

Canales Digitales TV / ASTRA 1A 1B 1C 1D 1E 1F 1G a 19.2° Este

Tipo de emision	Nº Canal	Freq. GHz	Pol	Nombre de la emisora	Beam	Norma de difusion	CODIFICACION	AUDIO	SR	FEC	V-PID	A-PID	PCR 4DTV
CRYPT	65	11.720	H	DSF Plus	EH1	MPEG-2	IRDETO		27500	3/4	255	256	
CRYPT	65	11.720	H	Cinedom 4 (1)	EH1	MPEG-2	IRDETO		27500	3/4	511	512	
CRYPT	65	11.720	H	Cinedom 1 (1)	EH1	MPEG-2	IRDETO		27500	3/4	767	768	
CRYPT	65	11.720	H	Cinedom 2 (1)	EH1	MPEG-2	IRDETO		27500	3/4	1023	1024	
CRYPT	65	11.720	H	Cinedom 3 (1)	EH1	MPEG-2	IRDETO		27500	3/4	1279	1280	
CRYPT	65	11.720	H	Cinedom 2 (2)	EH1	MPEG-2	IRDETO		27500	3/4	3071	3072	
CRYPT	66	11.740	V	Cine Cinema 16:9	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	160	80	
CRYPT	66	11.740	V	MCM France	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	84	
CRYPT	66	11.740	V	Kiosque 1	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	162	88	
CRYPT	66	11.740	V	Kiosque 2	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	163	92	
CRYPT	66	11.740	V	Kiosque 3	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	164	96	
CRYPT	66	11.740	V	Kiosque 4	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	165	100	
CRYPT	66	11.740	V	Kiosque 5	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	166	104	
CRYPT	66	11.740	V	MTV Europa	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	167	108	
CRYPT	67	11.758	H	Premiere	EH2	MPEG-2	IRDETO		27500	3/4	255	256	
CRYPT	67	11.758	H	Premiere Zwei	EH2	MPEG-2	IRDETO		27500	3/4	511	512	
CRYPT	67	11.758	H	Premiere Drei	EH2	MPEG-2	IRDETO		27500	3/4	767	768	
CRYPT	67	11.758	H	Premiere PPV 1	EH2	MPEG-2	IRDETO		27500	3/4	1023	1024	
CRYPT	67	11.758	H	Premiere PPV 2	EH2	MPEG-2	IRDETO		27500	3/4	1279	1280	
CRYPT	67	11.758	H	Premiere PPV 3	EH2	MPEG-2	IRDETO		27500	3/4	1535	1536	
CRYPT	67	11.758	H	Premiere PPV 4	EH2	MPEG-2	IRDETO		27500	3/4	1791	1792	
CRYPT	68	11.778	V	EuroSport France	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	160	80	
CRYPT	68	11.778	V	Monte Carlo TMC	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	84	
CRYPT	68	11.778	V	Planete	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	162	88	
CRYPT	68	11.778	V	Paris Iere	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	163	92	
CRYPT	68	11.778	V	Voyage	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	164	96	
CRYPT	68	11.778	V	Contact TV	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	165	100	
CRYPT	68	11.778	V	LCI - La Chaîne Info	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	166	104	
CRYPT	68	11.778	V	Canal J	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	167	108	
Libre	69	11.798	H	DF 1 Infokanal	EH1	MPEG-2			27500	3/4	255	256	
CRYPT	69	11.798	H	Cine Action	EH1	MPEG-2	IRDETO		27500	3/4	511	512	
CRYPT	69	11.798	H	Star Kino	EH1	MPEG-2	IRDETO		27500	3/4	767	768	
CRYPT	69	11.798	H	Western Movies	EH1	MPEG-2	IRDETO		27500	3/4	1023	1024	
CRYPT	69	11.798	H	Cine Comedy	EH1	MPEG-2	IRDETO		27500	3/4	1535	1536	
CRYPT	69	11.798	H	SF - Der Science Fiction Kanal	EH1	MPEG-2	IRDETO		27500	3/4	1791	1792	
CRYPT	69	11.798	H	Romantic Movies	EH1	MPEG-2	IRDETO		27500	3/4	2047	2048	
CRYPT	70	11.817	V	Seasons	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	160	80	
CRYPT	70	11.817	V	Cine Cinema 2	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	84	
CRYPT	70	11.817	V	Cine Cinema 3	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	162	88	
CRYPT	70	11.817	V	Bloomberg TV France	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	163	92	
CRYPT	70	11.817	V	Canal Satellite promo	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	164	96	
CRYPT	70	11.817	V	Canal Jimmy	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	165	100	

CRYPT	70	11.817	V	Muzzik	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	166	104	
CRYPT	70	11.817	V	La Chaîne Météo	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	167	108	
CRYPT	70	11.817	V	AB Sports	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	168	112	
CRYPT	71	11.837	H	Travel	G	MPEG-2	Mediaguard & Cryptoworks		27500	3/4	163	92	
CRYPT	71	11.837	H	Astra Info 1	G	MPEG-2	Mediaguard & Cryptoworks		27500	3/4	164	112	
CRYPT	72	11.856	V	Canal +	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	160	80	
CRYPT	72	11.856	V	Canal +	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	160	81	
CRYPT	72	11.856	V	Canal + Bleu	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	84	
CRYPT	72	11.856	V	Canal + Bleu	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	85	
CRYPT	72	11.856	V	Canal + Jaune	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	162	88	
CRYPT	72	11.856	V	Canal + Jaune	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	162	89	
CRYPT	72	11.856	V	Canal + 16:9	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	163	92	
CRYPT	72	11.856	V	Canal + 16:9	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	163	93	
CRYPT	72	11.856	V	Cine Classics	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	164	96	
CRYPT	72	11.856	V	Cine Cinema 1	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	165	100	
CRYPT	72	11.856	V	The Disney Channel	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	166	104	
CRYPT	72	11.856	V	Canal + Vert	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	167	108	
CRYPT	74	11.895	V	Taquilla 11	EV2	MPEG-2	Mediaguard		27500	3/4	160	80	
CRYPT	74	11.895	V	Taquilla 12	EV2	MPEG-2	Mediaguard		27500	3/4	161	84	
CRYPT	74	11.895	V	Taquilla 13	EV2	MPEG-2	Mediaguard		27500	3/4	162	88	
CRYPT	74	11.895	V	Taquilla 14	EV2	MPEG-2	Mediaguard		27500	3/4	163	92	
CRYPT	74	11.895	V	Taquilla 15	EV2	MPEG-2	Mediaguard		27500	3/4	164	96	
CRYPT	74	11.895	V	Taquilla 16	EV2	MPEG-2	Mediaguard		27500	3/4	165	100	
CRYPT	74	11.895	V	Taquilla 17	EV2	MPEG-2	Mediaguard		27500	3/4	166	104	
CRYPT	74	11.895	V	Taquilla 18	EV2	MPEG-2	Mediaguard		27500	3/4	167	108	
Libre	76	11.934	V	Mosaico	EV1	MPEG-2			27500	3/4	165	100	
Libre	76	11.934	V	Andalucia TV	EV1	MPEG-2			27500	3/4	166	104	
Libre	76	11.934	V	TVC Internacional	EV1	MPEG-2			27500	3/4	167	108	
Libre	76	11.934	V	Canal 99	EV1	MPEG-2			27500	3/4	168	112	
CRYPT	76	11.934	V	Meteo	EV1	MPEG-2	Mediaguard		27500	3/4	169	116	
CRYPT	76	11.934	V	Futbol Mundial	EV1	MPEG-2	Mediaguard		27500	3/4	170	120	
CRYPT	76	11.934	V	Real Madrid TV	EV1	MPEG-2	Mediaguard		27500	3/4	171	124	
Libre	76	11.934	V	CNN (test)	EV1	MPEG-2			27500	3/4	172	128	
CRYPT	78	11.973	V	Canal + Espana	EV2	MPEG-2	Mediaguard		27500	3/4	160	80	
CRYPT	78	11.973	V	Canal + Espana	EV2	MPEG-2	Mediaguard		27500	3/4	160	81	
CRYPT	78	11.973	V	Canal + Azul	EV2	MPEG-2	Mediaguard		27500	3/4	161	84	
CRYPT	78	11.973	V	Canal + Azul	EV2	MPEG-2	Mediaguard		27500	3/4	161	85	
CRYPT	78	11.973	V	Canal + Rojo	EV2	MPEG-2	Mediaguard		27500	3/4	162	88	
CRYPT	78	11.973	V	Canal + Rojo	EV2	MPEG-2	Mediaguard		27500	3/4	162	89	
CRYPT	78	11.973	V	The Disney Channel	EV2	MPEG-2	Mediaguard		27500	3/4	163	92	
CRYPT	78	11.973	V	Sportmania	EV2	MPEG-2	Mediaguard		27500	3/4	164	96	
CRYPT	78	11.973	V	40 TV	EV2	MPEG-2	Mediaguard		27500	3/4	165	100	
CRYPT	79	11.992	H	EuroSport Polska	EH2	MPEG-2	Mediaguard		27500	3/4	160	80	
CRYPT	79	11.992	H	/Wizja test card/	EH2	MPEG-2	Mediaguard		27500	3/4	166	104	
CRYPT	80	12.012	V	RTL 4	EV1	MPEG-2	IRDETO & Mediaguard		27500	3/4	160	80	
CRYPT	80	12.012	V	RTL 5	EV1	MPEG-2	IRDETO & Mediaguard		27500	3/4	161	84	

CRYPT	81	12.032	H	Heimatkanal	EH1	MPEG-2	IRDETO		27500	3/4	255	256
CRYPT	81	12.032	H	Filmpalast	EH1	MPEG-2	IRDETO		27500	3/4	511	512
CRYPT	81	12.032	H	Junior	EH1	MPEG-2	IRDETO		27500	3/4	767	768
CRYPT	81	12.032	H	K-toon	EH1	MPEG-2	IRDETO		27500	3/4	1023	1024
CRYPT	81	12.032	H	Blue Channel	EH1	MPEG-2	IRDETO		27500	3/4	1279	1280
CRYPT	81	12.032	H	Krimi & Co.	EH1	MPEG-2	IRDETO		27500	3/4	1535	1536
CRYPT	81	12.032	H	Comedy & Co.	EH1	MPEG-2	IRDETO		27500	3/4	1791	1792
CRYPT	81	12.032	H	13th Street	EH1	MPEG-2	IRDETO		27500	3/4	2047	2048
Libre	82	12.051	V	Pro Sieben Osterreich	EV2	MPEG-2	Cryptoworks		27500	3/4	161	84
Libre	82	12.051	V	FEED	EV2	MPEG-2	Cryptoworks		27500	3/4	162	163
Libre	82	12.051	V	Kabel 1 Osterreich	EV2	MPEG-2	Cryptoworks		27500	3/4	166	167
Libre	82	12.051	V	Pro Sieben Schweiz	EV2	MPEG-2	Cryptoworks		27500	3/4	289	290
CRYPT	83	12.070	H	DSF Action	EH1	MPEG-2	IRDETO		27500	3/4	255	256
CRYPT	83	12.070	H	Herz & Co.	EH1	MPEG-2	IRDETO		27500	3/4	511	512
CRYPT	83	12.070	H	Cinedom 3 (2)	EH1	MPEG-2	IRDETO		27500	3/4	767	768
CRYPT	83	12.070	H	Discovery Channel Germany	EH1	MPEG-2	IRDETO		27500	3/4	1023	1024
CRYPT	83	12.070	H	Cinedom 1 (2)	EH1	MPEG-2	IRDETO		27500	3/4	1535	1536
CRYPT	83	12.070	H	Cinedom 4 (2)	EH1	MPEG-2	IRDETO		27500	3/4	1791	1792
CRYPT	83	12.070	H	Classica	EH1	MPEG-2	IRDETO		27500	3/4	2047	2048
CRYPT	83	12.070	H	Blue Movie	EH1	MPEG-2	IRDETO		27500	3/4	2303	2304
CRYPT	84	12.090	V	Seasons	EH1	MPEG-2	IRDETO		27500	3/4	255	256
CRYPT	84	12.090	V	Planet	EH1	MPEG-2	IRDETO		27500	3/4	511	512
CRYPT	84	12.090	V	Cinedom 5 (1)	EH1	MPEG-2	IRDETO		27500	3/4	1023	1024
CRYPT	84	12.090	V	Cine Classics 2	EH1	MPEG-2	IRDETO		27500	3/4	1535	1536
CRYPT	84	12.090	V	Cinedom 6 (1)	EH1	MPEG-2	IRDETO		27500	3/4	1791	1792
CRYPT	84	12.090	V	Cinedom 6 (2)	EH1	MPEG-2	IRDETO		27500	3/4	2047	2048
CRYPT	86	12.129	V	Kiosque	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	160	80
CRYPT	86	12.129	V	Kiosque 9	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	84
CRYPT	86	12.129	V	Kiosque 6	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	162	88
CRYPT	86	12.129	V	Kiosque 7	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	163	92
CRYPT	86	12.129	V	Kiosque 8	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	164	96
CRYPT	86	12.129	V	Game One	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	165	100
CRYPT	86	12.129	V	France Courses	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	166	104
CRYPT	86	12.129	V	Kiosque 10	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	167	108
CRYPT	87	12.148	H	VH-1 Germany	EH1	MPEG-2	IRDETO		27500	3/4	255	256
CRYPT	87	12.148	H	BBC Prime	EH1	MPEG-2	IRDETO		27500	3/4	511	512
CRYPT	87	12.148	H	NBC Europa/QVC Germany	EH1	MPEG-2	IRDETO		27500	3/4	767	768
CRYPT	87	12.148	H	CNBC Europa	EH1	MPEG-2	IRDETO		27500	3/4	1023	1024
Libre	87	12.148	H	Hot - Home Order TV	EH1	MPEG-2			27500	3/4	1279	1280
Libre	87	12.148	H	MTV Germany	EH1	MPEG-2			27500	3/4	1535	1536
CRYPT	87	12.148	H	Cinedom 7 (1)	EH1	MPEG-2	IRDETO		27500	3/4	1791	1792
CRYPT	87	12.148	H	Cinedom 7 (2)	EH1	MPEG-2	IRDETO		27500	3/4	2047	2048
Libre	88	12.168	V	TNT	G	MPEG-2			27500	3/4	160	81
Libre	88	12.168	V	Cartoon Network France	G	MPEG-2			27500	3/4	161	85
CRYPT	88	12.168	V	TVBS Europa	G	MPEG-2	Mediaguard & Cryptoworks		27500	3/4	162	88
Libre	88	12.168	V	Travel	G	MPEG-2			27500	3/4	163	92

Libre	88	12.168	V	Cartoon Network Netherlands	G	MPEG-2		27500	3/4	164	96	
Libre	88	12.168	V	CNN International	G	MPEG-2		27500	3/4	165	100	
Libre	88	12.168	V	Cartoon Network UK	G	MPEG-2		27500	3/4	167	109	
CRYPT	89	12.188	H	RTL Schweiz	FH1	MPEG-2	Cryptoworks	27500	3/4	160	80	
CRYPT	89	12.188	H	RTL Osterreich	FH1	MPEG-2	Cryptoworks	27500	3/4	161	84	
Libre	89	12.188	H	RTL Deutschland	FH1	MPEG-2	Cryptoworks	27500	3/4	163	104	
Libre	89	12.188	H	RTL2 CH	FH1	MPEG-2	Cryptoworks	27500	3/4	164	112	
Libre	89	12.188	H	Super RTL	FH1	MPEG-2		27500	3/4	165	120	
Libre	89	12.188	H	RTL 2	FH1	MPEG-2		27500	3/4	166	128	
Libre	89	12.188	H	VOX	FH1	MPEG-2		27500	3/4	167	136	
Libre	90	12.207	V	La Cinquieme	EV2	MPEG-2		27500	3/4	160	80	
CRYPT	90	12.207	V	MCM Africa	EV2	MPEG-2	Mediaguard & Viaccess	27500	3/4	162	88	
CRYPT	90	12.207	V	NTV International	EV2	MPEG-2	Mediaguard & Viaccess	27500	3/4	163	92	
CRYPT	90	12.207	V	Euronews	EV2	MPEG-2	Mediaguard & Viaccess	27500	3/4	164	97	
Libre	90	12.207	V	ARTE	EV2	MPEG-2		27500	3/4	165	100	
CRYPT	90	12.207	V	CarSat	EV2	MPEG-2	Mediaguard & Viaccess	27500	3/4	167	108	
CRYPT	91	12.226	H	Beat BC	EH1	MPEG-2	IRDETO	27500	3/4	767	768	
CRYPT	92	12.246	V	Canal Canarias	FV1	MPEG-2	Mediaguard	27500	3/4	160	83	
CRYPT	92	12.246	V	Taquilla 6	FV1	MPEG-2	Mediaguard	27500	3/4	161	84	
CRYPT	92	12.246	V	Taquilla 7	FV1	MPEG-2	Mediaguard	27500	3/4	162	88	
CRYPT	92	12.246	V	Taquilla 8	FV1	MPEG-2	Mediaguard	27500	3/4	163	92	
CRYPT	92	12.246	V	EuroSport	FV1	MPEG-2	Mediaguard	27500	3/4	164	96	
CRYPT	92	12.246	V	Estilo	FV1	MPEG-2	Mediaguard	27500	3/4	165	100	
CRYPT	92	12.246	V	Viajar	FV1	MPEG-2	Mediaguard	27500	3/4	166	104	
CRYPT	92	12.246	V	Album TV	FV1	MPEG-2	Mediaguard	27500	3/4	167	108	
Libre	93	12.266	H	AB Sat Passion promo	FH1	MPEG-2		27500	3/4	160	80	
CRYPT	93	12.266	H	AB Channel 1	FH1	MPEG-2	Mediaguard	27500	3/4	161	84	
CRYPT	93	12.266	H	Animaux	FH1	MPEG-2	Mediaguard	27500	3/4	162	88	
CRYPT	93	12.266	H	Encyclopedia	FH1	MPEG-2	Mediaguard	27500	3/4	163	92	
CRYPT	93	12.266	H	Automobile / XXL	FH1	MPEG-2	Mediaguard	27500	3/4	164	96	
CRYPT	93	12.266	H	Escapes	FH1	MPEG-2	Mediaguard	27500	3/4	165	100	
CRYPT	93	12.266	H	La chaine de l'Histoire / Fit TV - Vive la vie	FH1	MPEG-2	Mediaguard	27500	3/4	166	104	
CRYPT	93	12.266	H	AB Sports	FH1	MPEG-2	Mediaguard	27500	3/4	167	108	
CRYPT	93	12.266	H	Nostalgie la Tele	FH1	MPEG-2	Mediaguard	27500	3/4	168	112	
CRYPT	94	12.285	V	Documania	FV2	MPEG-2	Mediaguard	27500	3/4	160	80	
CRYPT	94	12.285	V	Fox Kids	FV2	MPEG-2	Mediaguard	27500	3/4	161	84	
CRYPT	94	12.285	V	CNBC-NBC	FV2	MPEG-2	Mediaguard	27500	3/4	162	88	
CRYPT	94	12.285	V	Cine Classic	FV2	MPEG-2	Mediaguard	27500	3/4	163	92	
CRYPT	94	12.285	V	Seasons	FV2	MPEG-2	Mediaguard	27500	3/4	164	96	
Libre	94	12.285	V	Taquilla 0	FV2	MPEG-2		27500	3/4	165	100	
CRYPT	94	12.285	V	Taquilla 1	FV2	MPEG-2	Mediaguard	27500	3/4	166	104	
CRYPT	94	12.285	V	Taquilla 2	FV2	MPEG-2	Mediaguard	27500	3/4	167	108	
CRYPT	95	12.304	H	Wizja trailer	FH2	MPEG-2	Cryptoworks	27500	3/4	160	80	
CRYPT	95	12.304	H	Hallmark Polska	FH2	MPEG-2	Cryptoworks	27500	3/4	161	84	
CRYPT	95	12.304	H	Cartoon Network / TCM - Turner	FH2	MPEG-2	Cryptoworks	27500	3/4	162	90	

				Classic Movies / Cartoon Network UK									
CRYPT	95	12.304	H	Fox Kids / BET on Jazz	FH2	MPEG-2	Cryptoworks		27500	3/4	163	90	
CRYPT	95	12.304	H	HBO Polska	FH2	MPEG-2	Cryptoworks		27500	3/4	164	96	
CRYPT	95	12.304	H	Ques TV	FH2	MPEG-2	Cryptoworks		27500	3/4	165	98	
CRYPT	95	12.304	H	Wizja Pogoda / Travel	FH2	MPEG-2	Cryptoworks		27500	3/4	166	105	
CRYPT	96	12.324	V	Medecine Plus	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	84	
Libre	96	12.324	V	Mosaique	EV2	MPEG-2			27500	3/4	162	88	
Libre	96	12.324	V	Mosaique 2	EV2	MPEG-2			27500	3/4	163	92	
Libre	96	12.324	V	Mosaique 3	EV2	MPEG-2			27500	3/4	164	96	
Libre	96	12.324	V	Le Sesame C+	EV2	MPEG-2			27500	3/4	165	98	
Libre	97	12.344	H	Canal + promo	FH1	MPEG-2			27500	3/4	512	650	
Libre	97	12.344	H	/colour bars/	FH1	MPEG-2			27500	3/4	513	660	
Libre	98	12.363	V	RTM 1	EV2	MPEG-2			27500	3/4	162	96	
Libre	98	12.363	V	ESC 1	EV2	MPEG-2			27500	3/4	163	104	
Libre	98	12.363	V	TV 5 Europa	EV2	MPEG-2			27500	3/4	164	112	
Libre	98	12.363	V	/colour bars/	EV2	MPEG-2			27500	3/4	166	128	
Libre	98	12.363	V	RAI Uno	EV2	MPEG-2			27500	3/4	289	290	
Libre	98	12.363	V	RTP Internacional	EV2	MPEG-2			27500	3/4	300	301	
Libre	98	12.363	V	Deutsche Welle TV	EV2	MPEG-2			27500	3/4	305	306	
CRYPT	99	12.382	H	Twoja Wizja	FH2	MPEG-2	Cryptoworks		27500	3/4	162	88	
CRYPT	99	12.382	H	Discovery Channel	FH2	MPEG-2	Cryptoworks		27500	3/4	163	90	
CRYPT	99	12.382	H	National Geographic Channel	FH2	MPEG-2	Cryptoworks		27500	3/4	164	96	
CRYPT	99	12.382	H	Romantica	FH2	MPEG-2	Cryptoworks		27500	3/4	165	98	
CRYPT	99	12.382	H	Animal Planet	FH2	MPEG-2	Cryptoworks		27500	3/4	166	104	
CRYPT	99	12.382	H	Atomic TV	FH2	MPEG-2	Cryptoworks		27500	3/4	289	290	
CRYPT	99	12.382	H	MTV Europa	FH2	MPEG-2	Cryptoworks		27500	3/4	305	306	
CRYPT	100	12.402	V	Demain!	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	160	80	
CRYPT	100	12.402	V	Comedie!	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	161	84	
CRYPT	100	12.402	V	13eme Rue	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	162	88	
Libre	100	12.402	V	Fashion TV / L'Original	EV2	MPEG-2			27500	3/4	163	92	
CRYPT	100	12.402	V	Fox Kids/RFO Sat	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	164	96	
CRYPT	100	12.402	V	L'Equipe TV	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	165	100	
CRYPT	100	12.402	V	Forum Planete	EV2	MPEG-2	Mediaguard & Viaccess		27500	3/4	166	104	
CRYPT	101	12.422	H	Kanal 1 (1)	EH1	MPEG-2	IRDETO		27500	3/4	255	256	
CRYPT	101	12.422	H	Kanal 1 (2)	EH1	MPEG-2	IRDETO		27500	3/4	511	512	
CRYPT	101	12.422	H	Kanal 2	EH1	MPEG-2	IRDETO		27500	3/4	767	768	
CRYPT	101	12.422	H	Kanal 3	EH1	MPEG-2	IRDETO		27500	3/4	1023	1024	
CRYPT	101	12.422	H	Kanal 4	EH1	MPEG-2	IRDETO		27500	3/4	1279	1280	
CRYPT	101	12.422	H	Kanal 5	EH1	MPEG-2	IRDETO		27500	3/4	1535	1536	
Libre	104	12.480	V	Pro Sieben	EH1	MPEG-2			27500	3/4	255	256	
Libre	104	12.480	V	Kabel 1	EH1	MPEG-2			27500	3/4	511	512	
Libre	104	12.480	V	Sat. 1	EH1	MPEG-2			27500	3/4	767	768	
Libre	104	12.480	V	DSF - Deutsches SportFernsehen	EH1	MPEG-2			27500	3/4	1023	1024	
CRYPT	105	12.515	H	Canal + 1 Nederland	G	MPEG-2	IRDETO & Mediaguard		22000	5/6	160	80	
CRYPT	105	12.515	H	Canal + 2 Nederland	G	MPEG-2	IRDETO & Mediaguard		22000	5/6	161	84	
CRYPT	105	12.515	H	Nederland 1	G	MPEG-2	IRDETO & Mediaguard		22000	5/6	162	88	

CRYPT	105	12.515	H	TV 2 (Netherlands)	G	MPEG-2	IRDETO & Mediaguard		22000	5/6	163	92	
CRYPT	105	12.515	H	Nederland 3	G	MPEG-2	IRDETO & Mediaguard		22000	5/6	164	96	
CRYPT	106	12.522	V	Cinemanía	G	MPEG-2	Mediaguard		22000	5/6	160	80	
CRYPT	106	12.522	V	Cinemanía Azul	G	MPEG-2	Mediaguard		22000	5/6	161	84	
CRYPT	106	12.522	V	Taquilla 3	G	MPEG-2	Mediaguard		22000	5/6	162	88	
CRYPT	106	12.522	V	Taquilla 4	G	MPEG-2	Mediaguard		22000	5/6	163	92	
CRYPT	106	12.522	V	Taquilla 5	G	MPEG-2	Mediaguard		22000	5/6	164	96	
CRYPT	106	12.522	V	Discovery Channel	G	MPEG-2	Mediaguard		22000	5/6	165	100	
CRYPT	106	12.522	V	AXN	G	MPEG-2	Mediaguard		22000	5/6	166	104	
Libre	108	12.552	V	Bloomberg TV Germany	G	MPEG-2			22000	5/6	162	99	
Libre	108	12.552	V	Sat. 1	G	MPEG-2			22000	5/6	163	104	
Libre	108	12.552	V	Astra Info 1	G	MPEG-2			22000	5/6	164	112	
Libre	108	12.552	V	Astra Info 2	G	MPEG-2			22000	5/6	165	120	
Libre	108	12.552	V	Kabel 1	G	MPEG-2			22000	5/6	166	128	
Libre	108	12.552	V	DSF - Deutsches SportFernsehen	G	MPEG-2			22000	5/6	167	136	
Libre	108	12.552	V	Astra Vision 1	G	MPEG-2			22000	5/6	168	144	
Libre	108	12.552	V	Astra Vision 1	G	MPEG-2			22000	5/6	168	145	
Libre	108	12.552	V	Astra Vision 1	G	MPEG-2			22000	5/6	168	146	
Libre	108	12.552	V	Astra Vision 1	G	MPEG-2			22000	5/6	168	147	
Libre	108	12.552	V	Astra Vision 1	G	MPEG-2			22000	5/6	168	148	
Libre	108	12.552	V	Astra Vision 1	G	MPEG-2			22000	5/6	168	149	
Libre	108	12.552	V	Astra Vision 1	G	MPEG-2			22000	5/6	168	150	
Libre	108	12.552	V	RTL Tele Letzebuerg	G	MPEG-2			22000	5/6	168	144	
Libre	108	12.552	V	Sky news	G	MPEG-2			22000	5/6	305	306	
CRYPT	109	12.574	H	SBS 6	G	MPEG-2			22000	5/6	160	80	
CRYPT	109	12.574	H	Veronica	G	MPEG-2			22000	5/6	161	84	
CRYPT	109	12.574	H	TMF Nederland	G	MPEG-2			22000	5/6	162	88	
CRYPT	109	12.574	H	KinderNet	G	MPEG-2	IRDETO & Mediaguard		22000	5/6	163	92	
Libre	109	12.574	H	BVN TV - Beste van Nederland TV	G	MPEG-2			22000	5/6	164	96	
CRYPT	109	12.574	H	Net 5	G	MPEG-2	IRDETO & Mediaguard		22000	5/6	165	100	
CRYPT	110	12.581	V	EuroNews	G	MPEG-2	Mediaguard		22000	5/6	160	80	
CRYPT	110	12.581	V	EuroNews	G	MPEG-2	Mediaguard		22000	5/6	160	81	
CRYPT	110	12.581	V	Vivir	G	MPEG-2	Mediaguard		22000	5/6	161	84	
CRYPT	110	12.581	V	Taquilla 9	G	MPEG-2	Mediaguard		22000	5/6	162	88	
CRYPT	110	12.581	V	Taquilla X	G	MPEG-2	Mediaguard		22000	5/6	163	92	
CRYPT	110	12.581	V	Canal C:	G	MPEG-2	Mediaguard		22000	5/6	164	96	
CRYPT	110	12.581	V	Cinemanía Rojo	G	MPEG-2	Mediaguard		22000	5/6	165	100	
CRYPT	110	12.581	V	Taquilla 16:9	G	MPEG-2	Mediaguard		22000	5/6	166	104	
Libre	111	12.604	H	ARD	G	MPEG-2			22000	5/6	101	102	
Libre	111	12.604	H	Bayerisches Fernsehen	G	MPEG-2			22000	5/6	201	202	
Libre	111	12.604	H	Hessen Fernsehen	G	MPEG-2			22000	5/6	301	302	
Libre	111	12.604	H	N3	G	MPEG-2			22000	5/6	401	402	
Libre	111	12.604	H	Sudwest Fernsehen Saarland	G	MPEG-2			22000	5/6	501	502	
Libre	111	12.604	H	WDR	G	MPEG-2			22000	5/6	601	602	
Libre	111	12.604	H	BR Alpha	G	MPEG-2			22000	5/6	701	702	
Libre	115	12.663	H	ZDF	G	MPEG-2			22000	5/6	110	120	

Libre	115	12.663	H	3 Sat	G	MPEG-2		22000	5/6	210	220	
Libre	115	12.663	H	Der Kinderkanal	G	MPEG-2		22000	5/6	310	320	
Libre	115	12.663	H	ARTE	G	MPEG-2		22000	5/6	360	370	
Libre	115	12.663	H	Phoenix	G	MPEG-2		22000	5/6	410	420	
Libre	115	12.663	H	ORF Sat	G	MPEG-2		22000	5/6	506	507	
Libre	115	12.663	H	ZDF Infobox	G	MPEG-2		22000	5/6	610	620	
Libre	116	12.670	V	Grand Tourisme	G	MPEG-2		22000	5/6	162	97	
CRYPT	117	12.692	H	ORF 1	G	MPEG-2	Cryptoworks & Viaccess	22000	5/6	160	161	
Libre	117	12.692	H	TW1	G	MPEG-2		22000	5/6	166	167	
CRYPT	117	12.692	H	ORF 2	G	MPEG-2	Cryptoworks & Viaccess	22000	5/6	500	501	
CRYPT	117	12.692	H	SF 1	G	MPEG-2	Cryptoworks & Viaccess	22000	5/6	900	903	
Libre	119	12.722	H	Eins Extra	G	MPEG-2		22000	5/6	101	102	
Libre	119	12.722	H	Eins Festival	G	MPEG-2		22000	5/6	201	202	
Libre	119	12.722	H	Eins MuXx	G	MPEG-2		22000	5/6	301	302	
Libre	119	12.722	H	MDR	G	MPEG-2		22000	5/6	401	402	
Libre	119	12.722	H	ORB	G	MPEG-2		22000	5/6	501	502	
Libre	119	12.722	H	B 1	G	MPEG-2		22000	5/6	601	602	
Libre	119	12.722	H	ARD Online-Kanal	G	MPEG-2		22000	5/6	1804	8191	
Libre	71	11.837	H	TNT	G	MPEG-2		27500	3/4	160	80	
Libre	71	11.837	H	TNT	G	MPEG-2		27500	3/4	160	81	
Libre	71	11.837	H	TNT	G	MPEG-2		27500	3/4	160	82	
Libre	71	11.837	H	TNT	G	MPEG-2		27500	3/4	160	83	
Libre	71	11.837	H	Cartoon Network France	G	MPEG-2		27500	3/4	161	84	
Libre	71	11.837	H	Cartoon Network France	G	MPEG-2		27500	3/4	161	85	
Libre	71	11.837	H	Cartoon Network France	G	MPEG-2		27500	3/4	161	86	
CRYPT	71	11.837	H	TVBS Europa	G	MPEG-2	Mediaguard & Cryptoworks	27500	3/4	162	88	
Libre	71	11.837	H	Travel	G	MPEG-2		27500	3/4	163	92	
Libre	71	11.837	H	Travel	G	MPEG-2		27500	3/4	163	93	
Libre	71	11.837	H	Cartoon Network Netherlands	G	MPEG-2		27500	3/4	164	96	
Libre	71	11.837	H	Cartoon Network Netherlands	G	MPEG-2		27500	3/4	164	97	
Libre	71	11.837	H	CNN International	G	MPEG-2		27500	3/4	165	100	
Libre	71	11.837	H	Cartoon Network UK	G	MPEG-2		27500	3/4	167	109	
Libre	80	12.012	V	Kink FM	EVI	MPEG-2		27500	3/4			

Tecnología de la TV 2

Prof. Andrés Roldán Aranda