

SENSOR-LESS VIRTUAL STUDIO/  
REAL-TIME CG SYSTEM  
**VRCAM-NX**



# Virtual studio and real-time graphics control from a single workstation

Virtual camera work, without an operator, has created more dynamic opportunities for the use of fixed cameras. FOR-A's VRCAM-NX provides virtual studio and on-air graphics operation in a simple system. It also supports content production and playout control using CG templates.

## Full-featured, for easy operation <Solution for both virtual studio and on-air graphics systems>

### Playlists

- One-touch operation: Save camera switching, subtitles, captions, scene transitions, and other scheduled actions sequentially in a playlist for easy recall
- Save multiple events as a single action



Play list

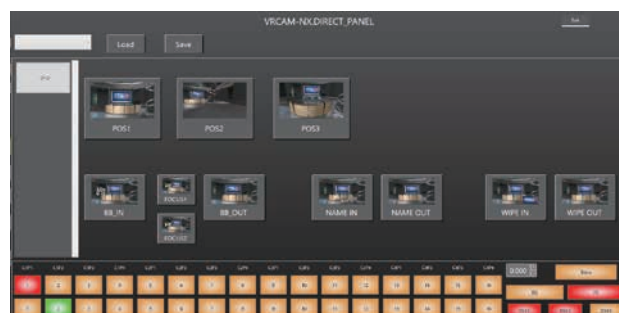
### Versatile control

- Both on-air and queued playout from a single playout workstation (some rendering quality restrictions apply to queued playout)
- Sensor-equipped camera support: Can be used as two of the four cameras.
- HVS-100TB2 control: Send I/O signals and control commands over a single Thunderbolt™ 2 cable.\*1 Camera positions and direct buttons can be controlled from HVS Series video switcher control panels.
- Remote control units or external devices can control system and compatible with tally output (contact control)
- Switch between and control multiple VRCAM-NX processors from a single VRCAM-NX control computer

\*1 Planned for future support

### Direct buttons

- Use direct buttons with playlists to follow program timelines while showcasing live content by easily rearranging elements



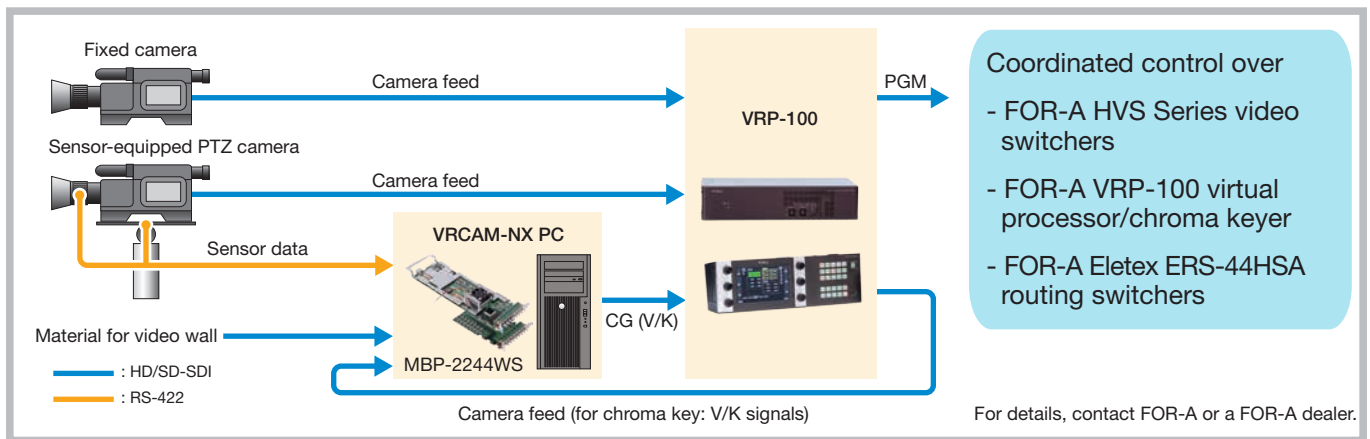
Direct button

### Other features

- Includes SmartDirect RCG template functionality
- eLibrary CG resource (optional): Start building program sets right away with a library of more than 160 copyright-free, CG backgrounds and over approx. 80 RCG objects.
- Supports template-based scene creation. Arrange scenes with a CG assigned to each of five layers—foreground, background and three DSK layers



### Example system configuration



## Enables production without a camera operator <Virtual system solution>

### Camera control function

- Up to four virtual cameras with 16 positions per camera
- Set keyframes to move cameras along straight or curved lines. Support for using a computer gamepad\*2 to create virtual camera motion path keyframes.
- Scene transitions: Cut, wipe, show/hide, walk-in, and others

\*2 Planned for future support

### Effects

- Defocus control: Background defocus
- Animation effects: Several methods to animates composite images
- Link audio files (sound effects) to video effects

### Scene control

- Object editing: Edit position, size, angle, color, and texture - depending on content
- Video wall input supported
- Intuitive scene-building and isolation of graphics that are linked or not linked to camera movement

### Text

- Display animated text simply by entering the text in a template
- Add text insertion timing to playlists

### Other features

- 4K-compatible software chroma keying and layering
- Brainstorm eStudio Ver.15 (newest version) used for graphics rendering.\*3 Produces impressive graphics applying physically-based rendering (PBR) and high dynamic range (HDR)
- Preview the studio in GUI



Preview

\*3 Brainstorm license is required for real-time graphics rendering. Playout requires a Brainstorm Engine license. Playout, new graphics library creation and in-depth editing requires a Brainstorm Global license.

## Easier linkage of on-air graphics <On-air graphics system solution>

- A fully virtual studio that supports on-air graphics
- Up to four virtual cameras for on-air graphics, with 16 positions per camera

## Software configuration

VRCAM-NX control software - on control computer

### VRCAM-NX Cont

Provides a graphical user interface for VRCAM-NX control. VRCAM-NX operations are possible from the playout workstation or another computer on the same network. The same workstation can be used for both processing and control.

HDR-compatible virtual studio software

### Brainstorm eStudio Ver.15

Graphics rendering engine. Choose from Engine or Global licenses.

## Video platform

Video Platform

### MBP-2244WS/2244WS-4K

Hardware for implementing an on-air graphics system. Equipped with four inputs (video wall V1/K1 and V2/K2) and four individually selectable outputs. For 4K needs, choose the MBP-2244WS-4K.



## Specifications

Computer	
VRCAM-NX processor	Z8 G4/Z4 G4 class workstation
Control computer	Notebook computer or similar
Software included	
VRCAM-NX processor	VRCAM-NX Proc (Brainstorm plug-in) + Brainstorm*1, or VRCAM-NX Cont (control GUI)*2
Control computer	VRCAM-NX Cont (control GUI)
Compatible video cards	
	FOR-A MBP-2244WS, MBP-2244WS-4K
Input and output	
MBP-2244WS	Camera input x 1, video wall input (V+K) x 1, 4 switchable HD outputs
MBP-2244WS-4K	HD mode: Camera input x 1, video wall input (V+K) x 1, 4 switchable HD outputs 4K mode: Camera input x 1, 4K outputs x 1 4K input/HD output mode: 4K camera input x 1, HD video wall input (V+K) x 1, 4 switchable HD outputs
Virtual cameras	
	Maximum: 4*3

\*1 Engine or Global licenses required

\*2 When used on the VRCAM-NX processor alone

\*3 Up to 2 sensor-equipped cameras

- Thunderbolt is a trademark of Intel Corporation or its subsidiaries in the U.S. and/or other countries.

VRCAM-NX control software - on playout computer

### VRCAM-NX Proc

Installed on the playout computer, this application works in conjunction with VRCAM-NX Cont to control VRCAM-NX



Head Office: 3-8-1 Ebisu, Shibuya-ku, Tokyo 150-0013, Japan

ISO 9001 and 14001 certified (Sakura R&D)

[www.for-a.com](http://www.for-a.com)

**FOR-A Corporation of America Corporate Office/ Service Center:**

Tel: +1 714-894-3311

11155 Knott Ave., Suite G, H & I, Cypress, CA 90630, U.S.A.

**FOR-A Corporation of America Northeast Office:**

Tel: +1 973-220-847

1360 Clifton Ave., Clifton, NJ 07012, U.S.A.

**FOR-A Corporation of America Support Center:**

Tel: +1 352-371-1505

2400 N.E. Waldo Road, Gainesville, FL 32609, U.S.A.

**FOR-A Latin America and the Caribbean Miami Office:**

Tel: +1 657-600-5759

**FOR-A Latin America and the Caribbean Sao Paulo Office:**

Tel: +55 11-99913-3751

**FOR-A Europe S.r.l.:**

Tel: +39 039-916-4811

Via Volturmo, 37, 20861 Brugherio MB, Italy

**FOR-A UK Limited:**

Tel: +44 (0)20-3044-2935

Trident Court, 1 Oakcroft Road, Chessington, KT9 1BD, UK

**FOR-A Italia S.r.l.:**

Tel: +39 039-881-086/103

Via Volturmo, 37, 20861, Brugherio MB, Italy

**FOR-A Corporation of Korea:**

Tel: +82 (0)2-2637-0761

1007, 57-5, Yangsan-ro, Yeongdeungpo-gu, Seoul 150-103, Korea

**FOR-A China Limited:**

Tel: +86 (0)10-8721-6023

1618 Huateng Building, No. 302, 3 District, Jinsong, Chaoyang, Beijing 100021, China

**FOR-A Middle East-Africa Office:**

Tel: +971 (0)4-551-5830

Dubai Media City, Aurora Tower, Office 1407, P.O. Box 502688, Dubai, UAE

**AGIV (India) Private Limited:**

Tel: +91 22-2673-3623

2nd Floor, Valecha Chambers, Link Road, Andheri (W), Mumbai 400053, India

**FOR-A South East Asia Office:**

Tel: +852 2110-1352

Studio 09, Rm. A1, 3/F., Phase 1, Hang Fung Ind. Bldg., 2G Hok Yuen St., Hung Hom, Hong Kong