INC.	8501 7507	FAIRWAY CORPORATION Feiyu Tech	D101 D206	Pison Contents, Inc. Pocket Queries, Inc.
4311	TACHII ELECTRIC WIRE CO., LTD	8402	Fiber 26 Network Inc.	D108	POPSLINE. Co., Ltd.
3209 2303	Taiwan Electrical and Electronic Manufacturers' Association (TEEMA) Takahashi-Kensetsu Co., Ltd.	7501 7401	FUJIMIC, INC. Hagiwara Solutions Co.,Ltd.	D504 D113	SHINFIELD Co., Ltd SIGGRAPH ASIA2018
4502	TAKE INC.	8305	HC Networks, Ltd.	D113	SISTO CO., LTD.
7510	TAKENAKA Co Ltd	7405	Hokuriku Denwa Kouji Co., Ltd.	D406	SoftBank Corp. / Toshiba Infrastructure Systems &
4403 5204	Tanaka Denki Co., Ltd. Techne Advance. Co.,Ltd.	7402 7508	ITOCHU Techno-Solutions Corporation JOLLY GOOD Inc.	D508	Solutions Corporation / MoriX Co, Ltd. Solidray Co., Ltd
2509	Techno House Inc.	7005	KAGA Solution Network Co., Ltd.	D104	Starship Vending-machine Corp.
3301 3314	TECHNONET CO., LTD. Tektronix Japan	7503 7505	KOBA 2019 (KOREA E & EX INC.) Macro Image Technology Inc.	D114 D106	SXSW 3D Medivision INC.
5101	Teledyne LeCroy Japan Corporation	7601	MEDIA PLUS CO., LTD	D501	Tokyo Metropolitan University, Graduate School of
4412 3210	Teleforce Co., Ltd. TEN-TRONICS CO., LTD.	7403 8001	MEDIACAST CO., LTD. MEDIAEDGE Corporation	D502	System Design, KADEN Project 2018 Tokyo Metropolitan University, Graduate School of System Design
2614	THAMWAY CO., LTD	7001	Memory-Tech Corporation	D410	Toppan Printing Co., Ltd.
5702 3404	3MIM Co., Ltd THREEM Inc.	8203 8404	MIC Associates, Inc. Microsoft Japan Co., Ltd.	D507	XVI Inc. / KKOpus
4307	TILTA	8201	NAB SHOW		Innovative Technologies 2018
7409 7406	TMS Corp. Tokyo Broadcasting System Television, Inc.	7502 8304	Newmedia Inc. NPO Visual Industry Promotion Organization	D309	Artificial Intelligence Laboratory, Center for Cybernics Research, University of Tsukuba
7406 3407	TOMOCA Electronics Company	8304 8401	PALTEK CORPORATION	D305	HA-PPY Co., Ltd "HA" means teeth in Japanese
8310	Too Corporation	8208	Plat-Ease Corporation	D312	Hiromasa Oku Laboratory, Gunma University
4314 4314	Toshiba Infrastructure Systems & Solutions Corporation TOSHIBA LIGHTING & TECHNOLOGY CORPORATION	7002 8403	PlayCanvas Team Japan RIKEI CORPORATION	D302	Ikei Laboratory, Tokyo Metropolitan University / NTT Communication Science Laboratories
4314	TOSHIBA LIGHTING & TECHNOLOGY ENGINEERING CORPORATION	8207	SET	D310	Interactive Media Laboratory, Faculty of Science
4314 4314	TOSHIBA DIGITAL SOLUTIONS CORPORATION Toshiba Memory Corporation	8303 7603	Sightron Japan Inc. Somethingfun Inc.	D306	and Technology, Keio University Keio University Graduate School of Media Design
4203	TOTSU INTERNATIONAL CO., LTD.	8204	Spectee Inc.	D304	Media Design Lab, The University of Electro-communications.
5201 7410	Traffic Sim Co., Ltd.	8306	Techno Mathematical Co., Ltd. The Association for Promotion of Advanced Broadcasting Sorvices	D308	Sato Laboratory, Osaka University
7410 4511	TRITECH Incorporated Turbo Systems Co., Ltd.	7509 8217	The Association for Promotion of Advanced Broadcasting Services The Institute of Image Information and Television Engineers	D307 D311	Silverwood Co., Ltd. Stanford University(from SIGGRAPH2018)
6308	TV TOKYO Corporation	7602	The Prudential Life Insurance Company	D301	The University of Tokyo / Japan Science and Technology Agency (JST) /
5302 3413	TVU Networks UNITEX Corporation	7004 7610	TID Limited TOHOKUSHINSHA FILM CORPORATION	D303	ERATO Kawahara Universal Information Network Project The University of Tokyo, Graduate School of Information Science
4301	Velbon Corporation	7607	VILLAGE island Co., Ltd.	2300	and Technology, Kituregawa laboratory / Satoh laboratory
8313 4514	VIDEO Service Co., LTD VIDEOTRON Corp	8101	YOSHIDUMI Information, Inc.		METI BizTech*Match
7201	Visual Graphics Inc.		INTER BEE CONNECTED	D208	Hapbeat LLC.
		7304	ATTRACTOR Co., Ltd.	D201	IVR
4205	Visual Research Inc.				METI "DiaToob*Motob" Matabia
	Visual Research Inc. Vitec Imaging Distribution KK Vitec Production Solutions K.K.	7308 7306	HAROID Inc. IPTV Forum Japan	D119 D111	METI "BizTech*Match" Matching zone OFFICE ZERO Limited Liability Company
4205 4001 4201 8213	Vitec Imaging Distribution KK Vitec Production Solutions K.K. Vocas Japan	7308	HAROID Inc. IPTV Forum Japan Fuji Television Network, Inc.	D119 D111 D112	OFFICE ZERO Limited Liability Company SOOTH Inc.
4205 4001 4201	Vitec Imaging Distribution KK Vitec Production Solutions K.K.	7308	HAROID Inc. IPTV Forum Japan	D119 D111	OFFICE ZERO Limited Liability Company

### NTER BEE FORUM

#### 11.14 (Wed.)

KN-141 Keynote Speech 1

#### **Inter BEE 2018 Opening & Keynote**

#### **Opening Session**

Greeting from Organizer Japan Electronics and Information Technology Industries Association Greeting from Guests Ministry of Internal Affairs and Communications, Ministry of Economy, Trade and Industry

#### **Keynote Speech**

#### **Latest Broadcasting Policy Trends**

Toshiya Nara Deputy Director-General of the Information and Communications Bureau, Ministry of Internal Affairs and Communications



10:3 ▼ 12:2

**Contents Innovation-driven** by Media Innovation





New 4K/8K Era Starting: Two Weeks until Broadcasting

Akihiko Chigono Executive Director, Chief of Engineering, Japan Broadcasting Corporation



4K/8K Broadcasting Finally Starts





#### Message from Nine New 4K/8K Satellite Broadcasting Operators

Akihiko Chigono ector, Chief of Engineering, n Broadcasting Corporation

President/Representative Director Asahi Satellite Broadcasting Limited

Seiichi Kikuchi

nt/Hepresentative Directo BS TV TOKYO Corporatio

sentative Director BS FUJI INC.

Ryota Sasaki President/Representative Director SC Satellite Broadcasting, Inc. Yuichiro Hanawa nt/Representative Director QVC Satellite, Inc. Kinya Furuya

#### KN-142 INTER BEE CONNECTED Keynote Speech

Talking about the Future of Television from the Boundary of **Television and the Internet** 





Masayoshi Boku







NPO corporation representative, cified Nonprofit Corporation 8bitNews CEO, GARDEN Co. Ltd.

Form of Broadcasting Services and Changes in Viewing Styles in the 2020s



**Broadcasting Technologies of the Future with** a Focus on Post-2020

Kohji Mitani Director, Science&Technology Reasearch Laboratories, Japan Broadcasting Corporation



**Outlook on the Broadcasting Business Post-2020** 



Mikio Kimura
Director of Research Institute,
The Japan Commercial Broadcasters Association



TC-141 Technical Session 1

#### The Impact of AI and the Block Chain on Video Media





Kurosaka Tatsuya



Yasuji Eguchi

SP-141 Special Session 1

#### **Business Chances Seized with E-Sports**

Part 1: Demo Presentation - What Is the Business in E-Sports?



Part 2: Panel Discussion - Business Chances Seized with E-Sports



Hiroshi Fukaya



Hisayuki Hoshi YOSHIMOTO SPORTS ENTERTAINMENT CO., LTD



Shingo Otomo











Isamu Yoshi



Masaru Ejiri CEO, GamingD Co.,Ltd. / DeToNator Owner SP-142 Special Session 2

#### **Advanced Imaging University 2018**

**Human Centered Design for VR Content** 





**Empowering Storytellers with Technology: Cloud Computing, Machine Learning and** the new tools changing our industry





Netflix's Approach to Image Quality & Pipeline







SP-143 Special Session 3

SP-144 Special Session 4

The business models are changing as the technology evolves, the IABM tracks the Media landscape



Sports Production inside the Rugby World Cup, Tokyo 2020, and Global Trends in OB design





Chris Hope d Cup 2019 RWC2019



Jochem van Apeldoorr ic Broadcasting Services (C





**Deregulation of Projection Mapping Promoted by** the Ministry of Land, Infrastructure, Transport and Tourism



Hideki Nagasaki TAKENAKA.co.ltd Sym-Direct Co Ltd



f Japan ntMedia President, Ambie



Keynote speech venue equipment provided by



### 11.15 (Thu.)

KN-151 Keynote Speech 3 **Bold Predictions! Smart Braodcast in 203X** IPTV FORUM JAPAN **Keynote Speech Challenge to Smart Broadcast!** Jun Murai Chief Director of IPTV Forum / Professor, nter for the Internet & Society, Keio University Shuji Nakamura KN-152 INTER BEE CREATIVE Keynote Speech **Japan Content Power:** Shin Godzilla vs the Anime Version of GODZILLA Shinji Higuchi Shuzo John Shiota Takafumi Yuki Director, INTER BEE CREATIVE KN-153 Keynote Speech 4 **CDN Session 2018** Latest Akamai Platform Trends Takashi Ito Media Product Management Product Manager, Akamai Technolog Introduction to the Contents Delivery Network and Amazon CloudFront - Proceeding to Integrate with Video Distribution Yoshihisa Nakatani AWS Solutions Architecture Sr. Solutions Architect, Amazon Web Services Japan K.K. CDN in the New Distribution Era Kazunori Fukuda Board director, JOCDN Inc Room 201, 2F International Conference Hall TC-151 DCEXPO 2018 Keynote Speech **Telexistence Today** -Toward Virtual Teleportation Industry and Telexistence Society-Susumu Tachi MODEL H TC-152A DCEXPO SIGGRAPH Seminar "Possibility of Art as Content" TC-153A DCEXPO "SIGGRAPH2018 Computer Animation Festival Travelling Show in Tokyo" and Introduction to "SIGGRAPH Asia 2018 Tokyo" SIGGRAPH Tokyo Chapter ( EXA CORPORATION/Smart System Div Room 201, 2F International Conference Hall TC-152B DCEXPO **SXSW Awesome** 

Special Session 5 **End to End Media Workflow in the cloud** Hitoshi Anji Takaaki Kudo SP-152 Special Session 6 **Delivering monetization of live sports at scale** David Springal **Disaster Information Provision and AI Utilization Evacuation Behavior Features in an Emergency and** 

Toward NHK Journalism and the Future in the Western Japan Torrential Rain Disaster Takatoshi Hashitsume Director, Disaster and Safety Information Center, News Department
Japan Broadcasting Corporation

**Posing Problems Related to Information Utilization** 

Naova Sekiva

**Current Situation of AI Technological Development and** Possibilities in Disaster Response Osamu Sudoh

Professor, Ph.D., Graduate School of Interdisciplin ary Information Studies, The University of Tokyo

#### Panel Discussion: How Can Al Technology Be Utilized at Those Times?

Associate Professor, The Center for Integrated Disaster Information Research,
University of Tokyo/GSII

Kiyotaka Eguchi



Takatoshi Hashitsume r and Safety Information Center, News Departmer Japan Broadcasting Corporatio





Osamu Sudoh



#### **Universal Design of Broadcasting Utilizing ICT: Second Screen Subtitles Conveyed in Real-time**

Migrating from a World Where It Is Possible to Hear to a World Where It Is Not Possible to Hear

- The Things Sought from Broadcasting

KARIN MATSUMORI

New Administrative Guidelines toward the Spread of Subtitle Broadcasting and Future Challenges



Proposal/Demo: "Overview Report on Efforts for Subtitle Broadcasting Utilizing the Second Screen" Sound UD Utilization

**Effective Utilization of SoundUD** 



"Subtitle Catcher," the Broadcasting Companies Idea of Subtitle Broadcasting that Utilizes Second Screen



Masami Yokota DENTSU INC

51

### NTER BEE FORUM

#### 11.16 (Fri.)

KN-161 Keynote Speech 5

#### 5G Session 2018

**Future Prospects Opened Up by 5G:** 

The World Fusing the Strengths of Partners



World Realized by 5G

KN-162 INTER BEE IGNITION Keynote

Exciting Experiences

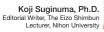
Akira Matsunaga Mobile Network Technical Development Division, Senior Director, KDDI Corporatio



5G: a platform for service delivery

Takao Okamawari









**Next multimedia entertainment X Experience design** 

- New urban entertainment that brings people together

**Keynote** 

Marc-André Baril Director, Tokyo Office, Asia Business Development, Moment Factory



**Panel Discussion** 





Tetsu Yoshikawa



Reiko Kunieda Content Business Design Department, DENTSU INC.



Masanori Shihamoto ior Execution Specialist, Department Manager, Brand Engagement Center, DENTSU TEC INC.



Mariko Nishimura CEO, HEART CATCH Inc.



#### KN-163 Keynote Speech 6 **IP Live Transmission Standards and Introduction Examples**

**Future Broadcasting System Considered by NHK** 

Atsushi Haruguchi
Director of Engineering Administration Department, JAPAN BROADCASTING CORPORATION



From IP Live Production Interconnection Verification

Shoji Kitajima
Broadcasting Engineering Department, JAPAN BROADCASTING CORPORATION



▼ 13:20

13:40 ▼ 14:40

Introduction Case: "Introducing an Overview of the IP Selection Concept and Introduced System"

**SKY Perfect!** 4K Broadcasting System



**Update of Line Center with** an IP Base





Local Stations? -- Summary of Mie TV

Engineering Department ion Broadcasting Co., Ltd

**News/Production Studio** Sub Renewal--Toshiyuki Iwamuro

Reasons for the Adoption of

**IP Transmission by QVC** 



Three real world examples of how broadcasters are using Microsoft AI to power digital transformation in Media

> Tony Emerson Managing Director, Worldwide Media & Entertainment, Microsoft Corporation



Daiyu Hatakeyama Principal Software Development Engineer Microsoft Japan, Co, Ltd



SP-162 Special Session 9



Patricio Cummins Vice President Sales Asia Pacific and Japan, Ooyala Inc



SP-163 Special Session 10

#### **Enhance your creativity with Atomos + ProRes RAW**









Special Session 11

#### **Recommendations from Creative Sites Utilizing Diverse Media Characteristics**

Ayumu Goto



KOICHI FURUYA





Satellite Young

Seiji Kunishige Joshibi University of Art and Design



Room 201, 2F International Conference Hall

**Technical Session 3** 

### Expressing the Glare of the Sun: HDR Content Production Basics and Application

"Operation Guidelines for Program Production Using ARIB TR-B43 High Dynamic Range Video"







**Technical Session 4** 

#### Latest Information and Actual Operation from the Basics of Audio Over IP Technolog

**Current Situation and Challenges with** 

SHV 8K/4K HDR Program Production

Tatsuya Fujii SENIOR MANAGER, Japan Broadcasting Corporation



Gregor Erlitz Director of APAC Sales, LAWO AG







Technical Session 5

#### **Voices from Advanced AoIP Vector and SR Sites: Superiority of Audio Networks Seen by Mixers**

Harumi Kato





Tomoko Ishiwata Technical Session 6

### **International Standardization Trends in Images and Sounds**

The Movement of International Standardization of Images and Multimedia Kohtaro Asai



The International Standardization of Audio Encoding: History, Application, and Movement

Akihiko Sugiyama



Koichi Hanzawa

Tomohiro Hase



### **Conference Sponsor Session**

CS2-141 Fight against Fake News!

CS2-151 Fight against Fake News!

#### ▶ Venue: Room 104, 1F International Conference Hall

	10:00 ▼ 12:00	Room 104	~ How fake news and vicious rumors are created and how we discover and protect from those.  Kenjiro Murakami CEO, Spectee Inc.
<b>14</b> (Wed.)	15:00 ▼ 17:00	Room 103	CS1-143 Key technologies for Broadcasting IP transformation / Network Control by AIMS NMOS  Koichi Hyodo  SE Manager, Arista Networks Japan Limited.
	15:00 ▼ 16:00	Room 104	CS2-143 How do you create VR contents and rich media advertisement on the Web?  An overview on the Next Generation Web contents by PlayCanvas!  Ryotaro Tsuda Syuji Munakata Kana Ichii



10:00 ▼ 12:00	Room 104	~ How fake news and vicious rumors are created and how we discover and protect from those.  Kenjiro Murakami CEO, Spectee Inc.	
		CS2-153 Achieving Low Latency, Reliable, Video Streaming Over Public Networks	6
15:00	Room	Peter Maag EVP & Chief Marketing Officer, Halvision Systems Inc.	
17:00	104	Panel Discussion Panellists Moderator	

Miyuki Fukuzawa
Explorer
EVP & Chief Marketing Officer,
Haivision Systems Inc. Rong Chen CS1-153 Verify! Power of Dell Remote Workstation to Improve Efficiency of Producing a Movie "KINGDOM" Field Verification of Producing a Movie "KINGDOM" Power of **Dell Remote Workstation** Seiji Saito Director/DI Producer/Color Grader Picture Element Inc

Power of Dell Products on FLAME What is "IT" Required at the Field of Image Production? Hiroyuki Toba FLAME Evangelist (Visual Graphics Inc.) Seiji Saito Yusuke Baba presentative Director Picture Element Inc. roducer/Color Grader Picture Element Inc.



CS1-163

15 (Thu.





Hiroyuki Toba

CS1-162 MQA LiveStreaming and MQA-CD Production



FLAME Evangelist Tells the Truth!





### **CO-LOCATED EVENT**

#### The 55th JBA Symposium of Broadcast Technology



- Venue: 3F. International Conference Hall, Makuhari Messe
- Sponsored by: The Japan Commercial Broadcasters Association

		Room 301	Room 302	Room 303		
14 (Wed.)		10:30 ▶ 16:45	10:30 ▶ 17:10	10:30 ▶ 17:35		
		Production Engineering	Information Technology / Network	Sound Broadcasting / Audio		
ĺ			10:30 ▶12:35	10:30 ▶ 12:35		
	15	_	Pictorial Image Technology	Transmission		
(Thu.)		14:00 ▶16:30 Special Program				
		Broadca	sting under attack!? Facing up	to cyberattacks -		
16	10:30 ▶ 16:45	10:30 ▶16:45	10:30 ▶ 15:05			
	(Fri.)	Production Engineering	Datacasting / Digital Service	Broadcast Engineering		

#### ZENEIKYO Forum 2018 in Makuhari



- ▶ Date: Thursday, November 15
- ▶ Venue: Tokyo Bay Makuhari Hall, APA Hotel & Resort
- ▶ Organizer: National Board of Regional Visual Industry Association

### INTER BEE \*\*PAVILION

#### IP equipment connection demo

▶ Venue: Exhibition Hall 3 (3112)

#### **SMPTE ST2110 Inter-operability**

Arista Networks Japan Limited., Cisco Systems, FAIRWAY CORPORATION, FOR-A COMPANY LIMITED, Grass Valley K.K., IKEGAMI TSUSHINKI CO., LTD., Japan Material Co., Ltd., Leader Electronics Corporation, Matrox Graphics Inc., MediaLinks LSI Lab Co., Ltd., NEC Corporation, OTARITEC Corporation, PHOTRON LIMITED, RIEDEL Communications Japan, SANSHIN ELECTRONICS CO., LTD., Seiko Solutions Inc., Sony Business Solutions Corporation, TASCAM/TEAC CORPORATION, Tektronix Japan. Toshiba Infrastructure Systems & Solutions Corporation

#### **ARIB STD B73 Inter-operability**

ALAXALA Networks Corporation, FOR-A COMPANY LIMITED, FUYOH VIDEO INDUSTRY CO., LTD. MEDIA LINKS, INC., Mellanox Technologies Japan KK, NEC Corporation

#### **SMPTE ST2022-6 Inter-operability**

ALAXALA Networks Corporation, FOR-A COMPANY LIMITED, FUYOH VIDEO INDUSTRY CO., LTD, MEDIA LINKS, INC., Mellanox Technologies Japan KK, NEC Corporation

#### Image quality comparison (JPEG-XS·TICO·LLVC·J2K)

ASK, FOR-A COMPANY LIMITED, INTOPIX, MEDIA LINKS, INC., Sony Business Solutions Corporation

#### IP-related companies exhibition

▶ Venue: Exhibition Hall 3 (3111)

Ikegami Tsushinki Co., Ltd., Sanshin Electronics Co., Ltd., Matrox / Japan Material Co., Ltd., Ltd., TASCAM/TEAC Corporation, Toshiba Infrastructure Systems & Solutions Corporation, Fairway Corporation, New Media Co., Ltd.

#### Relay Seminars

▶ Venue: Ex	hibition Hall 3 (3214)
11/14 (Wed.)	Lecture theme / Exhibitor name
12:00 ▶ 12:20	Functions needed for I/O to support IP Japan Material Co., Ltd.
12:30 ▶12:50	Introduction of 25GbE SMPTE ST2110 and ST2059 IP core for M3L's 12G-SDI which achieves top broadcasting quality Media Links LSI Lab (M3L)
13:00 ▶13:20	Introduction Results and Development Trend of IP Live Production System SONY Corporation
13:30 ▶13:50	Video transmission revolution by LiveU Systems - Continuously evolving mobile video distribution Sanshin Electronics Co., Ltd.
14:00 ▶14:20	SDI/IP system coexistence efforts FOR-A Co. Ltd.
14:30 ▶ 14:50	Introducing Mellanox Video over IP Solution Supporting Next Generation 4K and 8K  Mellanox Technologies Japan KK
15:00 ▶ 15:20	Introduction of TASCAM Dante-supporting products and installation applications  TASCAM/TEAC Corporation
15:30 ▶ 15:50	Media Switching Network (next-generation video transmission SDN Media Links Inc.
16:00 ▶ 16:20	High quality live encoder that maximizes advertising revenue Capella Systems
16:30 ▶ 16:50	Video IP transmission and Leader Electronics' activities Leader Electronics Corporation
11/15 (Thu.)	Lecture theme / Exhibitor name
11:00 > 11:20	Can live programs be made with IP systems?  Overview of Ikegami Tsushinki's activities and exhibition at Inter BEE
11:30 ▶ 11:50	Introduction Results and Development Trend of IP Live Production System SONY Corporation
12:00 ▶ 12:20	100km per hour IP transmission and 4K transmission realized by LTE Fairway Corporation
12:30 ▶ 12:50	Introduction of 25GbE SMPTE ST2110 and ST2059 IP core for M3L's 12G-SDI which achieves top broadcasting quality Media Links LSI Lab (M3L)
13:00 ▶ 13:20	"R2TP/F2TP " Realtime Transmission Technology on the Open Internet Caton Technology Japan Co., Ltd/InnoQos Corporation
13:30 ▶ 13:50	4K IP live transmission (TICO/J2K/WDM) Media Links Inc.
14:00 ▶14:20	IP-ization of studio facilities - Focusing on masters
14:30 ▶14:50	Introducing Mellanox Video over IP Solution Supporting Next Generation 4K and 8K  Mellanox Technologies Japan KK
15:00 ▶ 15:20	SDI/IP system coexistence efforts FOR-A Co. Ltd.
15:30 ▶ 15:50	SMPTE standardization trends relating to IP-ization of broadcasting facilities SMPTE
16:00 ▶ 16:20	AK IP production: Network control/status visualization by SDN and integrated surveillance/control by broadcast control - Introduction of embrionix/BFE/Mellanox proposals and installation case studies
16:30 ▶ 16:50	Video IP transmission technology and PHOTRON's activities PHOTRON Ltd.
11/16 (Fri.)	Lecture theme / Exhibitor name
11:00 ▶ 11:20	High quality live encoder that maximizes advertising revenue Capella Systems
11:30 ▶ 11:50	Video IP transmission technology and PHOTRON's activities PHOTRON Ltd.
12:00 ▶ 12:20	Functions needed for I/O to support IP Japan Material Co., Ltd.
12:30 ▶ 12:50	100km per hour IP transmission and 4K transmission realized by LTE Fairway Corporation

11/16 (Fri.)	Lecture theme / Exhibitor name	
11:00 ▶ 11:20	High quality live encoder that maximizes advertising revenue Capella Systems	
11:30 ▶ 11:50	Video IP transmission technology and PHOTRON's activities PHOTRON Ltd.	
12:00 ▶ 12:20	Functions needed for I/O to support IP Japan Material Co., Ltd.	
12:30 ▶ 12:50	100km per hour IP transmission and 4K transmission realized by LTE Fairway Corporation	
13:00 ▶13:20	4K IP production: Network control/status visualization by SDN and integrated surveillance/control by broadcast control - Introduction of embrionix/BFE/Mellanox proposals and installation case studies	
13:30 ▶13:50	SMPTE standardization trends relating to IP-ization of broadcasting facilities SMPTE	
14:00 ▶ 14:20	"R2TP/F2TP " Realtime Transmission Technology on the Open Internet Caton Technology Japan Co., Ltd/InnoQos Corporation	
14:30 ▶14:50	IP-ization of studio facilities - Focusing on masters	
15:00 ▶ 15:20	Video transmission revolution by LiveU Systems - Continuously evolving mobile video distribution Sanshin Electronics Co., Ltd.	
15:30 ▶ 15:50	Introduction of TASCAM Dante-supporting products and installation applications  TASCAM/TEAC Corporation	

# INTER BEE EXPERIENCE

# X-Speaker 🖺 SR Speakers Demo & Presentation

- ► Venue: Event Hall, Makuhari Messe
- ▶ Supported by Stage Sound Association of Japan, Japan Stage Sound Business Cooperative
- ► Media Partners: Sound Recording PROSOUND Stage Sound Journal SOUND

#### ► Video equipment supported by ARK Ventures

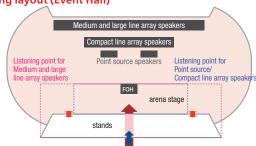
### **Presentation Schedule**

Nov. 14: 10:00am-6:30pm Nov. 15: 10:00am-6:00pm Nov. 16: 10:00am-4:40pm

	<b>11.14</b> (Wed.)		<b>11.15</b> (Thu.)	<b>11.16</b> (Fri.)	
10:30	YAMAHA Yamaha Music Japan Co.,Ltd.	10:30	Yamaha Music Japan Co.,Ltd.	10:30	CODA  O DA  hibino intersound corporation
11:20	TOA Corporation	11:10	Electro-Voice  Bosch Security Systems Ltd.	11:10 ▼	RCF Onkyo Tokki Ltd
12:00	<b>dB</b> Technologies	11:50 ▼	Bestec Audio Inc.	11:50 ▼	ADAMSON REWIRE INC.
12:40	RAMSA Auditorium Series Panasonic System Solutions Japan Co., Ltd.	12:30 <b>V</b>	Onkyo Tokki Ltd	12:30 ▼	Martin Audio Japan Inc.
13:20	Bose Corporation	13:10	LARMAN hibino corporation	13:10 ▼	d&b audiotechnik ••••••••••••••••••••••••••••••••••••
14:20 ▼	CODA  O D A A U D D D O  hibino intersound corporation	14:20 ▼	YAMAHA  Yamaha Music Japan Co.,Ltd.	13:50 ▼	Yamaha Music Japan Co.,Ltd.
15:00 ▼	RCF Onkyo Tokki Ltd	15:10 ▼	TOA Corporation	14:30 ▼	Electro-Voice  Bosch Security Systems Ltd.
15:40	ADAMSON REWIRE INC.	15:50 <b>V</b>	RAMSA Auditorium Series Panasonic System Solutions Japan Co., Ltd.	15:10 ▼	Bestec Audio Inc.
16:20	Martin Audio Japan Inc.	16:30 <b>V</b>	<b>dB</b> Technologies	15:50 ▼	Onkyo Tokki Ltd
17:00 <b>▼</b>	d&b audiotechnik ••••••••••••••••••••••••••••••••••••	17:10 ▼	ボーズ合同会社	16:30 ▼	UPL DETERMINE DETERMINE DETERMINE DETERMINE
Point	t source speakers Compa	act line	array speakers Medium	and larg	e line array speakers

**Exhibiting layout (Event Hall)** 

Equipment Assistance: Martin Audio Japan Inc.





# 

Headphone Trial Listening Experience Exhibition Microphone Trial Listening Experience Exhibition

► Venue: Exhibition Hall 1, Makuhari Messe

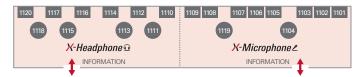
#### X-Microphone Product Brand / Participant Company

	•	
1101	UETAX Corporation	UETAX
1102	Roland Corporation	ASTON MICROPHONES
1103	Miyaji Music.M.I.D.	
1104	Sennheiser Japan K.K.	<b>SENNHEISER</b>
1104		» NEUMANN.BERLIN
1105	Audio-Technica Corporation	( audio-technica
1106	Tech Trust Japan Co., LTD.	SCHOEPS Mikrofone
1107	Sony Video & Sound Products Inc.	SONY
1108	Audiobrains Ltd.	your beyerdynamic
1109	OTARITEC Corporation	POSITE THE POSITION
1119	MASS-Kobo	SOUND PRODUCTS MASS-Kobo

X-Headphone • Product Brand / Participant Company					
1110	Sennheiser Japan K.K.	<b>SENNHEISER</b>			
1111	ULTRASONE	<b>ULTRASONE</b>			
1112	TEAC CORPORATION	your beyerdynamic			
1113	Yamaha Music Japan Co., Ltd.	<b>*YAMAHA</b>			
1114	STUDIO EQUIPMENT CORPORATION	SOUNDWARRIOR			
1115	STAX Limited	STAX.			
1116	Audio-Technica Corporation	(i) audio-technica			
1117	hibino corporationD	<b>AKG</b>			
1118	SHURE JAPAN LIMITED	SHURE			
1120	REWIRE INC.	PHONON			

Equipment Assistance: TEAC CORPORATION / Yamaha Music Japan Co.,Ltd.

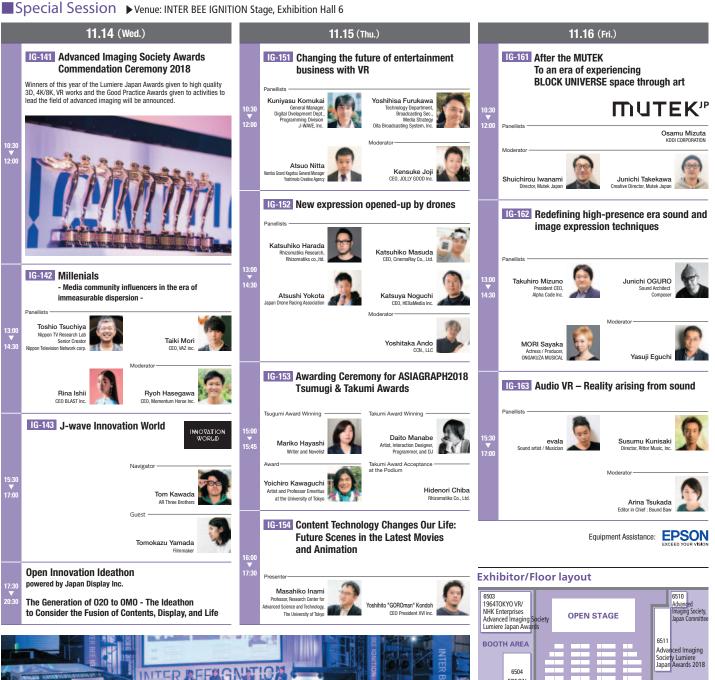
#### **Exhibiting layout (Exhibition Hall 1)**



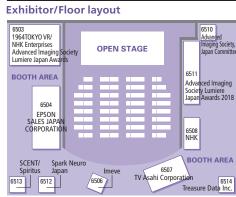


# INTER BEE IGNITION









### INTER BEE CONVECTED

■ Special Session ► Venue: INTER BEE CONNECTED Stage, Exhibition Hall 7

#### 11.14 (Wed.)

Fast facts at the forefront of the heated market of audience measurement, and audience analysis. What about the business expansion of the lime light audience data? A very important day for editors, creators, and sales personnel

Picture of multi-screen period animation audiences - Dentsu and latest analysis by video research -











Director,
Media Business Innovation Department,
Dentsu Media Innovation Lab,
DENTSU INC.



Keizo Yoshikawa

Executive Producer, DWANGO Co., Ltd.

Akira Miwa





Talking about the Future of Television from the Boundary of Television and the Internet







Jun Hori NPO corporation representative, fied Nonprofit Corporation 8bitNews CEO, GARDEN Co. Ltd.



Panellists :

#### At the front line of evolving TV viewing log data







co-director, big data, INTERNET OF TEREVISION Center,

Shunichiro Matsuse





#### Hear directly from students about their media lifestyles









Students of SANNO University



#### 11.15 (Thu.)

The Streaming War Period. What is the behind the scenes of the service everyone is wondering about? What is the movement of the common PT systematization in the industry? What about the debate of the simultaneous release? Grasping all the hot topics of streaming and its surroundings all at once

#### Don't stop radio!

- Constantly evolving activities of radiko



Masayuki Kakehara Technical Adviser Media Adviser / Radio NIKKEI



Yutaka Sakaya Manager of Business Promotion Office radiko Co.,Ltd



Yoichi Kaneko Department of Radio Technology / deputy general manager CBC RADIO CO.,LTD.



#### **SVOD** services started by TV stations - where are they heading?



Mikio Tsukamoto

Wise Media, Inc Standing Corporate Auditor at Fuller, Inc



Kazuo Takaya Director, Programming Board Member, HJ Holdings, Inc



Kazuo Nomura ASSISTANT MANAGER
CONTENT PRODUCTION OFFICE CONTENT REATION
AND DISTRIBUTION GENERAL BUSINESS DEPARTMENT
Fuji Television Network,inc.



#### CN-153

# Potential of sports media distribution in 2018

- Case studies of various developed initiatives -

Toru Sano PRODUCER, SENIOR DIRECTOR SPORTS DIVISION Nippon Television Network Corporation



Hiroshi Hatta Executive Director GOLF Net TV Inc.

Sota Suzawa



#### Will short videos be the next battleground for TV stations?





Hiroo HARA ICT STRATEGY Nippon Television Network Corporation





Hideaki Hashimoto Manager, Worldwide Production and Business Development, Fuji Television Network, Inc.



#### CN-155 After Hours! Future of TV through users' eyes (provisional)

Toshio Kuramata



Osamu Sakai



Kiyoyasu Ando President, HAROID Inc



Masataka Yoshikawa INSTITUTE OF MEDIA ENVIRONMENT, Hakuhodo DY media partners Inc.



Daisaku Kawase General Manager Program Eevelopment Production Headquarters NHK ENTERPRISES INC.



#### 11.16 (Fri.)

Contents of TV companies with its multiple types and roles. A day with lessons of detailed practical examples and methodology to maximize its value and expand it into business

#### Dynamic broadcasting stations' owned media

Osamu Sakai

Akihiro Nishikawa

Programming Division PR Department YOMIURI TELECASTING CORPORATION

Akinori Honda TV TOKYO Communications Corporation

Keitaro Hagiwara Director, Business Devlopment dept. Media Business div. TBS Radio, inc.

#### Status of overseas expansion of TV programs

Makito Sugiyama Media Business Division Global Business Department, Chief Broadcasting System Television Inc



Mikiko Nishiyama Associate Managing Director, International Business Development Nippon Television Network Corp.



Takayuki Hayakawa



School of Sociology, Professor Bukkyo University

Goro Oba

#### CN-163

#### Local contents X Sustainable local creativity

Kunio Yoshikawa Media Research & Studies Division, Senior Manager, NHK Broadcasting Culture Research Institute Japan Broadcasting Corporation



Kazuya Goto



Koji Ohnishi Executive Vice President, NANKAI BROADCASTING CO., LTD.



Ueta Masayuki Managing Director, Kochi sunsun TV

#### What are the possibilities of TV in 2030? - Role of Society 5.0 era media -

Masahiro Sogabe Graduate School of Law, Professor HOKKAIDO Cultural Broadcasting Co., Ltd

News Department SENIOR PRODUCER, JAPAN BROADCASTING CORPORATION

Hirohisa Hanawa



Managing Director TST Tonami Satellite unications Television

Keiko Murakami Principal Researche Media Research & Studies Division Icasting Culture Research Institute



#### ■Exhibitors Presentations

▶ Venue: INTER BEE CONNECTED Presentation Corner, Exhibition Hall 7

#### 11.14 (Wed.) Workflow Improved by Hybrid Cloud+On-premises! Introduction of Automatic Recording and Multiple Distribution Solution for News Materials Top Creation Co.,Ltd HAROID xAd: The logs from TV and

Web devices open next experience of audiences

HAROID Inc.

HAROID Inc.

IPTV Forum Japan

Top Creation Co.,Ltd

HAROID Inc.

Challenge to Millisecond!

Realizing Amazing Live Streaming of "Less than a Second" Delay

Limelight Networks Japan K.K

#### 11.15 (Thu.)

Leading Edge Streaming Technology for Hybridcast TVs And Mobile Devices Application of Low Latency Single Format CMAF, Seamless System Design from Studio to SSAI Server And Latest Standards of IPTV Forum Japan IPTV Forum Japan

A Solution "HAROID xAd" Utilizing Logs of TV/Web Cross Devices with Personally Identifiable Information

Video news site of up-to-the-second service and information

- VNN news channel -

Challenge to Millisecond!

Realizing Amazing Live Streaming of "Less than a Second" Delay

Limelight Networks Japan K.K

#### 11.16 (Fri.)

Formulation of technical standards for new broadcasting service

by Hybrid casting.

Workflow Improved by Hybrid Cloud+On-premises!

Introduction of Automatic Recording and Multiple Distribution Solution for News Materials

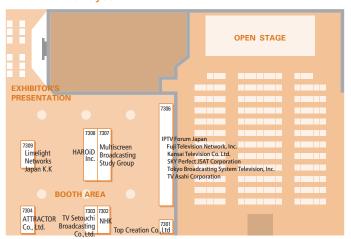
Pursue the goal of next TV. Live Entertainment "Live Channel"

Challenge to Millisecond!

Realizing Amazing Live Streaming of "Less than a Second" Delay

Limelight Networks Japan K.K

#### **Exhibitor/Floor layout**



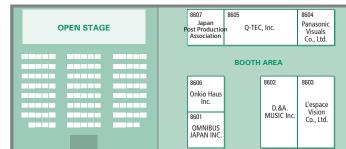


# INTER BEE CREATIVE

■ Keynote ▶ Venue: Convention Hall A, 2F International Conference Hall



#### **Exhibitor/Floor layout**



■ Creative Session ▶ Venue: INTER BEE CREATIVE Open Stage, Exhibition Hall 8







### INTER BEE CREATIVE MEET-UP

#### Exhibitor/Floor layout



### A Festival for Creators! Let's Meet-Up, Let's Start Creating

#### Meet-up / Work Shop Area

We have developed a place for networking between those in attendance, bringing together people who want to talk with others, get to know others, and start something together.

#### ■ MEET-UP original plan "Video Lab" (VOOK LABO)

"Video Lab" was established within the MEET-UP as a place to research the equipment, products and software being launched at Inter BEE. There are so many items on show at Inter BEE that many people have been at a loss about what to look at and how to view different items. Also, since there are exhibits for each manufacturer and piece of equipment, sometimes it is not clear where and how to use the equipment on show. VOOK LABO launched "Video Lab" to produce a place for research of new equipment appearing at Inter BEE from the viewpoint of producers, regardless of the manufacturer or equipment in question.

#### Nov. 14 VR Day VR (360° Video)

Inspected VR equipment in collaboration with Toru Watanabe.

13:00 ▶ 14:00 VR camera trends overseas & workflow with the talked-about "Insta 360 2" and "ObsidianS" VR cameras

14:15 ▶ 15:00 45-minute round-up of the most talked-about VR equipment & peripherals at InterBEE

16:00 ▶ 17:00 VR productions to watch in 2018: - Learn from watching many VR productions -

#### Nov. 15 PostProduction Day PostProduction & Premiere Pro User Group

Collaboration with Adobe Premiere Pro user group.

Collaboration seminar dedicated to software and editing equipment was held.

11:00 ▶ 13:00 Adobe User Group Meeting

13:30 ▶ 14:30 How to make boutique post-production

14:45 ▶ 15:25 Post-production workflow

15:30 ▶ 15:50 [Post-production and Cinema4D] What has changed with R20?

16:00 ▶ 17:00 Boris FX plug-in update demonstration

#### Nov. 16 Videographer Day VIDEOGRAPHER & Next Filmmaker's Summit

Various equipment was inspected, focusing on systems ranging from cameras to lenses and tripods, etc.

13:00 ▶ 14:00 Mirrorless cameras (DSLR)

14:30 ▶ 15:30 Cinema cameras

15:45 ▶ 16:30 Vook in Inter BEE



#### Hands On/Content Experience Area

An experience and exhibition corner featuring video cameras, audio recorders, VR hang glider, VR motorcycle, etc.

#### [Hands-on exhibitors]

Audio Visual Communications Ltd. Scenes Co., Ltd.

TASCAM/TEAC Corporation
Fujifilm Holdings Corporation

[Content experience area]

VR hang glider (valeur Inc.), VR motorcycle (Prototype Inc.)



#### Fireside Chat - INTER BEE CREATIVE

Fireside Chat was held as an opportunity for an exchange with INTER BEE CREATIVE speakers. This made it possible to interact with speakers close-up, including with offstage talks and Q&As that were not part of their main addresses.

#### Nov. 14

- ♦ MEDIA x CREATIVE: Future of new entertainment opened up by cutting-edge media
- ♦ Movie directors' aims: A talk with the director of "Kalanchoe no Hana"

#### Nov. 15

- ◆DigiCon6 ASIA 20th event commemorative session
- ◆"How to train video personnel in the 21st century
- ◆Business trip MOTION LOUNGE Part 1, 2
- Future of image expression from micro-drones

#### Nov. 16

- New VR footage that TV industry members should know about
- ◆Advanced video technology challenge, Part 3: From the HDR video production scene directly before start of HDR broadcasting! (HLG)

#### Open Lounge - Sandy beach appears behind greenery!

The Open Lounge could be used for various purposes such as dining, rest and appointments, and in addition to light meals and coffee, etc., the Inter BEE exclusive craft beer "INTER BEER" was also on offer. Plus, on the 16th there was a public live broadcast and recording of "Quickly learn about Inter BEE 2018 just by listening! PRONEWS BEACH RADIO".



MEET-UP special cooperation (alphabetical order)

DVJ Express "HOT SHOT", Event Marketing (MICE Laboratory, Inc.), Hana to Midorisha, Kamakura-beer brew Co., National Land Afforestation Promotion Organization (Forest Supporters), PRONEWS, stand up A guy's, Inc., TACHIHI BEACH, UCM Co., Ltd./Union Alpha, VOOK (adoir Inc.)

### INTER BEE RUKE-BENTO Grand prix

► Venue: Exhibition Hall 5 Cooperation: Location Japan / Locanavi!

# Location Bento Grand Prix - a great success this year as well!

Twelve stores participated in the Location Bento Grand Prix held in Exhibition Hall 5, making it a great success this year as well. Many location bento fans came to the venue from the first day, when each store started lining up its boxed lunches, and stores were sold out after the peak hours at lunchtime. The Location Bento Grand Prix is another firm fixture at Inter BEE. This year too it entertained a number of attendees across three days.

[Popularity contest results/Participating stores]

◆Grand Prix: SOMY'S DELI Lunchbox Kitchen ◆Silver: Dolphin ◆3rd place: Ginza WORLD DINER Other participating stores: Asian Shokudo Altoto, GALETTE STAND TOKYO, Kitchen Brillante, Kitchen Himawari, Loce-ben Hungry, Shiki, Shiokoji Bento Kamoshido, SUNDY, yokohama uotoki



# Result: Publication and Promotion

### ■ Publicity activities (Actual distribution of press releases)

- \* Notification of start of exhibitor recruiting (3/1)
- \*Notification of start of pre-admission registration (9/26)
- \*Announcement of the outline of INTER BEE EXPERIENCE (10/4)
- \*Announcement of the outline of INTER BEE CONNECTED (10/12)
- \*Announcement of the outline of INTER BEE IP PAVILION (10/25)
- \*Announcement of the outline of INTER BEE IGNITION (10/30)
- \*Announcement of the outline of INTER BEE CREATIVE (11/8)
- \*Announcement of the opening (11/13)
- \*Set up press room (11/14-16)
- \*Reported completion (11/16)

■ N	ewspapers and Magazines Articles in Japan
B-n	naga
Bro	padcasting Engineering
Car	mera Times
Dei	mpa Shimbun
Dei	mpa Times
Eiz	o Shimbun
EVI	ENT MARKETING
FDI	l (Full Digital Innovation)
FIL	M and Digital TIMES
НО	SO JOURNAL
Kad	den Ryutsu Shinbun
Kyc	odo News
	KAHOKU SHIMPO PUBLISHING
	The To-o Nippo Press
	Yamagata Shinbun

**IWATE NIPPO** 

CHIBA NIPPO

Osaka Nichinichi Shinbun

Nihonkai Shinbun

Nara newspaper

The Ise Shimbun

The Yamaguchi Shinbun

THE SHIKOKU SHIMBUN

Saga Shimbun

Kumamoto nichinichi Shimbun

Miyazaki Nichinichi Shimbun

etc.

Mac Fan

Net hanbai

**NEW MEDIA** 

NIKKAN KOGYO SHIMBUN

Nikkei Sangyo Shimbun

**PRONEWS** 

SENDENKAIGI

Sound & Recording Magazine

SOUND DESIGNER

Stage Sound Jounal

The Japan Exhibition News

The Science News

VIDEO JOURnAL

Video Tsushin

Video SALON

etc.

#### ■ News Media Representative

433 Record-high people (12 from overseas)

#### ■ Number of articles in the printed media

	Inter BEE 2018
Before the show	135
During the show	25
After the show	211
Total	371

%as of 2019 1 30

#### **■ WEB News**

@ Press
47NEWS
4Gamer.net
ASCII.jp
AV Watch
AXIS web Magazine
BIGLOBE NEWS
CAPA CAMERA WEB
CGWORLD.jp
DEJIKAME Watch
DroneTimes
EVENT MARKETING
Eventr.jp
EXHIBITION & MICE
feedclass News
FRESH LIVE
GIZMODO
IGN JAPAN
INTERNET Watch
IT media
Livedoor NEWS
Mac Fan
moovoo (The Asahi Shimbun)
NEWS SHOOTER
Newsdoga
NIKKEI Shinbun (Online)
NIKONIKO NEWS
PANORA VIRTUAL REALITY JAPAN
PC Watch
PHILE WEB
PR TIMES
PRONEWS
SankeiBiz
Screens
Smart NEWS
Social VR Info
Sports Video Group NEWS
Stereo Sound ONLINE
THE BRIDGE
TV Technology
ValuePress!
Video SALON
Vook
VR Digest Plus
VRonWEBMEDIA
VRTIMES
Walker Plus
YAHOO! JAPAN NEWS
etc.

#### ■ On-air media

#### Domestic

Date	Broadcast station	Program
Nov.14	NHK	NHK NEWS
Nov.14	TV TOKYO / BS TV TOKYO	World Business Satellite
Nov.14	Fuji Television Network	PRIME NEWS
Nov.14	TV TOKYO / BS TV TOKYO	NIKKEI Plus10
Nov.14	Chiba TV	NEWS Chiba600 / NEWS Chiba930
Nov.14	Abema-TV	Abema News
Nov.14	Radio Nippon	Smart News (Keiko Iwase)
Nov.16	TV TOKYO / BS TV TOKYO	World Business Satellite
Nov.16	NHK WORLD-JAPAN	NEWSLINE/ NEWSROOM TOKYO
Nov.17	Fuji Television Network	New-Weekly FujiTV Comments

#### **Overseas**

Date	Broadcast station	Program
Nov.16	NHK WORLD/jitv	NEWSLINE
Nov.16	NHK WORLD/jitv	NEWSROOM TOKYO

### ■ Inter BEE Official Mail Magazine

Approx. 103,000

#### ■ Inter BEE Official Website

Page views:

Number of articles posted before the show

**77** 

Number of video clips posted during the show (Inter BEE TV)

#### ■ Official Facebook

Number of Likes received post conference:

4,859 (an increase of 108% likes from the previous year)

Number of page transfers from the Facebook page to the Official Website:

8,682

#### **■** Official Twitter

Number of Twitter Followers:

1,519 (an increase of 133% from the previous year)

#### ■ Official Instagram

Number of Instagram Followers:

462 (an increase of 375% from the September, 2018)





#### ■ List of publication

#### Domestic

Broadcast Engineering	MOTION PICTURE AND TELEVISION ENGINEERING
CG WORLD+digital video	NEW MEDIA
Dempa Shimbun	PRN Magazine
Dempa Times	PROSOUND
Eizo Shimbun	Sound & Recording Magazine
FDI (Full Digital Innovation)	SOUND DESIGNER
FORN	Stage&Sound Jounal
HOSO JOURNAL	The Japan Commercial Broadcasters
HOT SHOT	VIDEO JOURNAL
LOCATION JAPAN	Video SALON

#### **Overseas**

APB-Asia Pacific Broadcasting (Asia) NAB DAILY NEWS (USA) IBC DAILY NEWS (UK) etnews (Korea IT NEWS)

#### ■ Media partners

Related industry journals and magazines helped support Inter BEE as media partners, graciously publishing many articles on the exhibitors.































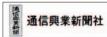


















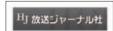






















# Result: Visitor Profile

### ■Breakdown of registered visitor number -

	11.14 (Wed.)	11.15 (Thu.)	11.16 (Fri.)	TOTAL
Domestic	13,999	12,892	13,177	40,068
Overseas	526	137	108	771
TOTAL	14,525	13,029	13,285	40,839

\Record-high/

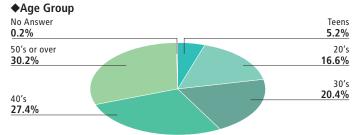
No. of visitor: 40,839 people

### ■Breakdown of registered visitors -

Area	Number of countries & region / Number of visitors	Breakdown of visitors by country & region
Domestic	1 country / 40,068	Japan 40,068
Asia	11 countries & regions / 647	Korea 310 / China 125 / Taiwan 90 / Thailand 32 / Indonesia 29 / Hong Kong 28 / Singapore 20 / Philippines 6 / Malaysia 3 / Vietnam 2 / India 2
North, Central and South America	2 countries / 54	U.S.A. 45 / Canada 9
Oceania	2 countries / 10	Australia 7 / New Zealand 3
Middle East / Africa	1 countries / 1	South Africa 1
Europe	11 countries / 25	Germany 7 / U.K. 5 / France 4 / Italy 2 / Spain 1 / Denmark 1 / Belgium 1 / Switzerland 1 / Czech 1 / Austria 1 / Latvia 1
Unknown		34
	28 countries & regions	40,839



### ■Visitor demography



#### ◆Job title

No Answer <b>0.2%</b>	,	Business manager 10.1%
General		Department manager and above 14.6%
62.4%		Sectional manager 12.7%

#### **◆**Type of occupation

Management 12.3%	No Answer <b>0.2</b> %
Production 12.1%	Technical
Other 28.2%	47.2%

### **♦**Objective

Other		0.2%
6.3% General interest		Purchasing <b>6.6</b> %
14.8%		Technical interest 72.1%

#### **◆**Type of Business

Equipment Manufacture	12.0%	Telecommunications Carrier	3.3%
Other User	9.4%	Related Internet Business	3.3%
Commercial TV Broadcaster	9.0%	Related Staging, Art and Lighting	2.7%
Other Guest	8.7%	Related CATV	2.1%
Student	7.8%	Government Office, Organization	2.0%
Post Production	6.7%	Facilities and Stores	1.5%
Film and Video Production Company	5.9%	Content Delivery Network	1.3%
Trading Company	5.7%	Ad Agency	1.3%
Related Content Creation	4.0%	Video Software Production Company	0.7%
Production	3.9%	Radio Station	0.7%
Related PA Equipment	3.9%	Recording Compan	0.5%
Public Broadcast Station	3.4%	No Ansuer	0.2%

#### ◆Interest (Multiple answers accepted)

▼Interest (Multiple answers accepted)				
Video Equipment	53.4%	Microphone	9.8%	
Audio Equipment	31.6%	VTRs, Memory Cards, Optical Disks	8.2%	
Camera	25.2%	Output System	7.9%	
Editing and Production Equipment	16.9%	Transmission Systems	8.5%	
VR, AR, 3D	18.1%	Multimedia System	7.0%	
Electronic Display	15.1%	Stand-by and Peripheral Products	6.8%	
Digital Contents	13.9%	Lighting Equipment	7.5%	
Speaker	10.8%	Digital Cinema	6.5%	
PublicViewing, Projection Mapping, DigitalSignage	12.4%	Measuring Equipment	5.1%	
Servers, Storage	9.4%	OTT, SNS, Second Screen	4.5%	
Software	10.6%	Production Management Systems	4.4%	
Mixer	10.2%	Art and Staging	4.2%	
Relay System	10.1%	Electronic Power Unit	3.1%	
Cloud Services	10.2%	Other	4.1%	

62

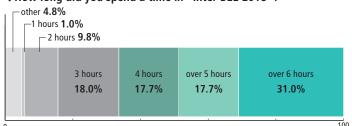
No Answer

#### ■Visitor Questionnaire result -

# ◆What was your goal in coming to "Inter BEE 2018"? (Multiple answers accepted)

50.0%	To obtain the	e latest information on	products and tech	nologies	
28.5%		dle on industry trends	,	3 1	
8.0%	General inter	rest			
5.4%	To make a pr devices and	reliminary examination technologies	concerning introdu	ıction of	
4.2%	To interact w	rith and improve friend	y relations with bu	isiness partners	
1.2%	To obtain riva	al company information	1		
1.2%	Other				
0.7%	Business Me	eting			
0.7%	To develop a	new business route			
0	10	20 30	40	50	(

### ♦How long did you spend a time in "Inter BEE 2018"?

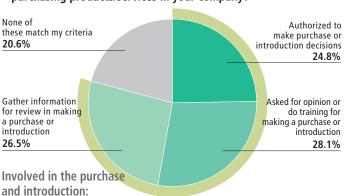


66.4 of visitors stay 4 hours.

# ◆Was your visit to Inter BEE 2018 valuable? (Multiple answers accepted)

1				
35.8%	Information obtained was useful for business deals or the procurement of products			
	·			
23.8%	Information obtain	ned was useful for marke	eting	
			J	
1E 00/	Information obtain	and word worded for the di		
15.8%	information obtain	ned was useful for the de	evelopment of products	
15.2%	Visiting the show	helped develop new bus	iness channels and conr	nections
	<b>.</b>			
C 00/				
6.9%	Had or having business discussions			
		1	1	
0	10	20	30	40

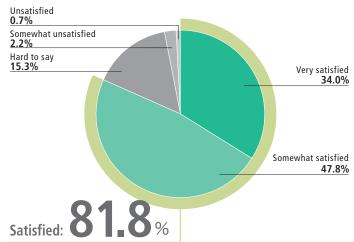
# ◆To what degree are you involved in the process of purchasing products/services in your company?



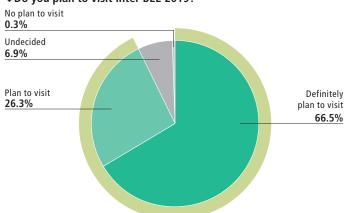
# ♦How much is annual budget you are involved in the process of purchasing products/services?

	•			
20.1%	Less than 2.5 million	ı yen		
7.9%	Between 2.5 to 5 million yen			
8.7%	Between 5 to 10 mil	Between 5 to 10 million yen		
8.4%	Between 10 to 50 m	Between 10 to 50 million yen		
3.9%	Between 50 to 100 r	Between 50 to 100 million yen		
5.0%	More than 100 millio	More than 100 million yen		
30.0%	Not involved			
16.0%	Unknown	1		
)	10	20		

#### ♦How satisfied are you with Inter BEE 2018



#### ◆Do you plan to visit Inter BEE 2019?



Planned to visit Inter BEE 2019: 92.8%



Inter BEE 2018 Results

Visitor Profile / Exhibitor Profile

# Result: Exhibitor Profile

#### ■Number of exhibitors -

Exhibition category	No. of exhibitors	No. of booth
Professional Audio Equipment	333	402
Video Expression/Professional Lighting Equipment	50	67
Video Production/Broadcast Equipment	642	1,412
ICT/Cross Media	127	173
Total	1,152	2,054

#### ■Breakdown of exhibitors -

Area	Number of countries / region Number of exhibitors	Breakdown of exhibitors by country & region
Domestic	1 country / 506	Japan 506
Asia	6 countries and regions / 116	China 50 / Korea 28 / Taiwan 33 / Hong kong 3 / Malaysia 1 / India 1
North, Central and South America	3 countries / 229	U.S.A. 210 / Canada 18 / Brazil 1
Oceania / Middle East	3 countries / 18	Australia 8 / New Zealand 1 / Israel 9
Europe	22 countries / 283	Germany 72 / U. K. 77 / France 24 The Netherland 15 / Italy 16 / Sweden 12 / Switzerland 12 / Spain11 / Belgium 7 / Denmark 7 / Norway 4 / Austria 5 / Bulgaria 4 / Finland 2 / Hungary 2 / Latvia 2 / Turkey 4 / Portugal 1 / Russia 2 / Slovakia 2 / Lichtenstein 1 / Greece 1
	35 countries and regions	1,152

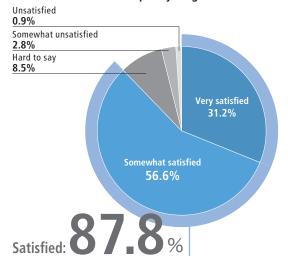
Record-high/
Exhibitors: 1,152 companies

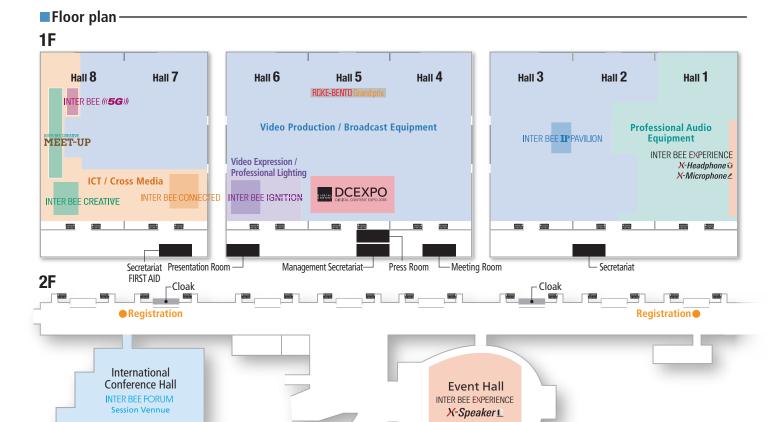
#### **■**Exhibitors Questionnaire result -

What were your main objectives for exhibiting at Inter BEE 2018? (Multiple answers accepted)



#### ◆How satisfied to accomplish your goal?





Inter BEE 2018 Results Outline

#### Broadmedia & Entertainment-

# Inter BEE 2018

#### **Outline**

#### Name

International Broadcast Equipment Exhibition 2018 (a.k.a. Inter BEE 2018)

Wednesday, November 14th – Friday, November 16th (3 days)

#### ■Exhibition hours

November 14th (Wednesday) 10:00 a.m. to 5:30 p.m.(\*10:00 a.m. to 5:50 p.m.) November 15th (Thursday) 10:00 a.m. to 5:30 p.m.(\*10:00 a.m. to 6:00 p.m.) November 16th (Friday) 10:00 a.m. to 5:00 p.m.(\*10:00 a.m. to 5:10 p.m.) \*Schedule for X-Speakers Demo & Presentation (Event Hall)

### ■Location -----

Makuhari Messe

Exhibition Hall 1-8 / International Conference Hall / Event Hall

Japan Electronics and Information Technology Industries Association (JEITA)

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 Bussinesses (ARIB)

Digital Content Association of Japan (DCAJ)

The Association for Promotion of Advanced Broadcasting Services (A-PAB)

#### ■Global Partners - - - -

























#### ■ Partners

Advanced Imaging Society Japan Committee Association of Media in Digital Camera & Imaging Products Association Digital Signage Consortium

IPDC Forum

IPTV FORUM JAPAN

JAPAN AD. CONTENTS ASSOCIATION

Japan Association of Audiovisual Producers, Inc. Japan Association of Lighting Engineers & Designers

Japan Association of Professional Recording Studios

Japan Association of Video Communication

Japan Audio Society

Japan Cable and Telecommunications Association Japan Cable Television Engineering Association JAPAN POST PRODUCTION ASSOCIATION

Japan PublicViewing Association

Japan Satellite Broadcasting Association

JAPAN STAGE SOUND BUSINESS COOPERATIVE

Japanese Society of Cinematographers

JSL

#### Mobile Broadband Association

MOTION PICTURE and TELEVISION ENGIREERING SOCIETY of japan, Inc.

MULTISCREEN BROADCASTING STUDY GROUP

National Theatrical & Television Lighting Industrial Cooperative

Next Generation Contents Distribution Forum

Projection Mapping Association of Japan

Radio Engineering & Electronics Association

Specified Radio microphone User's Federation

Stage Sound Association of Japan

State of the Art Technologies Expression Association

The Association of Japanese Animations

The Institute of Image Information and Television Engineers

Theatre and Entertainment Technology Association, Japan

3D Consortium

Ultra-Realistic Communications Forum Visual Industry Promotion Organization

#### ■Managed by -----

Japan Electronics Show Association (JESA) 5F Ote Center Bldg., 1-1-3, Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan

Tel: +81-3-6212-5231



# Broadmedia & Entertainment

# Inter BEE



**■**Organizer

JEITA Japan Electronics and Information Technology Industries Association

■Management/Contact

**Japan Electronics Show Association** 

5F Ote Center Bldg., 1-1-3 Otemachi, Chiyoda-ku, Tokyo 100-0004 Tel: +81-3-6212-5231 FAX: +81-3-6212-5225