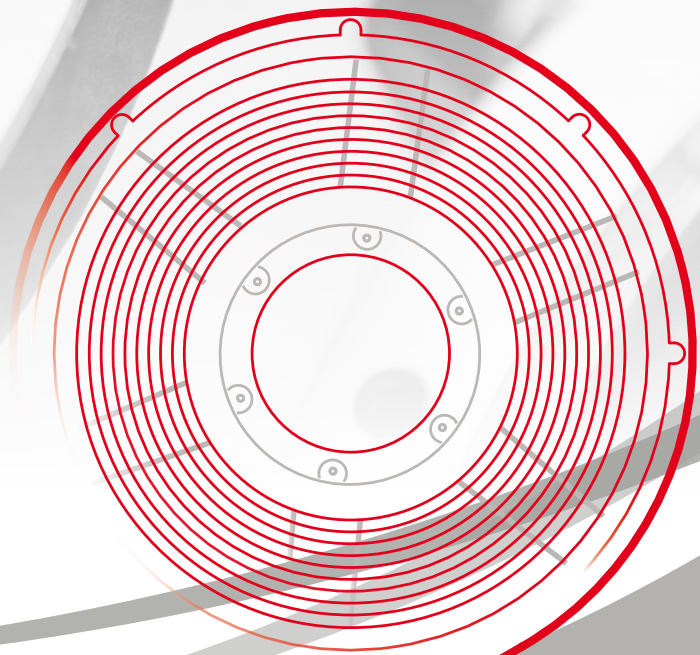




**PROFESSIONAL
LOUDSPEAKERS**



2017 PRODUCTS OVERVIEW



Eighteen Sound is a leading designer and manufacturer of high quality professional audio loudspeakers, with the most advanced development and manufacturing technologies in the world, located in Reggio Emilia, Italy.

The Eighteen Sound R&D and Engineering Teams' unparalleled experience in professional transducer design is manifest in the exceptional products created at the home offices and manufacturing center.

Repeatability and fulfillment of Design in every Production unit, is our goal and our daily responsibility. To achieve this mission, each Production Line is equipped with proprietary robotic equipment that precisely performs the most demanding tasks such as applying adhesives in exacting amounts and accurately moving and tempering parts and components, while highly skilled assembly technicians handle the essential human interface segments that define the perfect collaboration in assembly, that is the hallmark of Eighteen Sound products.

Quality Control is instituted at every stage of the manufacturing process, whether by automation and software, or close visual and tactile review. In the first stage of manufacturing, the raw materials are sourced only from providers with impeccable credential and documentation. Throughout the production process, each stage is equipped with automation and QC workstations to ensure accuracy, and validation of test criteria and design.

The fulfillment of our Customers' needs is fundamental in Eighteen Sound's philosophy. Eighteen Sound's Research & Development Department cooperates daily with top Pro Audio O.E.M. customers. The recognition of their needs, as well as an open-minded approach to the customer, helps us to identify even the most demanding professional audio market requirements. We believe that this philosophy allows Eighteen Sound's products to always satisfy the most rigorous and challenging expectations in audio reproduction.



**TTC**

Tetracoil Double Voice Coil (TTC) technology is based on an innovative magnetic structure where two different inside-outside voice coils are wound on the same former and suspended evenly in the two magnetic gaps.

The key advantages are:

- 1) Ideal motor symmetry over large displacement providing flat inductance and minimal even-order distortion.
- 2) Excellent thermal dissipation and reduction of thermal distortion resulting from: (a) twice the voice coil surface area of a standard single voice coil of the same diameter and, (b) reduced power compression for up to 50% more output at high power.

**ISV**

Interleaved Sandwich Voice coil (ISV) technology is based on a high strength fiberglass former where half of the coil is wound on the outside and the other half is wound on the inside. As a final result a balanced, linear motor unit is achieved. High force factor and improved heat dissipation are further advantages of the ISV technology.

**EWAL**

Edge Wound Aluminum Voice coil (EWAL) technology identifies models where this specific kind of wire is used in the voice coil winding.

**AIC**

Active Impedance Control (AIC) technology utilizes a secondary voice coil permanently fixed on the pole piece of the magnetic structure. The magnetic field generated by this secondary coil provides induction reduction for a flat impedance curve that increases sensitivity and extends high frequency bandwidth, while reducing harmonic and inter-modulation distortion.

**DSS**

The Double Silicon Spider (TSS) technology was developed by Eighteen Sound in 1998 and consists of a double layer spider structure, glued by a special silicone based adhesive mix. The result is an ultra-linear piston action and full suspension control across the entire working range.

**TSS**

The Triple Silicon Spider (TSS) technology is an evolution of the DSS technology. It consists of a triple layer spider structure, glued with a special silicone based adhesive mix. This suspension type is able to control the moving mass with high linearity, demonstrating an exceptional stability of mechanical parameter values in the long term.

**SDR**

Single Demodulating Ring (SDR) technology identifies the usage of an aluminum ring placed into the magnetic structure for reducing intermodulation distortion, while improving the transient response.

**DDR**

Double Demodulating Rings (DDR) identifies the presence of two aluminum rings embedded in the pole piece of the magnetic structure. These rings have been designed to dramatically reduce the intermodulation and harmonic distortion while improving the transient response of the transducer.

**ACS**

Active Cooling System (ACS) technology is related to different ways of extracting heat from the transducer motor in order to minimize power compression and increase power handling.

**TPM**

The True Piston Motion (TPM) technology is based on an exclusive titanium nitride coating process and the use of pure Beryllium membranes that dramatically improve stiffness with great benefits in transient and intermodulation distortion response. TPM is capable of doubling the diaphragm material stiffness without increasing the mass, showing a predictable, ideal frequency response decay and avoiding top-end spurious resonances.

**3P**

The Proprietary Phase Plug (3P) technology identifies a combination of radial and tangential slot geometric design. With its short openings and high flare rate value, 3P technology assures low distortion in the mid-high frequency range, providing a smooth coherent wavefront at the horn entrance.

**ESS**

Elliptical Shape (ESS) technology is related to the geometric profile of the horn surface. ESS horns are able to control the directivity not only on the main vertical and horizontal planes as standard geometry horns, but also in the planes between, resulting in acoustic energy control and increased audio quality.

**iD**

Eighteen Sound iD loudspeakers are optimized with very low impedance for maximum power transfer from a Class D type amplifier.

































































**iPAL**

The Eighteen Sound iPAL loudspeakers are designed to couple perfectly with iPAL Differential Pressure Control technology from Powersoft S.p.A. The iPAL power amplification module features a zero latency pressure-sensor feedback applying real-time correction that maximizes the control of select Eighteen Sound high efficiency transducers for unparalleled output at low frequencies.




















LF TRANSDUCERS - NEODYMIUM






















MODEL	21iD	21NLW9601	21NLW9001	21NLW4000	18iD	18NLW9601	18NLW4000	15NLW9500
APPLICATION	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer
PROGRAM POWER	3600 W	3600W	3200W	3200W	3600W	3600W	3200 W	1400W
VOICE COIL DIAM.	135 mm	135 mm	135 mm	100 mm	135 mm	135 mm	100 mm	100 mm
SENSITIVITY	94,2 dB	98 dB	98 dB	94 dB	95 dB	96 dB	95 dB	96dB
MAX XOVER FREQ.	120 Hz	120 Hz	120 Hz	120 Hz	150 Hz	150 Hz	150 Hz	500 Hz
FS	38 Hz	37 Hz	32 Hz	30 Hz	39 Hz	39 Hz	34 Hz	35Hz
XMAX	±14 mm	±14 mm	±14 mm	±14 mm	±15,5 mm	±14 mm	±14 mm	±9 mm
QTS	0,24	0.29	0.36	0,35	0,25	0.28	0,33	0.32
BL	25,2 Tm	43 Tm	37 Tm	30,5 Tm	24 Tm	31 Tm	30,5 Tm	26.8 Tm
TECHNOLOGIES								
MODEL	15NLW9401	15NLW9300	15ND930	15ND830	12NLW9300	12ND930	12ND830	12ND610
APPLICATION	Subwoofer	Woofer	Subwoofer	Woofer	Woofer	Subwoofer	Midbass	Midbass
PROGRAM POWER	2400W	1200W	800W	700W	1200W	800W	700W	700W
VOICE COIL DIAM.	100 mm	100 mm	75 mm	75 mm	100 mm	75 mm	75 mm	75 mm
SENSITIVITY	97dB	97 dB	98 dB	98 dB	97 dB	98 dB	99 dB	102 dB
MAX XOVER FREQ.	500 Hz	1200 Hz	1700 Hz	2000 Hz	1500 Hz	2000 Hz	2000 Hz	2000 Hz
FS	39 Hz	39 Hz	36 Hz	39 Hz	40 Hz	50 Hz	55 Hz	46 Hz
XMAX	±9.5 mm	±8 mm	±7,5 mm	±6,5 mm	±8 mm	±6,5 mm	±6,5 mm	±3,5 mm
QTS	0.26	0.26	0.22	0.32	0.24	0.21	0.28	0.14
BL	25.4 Tm	24.4 Tm	23.8 Tm	18 Tm	18 Tm	21.2 Tm	17.6 Tm	24 Tm
TECHNOLOGIES								
MODEL	12NMB420	10NDA610	10NW750	10NMB420	10NW650	8NW650	8NMB750	8NMB420
APPLICATION	Midbass	AIC Midrange	Woofer	Midbass	Woofer	Woofer	Midbass	Midbass
PROGRAM POWER	450W	600W	900W	500W	600W	600W	700 W	400W
VOICE COIL DIAM.	64 mm	75 mm	75 mm	65 mm	65 mm	65 mm	75 mm	51 mm
SENSITIVITY	100.5 dB	103 dB	94 dB	99 dB	96 dB	96 dB	93 dB	95 dB
MAX XOVER FREQ.	2000 Hz	4000 Hz	1500 Hz	2000 Hz	1800 Hz	2500 Hz	2500 Hz	2500 Hz
FS	53 Hz	89 Hz	53 Hz	65 Hz	51 Hz	63 Hz	86 Hz	61 Hz
XMAX	±4 mm	±2,5 mm	±7,5 mm	±4 mm	±7 mm	±5,5 mm	±6.3 mm	±5 mm
QTS	0.28	0.23	0.31	0.33	0.28	0.25	0.25	0.28
BL	13.9 Tm	20.3 Tm	16.4 Tm	19.5 Tm	14 Tm	15.2 Tm	18.5 Tm	10 Tm
TECHNOLOGIES								
MODEL	6ND430	6NMB420	6ND410					
APPLICATION	Woofer	Midbass	Midrange					
PROGRAM POWER	260W	260W	240W					
VOICE COIL DIAM.	44 mm	44 mm	44 mm					
SENSITIVITY	92.5 dB	100 dB	102 dB					
MAX XOVER FREQ.	3000 Hz	3500 Hz	5000 Hz					
FS	61 Hz	110 Hz	120 Hz					
XMAX	±5 mm	±3 mm	±2 mm					
QTS	0.27	0.33	0.24					
BL	10 Tm	9 Tm	11.6 Tm					
TECHNOLOGIES								






















MODEL	21LW2500	21LW1400	18TLW3000	18LW2500	18LW2400	18LW1400	18LW1250	18W2000
								
APPLICATION	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer	Subwoofer
PROGRAM POWER	3200W	1600W	3600W	3200 W	2400W	1400W	1400W	2400W
VOICE COIL DIAM.	100 mm	100 mm	tetra 100 mm	100 mm	100 mm	100 mm	100 mm	100 mm
SENSITIVITY	95 dB	99 dB	95 dB	95 dB	98 dB	98 dB	98 dB	99dB
MAX XOVER FREQ.	120 Hz	120 Hz	150 Hz	150 Hz	150 Hz	150 Hz	150 Hz	150 Hz
FS	30 Hz	28 Hz	33 Hz	34 Hz	35 Hz	31 Hz	35Hz	37 Hz
XMAX	±14 mm	±9,5 mm	±12 mm	±14 mm	±9,5 mm	±9 mm	±9 mm	±7 mm
QTS	0.37	0.23	0.41	0.33	0.31	0.29	0.27	0.25
BL	30 Tm	33.5 Tm	24.5 Tm	30 Tm	25.6 Tm	24.7 Tm	23.6 Tm	27.1 Tm
TECHNOLOGIES								
MODEL	15TLW3000	15LW2400	15LW1401	15MB1000	15W930	15W750	15W700	15MB700
								
APPLICATION	Subwoofer	Subwoofer	Subwoofer	Midbass	Woofer	Woofer	Woofer	Midbass
PROGRAM POWER	2800W	2400W	1400W	1200W	800W	1200W	700W	600W
VOICE COIL DIAM.	tetra 100 mm	100 mm	100 mm	100 mm	75 mm	75 mm	75 mm	75 mm
SENSITIVITY	98dB	98dB	98 dB	98 dB	98 dB	97 dB	99 dB	103 dB
MAX XOVER FREQ.	500 Hz	500 Hz	800 Hz	1000 Hz	1700 Hz	1800 Hz	2000 Hz	2000 Hz
FS	42 Hz	41 Hz	42 Hz	48 Hz	33 Hz	39 Hz	38 Hz	42 Hz
XMAX	±9 mm	±10 mm	±9 mm	±6 mm	±7,5 mm	±8 mm	±6,5 mm	±5,5 mm
QTS	0.39	0.37	0.27	0.31	0.22	0.37	0.3	0.29
BL	25 Tm	23.4 Tm	24.2 Tm	21 Tm	22.1 Tm	17.6 Tm	17.6 Tm	17.6 Tm
TECHNOLOGIES								
MODEL	15MB606	15W500	12LW1400	12MB1000	12W750	12W700	12MB700	12MB600
								
APPLICATION	Midbass	Woofer	Subwoofer	Midbass	Woofer	Woofer	Midbass	Midbass
PROGRAM POWER	600W	500W	1400W	800W	1200W	700W	600W	600W
VOICE COIL DIAM.	75 mm	64 mm	100 mm	100 mm	75 mm	75 mm	75 mm	75 mm
SENSITIVITY	101 dB	100.5 dB	96 dB	102 dB	97 dB	98 dB	101.5 dB	101 dB
MAX XOVER FREQ.	2000 Hz	3000 Hz	1000 Hz	2500 Hz	1800 Hz	1700 Hz	4000 Hz	2200 Hz
FS	43 Hz	50 Hz	45 Hz	54 Hz	49 Hz	58 Hz	49 Hz	44 Hz
XMAX	±4.5 mm	±4 mm	±8,25 mm	±2,5 mm	±8 mm	±6,5 mm	±4,5 mm	±4,5 mm
QTS	0.35	0.52	0.3	0.18	0.28	0.36	0.19	0.18
BL	15.1 Tm	12.6 Tm	20 Tm	23.5 Tm	18 Tm	17.7 Tm	17.8 Tm	18 Tm
TECHNOLOGIES								
MODEL	12MB650	12W500	10MB600	10M600	10W500	8MB500	8M400	5W430
								
APPLICATION	Midbass	Woofer	Midbass	Midrange	Woofer	Midbass	Midrange	Woofer
PROGRAM POWER	800W	500W	700W	500W	500W	400W	320W	120W
VOICE COIL DIAM.	64 mm	64 mm	75 mm	75 mm	51 mm	51 mm	51 mm	25 mm
SENSITIVITY	98 dB	99.5 dB	98 dB	102 dB	98 dB	95 dB	100.5 dB	89 dB
MAX XOVER FREQ.	2000 Hz	2500 Hz	2500 Hz	3000 Hz	2000 Hz	3000 Hz	4000 Hz	4000 Hz
FS	48 Hz	46 Hz	58 Hz	70 Hz	53 Hz	74 Hz	90 Hz	52 Hz
XMAX	±5,5 mm	±4 mm	±6,5 mm	±4 mm	±5,5 mm	±6 mm	±3 mm	±6 mm
QTS	0.23	0.36	0.22	0.23	0.29	0.43	0.27	0.32
BL	19 Tm	12.1 Tm	18.6 Tm	17.6 Tm	14.6 Tm	9.0 Tm	12.2 Tm	6.3 Tm
TECHNOLOGIES								



HF DRIVERS - NEODYMIUM

MODEL	ND4015BE	NSD4015N	ND4015Ti2	ND3ST NEW	ND3T NEW	ND2080	ND2060A	ND2060
								
TYPOLOGY	1.5" Beryllium	1.5" TPM Titanium	1.5" Titanium	1.4" Titanium	1.4" Titanium	2" Titanium	2" Aluminum	2" Titanium
PROGRAM POWER	280 W	320 W	320 W	240W	220W	200 W	160 W	200 W
VOICE COIL DIAM.	100 mm	100 mm	100 mm	75 mm	75 mm	75 mm	75 mm	75 mm
SENSITIVITY	113 dB	111 dB	113 dB	112dB	112dB	110 dB	110 dB	109 dB
MINIMUM Crossover FREQUENCY	1000 Hz (24 dB/oct)	800 Hz (24dB/oct)	800 Hz (24dB/oct)	1200 Hz	1200 Hz	800 Hz	800 Hz	800 Hz
FLUX DENSITY	2 T	2 T	2 T	2.1 T	2 T	2.2 T	1.9 T	1.9 T
NET WEIGHT	3.2 kg	3.2 kg	3.2 kg	2.3 Kg	1.6 Kg	3.6 kg	3.6 kg	3.6 kg
TECHNOLOGIES		 						
NOTES	1.4" and 2" exit versions available	1.4" and 2" exit versions available	1.4" and 2" exit versions available					








MODEL	NSD1480N	ND1480A	ND1480	ND1460A	ND1460	NSD1424BTN	ND1424BT	ND2T NEW
								
TYPOLOGY	1.4" TPM Titanium	1.4" Aluminum	1.4" Titanium	1.4" Aluminum	1.4" Titanium PEN	1.4" TPM Titanium	1.4" Titanium	1.4" Titanium
PROGRAM POWER	200 W	160 W	200 W	160 W	200W	140W	140 W	160W
VOICE COIL DIAM.	75 mm	75 mm	75 mm	75 mm	75 mm	60 mm	60 mm	60 mm
SENSITIVITY	111 dB	111 dB	110 dB	110 dB	110 dB	109 dB	109 dB	110 dB
MINIMUM Crossover FREQUENCY	800 Hz	800 Hz	800 Hz	800 Hz	800 Hz	1000 Hz	1000 Hz	1200 Hz
FLUX DENSITY	2.2 T	2.2 T	2.2 T	1.9 T	1.9 T	1.9 T	1.9 T	2 T
NET WEIGHT	3.1 kg	3.1 kg	3.1 kg	3.2 Kg	3.6 kg	1.7 kg	1.7 kg	1.4 Kg
TECHNOLOGIES	 					  	 	 

MODEL	NSD1095N	ND1090	ND1085	ND1070	ND1018BT	ND1050	ND1030	
								
TYPOLOGY	1.4" TPM Titanium	1" Titanium PEN	1" Titanium PEN	1" Titanium PEN	1" Titanium	1" Titanium PEN	1" Titanium	
PROGRAM POWER	100 W	100 W	80 W	100 W	100 W	90 W	60 W	
VOICE COIL DIAM.	44 mm	44 mm	44 mm	44 mm	44 mm	44 mm	34 mm	
SENSITIVITY	110 dB	110 dB	110 dB	109 dB	108 dB	109.5 dB	107 dB	
MINIMUM Crossover FREQUENCY	100 Hz	1500 Hz	1500 Hz	1500 Hz	1400 Hz	1400 Hz	1600 Hz	
FLUX DENSITY	2 T	2 T	2 T	1.8 T	1.8 T	1.9 T	1.8 T	
NET WEIGHT	1.2 kg	1.2 kg	1.2 kg	1.1 kg	1 kg	0.65 kg	0.8 kg	
TECHNOLOGIES	 	 	 	 	 	 	 	

MODEL	HD3020T NEW	HD3000T NEW	HD2080T	HD1480T	HD2020	HD2000	HD1050	HD1040
								
TYPOLOGY	2" Titanium PEN	1.4" Titanium PEN	2" Titanium PEN	1.4" Titanium PEN	2" Titanium	1.4" Titanium	1" Titanium	1" Titanium PEN
PROGRAM POWER	220 W	220 W	200 W	200 W	140 W	140 W	100 W	80 W
VOICE COIL DIAM.	75 mm	75 mm	75 mm	75 mm	61 mm	61 mm	44 mm	44 mm
SENSITIVITY	110 dB	112 dB	109 dB	109 dB	109 dB	108 dB	107 dB	107 dB
MINIMUM Crossover FREQUENCY	1000 Hz	1000 Hz	800 Hz	800 Hz	1100 Hz	1100 Hz	1400 Hz	1600 Hz
FLUX DENSITY	1,9 T	2,0 T	1.8 T	1.8 T	1.6 T	1,6 T	1.6 T	1.6 T
NET WEIGHT	4.9 Kg	4.9 Kg	5.3 Kg	5.3 Kg	3.2 Kg	2.8 Kg	1.8 Kg	1.8 Kg
TECHNOLOGIES					 	 	 	 
MODEL	HD1000	HD1030	HD125	XD125				
								
TYPOLOGY	1" Titanium	1" Titanium	1" Polyester	1" Polyester				
PROGRAM POWER	100 W	60 W	50 W	50 W				
VOICE COIL DIAM.	44 mm	34 mm	25 mm	25 mm				
SENSITIVITY	109 dB	106 dB	109 dB	109 dB				
MINIMUM Crossover FREQUENCY	1600 Hz	1800 Hz	2500 Hz	2500 Hz				
FLUX DENSITY	1,5 T	1.5 T	1.65 T	1.65 T				
NET WEIGHT	1.7 Kg	1 Kg	0.8 Kg	0.8 Kg				
TECHNOLOGIES	 	 		 				



COAXIALS



MODEL	15NCX1000	15NCX750	12NCX750	10CX650	8CX650	8CX401F	
							
MAGNETIC STRUCTURE	2xNeo-Single Motor	Single Neo Motor	Single Neo Motor	Single Ceramic	Single Ceramic	Dual Ceramic	
PROGRAM POWER	1600W	800W	800W	400W	400W	400W	
VOICE COIL DIAM.	100mm LF - 100mm HF	75mm LF - 60mm HF	75mm LF - 60mm HF	65mm LF - 44mm HF	65mm LF - 44mm HF	51mm LF - 25mm HF	
SENSITIVITY	96dB	98 dB LF - 107.5dB HF	97 dB LF - 107 dB HF	94dB LF - 106.5 dB HF	91dB LF - 106dB HF	95dB LF - 105dB HF	
FS	53 Hz	49 Hz	58 Hz	54Hz	65 Hz	64 Hz	
QTS	0.26	0.37	0.29	0.35	0.35	0.38	
BL	27 Tm	18 Tm	18 Tm	14 Tm	12 Tm	9.3 Tm	
COVERAGE ANGLE	90°	80°	80°	90°	90°	90°	
TECHNOLOGIES	  	   	   	 	 	 	
NOTES		A version with horn is available. Crossover available for this model.	A version with horn is available. Crossover available for this model.				



LINE ARRAY WAVEGUIDES

MODEL	XG14	XG10						
								
MATERIAL	Aluminum	Aluminum						
THROAT ENTRY	1.4"	1"						
COVERAGE ANGLE	100° x 10°	100° x 10°						
MIN XOVER FREQ.	800 Hz	1200 Hz						
FLANGE SIZE	133 x 133 mm	112 x 86 mm						
DEPTH	215 mm	131 mm						
NET WEIGHT	1 kg	0.6 kg						





HORNS

MODEL	XR2064C	XR1496C	XR1464C	XR1064	XT1464	XT1086	XT120	
								
MATERIAL	Composite material	Composite material	Composite material	Aluminum	Polyurethane	Aluminum	Polyurethane	
THROAT ENTRY	2"	1.4"	1.4"	1"	1.4"	1"	1"	
COVERAGE ANGLE	60° x 40°	90° x 60°	60° x 40°	60° x 40°	60° x 50°	80° x 60°	90° x 60°	
MIN XOVER FREQ.	800 Hz	800 Hz	800 Hz	1200 Hz	800 Hz	1200 Hz	2 kHz	
MOUTH WEIGHT	270 mm	270 mm	270 mm	210 mm	304 mm	215 mm	150 mm	
MOUTH HEIGHT	270 mm	270 mm	270 mm	210 mm	380 mm	260 mm	200 mm	
DEPTH	200 mm	180 mm	180 mm	110 mm	257 mm	126 mm	103 mm	
NET WEIGHT	1,8 Kg	1.4 Kg	1.4 Kg	0.75 Kg	1.3 Kg	1 Kg	0.35 Kg	
TECHNOLOGIES								



CROSSEOVERS

MODEL	03712XCR00	03715XCR00						
								
SPEAKER MODEL	12NCX750	15NCX750						
XOVER FREQUENCY	2.4 kHz	2.2 kHz						
HF SLOPE/OCTAVE	12dB/oct	12dB/oct						
LF SLOPE/OCTAVE	24dB/oct	24dB/oct						
MAX PROGR. POWER	1600W	1600W						
HF PROTECTION	Yes	Yes						



REFER TO
www.eighteensound.com
FOR THE MOST UP-TO-DATE
PRODUCT INFORMATION



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