

20 FEBRUARY 2014

4K BROADCAST QUALITY TURNKEY SYSTEMS FOR NIPPON TV



This is a section that handles graphic contents used in CG and telop broadcasts.

The contents are diverse, consisting of actual operations from the planning to the manufacturing, the construction and storage management of support systems and staff management. The main business in the CG section is separated into five categories.

Graphic room work - CG production done with a focus on news, program opening and commentary

Climate center work - Terrestrial broadcasting, Nippon TV NEWS24 and BS (partial) OA work is done nearly 24 hours a day.

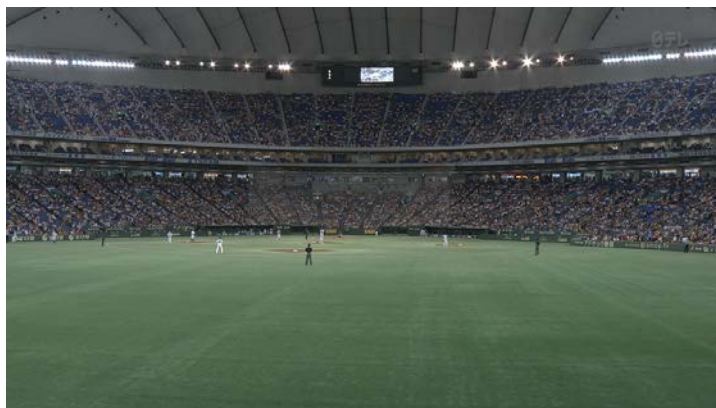
Virtual studio work - Used for operation of regular daily live programs. Consistently used for the production of designs on virtual sets and by sport coders and for transmissions

Telop center business (operated by Nippon Television Art) - Complete design to production of electronic telops, flips and small items. Transmission telops on the news floor, operators, revision, construction of telop system and management.

Sports code work - Uniform management from contents design production to transmission.

Originally operated Bluefish444

We introduced two sets of HD Bluefish444 turnkey systems three years ago. Before that, we operated using systems from other companies. It's a smokestack system and the maintenance cost was in the millions every year so it was very expensive. After comparing it to other systems during the renewal period, we had the option of Bluefish444. The reason why we chose them is because the company we were doing a production with, in 2005, was an Italian sports coder company that was an official contractor with FIFA for international videos of FIFA club world cup soccer, and they had introduced Bluefish444. We thought that it was a good system. At the time, the rivals of Bluefish444 were mostly lacking while Bluefish444 had a versatile video board with a stable broadcasting quality.



The keyword was "60P"

One of the reasons that we introduced the Bluefish444 turnkey system was that we were one of the established companies at a next generation broadcasting promotion forum (NexTV-F) and we had to provide contents, in a (4K) test broadcast from 2014. Each broadcasting network that was a member of NexTV-F was assigned to produce contents so we also had to construct a 4K production.

Bluefish444 User Story



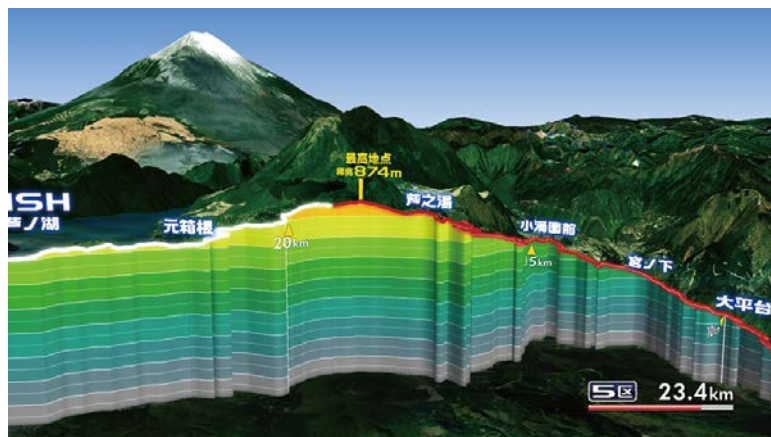
Another reason was because of the event of the “Special exhibition: The Beauty of Wall paintings from Kyoto-views in and around the city of Kyoto and sliding door paintings” at the Ueno Tokyo National Museum hosted by Nippon Television last autumn. It was an art exhibit hosted by a broadcasting company so it had to be an exhibition of such a company and not simply an exhibition. That was the consultation I received from the event division staff at our company three years before hosting the event. It was a difficult problem having an “exhibition that utilized

that” in anticipation of cutting-edge technology of broadcasting three years later but, after the technical managers brainstormed after receiving that, we concluded that “We won’t have 3D three years from now. It’s gotta be high resolution, 4K, right?”

It was then decided that a corner in which the Ryoanji Temple Stone Garden was shown on a big screen would be set up. A year was spent to film the garden and make a super high resolution video. It was a video which replicated the changing seasons that you could not experience anywhere else in several minutes and was played at the venue.

There were 4 C500 Canon used, 4K video of panorama is recorded and three 4K projectors were used to replicate the four seasons at Ryoanji Temple.

With the background of these two favorable things, a 4K system that included Bluefish444 was introduced. Furthermore, the keyword “60P” was there. It’s often said that only in Japan, among the nations of the world, is particular about “60P”. The current broadcast (NTSC, HD) is 60i. An increasing number of people have stated that 60 frames are necessary even in NexTV-F for strenuous movement such as with sports. When we looked as constructing a system, Bluefish was the only thing that could emit 60P even with 4K.



Adobe Creative Cloud



Premiere Pro CC



There were final deliveries of some baseball broadcast contents to NexTV-F until the end of February 2014 now. There are unexpected issues that come up when producing 4K and there is also the issue of the storage capacity mounting. The plan is to have the affiliated company, Nitro (NTV Technical Resources Inc.), place 4K onto a regular program production line in the future and examine the introduction of a 4K editing system in the present Nitro.

Our company is a private broadcasting station but, even if contents are provided through a test broadcast of 4K video, this doesn’t mean that it will immediately lead to a business chance. Therefore, we are in the step before contents are continually produced even if the verification of how to use this 4K technology in operating current broadcasting technology is the main objective now.

Bluefish444 User Story



I foresee that, even with the broadcast being HD, if the materials are 4K, you can expect to have a clear and high quality thing even if it is chroma key, for example. The trimming range can also be decided so I think the breadth of the structure will expand.

We have been with Crescent since introducing the motion capture system, Vicon, into the virtual studio when moving to the new company building in Shiodome in 2003. We could quickly reach them and stay in close contact with the general agents of the Crescent's local Bluefish444 development team concerning HD malfunctions and questions even when introducing the 4K version in May 2013 from the Bluefish HD introduction in 2010 so we are very confident in terms of the support that's there. They have responded really well to our needs.