

X GAMES ASPEN TV TECHNOLOGY

Leading live action sports production company, Echo Entertainment, will work with ESPN to produce X Games Aspen 2019. Echo's production team will produce an authentic and enhanced representation of the action sports community from both a sports and lifestyle perspective.

Over the four days of X Games Aspen coverage, live content will focus on action sports competitions, in-depth athlete profiles and other features highlighting the action sports lifestyle. The X Games host set will be the central hub for discussion of topics relevant to the action sports community, as well as interviews with the world's top action sports athletes and musicians.

PRODUCTION & TECHNOLOGY ELEMENTS

Throughout its coverage, X Games will leverage its array of innovative technologies and production elements to bring fans truly distinctive coverage of the very best in action sports. Among the production and technology elements are:

Mobile units: This year at X Games Aspen, we will be utilizing 5 trucks from Dome Productions, 4 of which will be A units, Pacific, Journey, Sierra, and Spirit. In Addition Dome will also bring in 1 B unit, Expando B, which will house the Comms engineer, Madi interface for the entire TV compound, and provide workspace for 3 international partners. BSI will also be bringing a 53 foot truck to use as their control center for all RF Cameras, Comms, and microphones.

Cameras: There are 31 manned cameras, coupled with 15 "Point of View" (POV) cameras, a TechnoCrane, 5 Jibs, a Pole Cam and 8 Slow Motion Cameras, covering over 130 unique camera locations.

AUDIO/COMMS

The X Games Aspen will be telecast in discrete 5.1 surround sound and feature nearly 200 individual microphones to capture the various sounds around the venue, all interconnected through a variety of transport mediums including Andiamo MADI and Calrec Hydra. The worldwide distribution will encompass a multitude of isolated audio channels to augment the domestic and international broadcasts.

X Games Aspen comms will be a trunked system between all the 6 TV trucks which also incorporates the in house system. We will have over 100 unique users in the comms pick sheet so that the technical crew can decided who they want to communicate with.

X Games Aspen will utilize a trunked repeater system using 14 repeaters. The system will also feature 95 radio channels supporting the different groups on-site. Over 1,200 radios and 800 speakers mics are used at X Games Aspen.

TECHNOLOGY

Condor Cam

X Games Aspen will use the CondorCam again after a successful debut in 2017. Condorcama is a two point aerial tracking camera system utilizing a three-axis gimbal. The combination of rigging, robotics, & RF made the perfect storm for CondorCam system to take flight on the Slopestyle course and giving unique views to the X Games viewers.

Super Slow Motion

Sony HDC-4300

Eight Sony 4300's, the first camera to use three 2/3" 4K sensors, will be used at each event to capture high speed HD images up to 8x the normal frame rate.

Antelope Pico

The Antelope Pico miniature slow motion and live broadcast camera system offers spectacular extreme slow motion replay and never seen before details from vantage points where larger cameras cannot be mounted. The Antelope Pico camera records up to 350 frames per second in native HD, and simultaneously supplies a 1080i50/60 signal via HDSDI for line-cut purposes.

Robotic Cameras

The X Games Aspen telecast will feature four robotic cameras positioned throughout the courses. These cameras will capture unique shots of all the competitions from vantage points impossible to capture with manned cameras.

RF/Wireless

14 RF hand-held cameras including 10 RF POV cameras coupled with the expertise of Broadcast Services International or BSI, will be deployed throughout the venue using low latency microwave transmitters. 6 of these RF POV camera's were specially built for the X Games so the viewer will be able to have the unique perspective. In addition, 25 wireless microphones will be used throughout the venue allowing the viewer to hear the action from every corner of every course. The RF mics also allows our talent the freedom to move freely without limitation.

Follow Cameras

Six small cameras which are attached to engineered rigs and used by cameramen on skis and snowboards, and attached to Snowmobiles and SnowBikes will provide a unique moving shot from right behind or on board each athlete in the Slopestyle, Big Air and SnowBike Cross events. These RF cameras provide dynamic tracking shots of the athletes as they compete.

Cable

Over the past summer and fall months Buttermilk Mountain installed some permanent fiber going to 4 pedestals. All 792 single mode ST fiber terminates in the TV compound. On top of the installed fiber we will pull an additional 500,000 feet of ST single mode fiber and nearly 50,000 feet of SMPTE cable. Echo Entertainment will employ a ten person cable crew which will will take eight days to pull and test all the cable.