



**T81244A Technical Data Report**  
**Thunder 8000A 12" Dual 4 Ohm Subwoofer**

**Features - Características - Caractéristiques - Technische Informationen**

<b>Mica-filled polypropylene cone, with aluminum finish</b> - Cono de aleación de Polipropileno con Mica - Cône polypropylene rempli de mica - Mika-gefüllter Polypropylen-Schalltrichter mit Aluminiumüberzug
<b>12 Stiffening Ribs</b> - 12 costillas de refuerzo - 12 nervures de renforcement - 12 Versteifungsrippen
<b>Machine Turned Plates</b> - Placas maquinadas - Plaques de champ fraisées - Maschinell geschliffene platte
<b>Spider Plateau Venting</b> - Ventilación de la placa de la pieza de centrado - Aération plateau à croisillons - Zentriermembranplateau-Entlüftung
<b>Apical Voice Coil Former</b> - Formador Cilíndrico de Bobina de Voz - Gabarit de bobine de voix apical - Sprechspulenkörper
<b>Laminated, hot pressed, Nomex &amp; Polycotton spider</b> - Circuito de Suspensión de Nomex y Polialgodón - Spider de nomex et de polyester et coton - Laminierte, warmgepresste Nomex- und Polycotton-Suspensionen
<b>Asymmetrical Linear Drive</b> - Excitación lineal asimétrica - Asymmetrical Linear Drive System - Asymmetrisches, lineares Antriebssystem
<b>Congruent Edge Technology</b> - Tecnología de borde continuo - Technologie de pointe congruente - Kongruenzkantentechnologie
<b>Extended Pole Piece</b> - Pieza polar extendida - Morceau polaire étendu - Erweitert Stabteil
<b>Polyimide Voice Coil Former</b> - Formador de Bobina de Voz de poliamide - Gabarit de bobine de voix de polyamide - Polyamide Stimmformerspule

**Specifications - Especificaciones - Données techniques - Spezifikationen**

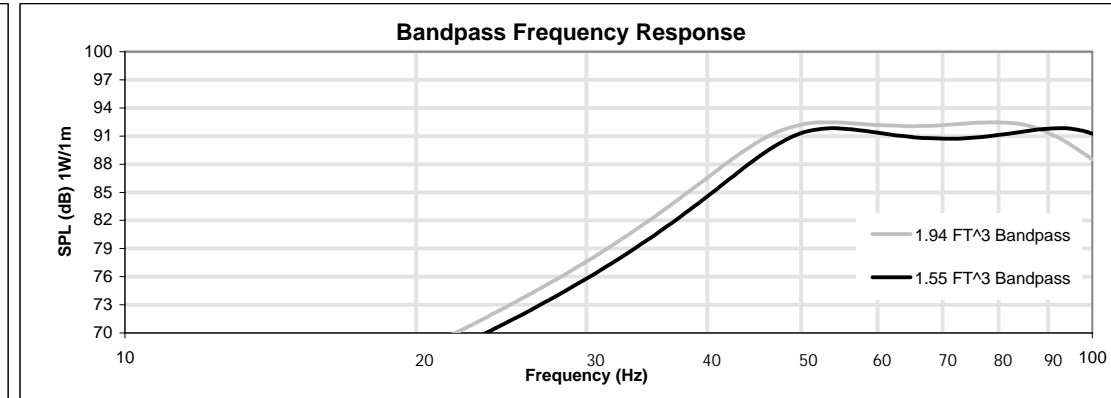
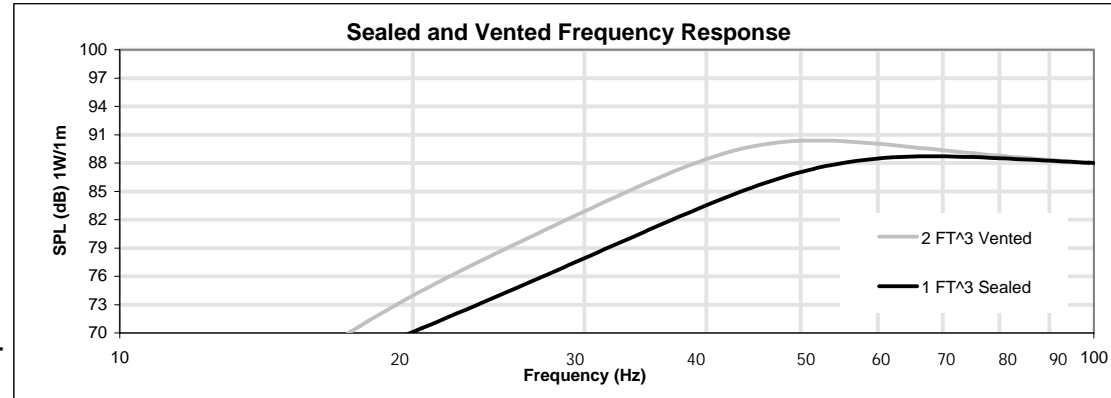
<b>Free Air Resonance</b> - Resonancia de atmósfera libre - Fréquence de résonance - Free Air-Resonanz	<b>Fs</b>	<b>25.2 Hz</b>
<b>Volume Acoustic Suspension</b> - Volumen de suspensión acústica - Volume équivalent à l'élasticité de la suspension - Äquivalenzvolumen	<b>Vas</b>	<b>3.21 Ft^3 (90.9 l)</b>
<b>Total Q</b> - Q total - Coefficient de surtension total - Gesamtgüte	<b>Qts</b>	<b>.49</b>
<b>Electrical Q</b> - Q eléctrica - Coefficient de surtension électrique - Elektrische Güte	<b>Qes</b>	<b>.54</b>
<b>Mechanical Q</b> - Q mecánica - Coefficient de surtension mécanique - Mechanische Güte	<b>Qms</b>	<b>5.53</b>
<b>DC Resistance</b> - Resistencia de CC - Résistance de la bobine au courant continu - Gleichstromwiderstand	<b>Re</b>	<b>1.84 Ohm</b>
<b>Linear Excursion (One Way)</b> - Excursión lineal (unidireccional) - Excursion maximum (dans un sens) - Lineare Auslenkung (eine Richtung)	<b>Xmax</b>	<b>.49" (12.4 mm)</b>
<b>Effective Piston Diameter</b> - Diámetro efectivo del pistón - Diamètre de la membrane - Effektiver Kolbendurchmesser	<b>D</b>	<b>10.315" (.2620 m)</b>
<b>RMS Power Handling</b> - Potencia máxima efectiva - Puissance RMS - Nennbelastbarkeits-Effektivwert	<b>RMS</b>	<b>400 Watts</b>
<b>Recommended Amplifier Power</b> - Potencia de amplificación recomendada - Puissance recommandée - Empfohlene Verstärkerleistung	<b>RMS</b>	<b>75-400 Watts</b>
<b>Sensitivity 1W/1m</b> - Sensibilidad - Efficacité 1W/1m - Empfindlichkeit	<b>SPLo</b>	<b>86.5 dB</b>
<b>Reference Efficiency</b> - Eficiencia de referencia - Efficacité de référence - Bezugswirkungsgrad	<b>No</b>	<b>0.26%</b>
<b>Frequency Response</b> - Respuesta de frecuencia - Réponse en fréquence - Frequenzgang		<b>24 - 150Hz</b>
<b>Voice Coil Inductance</b> - Inductancia de la bobina móvil - Inductance de la bobine mobile - Schwingspuleninduktivität	<b>Le</b>	<b>1.0 mH</b>
<b>Gap Height</b> - Altura del espacio - Hauteur de l'entrefer - Abstandshöhe		<b>.393" (10.0 mm)</b>
<b>Voice Coil Height</b> - Altura de la bobina móvil - Hauteur de la bobine - Schwingspulenhöhe		<b>1.246" (31.6 mm)</b>
<b>Voice Coil Diameter</b> - Diámetro del Bobina móvil - Diamètre de la bobine - Schwingspuledurchmesser		<b>2.5" (63.5 mm)</b>
<b>Magnet Weight</b> - Imán - Poids de la structure magnétique - Magnet		<b>102 oz (2892 g)</b>
<b>Motor Force</b> - Fuerza motriz - Facteur force - Schwingkraft	<b>BL</b>	<b>9.83 Tm</b>
<b>Compliance</b> - Cumplimiento - Compliance - Compliance	<b>Cms</b>	<b>.223 mm/N</b>
<b>Total Moving Mass</b> - Masa total en movimiento - Masse totale en mouvement - Gesamte bewegte Masse	<b>Mms</b>	<b>179.1 g</b>
<b>Moving Mass of Driver</b> - Masa en movimiento del altavoz - Poids de la membrane - Bewegte Masse des Subwoofers	<b>Mmd</b>	<b>171.9 g</b>
<b>Suspension Losses</b> - Pérdidas de suspensión - Pertes dans la suspension - Aufhängungsverlust	<b>Rms</b>	<b>5.13</b>
<b>Effective Surface Area</b> - Área superficial efectiva - Surface de la membrane - Wirksame Oberfläche	<b>Sd</b>	<b>83.6 in^2 (.0539m^2)</b>
<b>Mounting Diameter</b> - Diámetro de montaje - Diamètre de montage - Einbaudurchmesser	<b>11"</b>	<b>(279.4 mm)</b>
<b>Overall Diameter</b> - Diámetro total - Diamètre extérieur - Gesamtdurchmesser	<b>12 11/16"</b>	<b>(322.3 mm)</b>
<b>Mounting Depth</b> - Profundidad de montaje - Profondeur de montage - Einbautiefe	<b>5 5/8"</b>	<b>(142.9 mm)</b>
<b>Overall Depth</b> - Profundidad total - Profondeur totale - Gesamttiefe	<b>6 1/4"</b>	<b>(158.8 mm)</b>
<b>Speaker Displacement (Inside Box)</b> - Desplazamiento del altavoz (caja interior) - Volume occupé par le haut-parleur (montage intérieur) - Lautsprecherverdrängung (im Gehäuse)	<b>247in^2</b>	<b>(4.0 l)</b>
<b>Speaker Displacement (Outside Box)</b> - Desplazamiento del altavoz (caja exterior) - Volume occupé par le haut-parleur (montage extérieur) - Lautsprecherverdrängung (außerhalb des Gehäuses)	<b>172in^2</b>	<b>(2.8 l)</b>

\*Dual voice coil models measured with coils in parallel



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Thunder 8000A 12" Dual 4 Ohm Subwoofer



#### Sealed Enclosures - Gabinetes Sellados - Caissons Clos - Geschlossene Gehäuse

Enclosure Volume	1.00 Ft <sup>3</sup> (28.3 l)	1.25 Ft <sup>3</sup> (35.4 l)	1.50 Ft <sup>3</sup> (42.5 l)	1.75 Ft <sup>3</sup> (49.6 l)	2.00 Ft <sup>3</sup> (56.6 l)
F3	43 Hz	40 Hz	38 Hz	35 Hz	34 Hz
Ripple	.72dB	.53dB	.38dB	.26dB	.17dB
Qtc	1.05	.96	.89	.84	.81
Net Volume	.90 Ft <sup>3</sup> (25.5 l)	1.15 Ft <sup>3</sup> (32.6 l)	1.40 Ft <sup>3</sup> (39.7 l)	1.65 Ft <sup>3</sup> (46.7 l)	1.90 Ft <sup>3</sup> (53.8 l)
Driver Volume	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)
Excursion Limited SPL	114dB	114dB	113dB	113dB	113dB
Excursion Limited Power	400 Watts	400 Watts	400 Watts	400 Watts	390 Watts

#### Vented Enclosures - Gabinetes ventilados - Caissons Bass Reflex - Ventilierte Gehäuse

Enclosure Volume	2.00 Ft <sup>3</sup> (56.6 l)	2.25 Ft <sup>3</sup> (63.7 l)	2.50 Ft <sup>3</sup> (70.8 l)	2.75 Ft <sup>3</sup> (77.9 l)	3.00 Ft <sup>3</sup> (85.0 l)
Vent Dimensions	4"x17"	4"x16.25"	4"x15.5"	4"x14.75"	4"x14.25"
F3	33 Hz	31 Hz	29 Hz	26 Hz	25 Hz
Tuning Frequency	31 Hz	30 Hz	28 Hz	27 Hz	27 Hz
Ripple	2.38dB	2.24dB	2.11dB	2.00dB	1.86dB
Net Volume	1.77 Ft <sup>3</sup> (50.0 l)	2.02 Ft <sup>3</sup> (57.3 l)	2.28 Ft <sup>3</sup> (64.6 l)	2.54 Ft <sup>3</sup> (71.8 l)	2.79 Ft <sup>3</sup> (79.0 l)
Driver Volume	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)
Vent Volume	.13 Ft <sup>3</sup> (3.8 l)	.13 Ft <sup>3</sup> (3.6 l)	.12 Ft <sup>3</sup> (3.4 l)	.11 Ft <sup>3</sup> (3.3 l)	.11 Ft <sup>3</sup> (3.1 l)
Excursion Limited SPL	116dB	116dB	115dB	115dB	115dB
Excursion Limited Power	400 Watts	400 Watts	400 Watts	400 Watts	400 Watts

#### Single Reflex Bandpass Enclosures - Gabinetes reflectores sencillos de paso de banda - Caissons Bandpass à une chambre reflex - Bassreflex-Bandpassgehäuse

**s=0.5**

Enclosure Volume	1.35 Ft <sup>3</sup> (38.2 l)	1.44 Ft <sup>3</sup> (40.8 l)	1.55 Ft <sup>3</sup> (43.9 l)	1.70 Ft <sup>3</sup> (48.1 l)	1.91 Ft <sup>3</sup> (54.1 l)
Bandpass	53 - 124	47 - 119	42 - 114	37 - 109	32 - 104
Bandpass Gain	6.4dB	5.3dB	4.1dB	2.8dB	1.3dB
Vent Dimensions	(2)4"x9"	(2)4"x10.75"	(2)4"x13.25"	(2)4"x16.25"	(2)4"x20.5"
Tuning Frequency	81 Hz	76 Hz	71 Hz	65 Hz	59 Hz
Ripple	1.03dB	1.07dB	1.12dB	1.16dB	1.21dB
Sealed Volume	.34 Ft <sup>3</sup> (9.7 l)	.40 Ft <sup>3</sup> (11.2 l)	.47 Ft <sup>3</sup> (13.3 l)	.57 Ft <sup>3</sup> (16.1 l)	.71 Ft <sup>3</sup> (20.0 l)
Vented Volume	.78 Ft <sup>3</sup> (22.0 l)	.78 Ft <sup>3</sup> (22.0 l)	.78 Ft <sup>3</sup> (22.0 l)	.78 Ft <sup>3</sup> (22.0 l)	.78 Ft <sup>3</sup> (22.0 l)
Driver Volume	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)
Vent Volume	.14 Ft <sup>3</sup> (3.8 l)	.16 Ft <sup>3</sup> (4.6 l)	.21 Ft <sup>3</sup> (5.8 l)	.25 Ft <sup>3</sup> (7.2 l)	.32 Ft <sup>3</sup> (9.2 l)
Excursion Limited SPL	120dB	119dB	117dB	116dB	115dB
Excursion Limited Power	400 Watts	400 Watts	400 Watts	400 Watts	400 Watts

#### Single Reflex Bandpass Enclosures - Gabinetes reflectores sencillos de paso de banda - Caissons Bandpass à une chambre reflex - Bassreflex-Bandpassgehäuse

**s=0.6**

Enclosure Volume	1.72 Ft <sup>3</sup> (48.7 l)	1.81 Ft <sup>3</sup> (51.3 l)	1.94 Ft <sup>3</sup> (54.9 l)	2.11 Ft <sup>3</sup> (59.8 l)	2.35 Ft <sup>3</sup> (66.6 l)
Bandpass	51 - 108	46 - 103	43 - 98	38 - 93	32 - 88
Bandpass Gain	7.8dB	6.7dB	5.5dB	4.1dB	2.6dB
Vent Dimensions	(2)4"x6.5"	(2)4"x8"	(2)4"x10"	(2)4"x12.75"	(2)4"x16.25"
Tuning Frequency	75 Hz	70 Hz	65 Hz	60 Hz	54 Hz
Ripple	.37dB	.39dB	.41dB	.44dB	.46dB
Sealed Volume	.40 Ft <sup>3</sup> (11.4 l)	.47 Ft <sup>3</sup> (13.4 l)	.57 Ft <sup>3</sup> (16.0 l)	.69 Ft <sup>3</sup> (19.6 l)	.88 Ft <sup>3</sup> (24.9 l)
Vented Volume	1.12 Ft <sup>3</sup> (31.7 l)	1.12 Ft <sup>3</sup> (31.7 l)	1.12 Ft <sup>3</sup> (31.7 l)	1.12 Ft <sup>3</sup> (31.7 l)	1.12 Ft <sup>3</sup> (31.7 l)
Driver Volume	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)	.10 Ft <sup>3</sup> (2.8 l)
Vent Volume	.09 Ft <sup>3</sup> (2.7 l)	.12 Ft <sup>3</sup> (3.4 l)	.15 Ft <sup>3</sup> (4.3 l)	.20 Ft <sup>3</sup> (5.6 l)	.25 Ft <sup>3</sup> (7.2 l)
Excursion Limited SPL	120dB	119dB	118dB	117dB	115dB
Excursion Limited Power	400 Watts	400 Watts	400 Watts	400 Watts	400 Watts

#### One Year Limited Warranty

MTX Loudspeakers purchased in the United States from an authorized MTX dealer are guaranteed against defects in material and workmanship for a period of ONE YEAR from the date purchased by the end user, and limited to the original retail purchaser of the product. Product found to be defective during that period will be repaired or replaced by MTX at no charge. This warranty is void if it is determined that unauthorized parties have attempted repairs or alterations of any nature. Warranty does not extend to cosmetics or finish. Before presuming a defect is present in the product, be certain that all related equipment and wiring is functioning properly. MTX disclaims any liability for other incurred damages resulting from product defects. Any expenses incurred in the removal and reinstallation of products are not covered by this warranty. MTX's total liability will not exceed the purchase price of the product. If a defect is present, your authorized MTX dealer may be able to effect repairs. Proof of purchase is required when requesting service, so please retain your sales receipt and take a moment to register your warranty on line @ [www.mtx.com](http://www.mtx.com).