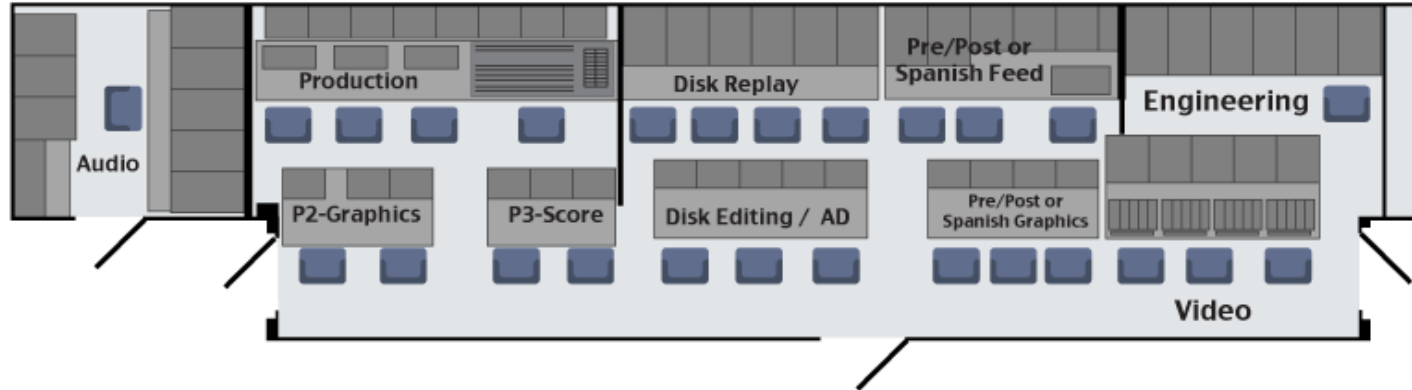# 33 HDX & 33 VMU Equipment Specifications

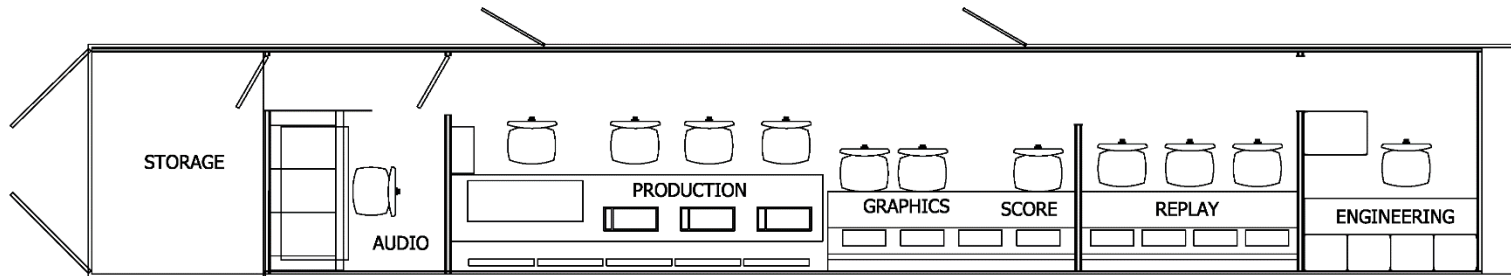**Unit A:**

Length: 53' Height: 13'3" Width: 8'6" with ability to expand to: 13'8"

VMU-Unit B:

Length: 53' Height: 13' Width: 8'6"

33 HDX Equipment Specifications

Production

- Grass Valley HD Kayenne K-Frame switcher
- 7 M/Es, 96 inputs/48 outputs
- Internal Image Store
- 12 iDPMs, 2D DPMs, FlexiKey, DoubleTake
- 32 Chroma Keyers
- 4 Stripe (M/E) control panel
- Up to 90 images in production wall

Cameras/ Lenses & Support

- 8 Grass Valley LDX80 Premier 720p/1080i triax cameras
- 4 Grass Valley LDX86 universe super slow mo cameras (Upon request. Can be used as regular live camera)
- 4 Grass Valley 3G fiber converters (SHEDS)
- Canon XJ95x8.6 long lens
- 6 Canon XJ76x9 long lenses
- Additional Canon XJ76x9 and Canon 72x9.3 long lenses if using VMU
- 4 Canon XA17x7.6 ENG lenses
- Canon HJ11x4.7 ENG wide angle lens
- Five 2" ENG VFs
- 2 Studio Config Kit LCD VFs
- Panasonic AG-HPX370 with fiber (2 Single mode fibers per camera required)
- 7 Grass Valley RefleX SuperExpander long lens adapter
- 2 Additional Grass Valley RefleX SuperExpander long lens adapter if using VMU
- 7 Vinten Vector 75 heavy duty pan/tilt heads
- 2 Additional heavy duty pan/tilt heads if using VMU
- 7 Mathews MT1 heavy duty tripods
- 2 Additional heavy duty tripods if using VMU
- 5 Gitzo ENG tripods with Libec H85 pan/tilt heads
- 2 SD LPS clock cameras

Replay, Spotbox and Edit Systems

- Three 12 channel EVS XT3 full editing units
  - One 12 channel for SSMO
  - One 12 channel an be split into 2 operator positions each with 4 inputs/2 outputs
  - One position uses LSM connect (No VGA)
- 8 Channel Evertz Dreamcatcher for instant replay of two 6x SSMO cameras (With file transfer of clips to EVS network) 60 hours of record.
- 4 Channel EVS XS server for Spotbox (2 channel per show during dual feeds)
- Codecs supported:
  - M-JPEG – User selectable bitrate 20-360Mbps
  - Avid DNxHD® (120/145Mbps)
  - Avid DNxHD® High Level (185/220Mbps, 8-bit and 10-bit)
  - VC-3 (SMPTE 2019-1; Avid-compatible) 100Mbps
  - Apple ProRes® 4:2:2 (120/145Mbps)
  - Apple ProRes® 4:2:2 HQ (185/220Mbps)
  - Apple ProRes® 4:2:2 LT (85/102Mbps)
  - MPEG-2 intra – User selectable bitrate 20-360Mbps
  - DVCPRO HD
  - AVC-Intra Class 100
  - XAVC-Intra Class 100
- Lance TDC-100 Disk Controller
- XFile3 with USB 3.0
- Gig-E network available
- 3 DVD recorders/players
- Panasonic P2 Deck AG-HPD24P
- Up to 6 replay operator positions

Audio

- CALREC Artemis Beam Audio Mixer (48 fader) 256 routable inputs via MADI, 64 analog inputs/64 analog outputs
- Audio Board can output multiple channels of surround sound
  - Encoders for transmitting surround sound are the clients responsibility
- Enco Hotshot2 Audio Playout System
- CD Player
- 6 Sennheiser MKH 70 P48 long shotgun mics
- 11 Audio Technica AT4073A short shotguns mics
- Sennheiser MKH 416 short shotgun mic
- 10 Sennheiser MD 46 stick mics
- 6 Sony ECM77B lavaliers
- 6 Sony ECM55B lavaliers
- 12 Sennheiser HMD sportscaster headsets
- 9 Daltech talkback boxes
- Yamaha CL1 Audio Mixer
- RTW TM7 audio scope
- 6 DT12 Breakout Boxes
- 14 DT12 fanouts
- 6 Fostex portable speakers
- Fiber Booth Kit (Upon request)
- Parab dishes (Upon request)

Communications

- RTS ADAM-M Matrix System
- 80 analog ports, 16 ports of RVON
- 12 Channels of IFB
- 12 Channels of PL
- 15 RTS 4030 IFB beltpacks
- 20 RTS BP325 headset boxes
- 4 Telos One Interfaces
- 2 RTS TIF 2000As
- 16 Line phone system
- 6 Two-Way Radios with 2 base stations

Graphics

- VizRT
- For-A Telestrator with HD touchscreen

Engineering & Misc

- 198x480 Evertz 3G router
- 1296x1456 Evertz Audio Router
- Embedded audio, 18 MADI, 48 AES, 96x192 analog
- 21 Frame sync/cross converters
  - 2 AJA FS-HDRs, 1 AJA FS-4s, 2 AJA FS1-Xs, and 16 Harris X-50s for a total of 30 paths
- TSI-3000 tally system with virtual tally
- 12 Utility cross converters
- 16 Channel embedded audio
- 2 Lighting Kits

Outboard Monitors

- Sixteen 15" Outboard HD LCD video monitors
  - Capability to provide HD program to booth (If fiber is available)

Cable

- 5550' Triax
  - Five 500', Nine 250', Eight 100'
- 400' 10 Line video mult
  - Two 100', Two 75', Three 50'
- 950' TAC Singlemode fiber
  - One 300' TAC-12, One 150' TAC-12, One 100' TAC-12, One 100' TAC-6
- 1900' SMPTE fiber
  - Six 250', Three 100', Four 25'
- 2050' DT12
  - Four 250', Seven 150'
- 225' Three phase power cable
  - Set of 100', 75', and 50'
- Additional cable available if shipped separately

Power Required

- 208 VAC, three phase, 200 amps
  - Separate 200 amps of three phase 208 VAC may be required in high heat locations

33 VMU Equipment Specifications

The following equipment is available to the Visitor Feed in addition to 33 HDX A Unit equipment. This trailer is fully networked to the A Unit with extensive fiber connectivity. All cameras and record trains are available to both trailers.

Production
- 3 Stripe Switcher Panel
- 2.5 M/Es assigned to visitor show
- Up to 48 images in production wall

Replay, Spotbox and Edit Systems
- XFile3 with USB 3.0
- 2 Channels of Spotbox from A Unit
- Lance TDC-100 disk control
- DVD recorder/player
- Up to 3 EVS operator positions

Audio
- STUDER Vista 1 (32 fader)
- 50 Mono channels, 38 stereo channels
- 16 Mono aux, 4 stereo aux
- 10 Stereo groups with Dynamics & EQ, 6 stereo busses
- Enco Hotshot2 Audio Playout System
- Digicart II with 320 Keyboard
- CD Player
- 5 Sennheiser MKH 70 P48 long shotgun mics
- 4 Sennheiser MD 46 stick mics
- 5 Sennheiser HMD sportscaster headsets
- 3 Daltech talkback boxes
- 2 Sound devices MP- line amps

Communications
- RTS Intercom System integrated with A Unit
- RTS ADAM 48 port Matrix System
- 12 Channels of IFB
- 12 Channels of PL
- 6 RTS 4030 IFB beltpacks
- 9 RTS BP325 headset boxes
- 2 Telos Hx2 Digital Telephone Interfaces
- 2 RTS TIF 2000As
- 3 Two-Way Radios with base station

Graphics
- VizRT (Upon request)
- For-A Telestrator with HD touchscreen (Upon Request)

Engineering & Misc
- 2 Lighting Kits
- Panasonic AG-HPX370 fiber camera with lens and tripod (2 Single mode fibers required) (Booth)

Outboard Monitors
- Four 15" Outboard HD LCD video monitors

Cable
- 700' DT12
  - *One 250', Three 150'*
- 225' Three phase power cable
  - *Set of 100', 75', and 50'*
- Additional cable available if shipped separately

Power Required
- 208 VAC, three phase, 150 amps