

XDCAM HD422 HD

File-Based Master Specifications

This document provides essential information, including recommended file settings and layout information, for delivering file-based masters to an Extreme Reach facility so your files can be prepared for broadcast.

If any of the requirements cannot be met, your content processing could be delayed. Please contact your Extreme Reach/Pathfire show coordinator with additional questions.

XDCAM HD422 HD (60i)	
Encoding & Video Bit Rate	MPEG2 (50Mbps)
Resolution / Frame Rate	1920x1080 (29.97fps)
Aspect Ratio	16:9
Chroma Sampling	4:2:2
GOP	IBBP 15 (Long)
Stream Type	XDCAM HD422 (MXF)
Profile / Level	4:2:2P Main
User Data	None
Closed Captioning	VANC (Line 9)
Nielsen	In Audio
V-Chip	VANC (Line 9)
Field Dominance	Upper (Odd) Field 1
Timecode	VANC (Line 10)
AFD	N/A (Line 11)
Audio Encoding Format	Uncompressed PCM
Audio Bit Rate	Stereo -2.304Mbps / Pair
Audio Bit Depth	24 bit
Audio Levels	Reference -20dBFS Loudness -24LKFS ± 2dB (Max)
Audio Sample Rate	48 KHz
Audio Channels	4 (2 Stereo Pairs)
Audio Configuration	Stereo Ch1 - Left Stereo Ch2 - Right Stereo Ch3 - Left Stereo (LAS) Ch4 - Right Stereo (LAS)

File Structure:

- Minimum 10 seconds of black / silence
- Minimum 30 seconds of bars / tone
- Minimum 10 seconds of slate
 - Show Name
 - Episode Number
 - Episode Name

- Episode Duration
- Audio Channel Configuration
 - Minimum 5 seconds black between each segment.
 - Minimum 10 seconds of black / silence

File Naming Conventions:

- The filename must contain the full show name and episode number with no spaces.
- For HD content, the filename must end with an H.
- The filename must contain only alphanumeric characters.

Notes:

1. The specification in this document is the preferred format for HD stereo content without attributes present.
2. The Video Bit Rate and Audio Bit Rates stated are for the elementary streams. The resulting MUX rate will be the aggregate of all elementary streams. Please use care when configuring your encoders.
3. This document describes the base technical details of the file format required. The content delivery specifications of the program provider may contain additional requirements which need to be observed.
4. For shows supplied with HD masters please note that these will be down converted to SD at non-HD stations. The default SD down conversion is to 4x3 full frame therefore HD masters should be center-cut safe. If letterboxed 4x3 SD presentation is required all segments must contain AFD code 1010.

Extreme Reach, Inc.

CORPORATE HEADQUARTERS

75 Second Avenue | Suite 720 | Needham MA 02494 | 781.577.2016

Boston • New York • Los Angeles • Chicago • Detroit • Dallas • Louisville • San Francisco • Seattle | extremereach.com