



Exklusive Hi-Fi-Komponenten
MADE IN GERMANY

Technical Data

SPEAKER "RADIALSTRAHLER"

	mbl 101E Radialstrahler Reference	mbl 111E Radialstrahler Hybrid	mbl 116 Radialstrahler Elegance	mbl 121 Radialstrahler Compact
System	4-way	4-way	4-way	3-way
Frequency range	24 Hz to 40,000 Hz	29 Hz - 40,000 Hz	32 Hz - 33,000 Hz	49 Hz - 30,000 Hz
Impedanz	4 Ω	4 Ω	4 Ω	4 Ω
SPL 2.83V/ 2π linear max	82 dB/W/m 106 dB	83 dB/W/m 106 dB	83 dB/W/m 106 dB	82dB/W/m 106 dB
Crossover frequencies	105/ 600/ 3500 Hz Linkwitz-Riley 4th order	130/ 600/ 3500 Hz Linkwitz-Riley 4th order	130/ 600/ 3500 Hz Linkwitz-Riley 4th order	600/ 3500 Hz Linkwitz-Riley 4th order
Acoustic center	114 cm	109 cm	109 cm	109 cm
Power handling continuous peak power	320 W / 500 W 2200 W	350 W / 550 W 2200 W	300 W / 450 W 1800 W	280 W / 400 W 1000 W
Sub-Woofer	300mm, 12" cone (mbl)	2x250 mm, 10 inch Alu	2x200 mm, 8 inch Alu	none
Woofer	Radial TT100 (mbl)	Double push-push 2x140 mm, 5.5 inch Alu	Double push-push 2x140 mm, 5.5 inch Alu	Double push-push 2x140 mm, 5.5 inch Alu
Midrange	Radial MT50/E, CFK (mbl)	Radial MT50, CFK (mbl)	Radial MT50, CFK (mbl)	Radial MT50, CFK (mbl)
Tweeter	Radial HT37/E, CFK (mbl)	Radial HT37 Al, CFK (mbl)	Radial HT37 Al, CFK (mbl)	Radial HT37 Al, CFK (mbl)
Finish: Satin: Piano:	on request black, silver, veneer	black, silver, veneer black, silver, veneer	black, silver, veneer black, silver, veneer	black, silver, veneer black, silver, veneer
Dimensions (W x D x H)	450 x500 x1700 mm 16 x 18 x 67 inch	450 x450 x1200 mm, (+cover H 1300mm) 16 x 18 x 47 inch (+cover H 53 inch)	280 x430 x1200 mm, (+cover H 1300mm) 11 x 17 x 47 inch (+cover H 53 inch)	280 x350 x430 mm, (+cover H 570mm) 11 x 13,5 x 17,5 inch (+cover H 23 inch)
Weight	80 kg, 176 lbs	60 kg, 132 lbs	40 kg, 88 lbs	20 kg, 44 lbs

SPEAKER

	mbl 300 E	mbl 311 E	mbl 321 E
System	Floorstanding	Bookshelf	Bookshelf
Frequency range	31 Hz – 50,000 Hz	45 – 50,000 Hz	45 Hz – 30,000 Hz
Impedanz	4 Ohm	4 Ohm	4 Ohm
SPL	86 dB /1W /1m @ 2V, 4 π	84 dB/1W /1m @ 2V, 4 π	84 dB /1W /1m @ 2V, 4 π
Crossover frequencies	140/ 2,500/ 30,000 Hz	2,500/ 30,000 Hz	2,500 Hz
Enclosure type	32 Hz, B4	41 Hz, B4	43 Hz, B4
Acoustic center	104 cm	104 cm, on stand	104 cm, on stand
Power handling			
Continuous	100 Watt/ 160 W	60 Watt/ 100W	60 Watt/ 100 Watt
Linear max	112 dB /1m/ 4π /570W/4Ω	104 dB /1m/ 4π /100W/4Ω	104 dB /1m/ 4π /100W/4Ω
Woofers	2 x 200 mm 8 inch Alu	none	none
Low / Mid	170 mm 6,5 inch Kevlar	170 mm 6,5 inch Kevlar	170 mm 6,5 inch Kevlar
Tweeter	28 mm 1,1 inch soft dome	28 mm 1,1 inch soft dome	28 mm 1,1 inch soft dome
Super Tweeter	Magnetostat	Magnetostat	none
Finish			
Satin	black, silver, veneer	black, silver, veneer	black, silver, veneer
Piano	black, silver, veneer	black, silver, veneer	black, silver, veneer
Dimensions (W x D x H)	250 x434x1206 mm 10 x 17 x 47,5 inch	220 x320 x 430 mm 8.7 x 12.5 x 17 inch	220 x320 x380 mm 8.7 x 12.5 x 15 inch
Weight	45 kg/ 99 lbs	16 Kg/ 37 lbs	15 kg, 33 lbs

CENTER – SPEAKER SUBWOOFER

	mbl 111 RC Radialstrahler Center	mbl 300 MC Passiv	mbl 333 MC Passiv	mbl 202 A Subwoofer
System	3-way	2 ½ -way	2-way	powerd
Frequency range	80 Hz – 40,000 Hz	80 Hz – 50,000 Hz	40 Hz – 30,000 Hz	18 – 96 Hz
Crossover frequencies	600/ 3500 Hz	2,500 /30,000 Hz	2,500 Hz	48 / 68 / 96 Hz selected by switch Linkwitz-Riley 24 dB/Okt
Power handling Continuous	320 Watt/ 500 Watt 2,200W peak	100 Watt/ 160 Watt	60 Watt/ 100 Watt	120 / 300 Watt 200 mV – 4V variable
Stand by Phase shift				2 mV on, 3 Min. off 0 - 15 ms
Impedanz:	4 Ohm	4 Ohm	4 Ohm	
SPL linear max	82 dB / 1W / 1m 106 dB	86 dB / 1W / 1m 112 dB	86 dB / 1W / 1m 106 dB	115dB / 25 Hz
Finish	Satin: black, silver Piano: black, silver	Satin: black, silver Piano: black, silver	Satin: black Piano: black	Satin: black, silver Piano: black, silver
Dimensions (W x D x H)	280 x350 x430 mm, 11 x 13,5 x 17,5 inch +cover H: 570mm / 23 inch	500 x 450 x 220 mm 19.6 x 17.7 x 8.7 inch	560 x 280 x 220 mm 19.6 x 17.7 x 8.7 inch	400 x 490 x 460 mm 16 x 19 x 18 inch
Weight	20 kg, 44 lbs	20 kg, / 44 lbs	17 kg / 37 lbs	40 Kg/ 88 lbs

POWER AMPLIFIER

	mbl 9011	mbl 9008	mbl 9007
Peak Pulse Power			
Mono	5 000 W	2200 W	1900 W
Stereo (2Ω)	1 200 W	1200 W	1000 W
Rated Power			
Mono/Stereo 8Ω	440 W / 130 W	440 W / 130 W	440 W / 130 W
4Ω	840 W / 220 W	840 W / 220 W	570 W / 200 W
2Ω	1390 W / 340 W	1000 W / 340 W	- / 290 W
Output Voltage max.	100 / 50 V peak	100 / 50 V peak	100 / 50 V peak
Output current max.	50 A peak	40 A peak	30 A peak
Input Impedance			
	20 kΩ, XLR (Mono)	20 kΩ, XLR (Mono)	20 kΩ, XLR (Mono)
	10 kΩ, RCA (Stereo)	10 kΩ, RCA (Stereo)	10 kΩ, RCA (Stereo)
Input Sensitivity	2,6 V, 840 W, 4Ω	2,6 V, 840 W, 4Ω	2,2 V, 570 W, 4Ω
S/N ratio unweighted	114 / 113 dB	114 / 113 dB	114 / 113 dB
S/N ratio A-weighted	118 / 123 dB	118 / 123 dB	118 / 123 dB
Frequency Response	DC - 200 / 320 kHz	DC - 200 / 320 kHz	DC - 200 / 320 kHz
Distortion	<0.001 %, 4 Ω, 1 kHz, 50 W	<0.001 %, 4 Ω, 1 kHz, 50 W	<0.001 %, 4 Ω, 1 kHz, 50 W
Damping Factor	300 @ 1 kHz, 4Ω	300 @ 1 kHz, 4Ω	300 @ 1 kHz, 4Ω
Power Consumption	1. on (main power) 20VA (Stand-by) 100VA (Idle Mode) 600 VA max (4Ω, Mono)	1. on (main power) 20VA (Stand-by) 100VA (Idle Mode) 600 VA max (4Ω, Mono)	on (main power) 4VA Sleep 20VA (Stand-by) 100VA (Idle Mode) 420 VA max I 4Ω, Mono
	2. on 1200 VA max (4Ω, Mono)	2. on 1200 VA max (4Ω, Mono)	
	3. on 1500 VA max (4Ω, Mono) 2600 VA max (2Ω, Mono)		
Line Voltage factory setting	230 / 115 Vac, 50 / 60 Hz	230 / 115 Vac, 50 / 60 Hz	230 / 115 Vac, 50 / 60 Hz
Weight	90 kg, 198 lbs	60 kg, 132 lbs	34 kg, 75 lbs
Dimensions (W x H x D)	480 x 320 x 870 mm 19 x 13 x 34 inch	480 x 320 x 610 mm 19 x 13 x 24 inch	480 x 230 x 430 mm 19 x 9 x 17 inch

POWER AMPLIFIER

	mbl 8011 S	mbl 8011AM	mbl 8006B
Peak Pulse Power	2 x 1100 W	1100 W	500W
Rated Power			
Mono/Stereo 8Ω	2 x 210 W	210 W	120 W
4Ω	2 x 310 W	310 W	185 W
2Ω	2 x 380 W	380 W	
Output Voltage max.	70 V peak	70 V peak	35 V peak
Output current max.	23 A peak	23 A peak	20 A peak
Input Impedance	5 kΩ, RCA 20 kΩ, XLR	5 kΩ, RCA 20 kΩ, XLR	10 kΩ, RCA 10 kΩ, XLR
Input Sensitivity	2.0 V, 310 W, 4 Ω	2.0 V, 310 W, 4 Ω	1,5V, 185 W, 4Ω
S/N ratio unweighted	115 dB RCA 117 dB XLR	115 dB RCA 117 dB XLR	111 dB
S/N ratio A-weighted	118 dB RCA 120 dB XLR	118 dB RCA 120 dB XLR	115 dB
Frequency Response Mono/Stereo	DC - 130 kHz	DC - 130 kHz	DC - 130 kHz
Distortion	<0.004%, 4 Ω, 1 kHz, 50 W	<0.004%, 4 Ω, 1 kHz, 50 W	<0.006%, 4 Ω, 1 kHz, 50 W
Damping Factor	200 (4Ω)	200 (4Ω)	300 (4Ω)
Power Consumption	2 x 47 VA (idle) 2 x 510 VA (max)	4 VA sleep mode 47 VA (Idle Mode) 510 VA (max.)	4 VA sleep mode 47 VA (Idle Mode) 450 VA (max.)
Line Voltage factory setting	230 / 115 Vac, 50 / 60 Hz	230 / 115 Vac, 50 / 60 Hz	230 / 115 Vac, 50 / 60 Hz
Weight	30kg, 67 lbs	25kg, 55 lbs	14kg, 30 lbs
Dimensions (W x H x D)	450 x 195 x 380mm 18 x 7,7 x 15 inch	304 x 235 x 410 (440) mm 12x 8(9,3) x 16(17) inch	450x100(120)x410(440)mm 18 x 4(5) x 16(17) inch

PREAMPLIFIERS

	mbl 4006	mbl 5011	mbl 6010 D
Inputs	7 + 1 inputs XLR (2x), CD (2x), high level (2x), processor (1x) Option (1x)	7 inputs XLR (1x), CD (2X), high level/ tape (1x), processor (1X), Option (2x)	8 inputs CD (2x), high level (1x), tape (2x), processor (1x), Option (2x)
Outputs	3 outputs RCA(2x), Balanced (1x)	6 outputs in 2 groups group 1: XLR (2x), RCA (1x) group 2: XLR (1x), RCA (2x)	6 outputs in 2 groups group 1: XLR (1x), RCA (2x) group 2: XLR (1x), RCA (2x)
Frequency Range	CD DC - 600 kHz High level DC - 600kHz	DC - 1.0 MHz DC - 600 kHz	DC - 1.0 MHz DC - 600 kHz
Output level	1Veff - 10Veff max.	1Veff - 11Veff max.	1Veff – 11Veff max.
Output Impedance	100 Ω	100 Ω	100 Ω
Noise Distortion 1 kHz, 2V	<0,0007%	<0,0006%	<0,0006%
Input Sensitivity High level	315mV	315 mV	315 mV
Signal to Noise	CD 98/101 dB, 1V/25Ω High level 105/108 dB, 1V/25Ω	108/110 dB, 1V/25Ω 105/108 dB, 1 V/25Ω	103/109 dB, 1V/25Ω 102/108 dB, 1V/25Ω
Maximum loading level	10 Veff	11 Veff	11 Veff
Input Impedance	CD 10 kΩ high level 50 kΩ processor 10 kΩ	5 kΩ 50 kΩ 10 kΩ	5 kΩ 50 kΩ 10kΩ
Channel separation High level	100 dB	95 dB	90 dB
Power Consumption	20 VA max.	20 VA max.	25 VA max.
Line Voltage	230 Vac, 50/60Hz 115 Vac, 50/60Hz	230/115Vac, 50/60Hz	230/115Vac, 50/60Hz
Weight	10 Kg, 22 lbs	19 kg, 42 lbs	35 kg, 77 lbs
Dimensions (WxHxD)	450x100(120)x410mm 18 x 4(5) x 16 inch	450 x 155 x 400 mm 18 x 6.1 x 15,7 inch	530 x 240 x 305 mm 21 x 9 x 12 inch

Integrated Amplifier

	mbi 7008	mbi 7006
<i>Pre section</i>		
Inputs	5 + 1 inputs XLR (1x), CD (2x), high level (1x), processor (1x), Option (1x)	6 inputs XLR (1x), CD (2x), high level (2x), processor (1x)
Outputs	Pre-out (RCA), fixed out, head phones,	Fixed out
Frequency Range	DC – 400kHz	DC – 400kHz
Output level	1 V _{eff} – 10 V _{eff} max.	1 V _{eff} – 10 V _{eff} max.
Output Impedance	100 Ω	100 Ω
Noise Distortion	<0.001%	<0.001%
Input Sensitivity	315mV	315mV
Signal to Noise	102/106dB, 1V/25Ω	98/101dB, 1V/25Ω
CD	105/108dB, 1V/25Ω	103/107dB, 1V/25Ω
Input Impedance		
High level	50 kΩ, bypass 10 kΩ	50 kΩ, bypass 10 kΩ
CD	5 kΩ	10 kΩ
<i>Power-section</i>		
Rated Power	120W (8Ω) 200W (4Ω) 380W (2Ω)	120W (8Ω) 185W (4Ω)
Output Voltage max	35V	35V
Output current max	22 A	20 A
Input sensitivity	1,5V, 200 W, 4Ω	1,5V, 185 W, 4Ω
Channel separation	90dB	90dB
S/N ratio unweighted	111dB	111dB
S/N ratio A-weighted	115dB	115dB
Frequency Response	DC – 135kHz / -3 dB	DC – 135kHz / -3 dB
Distortion THD+N:	<0.006%, 4 Ω, 1 kHz, 50 W	<0.006%, 4 Ω, 1 kHz, 50 W
Damping Factor	300 (4Ω)	300 (4Ω)
Power Consumption	13 VA, stand by 120 VA, idle mode 450 VA, maximum	4 VA, sleep mode 120 VA, idle mode 450 VA, maximum
Line Voltage	230/115Vac, 50/60Hz	230 Vac 50/60Hz (single voltage) 115 Vac, 50/60Hz
Weight	20 kg / 44 lbs	15 kg / 33 lbs
Dimensions (W x H x D)	450 x 155 x 400 mm 17.7 x 6.1 x 15.7 inch	450x100(120)x410(440)mm 18 x 4(5) x 16(17) inch

Tuner

FM Tuner section	mbl T1
Mono usable sensitivity	1,0 μ V
Sensitivity for 50dB quieting	
Mono	1,3 μ V
Stereo	25 μ V
Sensitivity	65 dB
Signal to noise ratio	
Mono	0,05%
Stereo	0,08%
Stereo separation	55 dB
Accuracy of frequency response	
Across 30 Hz to 15 kHz h	+0,5/ -1,0 dB
Output level at 1 kHz 75 kHz deviation	940 mV
High Level	110 dB
AM Tuner section	
Usable sensitivity	350 μ V
Sensitivity	35 dB
Signal to noise ratio	52 dB
Total harmonic distortion	0,2%
Line Voltage	230 Vac, 50Hz
Power consumption	8,5 W
Dimensions (W x H x D)	450 x 90 x 345 mm 18 x 4 x 13,6 inch
Weight	6,8 kg

D/A CONVERTER

CD PLAYER

	mbl 1611 E	mbl 1511 E	mbl 1531	mbl 1431
D/A Converter	Multi level Delta Sigma	Multi level Delta Sigma	Multi level Delta Sigma	Advanced segment architecture
Sampling (f)	192, 96, 48, 44.1, 32 kHz		44.1 kHz	44.1 kHz upsampling mode: 96 kHz
Digital filter	Oversampling 16 times =705,6 kHz (44.1 kHz red book)			
switchcapacitor filter	+Oversampling 128 times (smoothing)			
Converter (f)	2.82 MHz	2.82 MHz	2.82 MHz	
Resolution	24 bit linear	24 bit linear	24 bit linear	16 bit linear upsampling mode: 24 bit linear
Error correction	Repeat block on error	Repeat block on error	Repeat block on error	
Signal/ Noise-Ratio	110 dB/ 112 dB	110 dB/ 112 dB	110 dB/ 112 dB	109 dB/ 111 dB
Digital Inputs				
XLR AES/EBU 110Ω	2	1	<i>./.</i>	
RCA	2	1	<i>./.</i>	
Input impedance 75Ω				
BNC	2	1		
Input impedance 75Ω				
Glas ST	Option	Option	<i>./.</i>	
Wavelength	820 nm			
allowable input power	20 μW - 150 μW			
optimum Input power	50 μW - 100 μW			
Cut- off frequency	30 MHz			
TOSLINK	2	1	<i>./.</i>	
Wavelength	660 nm	660 nm		
allowable input power	3 μW - 30 μW	3 μW - 30 μW		
optimum Input power	10 μW	10 μW		
Cut- off frequency	6 MHz	6 MHz		
Digital outputs				
	1 RCA, 1 BNC	1 RCA	XLR, RCA, Toslink	RCA
Output Impedance	75Ω	75Ω	110Ω, 75Ω	75Ω
Open circuit voltage	1.0 Vp-p		1.0 Vp-p	1.0 Vp-p
Operating voltage	0.5 Vp-p	0.5 Vp-p	0.5 Vp-p	0.5 Vp-p
Cut-off frequency	30 MHz	30 MHz		
Pin assignment	<i>inner conductor: Inphase, outer conductor: Offphase</i>			
Analog Outputs				
Connection	2 RCA, 1 XLR	2 RCA, 1 XLR	1 RCA, 1 XLR	1 RCA, 1 XLR
Frequency Range	DC - 20 kHz, +0 / -0.5 dB	DC - 20 kHz, +0 / -0.5 dB	DC- 20 kHz, +0 / -0.5 dB	DC- 20 kHz, +0 / -0.5 dB
Signal to noise	110 / 112 dBr, 2 V	110 / 112 dBr, 2 V	110 / 112 dBr, 2 V	>110 dB
Dynamik	97 dB	97 dB	97 dB	>96.5 dB
Channel separation	110 dB, 1 kHz	110 dB, 1 kHz	110 dB, 1 kHz	>110 dB @ 1kHz
THD	0.0007%, 1 kHz	0.0007%, 1 kHz	0.0007%, 1 kHz	0.0020% @ 1kHz
Output level	2V, 1kHz (RCA), 4V,1kHz (XLR)	2V, 1kHz (RCA), 4V,1kHz (XLR)	2V, 1kHz (RCA), 4V,1kHz (XLR)	2 V, 1kHz
Output Impedance	RCA= 100 Ω, XLR= 200 Ω	RCA= 100 Ω, XLR= 200 Ω	RCA= 100 Ω, XLR= 200 Ω	100 Ω
Power consumption	50 VA max.	50 VA max.	50 VA max.	<50 VA
Line Voltage	230/115 Vac, 50/60 Hz	230/115 Vac, 50/60 Hz	230/115 Vac, 50/60 Hz	230/115 Vac 50/60 Hz
Weight	ca. 29 kg/ 64 lbs	ca. 15 kg/ 33 lbs	18 kg/ 40 lbs	10 kg/22 lbs
Abmessungen mm	480 x 150 x 430	450 x 112,5 x 400	450 x 155 x 400	450 x 100 x 410mm
(WxHxD) inch	19 x 6 x 17	17.7 x 4.4 x 15.7	17.7 x 6.1 x 15.7	17.7 x 3.9 x 16.1 inch high with feet 4.8 inch (123mm)

Transport			CD Player
	mbl 1621 A	mbl 1521 A	Mbl 1531
CD Mechanism	CDM12 PRO spec Module Heavy Die-Cast frame 3-beam laser for high tracking accuracy Laser: 780nm, max. 0.5mW Glass Lens	CDM12 IND Module Heavy Die-Cast frame 3-beam laser for high tracking accuracy Laser: 780nm, max. 0.5mW Glass Lens	CD PRO 2 Module Heavy Die-Cast frame 3-beam laser for high tracking accuracy Laser: 780nm, max. 0.5mW Glass Lens
Media	compact disk (Red Book) Resolution: 16-Bit Sample Rate: 44.1 kHz Number of Channels: 2 Modulation: EFM	compact disk (Red Book) Resolution: 16-Bit Sample Rate: 44.1 kHz Number of Channels: 2 Modulation: EFM	compact disk (Red Book) Resolution: 16-Bit Sample Rate: 44.1 kHz Number of Channels: 2 Modulation: EFM
Laser wavelength	780nm	780nm	780nm
Digital Outputs	Digital Bi-phase signal, no pulse distortion or jitter up to 500MHz		
AES/EBU, XLR	Output impedance: 110Ω Open Voltage: 5.0Vp-p Load Voltage: 2.5Vp-p Bandwidth: 40 MHz	Output impedance: 110Ω Open Voltage: 5.0Vp-p Load Voltage: 2.5Vp-p Bandwidth: 40 MHz	
S/P-DIF, RCA	Output impedance: 75Ω Open Voltage: 1.0Vp-p Load Voltage: 0.5Vp-p Bandwidth: 40 MHz	Output impedance: 75Ω Open Voltage: 1.0Vp-p Load Voltage: 0.5Vp-p Bandwidth: 40 MHz	
S/P-DIF, BNC	Output impedance: 75Ω Open Voltage: 1.0Vp-p Load Voltage: 0.5Vp-p Bandwidth: 40 MHz	Output impedance: 75Ω Open Voltage: 1.0Vp-p Load Voltage: 0.5Vp-p Bandwidth: 40 MHz	
Glass, ST	Wavelength: 820nm Output Power: 100 μW (-10dBm) Signal Pre-Bias conditioned Rated at 62.5/125 μm Fibre Diameter Bandwidth: 40 MHz	Option	
Power supply	Toroidal power transformer 2 guard shielding Separated windings: for digital out, servo drivers, control and display ¹ 10 different voltage regulators 12 VA, typical, during "Play"	Toroidal power transformer 2-guard shielding Separated windings: digital out, servo drivers, control and display ² 10 different voltage regulators 12 VA, typical, during "Play"	
Power consumption			
Line voltage factory set for country	230 / 115 Vac, 50/60 Hz	230 / 115 Vac, 50/60 Hz	
Weight	30kg, 66 lbs	20kg, 44 lbs	
Dimensions (w x h x d)	480 x 200 x 430 mm, 19 x 8 x 17 inch	450 x 160 x 400 mm, 18 x 6.3 x 16 inch	

¹ Different transformer windings for total separation of the different current paths

² Different transformer windings for total separation of the different current paths



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MADE IN GERMANY

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