

October 20, 2012  
SKY Perfect JSAT Corporation

The live broadcasting 4K moving picture was demonstrated via satellite.

- the 4K movie of the J. League soccer match was relayed live -

SKY Perfect JSAT Corporation (Head office: Minato-ku, Tokyo; President & Chief Executive Officer: Shinji Takada; hereinafter referred to as “SKY Perfect JSAT”) succeeded in demonstrating the live transmission of the 4K moving pictures of J-League soccer match using a satellite on October 20.

4K means four times the resolution of HDTV (resolution of 4096 x 2160 or 3840 x 2160) . Japanese consumer electronics companies plan to release digital TV sets for 4K. SKY Perfect JSAT transmitted live program of the J. League as the demonstration of 4K transmission using its own communication satellite.

In this demonstration, SKY Perfect JSAT adopted the DVB-S2 to realize more than 120 Mbps for each satellite repeater. This live 4K moving pictures of J. League screened on the entire theater at Odaiba Cinema Mediage, movie complex. The screen size was 350 inch.

This system would become a powerful solution for the markets that demand “high-quality picture and immediacy” for the public viewing at events, including sports, and the markets that require “simultaneous distribution,” such as contents delivery.

SKY Perfect JSAT will keep developing new technologies by utilizing the broad coverage and simultaneous distribution capability of its communication satellite, and propose solutions according to customers’ needs.

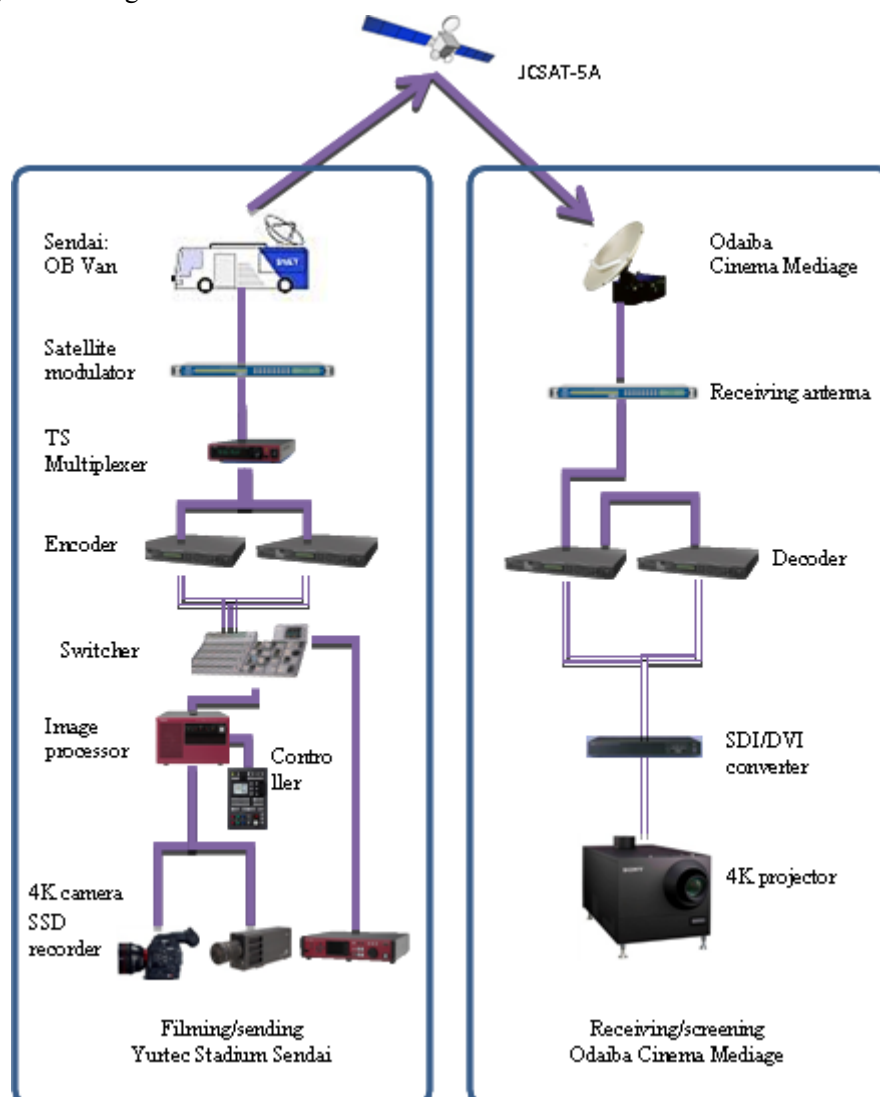


<For reference>

■ Outline of the experiment

- Date of the experiment  
Oct. 20, 2012 12:30-15:00
- Contents  
2012 J-League Vegalta Sendai vs Urawa Red Diamonds
- Uplink  
Yurtec Stadium Sendai (Sendai City, Miyagi Prefecture), OB Van,
- Downlink  
Odaiba Cinema Mediage (Daiba, Minato-ku, Tokyo), 1.9 m Flyaway antenna
- Satellite  
JCSAT-5A Ku-band Japan Beam (132degreeE)
- Frequency bandwidth:  
35.8 MHz
- Modulation scheme/FEC rate  
32APSK, FEC 3/4
- Information Rate  
More than 120 Mbps
- Video compression/encoding method  
H.264 | MPEG-4 AVC
- Video resolution (horizontal x vertical)/Scanning method  
3840×2160 / 59.94p

■ System configuration



For this experiment, we enlisted cooperation from the following organizations.

■ Cooperation in moving pictures

Japan Professional Football League

■ Filming devices

- Canon Inc.  
EOS-C500 Digital Cinema Camera
- ASTRODESIGN, Inc.  
HB-7513, RB7513  
4K Camera Control Unit (C500 RAW Developing Device)  
DF-3511 Full HD Electronic Viewfinder  
AH-4413, AP-4414, AM-4412  
4K Camera System  
HR-7512-A 4K SSD Recorder  
WM-3207 17-inch 4K Waveform Monitor  
DM-3428 4K2K 28-inch Liquid Crystal Monitor
- Corporation TELECAM  
3G Optical Transmission Device
- Kyodo Television Ltd.  
Relay Vehicle KR-advance (mounted with Sony MVS-7000X Multi-format Switcher)

■ Transmission devices

<Sender's equipment>

- ASTRODESIGN, Inc.  
CX-5528A-F MPEG2-TS Multiplexer
- FUJITSU LIMITED  
IP-9610 Video Transmission Device (H.264 Encoder)
- Satellite Network Inc  
OB Van

<Receiver's equipment>

- ASTRODESIGN, Inc.  
SD-8203 4K-compatible HD-SDI/DVI Converter
- FUJITSU LIMITED  
IP-9610 Video Transmission Device (H.264 Decoder)

■ Screening Equipment

- Sony Corporation  
SRX-T420 Data Projector  
LKRI-005 HDCP DVI Board