

Public Viewings of London Olympics in Super Hi-Vision (SHV)

NHK, Olympic Broadcasting Services (OBS), and the British Broadcasting Corporation (BBC) cooperated in presenting public viewings of the London Olympic Games in Super Hi-Vision (SHV). The viewing were held from Friday, July 27*, to Sunday, August 12, at nine locations in the U.K., U.S., and Japan. The programs included video from the Opening Ceremony and the swimming, basketball, track and field, and synchronized swimming competitions. The total number of visitors reached approximately 200,000 in Japan (including related events) and approximately 20,000 overseas. The dynamic video and audio of SHV allowed viewers from all over the world to experience an immersive sensation of presence, as if they were actually at the Olympic site.

The public viewing sites in Japan were the NHK Fureai Hall and Studio Park in Shibuya, Bellesalle Akihabara in Akihabara, Tokyo, and the NHK Fukushima Broadcasting Station in Fukushima. These venues attracted many visitors, especially families during the summer school break. The audience at the Fukushima Broadcasting Station was especially excited when a local-born Olympian swimmer appeared during the July 30 live broadcast; everybody at the site came together as one in cheering her on.

We received many comments from viewers such as "I felt like I was at the Olympic site" and "I want to see SHV broadcasting as soon as possible." NHK will accelerate its research and development of systems with the aim of delivering SHV programming to our viewers as soon as possible.

*Public viewings in Japan started on Saturday, July 28.

Public viewing sites in Japan

Shibuya



NHK Fureai Hall

video presented with a 520-inch large screen. STRL mascot character "Labo-chan" joined the cheering audience.

Akihabara



Bellesalle Akihabara

hosted related events and exhibition in addition to the SHV theater (picture shows the exhibition).

Shibuya



NHK Studio Park

SHV corner located right off the entrance.

Fukushima



NHK Fukushima Broadcasting Station

a 350-inch large screen at the studio presented the broadcast.

Science & Technology Research Laboratories Awarded the International Honour for Excellence - Recognition for many years of contributions to the advancement of broadcasting technology

At the IBC2012* held in Amsterdam, the Netherlands, NHK Science & Technology Research Laboratories (STRL) was bestowed with the highest honor in broadcasting, the International Honour for Excellence.

The IBC International Honour for Excellence is presented each year to an outstanding individual or organization who has fostered or contributed to the relationship between technology and creativity in the broadcast, movie, or media industries. Previous recipients have included director James Cameron and the New York Metropolitan Opera.

It recognizes that NHK STRL has long been at the forefront of research on broadcasting technology, by constantly working on practical solutions to current issues of the day as well as visionary technologies that have transformed the way professionals create content and audiences enjoy it.

Coinciding with this award, IBC2012 hosted an exhibition of a Super Hi-Vision (SHV) Liquid Crystal display, 22.2 multichannel sound system, and 120-Hz SHV camera. A large number of people visited the exhibition booth, and many were enthusiastic about the R&D being done at NHK STRL.

Since its foundation in 1930, NHK STRL has pioneered in every field of broadcasting technology, including radio, TV, satellite broadcasting, HDTV, flat displays, and digital broadcasting. STRL's contributions to broadcasting technology will continue with its research and development on Hybridcast, a service using both broadcasting and communications, and the SHV system, our next-generation broadcasting service.

* International Broadcasting Convention: the largest European conference and broadcasting system exhibition for professionals in the broadcasting industry.



Award ceremony



Acceptance speech

IBC exhibition booths



Super Hi-Vision (SHV) Liquid Crystal display



120-Hz SHV camera

Super Hi-Vision (SHV) Becomes an International TV Standard! –A giant leap toward SHV broadcasting



NHK has been researching and developing Super Hi-Vision (SHV) video signal specifications as a next-generation highly immersive broadcasting system. The specifications were recently approved as an ITU-R* Recommendation and became an international television standard.

An internationally recognized standard will be indispensable for the early deployment of SHV broadcasting. NHK has taken the initiative, in cooperation with the Ministry of Internal Affairs and Communications, the Association of Radio Industries and Businesses (ARIB), and various manufacturers, to establish international standards for the SHV system, which has 7,680 horizontal × 4,320 vertical pixels.

Recent additions were made to the specifications to reproduce the sensations of reality and presence that are unique to SHV video, including a 120-fps spec that can reduce blurring even for a fast-moving subject and an extended color gamut (wide gamut) designed to reproduce close-to-life color, and these were approved as an international TV standard.

The 2012 London Olympic Games were presented in SHV at public viewing sites in the U. K., U. S., and Japan, and its highly immersive video and audio won high acclaim.

NHK will continue with its international standardization activities and will accelerate its R&D on SHV broadcasting, including SHV signal transmission and home viewing system applications. We will deploy SHV as quickly as possible through active participation in PR activities to inform people in Japan and abroad of SHV's outstanding features.

* ITU-R: An International Telecommunication Union-Radiocommunication Sector Recommendation describes an international technical standard.

Newly established SHV standard overview



Image taken at 60 frames per second

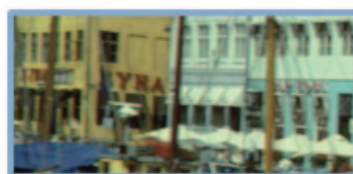


Image taken at 120 frames per second

When displaying a fast-moving subject, the "motion blur" observed at 60 fps is reduced at 120 fps.



Conventional Color gamut



Wide gamut

The wide gamut expands the reproducible color range; it includes colors that can't be reproduced using the conventional color gamut.

Item	Value
Aspect ratio (horizontal:vertical)	16 : 9
Pixel number	7,680 horizontal × 4,320 vertical
Frames per second	59.94、60、 120
Scanning scheme	Progressive scanning
Grayscale (bit/pixel)	10、12
Color gamut	Wide-gamut

Indicated in red: Specifications newly approved as an international standard.