



**MPEG-2 / DVB Free-To-Air Digital Signals
C and Ku-Band Satellites Received In Continental U.S.**

**ATLANTIC SATELLITE Region
78.0 West to 30.0 West
MARCH 15 2010 UPDATE**

COMPILED BY MIKE KOHL
Send comments and updates to:
mkohl@skyvision.com

MHz = Downlink Frequency In MHz

LOCAL OSCILLATOR FREQUENCY C-Band = 5150 Ku-Band = 10750
International Ku-Band using Universal LNBF is normally 9750 and 10600 MHz.

I. F. = Intermediate Frequency In MHz
(5150 MHz minus downlink frequency in MHz = C-Band I.F. Frequency)

POL = Polarity V = Vertical H = Horizontal
RHC = Right Hand Circular LHC = Left Hand Circular

Receiver settings for international signals using circular polarization are normally V for RHC and H for LHC. Best reception is achieved with a true circular feedhorn such as those made by ADL and Seavey.

F.E.C. = Forward Error Correction (now automatic on most receivers)
S. R. = Symbol Rate
VPID = Video Identifier APID = Audio Identifier
A third PID, called a PCR PID is usually the same as VPID number.
Exceptions listed in Notes.

V-3941

Denotes an active transponder with no available FTA signals.
Listings provided with red highlighted frequency, for the benefit of those using the transponder metering functions found in most FTA receivers.

Other charts may note three Brazilian satellites transmitting from 84.0, 75.0 & 70.0 West. They are not listed here because they don't reach the U.S.

<u>Pol-MHz</u>	<u>I. F.</u>	<u>F.E.CS.</u>	<u>R.</u>	<u>VPID</u>	<u>APID</u>	<u>SERVICE</u>	<u>NOTES</u>
78.0 West Simon Bolivar C-Band							
Serving Venezuela, some overspill to SE U.S.							
V-3888	1262 3/4	23.000		0259 0260		TELE SUR	
				1160 1120		VENEZOLANA DE TV Venezuela	
				1460 1420		VISION VENEZUELA Venezuela	
				4096 4097		TVes Venezuela	
				8191 0702		Audio: La Radio del Sur Venezuela	
				8191 1122		Audio: Canal Informativo Venezuela	
				8191 1522		Audio: Canal Activa FM Venezuela	
				8191 1622		Audio: Canal Clasico FM Venezuela	
78.0 West Simon Bolivar Ku-Band							
Serving Venezuela, some overspill to SE U.S.							
FEEDS							
65.0 West Star One C1 C-Band							
Brazilian satellite with good signals to Florida and U.S. Southeast region							
H-3691	1459 3/4	02.210		0256 0258		OI TV Brazil	Portuguese
H-3695	1455 3/4	04.131		0033 0034		TV ESPORTE INTERATIVO Brazil	Portuguese
H-3705	1445 5/6	02.460		0308 0256		RBPP Brazil	Portuguese
H-3736	1414 3/4	01.808		8191 0036		Audio: (L) "Nacional" (R) "Light"	Portuguese
				8191 0037		Audio: (L) "Dance" (R): "Instrumental"	Portuguese
				8191 4128		Audio: Radio C & A	Portuguese
				8191 4129		Audio: Pop	Portuguese
H-3744	1406 7/8	03.540		4131 4128		REDE BOAS NOVAS Manaus, Brazil	Portuguese
				8191 1213		Audio: Radio Boas Novas Manaus, Brazil	Portuguese
H-3762	1388 7/8	02.222		0033 0034		REDE BRASIL DE TV Brazil	Portuguese
H-3766	1384 3/4	03.340		0033 0034		TV PERNAMBUCO Brazil	Portuguese
H-3800	1350 7/8	27.500		8191 4924		Audio: Rede CBN Brazil	Portuguese
				8191 4926		Audio: Globo FM Brazil	Portuguese
H-3832	1318 3/4	03.530		0264 0265		REDE ESTACAO SATELLITE TV Brazil	Portuguese
				8191 0256		Audio: Radio Tabajara FM Brazil	Portuguese
				8191 0257		Audio: Radio 98-FM Joa Pessoa, Brazil	Portuguese
				8191 0260		Audio: Rede Estacao Sat AM Brazil	Portuguese
				8191 0261		Audio: OI-FM 97.1 Recife, Brazil	Portuguese
				8191 0262		Audio: Rede Estacao Sat FM Brazil	Portuguese

H-3847	1303 3/4	03.530	0308 0256	TV TIBAGI	Brazil	Portuguese
H-3864	1286 3/4	03.333	1160 1120	TV ALTEROSA JUIZ DE FORA	Brazil	Portuguese
H-4008	1142 3/4	03.333	0033 0034	TV RODOLINK	Brazil	Portuguese
V-3736	1414 3/4	02.853	0033 0034	TV IMACULADA CONCEICAO	Brazil	Portuguese
			8191 0044	Audio: AM-1490 R. Imaculada Conceicao	Brazil	Portuguese
V-3771	1379 3/4	01.479	8191 0256	Audio: Radio Tabajara FM	Brazil	Portuguese
			8191 0257	Audio: Radio 98-FM Joa Pessoa,	Brazil	Portuguese
			8191 0260	Audio: Radio Clube de Pernambuco	720-AM Brazil	Portuguese
			8191 0261	Audio: Radio Canaa	Brazil	Portuguese
			8191 0262	Audio: Radio Estacao Sat	Brazil	Portuguese
			8191 0263	Audio: Radio Melodia-97.3	Rio De Janeiro, Brazil	Portuguese
V-3792	1358 3/4	03.390	1110 1211	TV GAZETA - CANAL 10	Brazil	Portuguese
			8191 1213	Audio: Radio Gazeta FM	Brazil	Portuguese
V-3823	1327 3/4	01.808	0337 0340	TV VAT AMAZONIA	Brazil	Portuguese
V-3876	1274 3/4	02.740	0308 0256	TV TAROBA	Brazil	Portuguese
V-4100	1050 7/8	27.500	8191 3724	Audio: Grandes Interpretes	Brazil	Portuguese
			8191 3726	Audio: Anos 80	Brazil	Portuguese
			8191 3924	Audio: Redo Globo AM	Brazil	Portuguese
			8191 3926	Audio: Multishow FM	Brazil	Portuguese

63.0 West Telstar 14 Ku-Band

Covering U.S., Central America & Caribbean

V-11963	1213 3/4	11.280	0068 0070	SCETV 1 - South Carolina PBS	English
			0064 0066	SCETV 2	English
			0060 0062	SCETV 3	English
			0056 0058	SCETV 4	English
			0052 0054	SCETV 5	English
			0048 0050	SCETV 6	English
			0044 0046	SCETV 7	English
			0040 0042	SCETV 8	English
			0036 0038	SCETV 9	English
			0032 0034	SCETV 10	English

61.0 West Amazonas 1 C-Band

Americas beam covers U.S.; stronger in South

H-3630	1520 3/4	02.785	1110 1211	TV BANCO DO BRASIL	Brazil	Test Card
H-4139	1011 3/4	04.540	0308 0256	CANAL WS	Brazil	Portuguese PCR PID=8190
H-4150	1000 3/4	11.530	1800 1802	LFG-15	Brazil	Portuguese - Distance Learning
H-4170	0980 3/4	03.460	0067 0068	WOO HOO	Brazil	Portuguese-Surfing Videos
H-4174	0976 3/4	03.330	0033 0036	EL TRECE-CANAL 13	Asuncion, Paraguay	Spanish LEFT = TV Sound
			8191 0036	Audio: 730-Cardinal AM	Asuncion, Paraguay	Spanish RIGHT = Radio
			8191 0037	Audio: 92.3-Cardinal Romance	Asuncion, Pgy	Spanish (Stereo)
V-3925	1225 3/4	03.333	0033 0036	TV CLUBE	Brazil	Portuguese
V-3928	1222 3/4	02.222	0256 0258	FGV MANAGEMENT		Test Card
V-4142	1008 3/4	02.650	0100 0110	CANAL MINASSAUDE	Brazil	Portuguese

61.0 West Amazonas 1 Ku-Band

Covers Latin America & southern U.S.

58.0 West Intelsat 9 & 16 C-Band

Covers North & South America plus Europe

H-3805	1345 3/4	03.428	8191 3109	Audio: China Radio International		Other audio PIDs include 3110 3111 3112 3221 3222 3223 3224 3225 3226 3227 3228 3229 3230 4113 4114 4115 4116 4231 4232 4233 4234 4235 4236 4237 4238 4239 4240.
H-3815	1335 5/6	06.250	1110 1120	BAND INTERNACIONAL	Brazil	Portuguese
			1111 1130	BAND NEWS INTERNACIONAL	Brazil	Portuguese
H-3840	1310 7/8	27.684	1460 1420	EWTN LATIN AMERICA	U.S.	
			8191 1422	Audio: EWTN Catholic Radio		
			8191 1432	Audio: WACC-AM Radio Paz	Miami	
			1460 1434	EWTN LATIN AMERICA & SPAIN		(AC-3 audio)
			1560 1520	DEUTSCHE WELLE TV LATIN AMERICA	Germany	
			8191 1522	Audio: Deutsche Welle Radio 1	Germany	German
			8191 1620	Audio: Deutsche Welle Radio 2	Germany	English
			8191 1720	Audio: RFI - Radio France Int'l	France	French
H-3880	1270 7/8	27.684	1160 1120	CCTV-4	China	Chinese
			8191 1122	Audio: China Radio International		Also on APIDs 1222 and 1322
			1260 1220	CCTV-9	China	English
			1360 1320	CCTV-F	China	French
			1460 1420	CCTV-E	China	Spanish
			1560 1520	YTN	South Korea	Korean
			1960 1920	ARIRANG WORLD	South Korea	Korean, English
H-4107	1143 5/6	08.850	0771 0726	TVN 24 HORAS	Chile	Spanish - News
H-4040	1110 3/4	26.590	1360 1320	NHK WORLD TV - PAL Video	Japan	1320 APID = English 1322 APID = Japanese

			1660 1620	NHK WORLD TV - 1080 High Definition	Japan	1620 APID = English	1622 APID = Japanese
H-4080	1070 3/4	27.684	8191 1132	Audio: Radio Japan	Japan	VIDEO SCRAMBLED	AUDIO in the clear
			2160 2120	HALLMARK CHANNEL-Brazil		VIDEO SCRAMBLED	AUDIO in the clear
			2260 2220	HALLMARK CHANNEL-Latin America		VIDEO SCRAMBLED	AUDIO in the clear
			2360 2320	HALLMARK CHANNEL-Mexico		VIDEO SCRAMBLED	AUDIO in the clear
			2460 2420	HALLMARK CHANNEL-Argentina		VIDEO SCRAMBLED	AUDIO in the clear
			2760 2720	HALLMARK CHANNEL-Asia/Pacific		VIDEO SCRAMBLED	AUDIO in the clear
H-4122	1028 3/4	02.222	4130 4131	CTN INTERNATIONAL	U.S.	Spanish	
H-4137	1013 3/4	02.942	0033 0036	FAMILY CHRISTIAN NETWORK	Costa Rica	Spanish	
			8191 0037	Audio: FCN Radio	Costa Rica	Spanish	
			8191 0038	Audio: FCN Radio 2	Costa Rica	Spanish	
V-3800	1350 3/4	26.470	1160 1120	ESPN - Latin A		VIDEO SCRAMBLED	AUDIO in the clear
			1160 1122	ESPN - Latin B		VIDEO SCRAMBLED	AUDIO in the clear
			1260 1220	ESPN - Mexico		VIDEO SCRAMBLED	AUDIO in the clear
			1360 1320	ESPN - Atlantic		VIDEO SCRAMBLED	AUDIO in the clear
			1460 1420	ESPN - Pac Rim		VIDEO SCRAMBLED	AUDIO in the clear
			1560 1520	ESPN		VIDEO SCRAMBLED	AUDIO in the clear
			1660 1620	ESPN 2		VIDEO SCRAMBLED	AUDIO in the clear
			1760 1720	ESPN feeds		VIDEO SCRAMBLED	AUDIO in the clear
			1860 1820	ESPN feeds		VIDEO SCRAMBLED	AUDIO in the clear
V-3840	1310 7/8	27.684	1860 1820	AL JAZEERA INTERNATIONAL	Qatar	English language news	
			2660 2620	RUSSIA TODAY SPANISH	Russia	Spanish language news	
			8191 4112	Audio: CVC / Spanish	Miami-FL		
			8191 4114	Audio: CVC / Portuguese	Miami-FL		
V-3880	1270 7/8	27.684	1060 1031	DISCOVERY TURBO-English		VIDEO SCRAMBLED	AUDIO in the clear
			1060 1041	DISCOVERY TURBO-Spanish		VIDEO SCRAMBLED	AUDIO in the clear
			1860 1831	DISCOVERY CIVILIZATION-English		VIDEO SCRAMBLED	AUDIO in the clear
			1860 1841	DISCOVERY CIVILIZATION-Spanish		VIDEO SCRAMBLED	AUDIO in the clear
			1960 1931	DISCOVERY SCIENCE-English		VIDEO SCRAMBLED	AUDIO in the clear
			1960 1941	DISCOVERY SCIENCE-Spanish		VIDEO SCRAMBLED	AUDIO in the clear
V-3924	1226 3/4	06.620	0200 0201	ENLACE TBN	Costa Rica		
			8191 0202	Audio: Stereo Vision Internacional	Costa Rica		
			0300 0301	ENLACE JUVENIL	Costa Rica		
V-3934	1216 3/4	07.000	2260 2220	3ABN - ENGLISH	U.S.		
			2360 2320	3ABN - SPANISH	U.S.		
			8191 2322	Audio: 3ABN Radio	U.S.		
			8191 2330	Audio: Radio 74 International	U.S.		
V-4120	1030 3/4	27.500	0516 0690	YES ITALIA	Italy	Italian	
			0527 0755	RAI NEWS 24	Italy	Italian	
			0528 0770	FUTURE NEWS	Lebanon	Arabic	
			0529 0780	SALUTE TV	Lebanon	Arabic	
			8191 0651	Audio: Al Ddkir		Arabic	
			8191 0661	Audio: A.R.T. Music Radio		Arabic	
			8191 0681	Audio: RAI International	Italy	Italian	
			8191 0701	Audio: Radio Orient		Arabic	
			8191 0711	Audio: RAI International	Italy	Italian	
			8191 0721	Audio: Radio Italia Anni '60	Italy	Italian	
			8191 0801	Audio: Radio 2 Moro		Arabic	
			8191 0804	Audio: Radio Voice Of Charity	Italy	Italian	
V-4148	1002 3/4	02.941	0033 0034	NUUESTRA TV / R.I.T.	Brazil	Portuguese	LEFT-TV audio
			8191 0034	Audio: Nossa Radio FM		Portuguese	RIGHT-Radio
V-4159	0991 3/4	03.000	0032 0033	CDM INTERNACIONAL	Puerto Rico	Spanish	
V-4175	0975 3/4	02.941	4194 4195	MARIA VISION	Mexico	Spanish	

58.0 West Intelsat 9 Ku-Band

9750 MHz local oscillator with Universal LNBF

55.5 West Intelsat 805 C-Band

Covers much of North & South America

H-3667	1483 1/2	03.300	0033 0036	EDUCON 3	Brazil		
H-3670	1480 2/3	01.374	8191 0257	Audio: Radio Corazon 96.7-FM	Lima, Peru		
			8191 0258	Audio: Radio Oxigeno 102.1-FM	Lima, Peru		
			8191 0259	Audio: Felicidad 88.9-FM	Lima, Peru		
			8191 0260	Audio: La Luz 1080-AM	Lima, Peru		
			8191 0513	Audio: Studio 92 92.5-FM	Lima, Peru		
			8191 0514	Audio: La Mega 94.3-FM	Lima, Peru		
			8191 0516	Audio: Nuevo Tiempo	Lima, Peru		
H-3674	1476 2/3	03.200	0033 0036	EADCON 5	Brazil		
H-3679	1471 3/4	03.100	0041 0042	EADCON 4	Brazil		
H-3684	1466 5/6	04.444	0100 0110	EADCON 2	Brazil		
			0200 0210	EADCON 1	Brazil		
H-3733	1417 3/4	03.350	1960 1920	MANAGEMENT TV	Brazil		
H-3750	1400 3/4	03.350	1160 1120	TV MEIO NORTE	Brazil		
H-3760	1390 3/4	02.960	0033 0036	BOLIVIA TV	Bolivia		
H-3767	1383 3/4	04.420	4377 4385	BYU-TV LATIN AMERICA	Salt Lake City-UT		multiple audio PIDs for different languages
H-3791	1359 3/4	02.240	0512 4112	RTU-TV	Ecuador		
			8191 4114	Audio: RTU Radio 1020-AM	Quito, Ecuador		
H-3794	1356 3/4	01.450	4194 4195	PERU TV	Peru		

H-3858	1292 3/4	04.444	2160 1120	PANAMERICANA TV Peru
H-3880	1270 3/4	05.860	0308 0255	TELE AMAZONAS Ecuador
H-3908	1242 3/4	03.256	4194 4195	TV CAPIXABA Brazil
H-3930	1220 3/4	02.941	4194 4195	UNSION Ecuador
			8191 4197	Audio: Radio :Zaracay 100.5 FM Quito, Ecuador
H-3936	1214 2/3	03.256	8191 6622	Audio: BBC World Service Radio ENGLISH-America
			8191 6652	Audio: BBC World Service Radio ENGLISH-Caribbean
			8191 6692	Audio: BBC World Service Radio ENGLISH-News
			8191 6752	Audio: BBC World Service Radio ARABIC
H-3940	1210 3/4	02.575	4194 4195	MEXICO TRAVEL CHANNEL Mexico
H-4084	1066 3/4	10.320	8191 0401	Audio: Radio Sonora 96.9 Guatemala City-GT
			8191 0411	Audio: Radio Fiesta 91.9 Guatemala City-GT
			8191 0421	Audio: Radio Tropicalida 104.9 Guatemala City-GT
			8191 0431	Audio: Radio Galaxia 88.5 Guatemala City-GT
			8191 0443	Audio: Radio Alfa 97.3 Guatemala City-GT
			8191 0451	Audio: Radio Ranchera 95.9 Guatemala City-GT
H-4095	1055 3/4	05.250	0768 0769	CANAL 4 Managua, Nicaragua
			0868 0869	CANAL 10 Managua, Nicaragua
V-3612	1540 3/4	03.800	2304 2305	XHTVL-9 Villahermosa, Mexico
V-3735	1415 3/4	08.680	0300 0301	RE CARIBBEAN (Reggae Entertainment) Jamaica
V-3757	1393 3/4	02.222	0257 0258	TV AZTECA GUATEMALA Guatemala
			0513 0514	JNN-JAMAICA NEWS NETWORK Jamaica
V-3961	1389 3/4	03.617	0256 0258	IGREJA CRISTA MARANATA
V-3771	1379 5/6	13.333	2001 3001	THAI GLOBAL NETWORK Thailand
			2002 3002	VTV-4 Vietnam
			2004 3004	SUPREME MASTER TV U.S.
			2005 3005	RODNOY TV Russia
			2006 3006	MRTV-3 Myanmar (Burma)
			2007 3007	FEEDS
V-3912	1238 3/4	01.800	8191 3008	Audio: 94 - EFM Bangkok, Thailand
V-4004	1146 3/4	03.000	0337 0340	TV VAT AMAZONIA Brazil
V-4080	1070 3/4	04.340	0768 0770	TV AZTECA-31 Guatemala
			1003 1203	RTP Portugal
			8191 1230	Audio: RDP Internacional Portugal

53.0 West Intelsat 707 C-Band

Covers N & S America Circularly Polarized

R-3735	1115 3/4	18.800	0033 0032	RED TV Chile
			0047 0046	TELE CANAL 2 Chile
L-3960	1190 2/3	03.256	4096 1120	RCTV Venezuela

53.0 West Intelsat 707 Ku-Band

9750 MHz local oscillator with Universal LNBF

H-11633	1883 3/4	03.111	4194 4195	CRISTIANA-CANAL 27 Guatemala City, Guatemala
			8191 4197	Audio: Radio Exclusiva Guatemala City

Spot Beam covers most of U.S. Lower 48

50.0 West Intelsat 1R C-Band

Covers N & S America Linearly Polarized

V-4135	1015 7/8	27.900	0359 0351	HISTORY CHANNEL
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45.0 West Intelsat 14 C-Band

Covers much of North & South America

H-3944	1206 7/8	14.446	0032 0033	UNIVISION: WLI1-11 San Juan, Puerto Rico
			0034 0035	TELEMUNDO: WKAQ-02 San Juan, Puerto Rico
			0036 0037	TELEVICENTRO WAPA-04 San Juan, Puerto Rico
			0039 0040	TUTV: WIPR-06 San Juan, Puerto Rico
H-4096	1054 3/4	08.100	0054 0055	TV NACIONAL PERU Peru
			8191 0055	Audio: RPP Noticias-1160 Lima, Peru
			0054 0056	Audio: Radio la Cronica Lima, Peru
H-4126	1024 3/4	03.310	0032 0033	JOIAS VIP Brazil
H-4192	0958 3/4	02.075	0308 0256	IPDA SAT
V-3759	1391 3/4	04.410	0100 0200	TELEFUTURO Asuncion, Paraguay
			0101 0201	LA TELE Asuncion, Paraguay
			8191 0250	Audio: La Estacion 91.1 FM Asuncion, Paraguay
V-3779	1371 7/8	02.941	0033 0036	TV EDUCATIVA NACIONAL Honduras
V-3867	1283 7/8	10.075	3333 3331	TELESISTEMA 3/7 Honduras
			4848 4801	CANAL 48-TV CATOLICA Honduras
			5555 5551	CANAL 5 - EL LIDER Honduras
			7777 7771	TELECADENA 7 Y 4 Honduras
V-3987	1163 3/4	04.410	4194 4195	MEDALHAO PERSA 2 Brazil
V-3991	1159 5/6	02.370	1160 1120	CARIB VISION Barbados
V-4071	1079 3/4	02.615	4160 4120	UCV-TV Chile
V-4107	1043 7/8	11.030	0042 0043	TELECANAL-16 Santo Domingo, Dominican Rep
			0044 0046	ANTENA LATINA-CANAL 7 Santo Domingo, DR
			0050 0051	CANAL DE SOL-65 Santo Domingo, DR
			0055 0056	CDN-TV 2 Santo Domingo, DR
			0091 0092	CNT Santo Domingo, DR
			0098 0099	CERTV Santo Domingo, DR
			0100 0101	TELERADIO AMERICA-45 Santo Domingo, DR
			0110 0111	CDN TV-37 Santo Domingo, DR
			0125 0126	MARKET TV Santo Domingo, DR
			0170 0171	SDTV Santo Domingo, DR
			0868 0869	MANGU MUSIC TV Santo Domingo, DR

LEFT = TV Audio
RIGHT = Radio

Left: TV Audio
Right: Radio

LEFT: TV Audio

V-4173 0977 3/4 04.410
 3260 3220 ANTENA 21 Santo Domingo, DR
 4131 4132 OMNI MEDIA Santo Domingo, DR
 4163 4164 CARIBBEAN TRAVELING NETWORK Dom Rep
 4194 4195 MEDALHAO PERSA Brazil

43.0 West Intelsat 3R & 11 C-Band

H-4040 1110 7/8 30.800
 H-4150 1000 7/8 24.570
 V-3828 1322 3/4 03.300
 V-3875 1275 2/3 01.546
 V-3985 1165 1/2 01.200

8191 2322 Audio: CNN en Espanol
 0518 0710 CANAL RURAL SATELITAL Brazil
 4096 4097 TELETICA-7 San Jose, Costa Rica
 4131 4129 CHOLUSAT SUR-36 Honduras
 8191 0101 Audio: Radio Nederland RNW-1
 8191 0201 Audio: Radio Nederland RNW-2
 8191 0301 Audio: Radio Nederland RNW-3
 8191 0401 Audio: Radio Nederland RNW-4

**Covers eastern North America & South America
 U.S. Lower 48 signals can be quite weak.**

Portuguese
 Spanish
 Spanish
 Dutch
 English
 Spanish
 Various

43.0 West Intelsat 3R Ku-Band

V-11956 1206 3/4 03.125
 V-11995 1245 3/4 02.865
 V-12003 1253 3/4 03.125

0308 0256 TELEVISIA CHIHUAHUA Ciudad Juarez, Mexico
 0308 0256 TV PUEBLA Puebla, Mexico
 0308 0256 TELEVISIA NORESTE Mexico

10750 MHz local oscillator

North American Spot Beam

40.5 West NSS-806 C-Band

R-3632 1518 3/4 02.712
 R-3641 1509 3/4 02.666
 R-3647 1503 3/4 03.972
 R-3653 1497 3/4 05.925.
 R-3663 1487 3/4 02.170
 R-3681 1469 3/4 06.666
 R-3689 1461 3/4 05.180
 R-3694 1456 3/4 02.200
 R-3697 1453 3/4 02.220
 R-3725 1425 3/4 26.667
 R-3803 1347 3/4 26.865

0308 0256 COLOMBEIA Venezuela
 0100 0110 CMB TV INTERNACIONAL Colombia
 8191 0111 Audio: Radio Autentica Colombia
 0337 0340 REDE GENESIS Brazil
 8191 0341 Audio: Sara Brasil FM Brazil
 0210 0220 SBT - TV JORNAL Brazil
 0033 0034 TV UNIAO Fortaleza, Brazil
 4194 4195 K MUSIC Colombia
 4450 4451 TV CENTRO Colombia
 4706 4707 RADIOLA Colombia
 0514 0770 MI GENTE TV Brazil
 4194 4195 CRISTO VISION Colombia
 0308 0256 CANAL 33 El Salvador

**Covers much of North & South America
 Circularly Polarized**

R-3835 1315 3/4 02.170
 R-3878 1272 5/6 22.100

1160 1120 DAYSTAR U.S.
 8191 1122 Audio: Met Opera
 1360 1320 CUBAVISION INTERNACIONAL Cuba
 1460 1420 HELLO CHANNEL
 1560 1520 DESTINOS TV Costa Rica
 3030 3031 TV NOVO TEMPO Brazil
 0512 4112 TELE GRACIA Colombia
 0710 0700 FEEDS Venezuela
 8191 0702 Audio: La Radio del Sur Caracas
 0810 0800 MARTE TV - LA TELE Caracas, Venezuela
 8191 0802 Audio: Magimax 99.1 FM Caracas
 1160 1120 VENEZOLANA DE TV Caracas, Venezuela
 8191 1122 Audio: RNV Informativo 630-AM Caracas
 8191 1222 Audio: Circuito CNB 102.3 FM Caracas
 1360 1320 GLOBOVISION Caracas, Venezuela
 8191 1322 Audio: RCR-95.5 Caracas
 1460 1420 VISION VENEZUELA TV (ViVe) Venezuela
 8191 1422 Audio: Circuito Alianza Maracay, Venezuela
 1560 1520 MERIDIANO TV Venezuela
 8191 1522 Audio: RNV Juvenil-Activa FM 103.9 Caracas
 1660 1620 CANAL I Venezuela
 8191 1622 Audio: RNV Clasico FM 91.1 Caracas

May be scrambled

May be scrambled

R-3937 1213 3/4 02.170
 R-3960 1190 7/8 02.030
 R-3980 1170 3/4 17.800

0512 4112 TELE GRACIA Colombia
 0101 0102 CONTAC TV CRISTIANO Venezuela
 5160 5120 USIA WORLDNET South America
 5160 5130 Audio: Voice Of America - News Now
 5260 5220 USIA WORLDNET Persian
 5260 5222 Audio: Voice Of America
 5360 5320 USIA WORLDNET Persian
 5360 5330 Audio: Voice Of America

Left: TV Audio Right: Voice Of America-Music Mix

R-4026 1124 3/4 09.640
 R-4041 1109 3/4 08.200
 R-4055 1095 3/4 03.000
 R-4081 1069 5/6 06.510

0257 0258 TV COLOMBIA Colombia
 0513 0515 NTN Colombia
 1160 1120 MANAGEMENT TV LATIN AMERICA
 4194 4195 SPORTS SAT
 1160 1120 BLOOMBERG TV LATIN AMERICA U.S.
 1260 1220 BLOOMBERG TV BRAZIL U.S.

<ac-3 audio>
 <ac-3 audio>

Spanish
 Portuguese

R-4093 1057 3/4 02.900
 R-4119 1031 3/4 02.960
 R-4122 1028 7/8 01.855
 R-4129 1021 5/6 02.000
 R-4132 1018 7/8 02.357
 R-4136 1014 3/4 03.333
 R-4143 1007 3/4 04.800

0033 0034 ATEL Maracaibo, Venezuela
 0033 0034 TELE SUR Venezuela
 1062 1063 CITY-TV Bogota, Colombia
 4096 4097 ZUVISION Venezuela
 0308 0256 XPANDE TV U.S.
 0033 0036 TVR Venezuela
 6160 6120 TV MARTI U.S.

	3024	3034			OMAN TV	Oman		
	3026	3036			AL IRAQIYA	Iraq		
	8191	3037			Audio: Oman - Holy Quran			
	3028	3038			SAUDI ARABIA TV-1	Saudi Arabia		
	3029	3039			QATAR TV	Qatar		
	8191	3044			Audio: Radio Oman	Oman		
	3071	3081			SUDAN TV	Sudan		
	3072	3082			JAMAHIRYA TV	Libya		
	3073	3083			SHARJAH TV	U.A.E.		
	8191	3092			Audio: Radio Jamahiryah	Libya		
	3127	3137			SYRIA DRAMA CHANNEL	Syria		
	8191	3531			Audio: Emirates FM	U.A.E.		
	8191	3532			Audio: Voice Of The People			
	8191	3534			Audio: Saudi Program 1	Saudi Arabia		
	8191	3535			Audio: Radio Quran			
	8191	3536			Audio: Sudan Radio	Sudan		
	8191	3537			Audio: Nour Radio			
	8191	3538			Audio: Qatar Radio	Qatar		
	8191	3539			Audio: Radio Omdurman-Holy Koran			
	8191	3540			Audio: Oman Radio	Oman		
	8191	3541			Audio: Voice Of Youth			
	8191	3542			Audio: Sharjah FM	U.A.E.		
	8191	3631			Audio: Sana'a Radio	Yemen		
	8191	3632			Audio: Aden Radio	Yemen		
H-12172	1422	3/4	27.500	1101	1111	2M-TV	Morocco	
				8191	1120	Audio: RFI 1	France	
				8191	1121	Audio: RFI 2	France	
				8191	1131	Audio: Radio Kuwait	Kuwait	
				8191	1132	Audio: Holy Quran	Kuwait	
				8191	1211	Audio: Radio 2M	Morocco	
				1301	1311	PRESS TV	Iran	
				1401	1402	MTA INTERNATIONAL	Urdu Language	
								APIDs: 1403=English 1404=French 1405=German 1406=Arabic 1407=Bengali
				1501	1502	KTV-1	Kuwait Arabic	
				1601	1611	TV MARTI	U.S.	
				8191	1612	Audio: Voice Of America	U.S.	
				8191	1613	Audio: Radio Marti	U.S.	Also on APID 1614
				1701	1711	ATEI	Spain	
				1901	1911	TV CANARIA INTERNACIONAL	Canary Is, Spain	
				2201	2211	KTV-2	Kuwait English	
				8191	2212	Audio: Mix FM 98.4	Kuwait	
				2301	2311	KTV-3	Kuwait Arabic	
				8191	4111	Audio: Radio France Internationale	France	Also on APIDs 4211 4311 4411
V-11884	1134	2/3	27.500	0101	0201	CUBAVISION	Havana, Cuba	
				8191	0202	Audio: 90.3-FM Radio Progreso	Havana, Cuba	
				0102	0203	TELE REBELDE	Havana, Cuba	
				8191	0204	Audio: 96.7-FM Radio Rebelde	Havana, Cuba	
				0103	0205	CANAL EDUCATIVO 1	Havana, Cuba	
				8191	0206	Audio: 106.9-FM Radio Habana	Havana, Cuba	
				0104	0207	CANAL EDUCATIVO 2	Havana, Cuba	
				8191	0208	Audio: 101.5-FM Radio Reloj	Havana, Cuba	
				0105	0209	CUBAVISION INTERNACIONAL	Havana, Cuba	
				8191	0210	Audio: 93.3-FM Radio Taino	Havana, Cuba	
				8191	0212	Audio: 94.1-FM R. Enciclopedia	Havana, Cuba	
				8191	0213	Audio: 1260-AM CMBF	Havana, Cuba	
				0106	0216	SENAL ACN	Havana, Cuba	
				8191	0221	Audio: Habana Radio	Havana, Cuba	
V-11930	1180	3/4	02.220	4194	4195	TV LIBRE	Uruguay	
V-11940	1190	3/4	07.500	0101	0102	TELE CARIBE	Colombia	
				0103	0104	ZOOM	Colombia	
				0105	0106	REGION COLOMBIA INT'L	Colombia	
V-12052	1302	3/4	27.500	1000	1001	R T P A	Spain	
				1160	1120	ANTENA 3	Spain	VIDEO SCRAMBLED FTA AUDIO
				4208	4209	TV DE GALICIA	Spain	
				8191	4215	Audio: Radio Maria	Spain	
				4240	4241	TVC INTERNACIONAL	Spain	
				4256	4257	CANAL VASCO	Spain	
				8191	0035	Audio: RNE Radio 1	Spain	
				8191	0036	Audio: RNE Radio Clasica	Spain	
				8191	0038	Audio: RNE Radio 5	Spain	
				8191	0039	Audio: REE-Radio Exterior de Espana	Spain	
				8191	0040	Audio: REE-Radio Exterior de Espana	Spain	
				8191	0041	Audio: Radio Galega	Spain	
				8191	0042	Audio: I-Cat FM	Spain	
				8191	0043	Audio: Euskadi Irratiio	Spain	
				8191	0044	Audio: Radio Euskadi	Spain	
				8191	0045	Audio: Catalunya Radio	Spain	
				8191	0046	Audio: RNE Radio 3	Spain	
				8191	0047	Audio: REE-Radio Exterior de Espana	Spain	
				8191	0049	Audio: RNE Radio 5 Todo Noticias	Spain	
V-12145	1395	3/4	04.200	8191	0768	Audio: Radio Panorama 100.1	Santiago, Argentina	
V-12156	1406	3/4	02.222	4194	4197	CANAL 6 TV COOPERATIVA	Argentina	Very Weak Signal
V-12159	1409	3/4	02.348	0308	0256	CANAL LUZ SATELITAL	Argentina	"

V-12169	1419	3/4	05.240	8191 0255	Audio: Vida FM Argentina	"
				0255 0256	SOLO TANGO Argentina	
				0257 0258	SUPREME MASTER TV U.S.	
				8191 0261	Audio: Cadena 3 99.1 Buenos Aires, Argentina	
				8191 0262	Audio: Radio 3 AM 780 Trelew, Argentina	
				8191 0266	Audio: Radio de la Mujer Argentina	
				8191 0267	Audio: Cooperativa 740-AM Buenos Aires, Arg	
				8191 0268	Audio: Cristo la Solucion 97.1 Buenos Aires, Arg	
				8191 0269	Audio: Cadena Uno AM-1240 Buenos Aires, Arg	
V-12173	1423	3/4	02.222	1160 1120	CANAL 21 Argentina	Very Weak Signal