

IEEE P1722 Media Formats

Stephen Turner, April-19-2010

AudioScience, Inc

sgturner <at> audioscience.com

The following table documents the possible IEEE P1722 media formats in an OSC like schema

format	iec61883	sd_dvcr	system=525_60,625_50					
		mpeg2_ts	pes	[PES_ID]	video	format	mpeg2	resolution, bitrate
					audio	format	h264	resolution, bitrate
							mpeg	layer=2,3 samplerate=32,44.1,48khz, bitrate=32..384kbps channels=1,2, mode=dual_mono, stereo_joint_stereo
							dolby_ac3	channels=2..6? bitrate=?
		audio_music	am824	iec60958				
				pcm	format	assume samplelength=24 samplerate=32,44.1,48,64, 88.2,96,192kHz, channels=1..? MAX channels?		
				onebit				
				onebit_enc				
				pcm_hp		samplelength=25..196		
				midi				
				smpte				
				sample_count				
				ancillary				
			float32	assume samplelength=32bit samplerate=32,44.1,48,64, 88.2,96,192kHz, channels=1..? MAX channels?				
			generic					
		video	<TBD>					
		dss_ts	<TBD>					
	iidc	format	xres,yres,pixel_format, frame_rate					
		enum_format	[IIDC_FORMAT_ENUM_ID]	xres,yres,pixel_format, frame_rate				
	mma	?						

RED means formats included in 61883-x but NOT supported by P1722

61883 standard	Format	Sub-format	Description
61883-2 (SD-DVCR)	DV		720x525/625 line 50/60fps, DCT based compression (DV format), 61834-2. stereo 16bit, 48khz, PCM audio
61883-3 (HD-DVCR)			
61883-4 (MPEG2-TS)	TS (Transport stream)	1 or more PES (Packetized Elementary Streams)	PES is compressed video and audio. Video: Most likely MPEG-2 or H.264. Audio: MPEG-1 layer 2(stereo) or Dolby AC3 (5.1)
61883-5 (SDL-DVCR)			
61883-6 (Audio & MIDI)	AM824	IEC60958 conformant	24bit PCM + other info provided in AES/EBU and S/PDIF what about non PCM , i.e AC3 or DTS over S/PDIF?
		Multi-bit linear audio	16,20 or 24 bit PCM
		One bit audio (plain)	DSD bitstream audio as used in SACD?
		One bit audio (encoded)	?
		High-precision multi-bit linear audio	25 to 196 bit PCM
		MIDI conformant	
		SMPTE time code conformant	
		Sample count	
		Ancillary data	
	32bit floating point		
	24 bit * 4 pack		
	32bit generic		
61883-7 (BO.1294)	Transport Stream		DirecTV DSS MPEG-2 transport stream. 130byte TS packet length
61883-8 (BT.601)	Video		Compressed and uncompressed video: 176x120 to 1920x1080, 15 to 60fps
IIDC (1394 Digital Camera)	Video		Uncompressed video 160x120 to 1600x1200 RGB/YUV/B&W, 1.875 to 240fps
MMA	?		New proposed HD Midi format

[end]