

TV Channel, CATV and FM Broadcast Frequencies

Note: This information copied with permission. Thanks to [Kevin K. Custer W3KKC, Masters Communications, Inc.](#)

Newsgroups: sci.electronics

From: andy@cbrown.claremont.edu

Subject: Re: CATV channel frequencies USA

Here is a list of TV frequencies. In the US, a TV channel is a 6 MHz wide chunk of bandspace. The bottom edge of the over-the-air channel 2 is 54 MHz and the upper edge is 60 MHz. Within this 6 MHz space is a video carrier, a color carrier, and an audio carrier.

The frequency of the video carrier is 1.25 MHz above the lower edge, so for channel 2 the video is at 55.25 MHz.

The color carrier is approx. 3.58 MHz above the _video_ carrier (N.B. not the lower edge), so for ch 2 it is 58.83 MHz.

The audio carrier is 4.5 MHz above the _video_ carrier, so for ch 2 it is 59.75 MHz.

The reason I mention all of this is that you have to be careful to note how a channel frequency is being specified. The two common methods are (1) specifying the lower edge (e.g. 54 MHz, but often as a range of lower edge to upper edge like 54-60 MHz) and (2) specifying the frequency of the video carrier (e.g. 55.25 MHz). In the following lists I always use the latter method, specifying the video carrier.

CATV has channels with frequencies below channel 2. They are designated T-7 (tee seven or tee dash seven) through T-14 and are usually used for transmission in the reverse direction. If your local city council meeting is broadcast live, the camera is being modulated onto one of those T channels and sent back up to the cable system headend whereupon it is broadcast outbound on the community cable access channel.

In the list I have some channels with the designation A-1 (A minus one, not A dash one) through A-8. They are so designated because their frequencies immediately precede that of the CATV channel known as A.

In the CATV listing, the column labeled Common gives the common industry parlance for that channel. The next column labeled EIA gives the new EIA standardized designation. Column STD shows the standard CATV frequency which usually matches IRC. IRC stands for Incrementally Related Carrier and means that the _lower_edge_ of the channel space is on the nice, round-numbered boundary such as 54 MHz, 60 MHz, 66 MHz etc. HRC stands for Harmonically Related Carrier, and as you can see means that it

is the `_video_carrier_` that is assigned the nice round number (6 MHz harmonics, hence). Some cable systems use IRC, some use HRC.

The number of channels on a given cable system varies. Very old systems might only go up to 300 or 350 MHz. Most common in the past ten years or so is 450 MHz. Newer systems may be 550 MHz. The latest and greatest with any meaningful installed base is 800 or 860 MHz (somebody correct me), but it is rare and pricey. The list herein only goes up to 550 MHz.

FM radio frequencies are thrown in for good measure.

This stuff was gathered from several sources. My thanks to all of them.

Error reports are welcome.

AIR	2	55.25	VHF-LO	
AIR	3	61.25	VHF-LO	
AIR	4	67.25	VHF-LO	
AIR	5	77.25	VHF-LO	
AIR	6	83.25	VHF-LO	
AIR	7	175.25	VHF-HI	
AIR	8	181.25	VHF-HI	
AIR	9	187.25	VHF-HI	
AIR	10	193.25	VHF-HI	
AIR	11	199.25	VHF-HI	
AIR	12	205.25	VHF-HI	
AIR	13	211.25	VHF-HI	
AIR	14	471.25	UHF	
AIR	15	477.25	UHF	
AIR	16	483.25	UHF	
AIR	17	489.25	UHF	

AIR	18	495.25	UHF	
AIR	19	501.25	UHF	
AIR	20	507.25	UHF	
AIR	21	513.25	UHF	
AIR	22	519.25	UHF	
AIR	23	525.25	UHF	
AIR	24	531.25	UHF	
AIR	25	537.25	UHF	
AIR	26	543.25	UHF	
AIR	27	549.25	UHF	
AIR	28	555.25	UHF	
AIR	29	561.25	UHF	
AIR	30	567.25	UHF	
AIR	31	573.25	UHF	
AIR	32	579.25	UHF	
AIR	33	585.25	UHF	
AIR	34	591.25	UHF	
AIR	35	597.25	UHF	
AIR	36	603.25	UHF	
AIR	37	609.25	UHF	
AIR	38	615.25	UHF	
AIR	39	621.25	UHF	
AIR	40	627.25	UHF	
AIR	41	633.25	UHF	
AIR	42	639.25	UHF	

AIR	43	645.25	UHF	
AIR	44	651.25	UHF	
AIR	45	657.25	UHF	
AIR	46	663.25	UHF	
AIR	47	669.25	UHF	
AIR	48	675.25	UHF	
AIR	49	681.25	UHF	
AIR	50	687.25	UHF	
AIR	51	693.25	UHF	
AIR	52*	699.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	53*	705.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	54*	711.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	55*	717.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	56*	723.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	57*	729.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	58*	735.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	59*	741.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	60*	747.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	61*	753.25	UHF	*No longer assigned to TV as of 06/12/09

AIR	62*	759.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	63*	765.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	64*	771.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	65*	777.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	66*	783.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	67*	789.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	68*	795.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	69*	801.25	UHF	*No longer assigned to TV as of 06/12/09
AIR	70**	807.25	UHF	**No longer assigned to TV since the 1980s.
AIR	71**	813.25	UHF	**No longer assigned to TV since the 1980s.
AIR	72**	819.25	UHF	**No longer assigned to TV since the 1980s.
AIR	73**	825.25	UHF	**No longer assigned to TV since the 1980s.
AIR	74**	831.25	UHF	**No longer assigned to TV since the 1980s.
AIR	75**	837.25	UHF	**No longer assigned to TV since the 1980s.
AIR	76**	843.25	UHF	**No longer assigned to TV since the 1980s.
AIR	77**	849.25	UHF	**No longer assigned to TV since the 1980s.

AIR	78**	855.25	UHF	**No longer assigned to TV since the 1980s.
AIR	79**	861.25	UHF	**No longer assigned to TV since the 1980s.
AIR	80**	867.25	UHF	**No longer assigned to TV since the 1980s.
AIR	81**	873.25	UHF	**No longer assigned to TV since the 1980s.
AIR	82**	879.25	UHF	**No longer assigned to TV since the 1980s.
AIR	83**	885.25	UHF	**No longer assigned to TV since the 1980s.

Common	EIA	STD	IRC	HRC	Band
CATV T-7		7.00			SUB
CATV T-8		13.00			SUB
CATV T-9		19.00			SUB
CATV T-10		25.00			SUB
CATV T-11		31.00			SUB
CATV T-12		37.00			SUB
CATV T-13		43.00			SUB
CATV T-14		49.00			SUB
CATV 2-1			49.25	48.00	LO
CATV 2	02	55.25	55.25	54.00	LO
CATV 3	03	61.25	61.25	60.00	LO
CATV 4	04	67.25	67.25	66.00	LO
CATV A-8		01	73.25	72.00	LO

4+					
CATV A-7 5	05		79.25	78.00	LO
CATV A-6 6	06		85.25	84.00	LO
CATV A-5	95	91.25	90.00	91.25	MID
CATV A-4	96	97.25	96.00	97.25	MID
CATV A-3	97	103.25	102.00	103.25	MID
CATV A-2	98	109.25	108.00	109.25	MID
CATV A-1	99	115.25	114.00	115.25	MID
CATV 7	07	175.25	175.25	174.00	HI
CATV 8	08	181.25	181.25	180.00	HI
CATV 9	09	187.25	187.25	186.00	HI
CATV 10	10	193.25	193.25	192.00	HI
CATV 11	11	199.25	199.25	198.00	HI
CATV 12	12	205.25	205.25	204.00	HI
CATV 13	13	211.25	211.25	210.00	HI
CATV A	14	121.25	121.25	120.00	MID
CATV B	15	127.25	127.25	126.00	MID
CATV C	16	133.25	133.25	132.00	MID
CATV D	17	139.25	139.25	138.00	MID
CATV E	18	145.25	145.25	144.00	MID
CATV F	19	151.25	151.25	150.00	MID
CATV G	20	157.25	157.25	156.00	MID
CATV H	21	163.25	163.25	162.00	MID
CATV I	22	169.25	169.25	168.00	MID
CATV J	23	217.25	217.25	216.00	SUPER

CATV K	24	223.25	223.25	222.00	SUPER
CATV L	25	229.25	229.25	228.00	SUPER
CATV M	26	235.25	235.25	234.00	SUPER
CATV N	27	241.25	241.25	240.00	SUPER
CATV O	28	247.25	247.25	246.00	SUPER
CATV P	29	253.25	253.25	252.00	SUPER
CATV Q	30	259.25	259.25	258.00	SUPER
CATV R	31	265.25	265.25	264.00	SUPER
CATV S	32	271.25	271.25	270.00	SUPER
CATV T	33	277.25	277.25	276.00	SUPER
CATV U	34	283.25	283.25	282.00	SUPER
CATV V	35	289.25	289.25	288.00	SUPER
CATV W	36	295.25	295.25	294.00	SUPER
CATV AA	37	301.25	301.25	300.00	HYPER
CATV BB	38	307.25	307.25	306.00	HYPER
CATV cc	39	313.25	313.25	312.00	HYPER
CATV DD	40	319.25	319.25	318.00	HYPER
CATV EE	41	325.25	325.25	324.00	HYPER
CATV FF	42	331.25	331.25	330.00	HYPER
CATV GG	43	337.25	337.25	336.00	HYPER
CATV HH	44	343.25	343.25	342.00	HYPER
CATV II	45	349.25	349.25	348.00	HYPER
CATV JJ	46	355.25	355.25	354.00	HYPER
CATV KK	47	361.25	361.25	360.00	HYPER
CATV LL	48	367.25	367.25	366.00	HYPER

CATV MM	49	373.25	373.25	372.00	HYPER
CATV NN	50	379.25	379.25	378.00	HYPER
CATV OO	51	385.25	385.25	384.00	HYPER
CATV pp	52	391.25	391.25	390.00	HYPER
CATV QQ	53	397.25	397.25	396.00	HYPER
CATV RR	54	403.25	403.25	402.00	HYPER
CATV SS	55	409.25	409.25	408.00	HYPER
CATV TT	56	415.25	415.25	414.00	HYPER
CATV UU	57	421.25	421.25	420.00	HYPER
CATV VV	58	427.25	427.25	426.00	HYPER
CATV WW	59	433.25	433.25	432.00	HYPER
CATV xx	60	439.25	439.25	438.00	HYPER
CATV YY	61	445.25	445.25	444.00	HYPER
CATV ZZ	62	451.25	451.25	450.00	HYPER
CATV AAA	63	457.25	457.25	456.00	HYPER
CATV BBB	64	463.25	463.25	462.00	HYPER
CATV CCC	65	469.25	469.25	468.00	HYPER
CATV DDD	66	475.25	475.25	474.00	HYPER
CATV EEE	67	481.25	481.25	480.00	HYPER
CATV FFF	68	487.25	487.25	486.00	HYPER
CATV GGG	69	493.25	493.25	492.00	HYPER
CATV HHH	70	499.25	499.25	498.00	HYPER
CATV III	71	505.25	505.25	504.00	HYPER
CATV JJJ	72	511.25	511.25	510.00	HYPER
CATV KKK	73	517.25	517.25	516.00	HYPER

CATV LLL	74	523.25	523.25	522.00	HYPER
CATV MMM	75	529.25	529.25	528.00	HYPER
CATV NNN	76	535.25	535.25	534.00	HYPER
CATV OOO	77	541.25	541.25	540.00	HYPER
CATV PPP	78	547.25	547.25	546.00	HYPER

FM 200	87.90	Assigned only in rare cases.
FM 201	88.10	
FM 202	88.30	
FM 203	88.50	
FM 204	88.70	
FM 205	88.90	
FM 206	89.10	
FM 207	89.30	
FM 208	89.50	
FM 209	89.70	
FM 210	89.90	
FM 211	90.10	
FM 212	90.30	
FM 213	90.50	
FM 214	90.70	
FM 215	90.90	
FM 216	91.10	
FM 217	91.30	
FM 218	91.50	
FM 219	91.70	
FM 220	91.90	
FM 221	92.10	
FM 222	92.30	
FM 223	92.50	
FM 224	92.70	

FM	225	92.90	
FM	226	93.10	
FM	227	93.30	
FM	228	93.50	
FM	229	93.70	
FM	230	93.90	
FM	231	94.10	
FM	232	94.30	
FM	233	94.50	
FM	234	94.70	
FM	235	94.90	
FM	236	95.10	
FM	237	95.30	
FM	238	95.50	
FM	239	95.70	
FM	240	95.90	
FM	241	96.10	
FM	242	96.30	
FM	243	96.50	
FM	244	96.70	
FM	245	96.90	
FM	246	97.10	
FM	247	97.30	
FM	248	97.50	
FM	249	97.70	
FM	250	97.90	
FM	251	98.10	
FM	252	98.30	
FM	253	98.50	
FM	254	98.70	
FM	255	98.90	
FM	256	99.10	
FM	257	99.30	
FM	258	99.50	
FM	259	99.70	

FM 260	99.90	
FM 261	100.10	
FM 262	100.30	
FM 263	100.50	
FM 264	100.70	
FM 265	100.90	
FM 266	101.10	
FM 267	101.30	
FM 268	101.50	
FM 269	101.70	
FM 270	101.90	
FM 271	102.10	
FM 272	102.30	
FM 273	102.50	
FM 274	102.70	
FM 275	102.90	
FM 276	103.10	
FM 277	103.30	
FM 278	103.50	
FM 279	103.70	
FM 280	103.90	
FM 281	104.10	
FM 282	104.30	
FM 283	104.50	
FM 284	104.70	
FM 285	104.90	
FM 286	105.10	
FM 287	105.30	
FM 288	105.50	
FM 289	105.70	
FM 290	105.90	
FM 291	106.10	
FM 292	106.30	
FM 293	106.50	
FM 294	106.70	

FM	295	106.90	
FM	296	107.10	
FM	297	107.30	
FM	298	107.50	
FM	298	107.70	
FM	300	107.90	

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