

















Attenuation Pluggerz (acrylate material)

FILTER		FREQ.	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	SNR	H	M	L
C00 CYAN		A	8.4	12.5	17.8	25.0	34.1	36.3	43.6	22	29	19	11
		S	3.1	2.9	2.5	1.9	3.8	4.4	5.7				
		APV	5.3	9.6	15.3	23.1	30.3	31.9	37.9				
C01 GREEN		A	11.1	14.9	19.1	25.1	34.2	29.6	43.4	23	28	20	14
		S	4.0	2.7	2.4	2.2	3.4	3.3	5.8				
		APV	7.1	12.2	16.7	22.9	30.8	26.3	37.6				
C02 YELLOW		A	15.4	16.7	20.4	26.9	33.6	30.6	43.9	24	28	21	16
		S	3.0	2.5	3.8	2.4	3.3	4.4	6.5				
		APV	12.4	14.2	16.6	24.5	30.3	26.2	37.4				
C03 ORANGE		A	16.7	19.1	21.6	26.7	34.3	31.6	43.5	26	29	23	18
		S	4.1	2.6	2.7	1.9	3.2	3.9	4.3				
		APV	12.6	16.5	18.9	24.8	31.1	27.7	39.2				
C04 RED		A	20.8	21.1	24.4	26.6	35.4	34.5	43.0	28	30	24	20
		S	3.2	3.5	3.4	2.5	2.5	4.3	6.9				
		APV	17.6	17.6	21.0	24.1	32.9	30.2	36.1				
C05 PURPLE		A	22.9	22.8	26.7	28.3	34.6	35.0	43.2	29	31	25	22
		S	3.0	3.7	4.1	3.4	3.4	4.0	3.9				
		APV	19.9	19.1	22.6	24.9	31.2	31.0	39.3				
C06 BLUE		A	26.6	24.7	28.6	30.6	35.8	38.2	45.0	32	33	28	25
		S	3.6	2.1	2.4	2.6	3.1	3.4	4.3				
		APV	23.0	22.6	26.2	28.0	32.7	34.8	40.7				
C07 BLACK		A	28.6	27.3	29.8	31.4	36.9	40.7	44.9	33	34	29	26
		S	4.0	3.3	3.1	2.6	3.9	2.7	4.6				
		APV	24.6	24.0	26.7	28.8	33.0	38.0	40.3				
DM10 OCEAN		A	11.0	9.1	7.2	9.5	14.3	18.0	17.0	10	7	6	11
		S	3.4	3.3	2.6	4.2	5.3	3.5	4.8				
		APV	8.3	5.8	4.6	5.3	9.0	14.5	12.2				
DM15 BLUE		A	14.8	14.2	14.6	18.4	24.3	20.2	23.9	18	19	15	13
		S	3.8	3.0	2.4	3.2	3.5	2.5	3.9				
		APV	11.0	11.2	12.2	15.2	20.8	17.7	20.0				
DM20 WHITE		A	26.9	23.3	24.3	26.1	24.9	18.6	18.5	19	17	20	20
		S	6.8	5.3	3.9	3.0	3.3	3.6	3.0				
		APV	20.1	18.0	20.4	23.1	21.6	15.0	15.5				
DM25 BLACK		A	28.7	28.5	29.4	30.2	30.7	20.9	34.4	24	22	24	24
		S	5.0	5.8	5.4	4.2	4.5	3.0	3.0				
		APV	23.7	22.7	24.0	26.0	26.2	17.9	31.4				

Attenuation Lifeshell Protect

FILTER		FREQ.	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	SNR	H	M	L
C01 GREEN		A	12.9	17.2	20.3	25.6	35.2	32.5	41.6	23	28	19	14
		S	5.6	4.2	5.3	3.8	4.5	3.6	5.9				
		APV	7.3	13	15	21.8	30.7	28.9	35.7				
C03 ORANGE		A	18.8	22.6	24.2	27.9	35.7	34.1	41.5	27	30	24	20
		S	3.8	4	4.1	4	4.4	3.1	5				
		APV	15	18.6	20.1	23.9	31.3	31	36.5				
C05 PURPLE		A	26.1	26.4	27.2	31.8	36.9	37.5	41.4	30	32	26	23
		S	4.6	6.1	4.6	4.5	3.9	3.7	5.6				
		APV	21.5	20.3	22.6	27.3	33	33.8	35.8				
C07 BLACK		A	28.8	29	28.7	32.5	38.2	40.8	43.6	33	35	29	27
		S	4.5	4.8	4.9	3.3	4.1	3.5	4.2				
		APV	24.3	24.2	23.8	29.2	34.1	37.3	39.4				

Attenuation Pluggerz hearing Protector:

A Average attenuation in dB

S Standard deviation in dB

APV Assumed protection value in dB


















SNR Single number rating

H Protection value in high frequencies in dB

M Protection value in medium frequencies in dB

L Protection value in low frequencies in dB

Attenuation Pluggerz (silicone material)




FILTER		FREQ.	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	SNR	H	M	L
C00 CYAN 	A	9.3	13.8	17.5	22.6	31.3	31.8	31.6	21	26	18	12	
	S	3.6	3.6	3.5	2.6	3.9	3.1	4.6					
	APV	5.7	10.2	14.0	20.0	27.4	28.7	27.0					
C01 GREEN 	A	9.1	14.1	19.2	23.8	29.2	30.9	29.1	22	26	19	13	
	S	3.0	1.8	2.6	2.9	3.5	2.6	3.6					
	APV	6.1	12.3	16.6	20.9	25.7	28.3	25.5					
C02 YELLOW 	A	12.6	14.3	20.5	23.0	30.5	31.0	31.1	22	26	19	14	
	S	2.9	2.9	3.4	3.4	3.8	3.8	3.6					
	APV	9.7	11.4	17.1	19.6	26.7	27.2	27.5					
C03 ORANGE 	A	14.5	17.9	21.4	23.0	30.2	31.5	32.9	23	26	20	16	
	S	4.5	3.6	3.8	3.8	3.7	2.4	4.0					
	APV	10.0	14.3	17.6	19.2	26.5	29.1	28.9					
C04 RED 	A	18.7	20.4	23.4	23.3	30.9	32.1	32.8	24	26	21	18	
	S	3.8	4.4	3.4	3.8	3.4	2.4	5.1					
	APV	14.9	16.0	20.0	19.5	27.5	29.7	27.7					
C05 PURPLE 	A	19.8	20.2	22.7	23.9	30.7	33.2	33.5	25	27	22	19	
	S	3.7	3.0	3.2	2.4	3.5	2.7	5.3					
	APV	16.1	17.2	19.5	21.5	27.2	30.5	28.2					
C06 BLUE 	A	24.1	22.9	24.0	24.9	31.8	32.5	33.5	27	28	23	21	
	S	2.5	3.8	3.1	2.4	3.7	2.2	3.6					
	APV	21.6	19.1	20.9	22.5	28.1	30.3	29.9					
C07 BLACK 	A	23.2	22.6	23.6	24.3	33.1	32.4	33.5	26	28	23	20	
	S	4.2	4.5	2.9	2.6	4.1	3.3	4.7					
	APV	19.0	18.1	20.7	21.7	29.0	29.1	28.8					
TRAVEL NEON PINK 	A	29.5	27.2	28.8	29.0	33.3	40.3	33.0	28	29	25	24	
	S	5.3	5.1	4.5	4.9	4.4	3.5	6.5					
	APV	24.2	22.1	24.3	24.1	28.9	36.8	26.5					
DM10 OCEAN 	A	11.7	9.1	7.2	9.5	14.3	18.0	17.0	10	10	6	6	
	S	3.4	3.3	2.6	4.2	5.3	3.5	4.8					
	APV	8.3	5.8	4.6	5.3	9.0	14.5	12.2					
DM15 BLUE 	A	18.4	17.7	15.9	18.1	18.3	19.4	17.5	16	14	14	14	
	S	2.9	2.9	3.3	4.0	4.4	2.5	4.5					
	APV	15.5	14.8	12.6	14.1	13.9	16.9	13.0					
DM20 WHITE 	A	24.3	22.5	22.0	21.9	18.8	19.9	16.6	18	15	18	19	
	S	3.8	2.3	2.7	2.5	4.1	2.5	2.9					
	APV	20.5	20.2	19.3	19.4	14.7	17.4	13.7					
DM25 BLACK 	A	26.7	27.4	26.9	26.3	28.3	20.2	26.7	23	21	22	23	
	S	3.4	3.6	3.7	3.2	3.8	2.6	2.8					
	APV	23.3	23.8	23.2	23.1	24.5	17.6	23.9					
SLEEP BLUE 	A	26.2	24.7	24.3	25.1	33.0	37.8	39.1	27	29	23	22	
	S	5.7	3.5	4.2	3.3	3.4	2.7	5.5					
	APV	20.5	21.2	20.1	21.8	29.6	35.1	33.6					
M15 2-IN-1 BLUE 	A	19.4	18.1	17.0	16.8	17.5	17.8	18.2	15	14	13	13	
	S	4.2	4.8	4.2	4.0	3.7	2.1	4.6					
	APV	15.2	13.3	12.8	12.8	13.8	15.7	13.6					
M20 2-IN-1 GREY 	A	25.0	22.4	23.2	24.3	28.1	20.4	20.9	21	20	21	21	
	S	3.9	2.5	3.2	3.1	3.9	1.9	4.0					
	APV	21.1	19.9	20.0	21.2	24.2	18.5	16.9					
M25 2-IN-1 YELLOW 	A	26.2	25.3	25.8	27.3	30.4	20.7	32.6	24	22	22	22	
	S	4.4	4.2	5.2	3.8	3.8	1.9	4.6					
	APV	21.8	21.1	20.6	23.5	26.6	18.8	28.0					

Attenuation Pluggerz hearing Protector:

A Average attenuation in dB
 S Standard deviation in dB
 APV Assumed protection value in dB

SNR Single number rating
 H Protection value in high frequencies in dB
 M Protection value in medium frequencies in dB
 L Protection value in low frequencies in dB

Attenuation Pluggerz Protect & Communicate

FILTER		FREQ.	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	SNR	H	M	L
M15 2-IN-1 BLUE		A	19.4	18.1	17.0	16.8	17.5	17.8	18.2	15	14	13	13
		S	4.2	4.8	4.2	4.0	3.7	2.1	4.6				
		APV	15.2	13.3	12.8	12.8	13.8	15.7	13.6				
M20 2-IN-1 GREY		A	25.0	22.4	23.2	24.3	28.1	20.4	20.9	21	20	21	21
		S	3.9	2.5	3.2	3.1	3.9	1.9	4.0				
		APV	21.1	19.9	20.0	21.2	24.2	18.5	16.9				
M25 2-IN-1 YELLOW		A	26.2	25.3	25.8	27.3	30.4	20.7	32.6	24	22	22	22
		S	4.4	4.2	5.2	3.8	3.8	1.9	4.6				
		APV	21.8	21.1	20.6	23.5	26.6	18.8	28.0				

FILTER	FREQ.	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	SNR	H	M	L
BLUETOOTH AMBIENT	A	15.7	16.3	15.5	13.0	17.4	27.0	25.3	33.0	19.9	23.2	16.6	15.1
	S	4.2	3.6	2.8	3.3	3.2	4.3	4.2	6.8	2.1	2.7	2.3	2.2
	APV	11.5	12.7	12.7	9.7	14.2	22.7	21.1	26.2	18	21	14	13
SPEAKER AMBIENT	A	15.7	16.3	15.5	13.0	17.4	27.0	25.3	33.0	19.9	23.2	16.6	15.1
	S	4.2	3.6	2.8	3.3	3.2	4.3	4.2	6.8	2.1	2.7	2.3	2.2
	APV	11.5	12.7	12.7	9.7	14.2	22.7	21.1	26.2	18	21	14	13
PORTOTUBE AMBIENT+M15	A	18.3	17.1	14.5	12.2	13.6	19.0	21.6	23.4	17.1	18.2	14.1	13.6
	S	5.3	5.0	5.0	4.0	3.4	5.1	3.5	4.9	3.0	2.9	3.2	3.6
	APV	13.0	12.1	9.5	8.2	10.2	13.9	18.1	18.5	14	15	11	10
PORTOTUBE AMBIENT+M25	A	22.3	21.9	19.5	17.0	16.9	27.0	23.8	33.7	20.8	22.5	17.6	17.3
	S	5.3	4.7	5.7	3.9	5.3	3.9	2.8	6.7	2.8	2.5	3.5	3.4
	APV	17.0	17.2	13.8	13.1	11.6	23.1	21.0	27.0	18	20	14	14
MICROPHONE AMBIENT+M15	A	18.3	17.1	14.5	12.2	13.6	19.0	21.6	23.4	17.1	18.2	14.1	13.6
	S	5.3	5.0	5.0	4.0	3.4	5.1	3.5	4.9	3.0	2.9	3.2	3.6
	APV	13.0	12.1	9.5	8.2	10.2	13.9	18.1	18.5	14	15	11	10
MICROPHONE AMBIENT+M25	A	22.3	21.9	19.5	17.0	16.9	27.0	23.8	33.7	20.8	22.5	17.6	17.3
	S	5.3	4.7	5.7	3.9	5.3	3.9	2.8	6.7	2.8	2.5	3.5	3.4
	APV	17.0	17.2	13.8	13.1	11.6	23.1	21.0	27.0	18	20	14	14

Attenuation Pluggerz earplugs Uni-Fit

PRODUCT	FREQ.	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	SNR	H	M	L
MUSIC	A	17.7	19.0	19.1	18.3	22.2	30.5	28.9	27.1	22	24	18	16
	S	5.5	3.5	4.6	3.5	3.8	4.3	3.1	3.8				
	APV	12.2	15.5	14.5	14.8	18.4	26.2	25.8	23.3				
SLEEP	A	25.1	24.8	23.7	23.9	27.1	32.4	37.7	37.9	27	28	24	21
	S	4.5	3.8	4.6	3.4	3.3	4.2	6.7	8.0				
	APV	20.6	21.0	19.1	20.5	23.8	28.2	31.0	29.9				
WATER	A	17.3	18.9	21.1	22.7	27.3	31.0	31.9	32.2	25	27	22	19
	S	3.1	4.4	3.4	4.0	4.2	3.6	5.7	3.7				
	APV	14.2	14.5	17.7	18.7	23.1	27.4	26.2	28.5				
ROAD	A	17.8	19.5	19.6	20.8	24.7	29.8	28.7	31.0	23	24	20	17
	S	6.3	3.7	5.0	4.6	4.6	4.6	4.7	6.0				
	APV	11.5	15.8	14.6	16.2	20.1	25.2	24.0	25.0				
TRAVEL	A	25.6	26.4	25.5	26.5	27.9	31.8	30.1	30.3	27	27	25	23
	S	4.8	3.9	3.9	3.6	3.1	4.0	4.2	4.4				
	APV	20.8	22.5	21.6	22.9	24.8	27.8	25.9	25.9				
SHOOT & QUIET	A	25.0	24.8	25.7	26.8	29.3	32.1	36.5	34.2	26	27	22	20
	S	6.6	7.6	6.8	7.6	6.8	5.7	5.0	4.2				
	APV	18.4	17.2	18.9	19.2	22.4	26.4	31.5	30.0				
MUSIC PREMIUM	A	19.6	20.4	17.3	16.0	15.5	20.8	20.2	19.4	16	15	13	13
	S	3.3	3.6	4.1	4.3	3.4	4.0	4.7	4.4				
	APV	16.3	16.8	13.2	11.7	12.1	16.8	15.5	15.0				
PRO (DETEC)	A	24.1	24.6	24.5	24.1	26.5	30.4	29.0	30.9	24	24	21	20
	S	5.3	4.8	4.3	4.8	5.7	4.7	6.4	5.5				
	APV	18.8	19.8	20.2	19.3	20.8	25.7	22.6	25.4				

Attenuation Pluggerz earmuffs

PRODUCT	FREQ.	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ	SNR	H	M	L
KIDS	A	11.5	15.0	25.2	28.7	33.8	35.2	35.7	25.8	29.8	23.4	14.4
	S	3.2	1.3	2.2	1.7	3.0	3.5	3.1				
	APV	8.3	13.4	22.9	27.0	30.8	31.7	32.7				

Attenuation Pluggerz hearing Protector:

- A Average attenuation in dB
- S Standard deviation in dB
- APV Assumed protection value in dB

- SNR Single number rating
- H Protection value in high frequencies in dB
- M Protection value in medium frequencies in dB
- L Protection value in low frequencies in dB