



JIOSTAR INDIA PVT. LTD.
TECHNICAL SPECIFICATIONS

Specifications for TVC

TVC Video Specifications for HD TVC

PROGRAM VIDEO SPECIFICATIONS	
File Extension	.mxf
Container	MXF OP1a
GOP	Long GOP
Codec	XDCAM HD422
Bit Rate Type	CBR
Video Bitrate	50 Mbps
Resolution	1920x1080
Aspect Ratio	16:9 (1.78:1)
Frame Rate	25 fps/ 50i
Scan Type	Interlaced
Color Space	Rec.709
Chroma Subsampling	4:2:2
Bit Depth	8-bit

* Any format outside the above specifications requires consultation and approval from the JSIPL technical team before use.

TVC Audio Specification

PROGRAM AUDIO SPECIFICATION	
Audio Track File Container	MXF OP1(a) and SMPTE ST382-2007
	(Material Exchange Format - Mapping AES3 and Broadcast Wave Audio into the MXF Generic Container)
Audio Essence	WAV
Sampling Rate	48 KHz
Bit Depth	24 bits
Bit Rate	1152
Integrated Loudness (Stereo)	-23 LUFS +/- 2 LU
True Peak	Not exceeding -2 dB TP

HD Audio Channel Allocation:

Audio Channels	Audio Allocation	Description	Delivery Criteria
Audio Track 1	Full Mix Stereo Left	Stereo Mix Main Language	Mandatory
Audio Track 2	Full Mix Stereo Right		
Audio Track 3	Full Mix - 5.1 Surround L	5.1 Surround Sound	Mute If not Applicable
Audio Track 4	Full Mix - 5.1 Surround R		
Audio Track 5	Full Mix - 5.1 Surround C		
Audio Track 6	Full Mix - 5.1 Surround LFE		
Audio Track 7	Full Mix - 5.1 Surround LS		
Audio Track 8	Full Mix - 5.1 Surround RS		
Audio Track 9	Full Mix - Top Front Left	Atmos Audio	Mute If not Applicable
Audio Track 10	Full Mix - Top Front Right		
Audio Track 11	Full Mix - Top Rear Left		
Audio Track 12	Full Mix - Top Rear Right		
Audio Track 13	Audio Descriptor	Mono Mix	Mute If not Applicable
Audio Track 14	Dialogues only	Mono Unmix	
Audio Track 15	Show IP / Stock Music + SFX Stereo Left	Stereo Unmix	
Audio Track 16	Show IP / Stock Music + SFX Stereo Right		
Audio Track 17	Language English Left	Stereo Mix Language 1	Not required If not Applicable
Audio Track 18	Language English Right		
Audio Track 19	Language Hindi Left	Stereo Mix Language 2	
Audio Track 20	Language Hindi Right		
Audio Track 21	Language Tamil Left	Stereo Mix Language 3	
Audio Track 22	Language Tamil Right		
Audio Track 23	Language Telugu Left	Stereo Mix Language 4	
Audio Track 24	Language Telugu Right		
Audio Track 25	Language Kannada Left	Stereo Mix Language 5	
Audio Track 26	Language Kannada Right		
Audio Track 27	Language Malayalam Left	Stereo Mix Language 6	
Audio Track 28	Language Malayalam Right		
Audio Track 29	Language Marathi Left	Stereo Mix Language 7	
Audio Track 30	Language Marathi Right		
Audio Track 31	Language Bengali Left	Stereo Mix Language 8	
Audio Track 32	Language Bengali Right		

- Tracks 1–16 are **mandatory** and must be present in all delivered assets without exception. Tracks within this range that are not applicable to the track title must be **muted (silent)** — absence or omission of any track within this range is not acceptable.
- Tracks 17–32 are **conditional** and may be omitted entirely if the corresponding language version is not applicable to the track title. Where a language stem is included, both the Left and Right channels of the stereo pair **must be delivered together**.