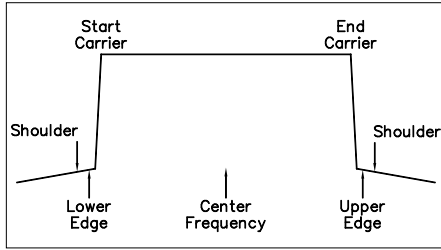
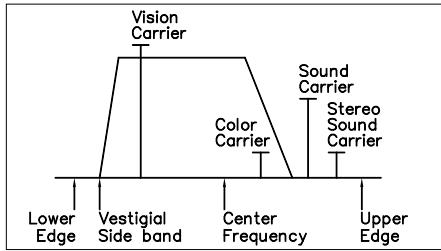


# Channel Structure



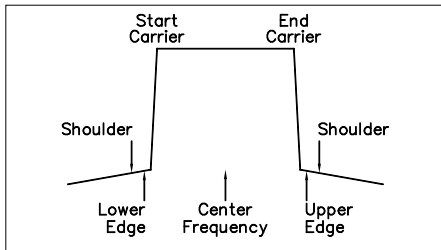
### DTV

Standard	Channel Width	Start - Stop	Shoulders	1 <sup>st</sup> Mask Breakpoint	2 <sup>nd</sup> Mask Breakpoint
DVB-T/T2 8 MHz	8 MHz	± 3.8/3.9 MHz	± 4.2 MHz	± 6 MHz	± 12 MHz
DVB-T/T2 7 MHz	7 MHz	± 3.325/3.4 MHz	± 3.675 MHz	± 5.25 MHz	± 10.5 MHz
DVB-T/T2 6 MHz	6 MHz	± 2.85/2.9 MHz	± 3.15 MHz	± 4.5 MHz	± 9 MHz
ATSC/ATSC 3.0	6 MHz	± 2.7/2.93 MHz	± 3.5 MHz	± 6 MHz	± 9 MHz
ISDB	6 MHz	± 2.79 MHz	± 3.15 MHz	± 4.5 MHz	± 9 MHz



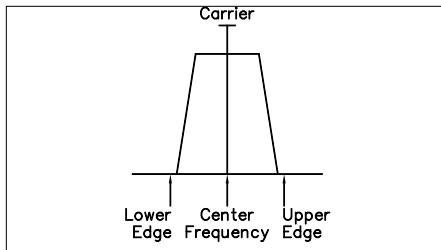
### ATV

Standard	Channel Width	Sound Carrier	Center Frequency	Vestigial Sideband	Stereo Sound Carrier
G	8 MHz	V.C.+5.5 MHz	V.C.+2.75 MHz	V.C.-0.75 MHz	V.C.+5.74 MHz
D, K, K1 L	8 MHz	V.C.+6.5 MHz	V.C.+3.25 MHz	V.C.-0.75 MHz	
I	8 MHz	V.C.+6.0 MHz	V.C.+3.00 MHz	V.C.-1.25 MHz	
B	7 MHz	V.C.+5.5 MHz	V.C.+2.75 MHz	V.C.-0.75 MHz	
M, N	6 MHz	V.C.+4.5 MHz	V.C.+2.25 MHz	V.C.-0.75 MHz	



### DAB / T-DMB

Channel Width	Start / Stop	Shoulders	1 <sup>st</sup> Mask Breakpoint	2 <sup>nd</sup> Mask Breakpoint	3 <sup>rd</sup> Mask Breakpoint
1.712 MHz	± 0.77 MHz	± 0.97 MHz	± 1.75 MHz	± 2.2 MHz	± 3 MHz



### FM

Channel Width	Modulation Limit	Carrier
200 KHz	± 90 KHz	Center Frequency

## 8 MHz (UHF)

## DVB 8 MHz / G, K, L, I

Ch. Europe	Ch. China	Center Freq. (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
21	13	474	471.25	470	478
22	14	482	479.25	478	486
23	15	490	487.25	486	494
24	16	498	495.25	494	502
25	17	506	503.25	502	510
26	18	514	511.25	510	518
27	19	522	519.25	518	526
28	20	530	527.25	526	534
29	21	538	535.25	534	542
30	22	546	543.25	542	550
31	23	554	551.25	550	558
32	24	562	559.25	558	566
33	-	570	567.25	566	574
34	-	578	575.25	574	582
35	-	586	583.25	582	590
36	-	594	591.25	590	598
37	-	602	599.25	598	606
38	25	610	607.25	606	614
39	26	618	615.25	614	622
40	27	626	623.25	622	630
41	28	634	631.25	630	638
42	29	642	639.25	638	646
43	30	650	647.25	646	654
44	31	658	655.25	654	662
45	32	666	663.25	662	670
46	33	674	671.25	670	678
47	34	682	679.25	678	686
48	35	690	687.25	686	694
49	36	698	695.25	694	702
50	37	706	703.25	702	710
51	38	714	711.25	710	718
52	39	722	719.25	718	726
53	40	730	727.25	726	734
54	41	738	735.25	734	742
55	42	746	743.25	742	750
56	43	754	751.25	750	758
57	44	762	759.25	758	766
58	45	770	767.25	766	774
59	46	778	775.25	774	782
60	47	786	783.25	782	790
61	48	794	791.25	790	798
62	49	802	799.25	798	806
63	50	810	807.25	806	814
64	51	818	815.25	814	822
65	52	826	823.25	822	830
66	53	834	831.25	830	838
67	54	842	839.25	838	846
68	55	850	847.25	846	854
69	56	858	855.25	854	862

## 8 MHz (VHF)

## DVB 8 MHz / I, K1, D OIRT

Ch. Ireland	Ch. South Africa	Ch. French Overseas K1	Ch. OIRT	Center Freq. (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
<b>Band I</b>							
I A	-	-	-	48.5	45.75	44.5	52.5
I B	-	-	-	56.5	53.75	52.5	60.5
I C	-	-	-	64.5	61.75	60.5	68.5
-	-	-	R I	52.5	49.75	48.5	56.5
-	-	-	R II	62	59.25	58	66
-	-	-	R III	80	77.25	76	84
<b>Band II</b>							
-	-	-	R IV	88	85.25	84	92
-	-	-	R V	96	93.25	92	100
<b>Band III</b>							
I D	4	4	R VI	178	175.25	174	182
I E	5	5	R VII	186	183.25	182	190
I F	6	6	R VIII	194	191.25	190	198
I G	7	7	R IX	202	199.25	198	206
I H	8	8	R X	210	207.25	206	214
I J	9	9	R XI	218	215.25	214	222
-	10	-	R XII	226	223.25	222	230
-	11	-	-	234	231.25	230	238
-	(12)	-	-	242	-	238	246
-	13	-	-	250	247.25	246	254

## DVB 8 MHz / D

Ch. China	Center Frequency (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
<b>Band I</b>				
1	52.5	49.75	48.5	56.5
2	60.5	57.75	56.5	64.5
3	68.5	65.75	64.5	72.5
4	80	77.25	76	84
5	88	85.25	84	92
<b>Band III</b>				
6	171	168.25	167	175
7	179	176.25	175	183
8	187	184.25	183	191
9	195	192.25	191	199
10	203	200.25	199	207
11	211	208.25	207	215
12	219	216.25	215	223

## DVB 8 MHz / L

Ch. France	Center Frequency (DTV)	Vision Carrier (ATV)	Lower Edge	Channel End
<b>Band I</b>				
A	44	47.75	41	49
B	52	55.75	49	57
C	60	63.75	57	65
C1	56.75	60.5	53.75	61.75
<b>Band III</b>				
1	178.75	176	174.75	182.75
2	186.75	184	182.75	190.75
3	194.75	192	190.75	198.75
4	202.75	200	198.75	206.75
5	210.75	208	206.75	214.75
6	218.75	216	214.75	222.75

## 7 MHz (UHF / VHF)

## DVB 7 MHz / B (UHF)

Ch. Australia	Center Freq. (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
28	529.5	527.25	526	533
29	536.5	534.25	533	540
30	543.5	541.25	540	547
31	550.5	548.25	547	554
32	557.5	555.25	554	561
33	564.5	562.25	561	568
34	571.5	569.25	568	575
35	578.5	576.25	575	582
36	585.5	583.25	582	589
37	592.5	590.25	589	596
38	599.5	597.25	596	603
39	606.5	604.25	603	610
40	613.5	611.25	610	617
41	620.5	618.25	617	624
42	627.5	625.25	624	631
43	634.5	632.25	631	638
44	641.5	639.25	638	645
45	648.5	646.25	645	652
46	655.5	653.25	652	659
47	662.5	660.25	659	666
48	669.5	667.25	666	673
49	676.5	674.25	673	680
50	683.5	681.25	680	687
51	690.5	688.25	687	694
52	697.5	695.25	694	701
53	704.5	702.25	701	708
54	711.5	709.25	708	715
55	718.5	716.25	715	722
56	725.5	723.25	722	729
57	732.5	730.25	729	736
58	739.5	737.25	736	743
59	746.5	744.25	743	750
60	753.5	751.25	750	757
61	760.5	758.25	757	764
62	767.5	765.25	764	771
63	774.5	772.25	771	778
64	781.5	779.25	778	785
65	788.5	786.25	785	792
66	795.5	793.25	792	799
67	802.5	800.25	799	806
68	809.5	807.25	806	813
69	816.5	814.25	813	820

## DVB 7 MHz / B (VHF)

Ch. Europe	Ch. Australia	Ch. New Zealand	Center Frequency (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
<b>Band I</b>						
E 2	-	-	50.5	48.25	47	54
E 3	-	-	57.5	55.25	54	61
E 4	-	-	64.5	62.25	61	68
-	0	-	48.5	46.25	45	52
-	1	-	59.5	57.25	56	63
-	2	-	66.5	64.25	63	70
-	-	1	47.5	45.25	44	51
-	-	2	57.5	55.25	54	61
-	-	3	64.5	62.25	61	68
<b>Band II</b>						
-	3	-	88.5	86.25	85	92
-	4	-	97.5	95.25	94	101
-	5	-	104.5	102.25	101	108
-	5A	-	140.5	138.25	137	144
<b>Band III</b>						
E 5	6	4	177.5	175.25	174	181
E 6	7	5	184.5	182.25	181	188
E 7	8	6	191.5	189.25	188	195
E 8	9	7	198.5	196.25	195	202
E 9	9A	8	205.5	203.25	202	209
E 10	10	9	212.5	210.25	209	216
E 11	11	10	219.5	217.25	216	223
E 12	12	-	226.5	224.25	223	230

## 6 MHz (UHF)

## ATSC, ISDB, DVB 6 MHz / M, N

Ch. USA	Ch. Japan	Center Freq. (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
14	13	473	471.25	470	476
15	14	479	477.25	476	482
16	15	485	483.25	482	488
17	16	491	489.25	488	494
18	17	497	495.25	494	500
19	18	503	501.25	500	506
20	19	509	507.25	506	512
21	20	515	513.25	512	518
22	21	521	519.25	518	524
23	22	527	525.25	524	530
24	23	533	531.25	530	536
25	24	539	537.25	536	542
26	25	545	543.25	542	548
27	26	551	549.25	548	554
28	27	557	555.25	554	560
29	28	563	561.25	560	566
30	29	569	567.25	566	572
31	30	575	573.25	572	578
32	31	581	579.25	578	584
33	32	587	585.25	584	590
34	33	593	591.25	590	596
35	34	599	597.25	596	602
36	35	605	603.25	602	608
37	36	611	609.25	608	614
38	37	617	615.25	614	620
39	38	623	621.25	620	626
40	39	629	627.25	626	632
41	40	635	633.25	632	638
42	41	641	639.25	638	644
43	42	647	645.25	644	650
44	43	653	651.25	650	656
45	44	659	657.25	656	662
46	45	665	663.25	662	668
47	46	671	669.25	668	674
48	47	677	675.25	674	680
49	48	683	681.25	680	686
50	49	689	687.25	686	692
51	50	695	693.25	692	698
52	51	701	699.25	698	704
53	52	707	705.25	704	710
54	53	713	711.25	710	716
55	54	719	717.25	716	722
56	55	725	723.25	722	728
57	56	731	729.25	728	734
58	57	737	735.25	734	740
59	58	743	741.25	740	746
60	59	749	747.25	746	752
61	60	755	753.25	752	758
62	61	761	759.25	758	764
63	62	767	765.25	764	770
64	-	773	771.25	770	776
65	-	779	777.25	776	782
66	-	785	783.25	782	788
67	-	791	789.25	788	794
68	-	797	795.25	794	800
69	-	803	801.25	800	806

## 6 MHz (VHF)

## ATSC, DVB 6 MHz / M, N

Ch. USA	Center Freq. (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
<b>Band I</b>				
A 02	57	55.25	54	60
A 03	63	61.25	60	66
A 04	69	67.25	66	72
A 05	79	77.25	76	82
A 06	85	83.25	82	88
<b>Band III</b>				
A 07	177	175.25	174	180
A 08	183	181.25	180	186
A 09	189	187.25	186	192
A 10	195	193.25	192	198
A 11	201	199.25	198	204
A 12	207	205.25	204	210
A 13	213	211.25	210	216

## ISDB, DVB 6 MHz / N

Ch. Japan	Center Freq. (DTV)	Vision Carrier (ATV)	Lower Edge	Upper Edge
<b>Band II</b>				
J 1	93	91.25	90	96
J 2	99	97.25	96	102
J 3	105	103.25	102	108
<b>Band III</b>				
J 4	173	171.25	170	176
J 5	179	177.25	176	182
J 6	185	183.25	182	188
J 7	191	189.25	188	194
J 8	195	193.25	192	198
J 9	201	199.25	198	204
J 10	207	205.25	204	210
J 11	213	211.25	210	216
J 12	219	217.25	216	222

## DAB, T-DMB (VHF)

## DAB, T-DMB

Block	Center Freq.	Lower Edge	Upper Edge
5A	174.928	174.072	175.784
5B	176.640	175.784	177.496
5C	178.352	177.496	179.208
5D	180.064	179.208	180.920
6A	181.936	181.080	182.792
6B	183.648	182.792	184.504
6C	185.360	184.504	186.216
6D	187.072	186.216	187.928
7A	188.928	188.072	189.784
7B	190.640	189.784	191.496
7C	192.352	191.496	193.208
7D	194.064	193.208	194.920
8A	195.936	195.080	196.792
8B	197.648	196.792	198.504
8C	199.360	198.504	200.216
8D	201.072	200.216	201.928
9A	202.928	202.072	203.784
9B	204.640	203.784	205.496
9C	206.352	205.496	207.208
9D	208.064	207.208	208.920
10A	209.936	209.080	210.792
10B	211.648	210.792	212.504
10C	213.360	212.504	214.216
10D	215.072	214.216	215.928
11A	216.928	216.072	217.784
11B	218.640	217.784	219.496
11C	220.352	219.496	221.208
11D	222.064	221.208	222.920
12A	223.936	223.080	224.792
12B	225.648	224.792	226.504
12C	227.360	226.504	228.216
12D	229.072	228.216	229.928
13A	230.784	229.928	231.640
13B	232.496	231.640	233.352
13C	234.208	233.352	235.064
13D	235.776	234.920	236.632
13E	237.488	236.632	238.344
13F	239.200	238.344	240.056