# Digital television studio

## 1. Studio shooting

Identify the TV studio equipment.

Studio projectors are adjusted to ensure uniform light design on the backround and on the people who are on the show.

Camcorders are Sony XDCAM EX series: PMW-350 and PMW-320, equipped with the latest Exmor ™ technology full-HD CMOS sensor and uses SxS ™ memory cards for storing records. They support DVCAM recording format, which is the de facto standard in industrial and professional video productions. SxS memory cards combine high transfer speeds with high reliability. SxS memory cards use the PCI Express interface to achieve an extremely high transfer speed (800Mbps) and can withstand stronger shocks (1500G) and vibration (15G). Also, the data save2 function helps restitution media content damaged by unexpected power failure or memory disconnection during recording.
PMW-350 and PMW rooms-320 are equipped with three CMOS Exmor sensor that delivers superb performance in image quality full-HD resolution. The PMW-350 has a 2/3 inch image sensor and PMW-320 model a 1/2 inch image sensor. Both sensors give a sensitivity excellent (F12 PMW-350 and F10 PMW-320), a remarkable rate signal-image noise (59 dB for the PMW-350 and 54 dB for the PMW-320) and a high horizontal resolution of 1000 TV lines.
PMW-350 and PMW models-320 offers a variety of gamma curves to adjust the contrast and to give a specific aspect of the image. In addition to the six standard gamma curves are available four curves Hyper Gamma which are identical to those available in the flagship CineAlta cameras.

Video cameras positioned on persons involved in the issue and fall through the zoom setting.

The studio director adjusts white balance for the 3 camcorders. Microphones for each person are lavalier mounted and the main microphone is fixed.
Switching video mixer images from studio camcorders to transmit images to the forefront of people in the studio and the audio switching matrix sounds from microphones in the studio.


Mixer and video switch Kahuna 1ME (Snell Wilcox)

Measure with the vectorscope and oscilloscope that the studio is delivering good quality images. Also, check the sound transmission channel stereo L and R from the studio.

### 3. General control

The windows on the split screen monitor shows images from different studios and images from the server. It aims to monitor the output video quality image that is transmitted from the television center.


Monitor with split screen

Measure the signals Y, R-Y, B-Y and L and R channels on the oscilloscope for monitoring audio. Analyze the image on vectoroscope to verify the correct transmission of color.

4. **Video editor**

Identify all the facilities of the video console editing group (video decomposition in sequence frames, cropping, editing, available special effects). Choose audio commentary or background sound for each portion of the video. Run the video one frame at a time, checking how cut and bonding with the video sequence 2.
Testing the use of special effects with video editing equipment.