



FILTER SHEET

HK AUDIO VORTIS VR10810, LAB.GRUPPEN IPD1200/2400

	VR10810 60x40 100Hz	VR10810 60x40 FR	VR10810 90x55 100Hz	VR10810 90x55 FR	VR10810 ASY 100Hz	VR10810 ASY FR				
Phase	NORM	NORM	NORM	NORM	NORM	NORM				
Delay [ms]	0	0	0	0	0	0				
High Pass										
Frequ. [Hz]	118	85	118	85	118	85				
Shape	But24	But24	But24	But24	But24	But24				
Low Pass										
Frequ. [Hz]	18.1k	18.1k	18.1k	18.1k	18.1k	18.1k				
Shape	But24	But24	But24	But24	But24	But24				
EQ1										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	135	100	135	100	135	100				
Q/Bandwidth	1	1.9	1	1.9	1	1.9				
Gain [dB]	-1.5	2.1	-1.5	2.1	-1.5	2.1				
EQ2										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	350	350	350	350	350	350				
Q/Bandwidth	2	2	2	2	2.7	2.7				
Gain [dB]	-2	-2	-2	-2	-1.4	-1.4				
EQ3										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	809	809	809	809	839	839				
Q/Bandwidth	2	2	2.6	2.6	2.9	2.9				
Gain [dB]	-2.2	-2.2	-4	-4	-3	-3				
EQ4										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	1.77k	1.77k	1.37k	1.37k	2.09k	2.09k				
Q/Bandwidth	2	2	2	2	2.5	2.5				
Gain [dB]	1	1	2.2	2.2	-2	-2				
EQ5										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	5.5k	5.5k	1.91k	1.91k	4.79k	4.79k				
Q/Bandwidth	1.5	1.5	3.7	3.7	3.1	3.1				
Gain [dB]	-3	-3	-2	-2	-2.6	-2.6				
EQ6										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	7.05k	7.05k	5.01k	5.01k	6.5k	6.5k				
Q/Bandwidth	2.5	2.5	3.4	3.4	3.6	3.6				
Gain [dB]	2.6	2.6	-1	-1	1	1				
EQ7										
Type	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf				
Frequ. [Hz]	700	700	700	700	700	700				
Q/Bandwidth	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]	4	4	4	4	4	4				
EQ8										
Type	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf				
Frequ. [Hz]	10k	10k	4.79k	4.79k	3.52k	3.52k				
Q/Bandwidth	13.5dB/oct	13.5dB/oct	3dB/oct	3dB/oct	3dB/oct	3dB/oct				
Gain [dB]	-2.2	-2.2	2.1	2.1	2.2	2.2				
EQ9										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
EQ10										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
Peak Limiter										
Vpk [dB]	98	98	98	98	98	98				
Release [ms]	15	15	15	15	15	15				
RMS Limiter										
Tresh. [dBu]	29	29	29	29	29	29				
Attack [ms]	15	15	15	15	15	15				
Hold [ms]	10	10	10	10	10	10				
Release [ms]	80	80	80	80	80	80				
Ratio	1.6:1	1.6:1	1.6:1	1.6:1	1.6:1	1.6:1				
Gain [dB]	0	0	0	0	0	0				



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HK AUDIO VORTIS VR11210, LAB.GRUPPEN IPD1200/2400

	VR11210 60x40 100Hz	VR11210 60x40 FR	VR11210 90x55 100Hz	VR11210 90x55 FR	VR11210 ASY 100Hz	VR11210 ASY FR				
Phase	NORM	NORM	NORM	NORM	NORM	NORM				
Delay [ms]	0	0	0	0	0	0				
High Pass										
Frequ. [Hz]	118	52	120	52	120	52				
Shape	But24	But24	But24	But24	But24	But24				
Low Pass										
Frequ. [Hz]	18.1k	18.1k	18.1k	18.1k	18.1k	18.1k				
Shape	But24	But24	But24	But24	But24	But24				
EQ1										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	135	70	135	70	135	70				
Q/Bandwidth	1	1.7	1	1.7	1	1.7				
Gain [dB]	-1.5	1.25	-1.5	1.25	-1.5	1.25				
EQ2										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	402	402	200	200	200	200				
Q/Bandwidth	2.5	2.5	1.5	1.5	1.5	1.5				
Gain [dB]	0.8	0.8	-0.8	-0.8	-0.8	-0.8				
EQ3										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	938	938	802	802	802	802				
Q/Bandwidth	1.4	1.4	0.8	0.8	0.8	0.8				
Gain [dB]	-1	-1	-1.6	-1.6	-1.6	-1.6				
EQ4										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	2k	2k	2.47k	2.47k	6.08k	6.08k				
Q/Bandwidth	2	2	1	1	2.5	2.5				
Gain [dB]	5.4	5.4	4.5	4.5	2.7	2.7				
EQ5										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	3.35k	3.35k	3.53k	3.53k	2.09k	2.09k				
Q/Bandwidth	1.2	1.2	2	2	2	2				
Gain [dB]	-3.75	-3.75	-5.2	-5.2	4.1	4.1				
EQ6										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	5.62k	5.62k	6.5k	6.5k	4.66k	4.66k				
Q/Bandwidth	0.8	0.8	3.6	3.6	1.5	1.5				
Gain [dB]	-0.75	-0.75	1	1	-3.7	-3.7				
EQ7										
Type	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf				
Frequ. [Hz]	233	233	337	337	337	337				
Q/Bandwidth	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]	3.4	3.8	3.8	4	3.8	3.8				
EQ8										
Type			High Shelf	High Shelf	High Shelf	High Shelf				
Frequ. [Hz]			12k	12k	12k	12k				
Q/Bandwidth			16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]			4.5	4.5	4.5	4.5				
EQ9										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
EQ10										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
Peak Limiter										
Vpk [dB]	98	98	98	98	98	98				
Release [ms]	15	15	15	15	15	15				
RMS Limiter										
Tresh. [dBu]	36	36	36	36	36	36				
Attack [ms]	15	15	15	15	15	15				
Hold [ms]	10	10	10	10	10	10				
Release [ms]	80	80	80	80	80	80				
Ratio	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1				
Gain [dB]	0	0	0	0	0	0				



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HK AUDIO VORTIS VR11214, LAB.GRUPPEN IPD1200/2400

	VR11214 60x40 100Hz	VR11214 60x40 FR	VR11214 90x55 100Hz	VR11214 90x55 FR	VR11214 ASY 100Hz	VR11214 ASY FR				
Phase	NORM	NORM	NORM	NORM	NORM	NORM				
Delay [ms]	0	0	0	0	0	0				
High Pass										
Frequ. [Hz]	118	52	118	52	118	52				
Shape	But24	But24	But24	But24	But24	But24				
Low Pass										
Frequ. [Hz]	18.1k	18.1k	18.1k	18.1k	18.1k	18.1k				
Shape	But24	But24	But24	But24	But24	But24				
EQ1										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	135	90	135	90	135	90				
Q/Bandwidth	1	1.1	1	1.1	1	1.1				
Gain [dB]	-1.5	2.4	-1.5	2.4	-1.5	2.4				
EQ2										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	221	221	221	221	221	221				
Q/Bandwidth	2.5	2.5	2.5	2.5	2.5	2.5				
Gain [dB]	-2.7	-2.7	-2.7	-2.7	-2.7	-2.7				
EQ3										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	705	705	850	850	766	766				
Q/Bandwidth	1.6	1.6	2.3	2.3	1.6	1.6				
Gain [dB]	-1	-1	-3.6	-3.6	-2.8	-2.8				
EQ4										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	1.11k	1.11k	1.17k	1.17k	1.2k	1.2k				
Q/Bandwidth	2.3	2.3	1.5	1.5	2.2	2.2				
Gain [dB]	1	1	3.4	3.4	3.2	3.2				
EQ5										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	3.28k	3.28k	2k	2k	1.66k	1.66k				
Q/Bandwidth	2.9	2.9	3.4	3.4	3.6	3.6				
Gain [dB]	-2.4	-2.4	1.8	1.8	-2	-2				
EQ6										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	5.2k	5.2k	5.6k	5.6k	2.2k	2.2k				
Q/Bandwidth	4.5	4.5	2.9	2.9	2.7	2.7				
Gain [dB]	1.6	1.6	3	3	2	2				
EQ7										
Type	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf				
Frequ. [Hz]	470	470	470	470	470	470				
Q/Bandwidth	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]	3.75	4.1	3.9	3.9	3.9	3.9				
EQ8										
Type	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf				
Frequ. [Hz]	6.92k	6.92k	4.34k	4.34k	14.9k	14.9k				
Q/Bandwidth	16dB/oct	16dB/oct	3dB/oct	3dB/oct	7dB/oct	7dB/oct				
Gain [dB]	-1.2	-1.2	1.3	1.3	4.5	4.5				
EQ9										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
EQ10										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
Peak Limiter										
Vpk [dB]	98	98	98	98	98	98				
Release [ms]	15	15	15	15	15	15				
RMS Limiter										
Tresh. [dBu]	36	36	36	36	36	36				
Attack [ms]	15	15	15	15	15	15				
Hold [ms]	10	10	10	10	10	10				
Release [ms]	80	80	80	80	80	80				
Ratio	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1				
Gain [dB]	0	0	0	0	0	0				



FILTER SHEET

HK AUDIO VORTIS VR11510, LAB.GRUPPEN IPD1200/2400

	VR11510 60x40 100Hz	VR11510 60x40 FR	VR11510 90x55 100Hz	VR11510 90x55 FR	VR11510 ASY 100Hz	VR11510 ASY FR				
Phase	NORM	NORM	NORM	NORM	NORM	NORM				
Delay [ms]	0	0	0	0	0	0				
High Pass										
Frequ. [Hz]	118	52	118	52	118	52				
Shape	But24	But24	But24	But24	But24	But24				
Low Pass										
Frequ. [Hz]	18.1k	18.1k	18.1k	18.1k	18.1k	18.1k				
Shape	But24	But24	But24	But24	But24	But24				
EQ1										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	135	67	135	67	135	67				
Q/Bandwidth	1	2.2	1	2.2	1	2.2				
Gain [dB]	-1.5	3.75	-1.5	3.75	-1.5	3.75				
EQ2										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	500	500	500	500	500	500				
Q/Bandwidth	3.6	3.6	3.6	3.6	3.6	3.6				
Gain [dB]	-2	-2	-2	-2	-2	-2				
EQ3										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	1k	1k	1k	1k	1k	1k				
Q/Bandwidth	2.3	2.3	2.3	2.3	2.3	2.3				
Gain [dB]	-3	-3	-3	-3	-3	-3				
EQ4										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	2k	2k	2.56k	2.56k	2.56k	2.56k				
Q/Bandwidth	1.9	1.9	4.2	4.2	1.9	1.9				
Gain [dB]	2.8	2.8	1.4	1.4	3	3				
EQ5										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	5.01k	5.01k	3.47k	3.47k	3.25k	3.25k				
Q/Bandwidth	3.1	3.1	3.6	3.6	2.5	2.5				
Gain [dB]	-1.2	-1.2	-2.8	-2.8	-2	-2				
EQ6										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	7k	7k	4.83k	4.83k	6.5k	6.5k				
Q/Bandwidth	2	2	3.9	3.9	2.5	2.5				
Gain [dB]	1.4	1.4	-1.2	-1.2	2.4	2.4				
EQ7										
Type	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf				
Frequ. [Hz]	441	441	441	441	441	441				
Q/Bandwidth	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]	3.8	3.8	3.8	3.8	3.8	3.8				
EQ8										
Type	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf				
Frequ. [Hz]	8.02k	8.02k	5.54k	5.54k	9.8k	9.8k				
Q/Bandwidth	16dB/oct	16dB/oct	3dB/oct	3dB/oct	16dB/oct	16dB/oct				
Gain [dB]	2.9	2.9	6	6	6.8	6.8				
EQ9										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
EQ10										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
Peak Limiter										
Vpk [dB]	98	98	98	98	98	98				
Release [ms]	15	15	15	15	15	15				
RMS Limiter										
Tresh. [dBu]	36	36	36	36	36	36				
Attack [ms]	15	15	15	15	15	15				
Hold [ms]	10	10	10	10	10	10				
Release [ms]	80	80	80	80	80	80				
Ratio	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1				
Gain [dB]	0	0	0	0	0	0				



FILTER SHEET

HK AUDIO VORTIS VR11514, LAB.GRUPPEN IPD1200/2400

	VR11514 60x40 100Hz	VR11514 60x40 FR	VR11514 90x55 100Hz	VR11514 90x55 FR	VR11514 ASY 100Hz	VR11514 ASY FR				
Phase	NORM	NORM	NORM	NORM	NORM	NORM				
Delay [ms]	0	0	0	0	0	0				
High Pass										
Frequ. [Hz]	120	52	120	52	120	52				
Shape	But24	But24	But24	But24	But24	But24				
Low Pass										
Frequ. [Hz]	18.1k	18.1k	18.1k	18.1k	18.1k	18.1k				
Shape	But24	But24	But24	But24	But24	But24				
EQ1										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	135	65	135	65	135	65				
Q/Bandwidth	1	2	1	2	1	2				
Gain [dB]	-1.5	2.8	-1.5	2	-1.5	2				
EQ2										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	223	223	223	223	223	223				
Q/Bandwidth	2.9	2.9	3.1	3.1	3.1	3.1				
Gain [dB]	-3.4	-3.4	-2.8	-2.8	-2.8	-2.8				
EQ3										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	300	300	600	600	600	600				
Q/Bandwidth	1.5	1.5	1	1	1	1				
Gain [dB]	2.2	2.2	-3.2	-3.2	-3.2	-3.2				
EQ4										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	650	650	1.25k	1.25k	1.26k	1.26k				
Q/Bandwidth	1.2	1.2	2.9	2.9	2.9	2.9				
Gain [dB]	-3.2	-3.2	4.6	4.6	2.4	2.4				
EQ5										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	2.01k	2.01k	2.01k	2.01k	2.17k	2.17k				
Q/Bandwidth	2.3	2.3	3.9	3.9	2.7	2.7				
Gain [dB]	2	2	2.4	2.4	2.8	2.8				
EQ6										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	3.19k	3.19k	5.65k	5.65k	7.5k	7.5k				
Q/Bandwidth	1.7	1.7	2.9	2.9	3.9	3.9				
Gain [dB]	-3.2	-3.2	3.2	3.2	-2.2	-2.2				
EQ7										
Type	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf	Low Shelf				
Frequ. [Hz]	344	344	398	398	398	398				
Q/Bandwidth	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]	4.8	4.9	5.7	5.8	5.7	5.8				
EQ8										
Type	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf	High Shelf				
Frequ. [Hz]	5.5k	5.5k	8.02k	8.02k	6.55k	6.55k				
Q/Bandwidth	3dB/oct	3dB/oct	16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]	2	2	3	3	4.4	4.4				
EQ9										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
EQ10										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
Peak Limiter										
Vpk [dB]	98	98	98	98	98	98				
Release [ms]	15	15	15	15	15	15				
RMS Limiter										
Tresh. [dBu]	36	36	36	36	36	36				
Attack [ms]	15	15	15	15	15	15				
Hold [ms]	10	10	10	10	10	10				
Release [ms]	80	80	80	80	80	80				
Ratio	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1	1.2:1				
Gain [dB]	0	0	0	0	0	0				



FILTER SHEET

HK AUDIO VORTIS VR21214, LAB.GRUPPEN IPD1200/2400

	VR21214 60x40 100Hz	VR21214 60x40 FR	VR21214 90x55 100Hz	VR21214 90x55 FR	VR21214 ASY 100Hz	VR21214 ASY FR				
Phase	NORM	NORM	NORM	NORM	NORM	NORM				
Delay [ms]	0	0	0	0	0	0				
High Pass										
Frequ. [Hz]	118	52	118	52	118	52				
Shape	But24	But24	But24	But24	But24	But24				
Low Pass										
Frequ. [Hz]	18.1k	18.1k	18.1k	18.1k	18.1k	18.1k				
Shape	But24	But24	But24	But24	But24	But24				
EQ1										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	135	67	135	67	135	67				
Q/Bandwidth	1	1.2	1	1.2	1	1.2				
Gain [dB]	-1.5	8.9	-1.5	8.9	-1.5	8.9				
EQ2										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	150	150	150	150	150	150				
Q/Bandwidth	3.4	3.4	3.4	3.4	3.4	3.4				
Gain [dB]	-1	-1	-1	-1	-1	-1				
EQ3										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	1.29k	1.29k	1.27k	1.27k	1.74k	1.74k				
Q/Bandwidth	2.9	2.9	2	2	3.9	3.9				
Gain [dB]	-1.8	-1.8	2	2	-2.4	-2.4				
EQ4										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	1.8k	1.8k	1.64k	1.64k	2.2k	2.2k				
Q/Bandwidth	3.9	3.9	4.5	4.5	1.9	1.9				
Gain [dB]	-1.2	-1.2	-2	-2	1.4	1.4				
EQ5										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	3.47k	3.47k	4k	4k	5.5k	5.5k				
Q/Bandwidth	2.7	2.7	3.9	3.9	3.6	3.6				
Gain [dB]	-1.6	-1.6	-0.8	-0.8	1.2	1.2				
EQ6										
Type	Bell	Bell	Bell	Bell	Bell	Bell				
Frequ. [Hz]	7k	7k	5.6k	5.6k	7.45k	7.45k				
Q/Bandwidth	3.4	3.4	2.3	2.3	3.4	3.4				
Gain [dB]	-1.6	-1.6	2.3	2.3	-1.6	-1.6				
EQ7										
Type			High Shelf	High Shelf	High Shelf	High Shelf				
Frequ. [Hz]			8.5k	8.5k	8.5k	8.5k				
Q/Bandwidth			16dB/oct	16dB/oct	16dB/oct	16dB/oct				
Gain [dB]			0.8	0.8	2.2	2.2				
EQ8										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
EQ9										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
EQ10										
Type										
Frequ. [Hz]										
Q/Bandwidth										
Gain [dB]										
Peak Limiter										
Vpk [dB]	98	98	98	98	98	98				
Release [ms]	15	15	15	15	15	15				
RMS Limiter										
Tresh. [dBu]	41	41	41	41	41	41				
Attack [ms]	15	15	15	15	15	15				
Hold [ms]	10	10	10	10	10	10				
Release [ms]	80	80	80	80	80	80				
Ratio	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1				
Gain [dB]	0	0	0	0	0	0				