

Coaxial Cable Attenuation Charts

A compilation of the most common coaxial cables and their attenuation.
Credit goes to the webpages that provided them in the first place.

Attenuation of Coaxial Transmission Lines in the VHF/UHF/Microwave Amateur and ISM Bands

Cable Type	144 MHz	220 MHz	450 MHz	915 MHz	1.2 GHz	2.4 GHz	5.8 GHz
RG-58	6.2 (20.3)	7.4 (24.3)	10.6 (34.8)	16.5 (54.1)	21.1 (69.2)	32.2 (105.6)	51.6 (169.2)
RG-8X	4.7 (15.4)	6.0 (19.7)	8.6 (28.2)	12.8 (42.0)	15.9 (52.8)	23.1 (75.8)	40.9 (134.2)
LMR-240	3.0 (9.8)	3.7 (12.1)	5.3 (17.4)	7.6 (24.9)	9.2 (30.2)	12.9 (42.3)	20.4 (66.9)
RG-213/214	2.8 (9.2)	3.5 (11.5)	5.2 (17.1)	8.0 (26.2)	10.1 (33.1)	15.2 (49.9)	28.6 (93.8)
9913	1.6 (5.2)	1.9 (6.2)	2.8 (9.2)	4.2 (13.8)	5.2 (17.1)	7.7 (25.3)	13.8 (45.3)
LMR-400	1.5 (4.9)	1.8 (5.9)	2.7 (8.9)	3.9 (12.8)	4.8 (15.7)	6.8 (22.3)	10.8 (35.4)
3/8" LDF	1.3 (4.3)	1.6 (5.2)	2.3 (7.5)	3.4 (11.2)	4.2 (13.8)	5.9 (19.4)	8.1 (26.6)
LMR-600	0.96 (3.1)	1.2 (3.9)	1.7 (5.6)	2.5 (8.2)	3.1 (10.2)	4.4 (14.4)	7.3 (23.9)
1/2" LDF	0.85 (2.8)	1.1 (3.6)	1.5 (4.9)	2.2 (7.2)	2.7 (8.9)	3.9 (12.8)	6.6 (21.6)
7/8" LDF	0.46 (1.5)	0.56 (2.1)	0.83 (2.7)	1.2 (3.9)	1.5 (4.9)	2.3 (7.5)	3.8 (12.5)
1 1/4" LDF	0.34 (1.1)	0.42 (1.4)	0.62 (2.0)	0.91 (3.0)	1.1 (3.6)	1.7 (5.6)	2.8 (9.2)
1 5/8" LDF	0.28 (0.92)	0.35 (1.1)	0.52 (1.7)	0.77 (2.5)	0.96 (3.1)	1.4 (4.6)	2.5 (8.2)

Attenuation of Various Transmission Lines in Amateur and ISM Bands in dB/ 100 ft (dB/ 100 m)

Cable Attenuation (measured in db per 100 feet)

Cable	1MHz	10MHz	50MHz	100MHz	200MHz	400MHz	700MHz	900MHz	1GHz
RG-58	0.44	1.4	4.1	4.8	7.5	11.8			
RG-8X	0.2	0.78	2.0	3.0	4.5	6.0	7.9	8.8	
RG-213	0.17	0.55	1.3	1.9	2.5	4.1	7.5	8.0	8.2
RG-6	0.16	0.57	1.4	2.0	2.8	4.3	5.6	6.0	6.1
RG-11	0.14	0.42	1.0	1.5	2.2	3.5	4.1	5.2	6.6
RF9913**	0.15	0.4	0.9	1.4	1.8	2.6	3.6	4.2	4.5
BURY-FLEX™*	0.26	0.52	1.1	1.5	2.0	2.9	3.8	4.9	5.3
RG-59	0.6	1.1	2.4	3.4	4.9	7.0	9.7	11.1	12.0
RG-214	0.17	0.55	1.3	1.9	2.7	4.1	6.5	7.6	9.0

Coaxial Cable Attenuation Charts

Coaxial Cable Attenuation Ratings Nominal attenuation db/100 feet at (MHz)

RG/U CABLE	1.0	10	50	100	200	400	900	1000	3000	5000
6A,212	.26	.83	1.9	2.7	4.1	5.9	6.5	9.8	23.0	32.0
8 MINI,8X		1.1	2.5	3.8	5.4	7.9	8.8	13.0	26.0	
LMR -240	.24	.76	1.7	2.4	3.4	4.9	7.5	7.9	14.2	18.7
8,8A,10A,213	.15	.55	1.3	1.9	2.7	4.1	7.5	8.0	16.0	27.0
9913,9086,9096			0.9	1.4	1.8	2.6	4.2	4.5		13.0
4XL8IIIA,FLEXI 4XL			0.9	1.4	1.8	2.6	4.2	4.5		13.0
LMR-400			.9	1.2		2.5	4.1	4.3		
LMR-500			.7	1.0		2.0	3.2	3.4		
LMR-600			.6	.8		1.4	2.5	2.7		
8214		.60	1.2	1.7	2.7	4.2		7.8	14.2	22.0
9095			1.0	1.8	2.6	3.8	6.0	7.5		
9,9A,9B,214	.21	.66	1.5	2.3	3.3	5.0	7.8	8.8	18.0	27.0
11,11A,12,12A, 13,13A,216	.19	.66	1.6	2.3	3.3	4.8		7.8	16.5	26.5
RG/U CABLE	1.0	10	50	100	200	400	900	1000	3000	5000
14,14A,217	.12	.41	1.0	1.4	2.0	3.1		5.5	12.4	19.0
17,17A,18,18A, 218,219	.06	.24	.62	.95	1.5	2.4		4.4	9.5	15.3
55B,223	.30	1.2	3.2	4.8	7.0	10.0	14.3	16.5	30.5	46.0
58	.33	1.2	3.1	4.6	6.9	10.5	14.5	17.5	37.5	60.0
58A,58C	.44	1.4	3.3	4.9	7.4	12.0	20.0	24.0	54.0	83.0
59,59B	.33	1.1	2.4	3.4	4.9	7.0	11.0	12.0	26.5	42.0
62,62A,71A,71B	.25	.85	1.9	2.7	3.8	5.3	8.3	8.7	18.5	30.0
62B	.31	.90	2.0	2.9	4.2	6.2		11.0	24.0	38.0
141,141A,400 142,142A	.30	.90	2.1	3.3	4.7	6.9		13.0	26.0	40.0
174	2.3	3.9	6.6	8.9	12.0	17.5	28.2	30.0	64.0	99.0
178B,196A	2.6	5.6	10.5	14.0	19.0	28.0		46.0	85.0	100
188A,316	3.1	6.0	9.6	11.4	14.2	16.7		31.0	60.0	82.0
179B	3.0	5.3	8.5	10.0	12.5	16.0		24.0	44.0	64.0
393,235		.6	1.4	2.1	3.1	4.5		7.5	14.0	21.0
402		1.2	2.7	3.9	5.5	8.0		13.0	26.0	26.0
405								22.0		
LDF4-50A	.06	.21	.47	.68	.98	1.4	2.2	2.3	4.3	5.9
LDF5-50A	.03	.11	.25	.36	.53	.78	1.2	1.4	2.5	3.5
RG/U CABLE	1.0	10	50	100	200	400	900	1000	3000	5000

Coaxial Cable Attenuation Charts

Coax Cable Signal Loss (Attenuation) in dB per 100ft*								
Loss*	RG-174	RG-58	RG-8X	RG-213	RG-6	RG-11	RF-9914	RF-9913
1MHz	1.9dB	0.4dB	0.5dB	0.2dB	0.2dB	0.2dB	0.3dB	0.2dB
10MHz	3.3dB	1.4dB	1.0dB	0.6dB	0.6dB	0.4dB	0.5dB	0.4dB
50MHz	6.6dB	3.3dB	2.5dB	1.6dB	1.4dB	1.0dB	1.1dB	0.9dB
100MHz	8.9dB	4.9dB	3.6dB	2.2dB	2.0dB	1.6dB	1.5dB	1.4dB
200MHz	11.9dB	7.3dB	5.4dB	3.3dB	2.8dB	2.3dB	2.0dB	1.8dB
400MHz	17.3 B	11.2dB	7.9dB	4.8dB	4.3dB	3.5dB	2.9dB	2.6dB
700MHz	26.0dB	16.9dB	11.0dB	6.6dB	5.6dB	4.7dB	3.8dB	3.6dB
900MHz	27.9 B	20.1dB	12.6dB	7.7dB	6.0dB	5.4dB	4.9dB	4.2dB
1GHz	32.0dB	21.5dB	13.5dB	8.3dB	6.1dB	5.6dB	5.3dB	4.5dB
Imped	50ohm	50ohm	50ohm	50ohm	75ohm	75ohm	50ohm	50ohm

	LMR-1200	LMR-900	LMR-600	1/2" Superflex	LMR-400	Belden 9913F7	9914	RG214 RG213	LMR-240	Belden RG8X	LMR-200	LMR-195	RG-58/U
Frequency/Size	1.200"	0.870"	0.590"	0.520"	0.405"	0.405"	0.400"	0.405"	0.240"	0.242"	0.195"	0.195"	0.195"
30 MHz	0.209	0.288	0.421	0.561	0.7	0.8	0.8	1.2	1.3	2.0	1.8	1.8	2.5
50 MHz	0.272	0.374	0.547	0.730	0.9	1.1	1.1	1.6	1.7	2.5	2.3	2.3	3.1
150 MHz	0.481	0.658	0.964	1.29	1.5	1.7	1.7	2.8	3.0	4.7	3.9	4.0	6.2
220 MHz	0.589	0.803	1.18	1.58	1.8	2.1	2.1	3.5	3.7	6.0	4.8	4.8	7.4
450 MHz	0.864	1.17	1.72	2.32	2.7	3.1	3.1	5.2	5.3	8.6	6.9	7.0	10.6
900 MHz	1.27	1.70	2.50	3.41	3.9	4.4	4.5	8.0	7.6	12.8	9.9	9.9	16.5
1,500 MHz	1.69	2.24	3.31	4.57	5.1	6.0			9.9		12.7	12.9	

CABLE ATTENUATION (dB per 100 ft)

	1.8	3.5	7.0	14.0	21.0	28.0	50.0	144	440	1296
LDF7-50A	.03	.04	.06	.08	.10	.12	.16	.27	0.5	0.9
FHJ-7	.03	.05	.07	.10	.12	.15	.20	.37	0.8	1.7
LDF5-50A	.04	.06	.09	.14	.17	.19	.26	.45	0.8	1.5
FXA78-50J	.06	.08	.13	.17	.23	.27	.39	.77	1.4	2.8
3/4" CATV	.06	.08	.13	.17	.23	.26	.38	.62	1.7	3.0
LDF4-50A	.09	.13	.17	.25	.31	.36	.48	.84	1.4	2.5
RG-17	.10	.13	.18	.27	.34	.40	.50	1.3	2.5	5.0
SLA12-50J	.11	.15	.20	.28	.35	.42	.56	1.0	1.9	3.0
FXA12-50J	.12	.16	.22	.33	.40	.47	.65	1.2	2.1	4.0
FXA38-50J	.16	.23	.31	.45	.53	.64	.85	1.5	2.7	4.9
9913	.16	.23	.31	.45	.53	.64	.92	1.6	2.7	5.0
RG-213	.25	.37	.55	.75	1.0	1.2	1.6	2.8	5.1	10.0
RG-8X	.49	.68	1.0	1.4	1.7	1.9	2.5	4.5	8.4	