

NTENSE 8 SPECIFICATION SHEET

You have purchased the finest car audio loudspeaker available. Ntense speakers set new standards for performance and reliability. They are superbly crafted and precision calibrated. If you install each loudspeaker properly, you will be astonished with the quality of sound and you will have an audio system that you can be proud of and enjoy for many years.



WARRANTY AND SERVICE

ORION Industries, Inc. (hereafter ORION) warrants this product to be free from defects in material and workmanship under the following terms:

PARTS and LABOR are warrantied for a period of 3 years from the date of the first consumer purchase from an Authorized ORION Dealer, or limited lifetime if installed by an Authorized ORION Dealer. Except as specified below, this warranty covers ALL defects in material and workmanship in this product. The following are NOT covered by this warranty:

 Any product which is NOT purchased from an Authorized ORION Dealer. If you are uncertain as to whether your Dealer is Authorized, please contact ORION at (602) 730-8200. In countries other than the USA, each distributor warrantees the ORION products which it sells. (If the product is purchased from a non-authorized Dealer, the warranty is 90-days from date of purchase).

NT 8 SVC

nominal impedance	4 ohms	nominal impedance	2 ohms	8 ohms		
Re (DC resistance)	3.95 ohms	Re (DC resistance)	2.25 ohms	8.40 ohms		
Levc (coil inductance)	.32 mH	Levc (coil inductance)	.40mH	1.72 mH		
SPLo (reference efficiency) @ 2.83v	87.3 dB	SPLo (reference efficiency) @ 2.83v	92.0 dB	86.0 dB		
Fo (free air resonance)	32.1 Hz	Fo (free air resonance)	27.8 Hz	27.8 Hz		
Qms (mechanical Q)	1.98	Qms (mechanical Q)	2.25	2.25		
Qes (electrical Q)	.63	Qes (electrical Q)	.38	.38		
Qts (total Q)	.48	Qts (total Q)	.32	.32		
BL (force factor)	6.00 TM	BL (force factor)	6.27TM	12.20 TM		
Sd (cone area)	.0206 sq M	Sd (cone area)	.0206 sq M	.0206 sq M		
Vas (volume acoustic suspension)	52 Liters	Vas (volume acoustic suspension)	52 Liters	52 Liters		
Vas (volume acoustic suspension)	1.84 cu Ft	Vas (volume acoustic suspension)	1.84 cu Ft	1.84 cu Ft		
Xmax (excursion)	8.63 mm	Xmax (excursion)	8.63 mm	8.63 mm		
Pmax (thermal power handling)	500 Watts	Pmax (thermal power handling)	500 Watts	500 Watts		
mounting diameter	7.25 in	mounting diameter	7.25 in	7.25 in		
mounting depth	4.00 in	mounting depth	4.00 in	4.00 in		
basket displacement	62.5 cu in	basket displacement	62.5 cu in	62.5 cu in		
voice coil diameter	1.5 in	voice coil diameter	1.5 in	1.5 in		

NT 8 DVC

Note: Ntense Woofers are designed to perform with an enclosure. See your Orion dealer for box design information.

- 2. Any product on which the serial number has been defaced, modified or removed.
- 3. Damage or malfunction resulting from;
 - a. accident, misuse, abuse, unauthorized modification or failure to follow the instructions provided with the product
 - b. repair by anyone NOT Authorized by ORION
 - c. damage due to shipping (these claims must be presented to the freight carrier)
 - d. removal or installation of the product
 - e. any failure that has NOT been caused by a defect in material or workmanship

This warranty is in effect for the original purchaser only. ORION will pay for labor and material expense for covered items. ORION does not cover removal or installation charges, payment of shipping charges to ORION, payment of OUT-OF-WARRANTY shipping charges, or damage to other property caused by any defects in this product.

To obtain service, take or ship the product (pre-paid) in its original packaging, if you do not have the original packaging the product must be packed so no damage will incur to the product during its shipment to:

ORION Industries, Inc. Attn: Repair Department 118 West Julie Dr. Tempe, AZ 85283 USA

For IN-WARRANTY service you must include a copy of the original, dated sales receipt, including serial number, from an Authorized ORION Dealer. Please also enclose your name, return street address (No P.O. Boxes) and a detailed description of the problem.

This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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LOUDSPEAKER TECHNICAL DATA

Recommended Sealed Enclosures					
Volume	Qtc.	F3	F10		
0.25	1.39	71.68	50.49		
0.50	1.04	55.34	36.47		
1.00	0.81	47.23	28.68		

Recommended Vented Enclosures						
Volume	Fb	Av	Lv	F3	F10 Vr	port
0.50	41	(1)2"	8 ³ /8"	57.22	40.99	41
1.00	37	(1)3"	11 ³ /8"	39.31	28.87	81
1.50	34	(1)3"	81/ 2 "	32.18	25.26	82

DESIGN FEATURES

- Die Cast Frame- Provides a solid foundation for the speaker to operate.
- ICF Cones- Inter-woven Carbon-Fibre Cones are ultra-rigid light weight cone material offers smooth response without the cone break-up associated with lesser cone material.
- SBR Rubber Surround- SBR Surround provides linear cone movement while reducing resonance transferred from the woofer to the frame for reduced distortion and improved sound quality.
- L\C\S- Linear Control System suspension maximizes the linear excursion of the woofer while eliminating suspension "bottoming out" and fatigue problems associated with less capable woofers.
- force β (focused radial controlled energy) extended pole piece geometry focuses magnetic energy from the magnet to the voice coil creating a larger more uniform magnetic field.
 Improves woofer efficiency and linearity while reducing distortion.
- Vented Pole Piece- Forced air cooling improves thermal power handling of the woofer.
- High Temperature Flat Wound Voice Coil- High temperature flat wound voice coil maximizes the efficiency of the magnetic field and maintains performance over a wide temperature range.
- Stepped Back Plate- Maximizes the excursion capability of the woofer.
- Black anodized aluminum voice coil former-Dissipates heat generated by the voice coil improving the thermal power handling of the woofer.
- Gold Speaker Terminals- Gold Plated speaker spring terminals provide a solid connection to accommodate a wide variety of speaker wires.

Specifications

nominal impedance	4 ohms
Re (DC resistance)	3.95 ohms
Leve (coil inductance)	0.32 mH
SPLo (2.83V, 1 meter)	87.30 dB
Fo (free air resonance)	32.10 Hz
Qms (mechanical Q)	1.98
Qes (electrical Q)	0.63
Qts (total Q)	0.48
Bl (force factor)	6.00 TM
Volume Sd (cone area)	.020 sq. M
Vas	52.0 Liters
(volume acoustic suspension)	
Vas	1.84 cu.ft.
(volume acoustic suspension)	
Xmax (excursion)	8.63 mm
Pmax	500 Watts
(thermal power handling)	
mounting diameter	7.25 in.
mounting depth	4.00 in.
basket displacement	62.5 cu.in.
voice coil diameter	1.5 in.

* Note: All enclosure volumes do not include the displacement of the woofer or the port.

NTENSE 8 DVC

LOUDSPEAKER TECHNICAL DATA

Recommended Sealed Enclosures					
Volume	Qtc.	F3	F10		
0.25	0.93	67.05	43.09		
0.50	0.89	57.22	32.99		

Recommended Vented Enclosures						
Volume	Fb	Av	Lv	F3	F10 V	port
0.50	41	(1)2"	8 ³ /8"	48.03	34.98	41
1.00	37	(1)3"	11³/8"	34.69	28.16	81
1.50	34	(1)3"	8 ¹ /2 "	30.35	25.47	82

DESIGN FEATURES

- Die Cast Frame- Provides a solid foundation for the speaker to operate.
- ICF Cones- Inter-woven Carbon-Fibre Cones are ultra-rigid light weight cone material offers smooth response without the cone break-up associated with lesser cone material.
- SBR Rubber Surround- SBR Surround provides linear cone movement while reducing resonance transferred from the woofer to the frame for reduced distortion and improved sound quality.
- L\C\S- Linear Control System suspension maximizes the linear excursion of the woofer while eliminating suspension "bottoming out" and fatigue problems associated with less capable woofers.
- force β (focused radial controlled energy) extended pole piece geometry focuses magnetic energy from the magnet to the voice coil creating a larger more uniform magnetic field.
 Improves woofer efficiency and linearity while reducing distortion.
- Vented Pole Piece- Force ßd air cooling improves thermal power handling of the woofer.
- High Temperature Flat Wound Voice Coil- High temperature flat wound voice coil maximizes the efficiency of the magnetic field and maintains performance over a wide temperature range.
- Stepped Back Plate- Maximizes the excursion capability of the woofer.
- Black anodized aluminum voice coil former-Dissipates heat generated by the voice coil improving the thermal power handling of the woofer.
- Gold Speaker Terminals- Gold Plated speaker spring terminals provide a solid connection to accommodate a wide variety of speaker wires.
- Dual Voice Coils- Provides multiple wiring configurations to maximize the power of the amplifier/s.

Specifications

nominal impedance	2 ohms	8 ohms
Re (DC resistance)	2.25 ohms	8.40 ohms
Leve (coil inductance)	0.40 mH	1.72 mH
SPLo (2.83V, 1 meter)	92.00 dB	86.00 dB
Fo.(free air resonance)	27.80 Hz	27.80 Hz
Qms (mechanical Q)	2.25	2.25
Qes (electrical Q)	0.38	0.38
Qts (total Q)	0.32	0.32
BI (force factor)	6.27 TM	12.20 TM
Volume Sd (cone area)	.0206 sq. M	.0206 sq. M
Vas (volume acoustic suspension)	52.0 Liters	52.0 Liters
Vas (volume acoustic suspension)	1.84 cu.ft.	1.84 cu.ft.
Xmax (excursion)	8.63 mm	8.63 mm
Pmax (thermal power handling)	500 Watts	500 Watts
mounting diameter	7.25 in.	7.25 in.
mounting depth	4.00 in.	4.00 in.
basket displacement	62.5 cu.in.	62.5cu.in.
voice coil diameter	1.5 in.	1.5 in.

* Note: All enclosure volumes do not include the displacement of the woofer or the port.