

## ATOM

Dual Voice Coil Car Audio Subwoofer



Intriguing from the first look, Atom subwoofers offer more than what meets your eyes. The first thing you probably noticed was a wild looking dustcap. No, it's not just for your viewing pleasure, it is coupled to the aluminum voice coil former, acting like a heatsink to extract heat away from the voice coil. It's three fins are epoxied and embedded into recesses of the cone, eliminate cone flex and radiated distortion during high excursion. Atom subwoofer cones use a composite of wood pulp and natural fibers to maximize durability and produce smooth, low bass. Sparing no compromise, the motor assembly of Atom subwoofers include an extended gap top plate, which expands the magnete field resulting in dynamic sound & performance qualities you demand. Dedicated to the enthusiast in all of us, Atom subwoofers are engineered to be a pinnacle of PrecisionPower, delivering you absolutely state of the art mobile audio.

## FEATURES, PARAMETERS, & SPECIFICATIONS

- -Cast Aluminum Heatsink Dust Cap Coupled to the Voice Coil Former Absorbs & dissipates heat from thermally sensitive voice coil
- -Aluminum Dust Cap Fins Adhered to Cone Strengthen Rigidity Eliminates cone flex & radiated distortions during high excusrion
- -Non-Transfer Spruce Pulp Cone w/ UV & Chemical Protection Composite wood pulp & natural fibers produce smooth, low bass
- -Dual Poly-Cotton Suspension Maintains Magnetic Gap Linearity
  Dampens violent accelerations ensuring moving diaphragm alignment
- -2.5" 4-Layer 100% Oxygen-Free Copper Voice Coil on Aluminum Former
  Aluminum former routes heat from the voice coil to the dust cap by conduction transfer
- -Hot Forged 1-piece 10mm Top Plate w/ +5mm Expanded Magentic Gap Expanded magnetic gap increases magnetic force for higher SPL & maintaining linerarity
- -Hot Forged 1-piece 10mm T-Yoke w/ Center Pole & Back Plate Venting Venting milled into the T-yoke pole & back plate remove heat by convection transfer

Specification	AW.10D2	AW.10D4	AW-12D2	AW.12D4	
Fs (Hz)	29.24	29.34	24.77	25.82	
Qms	5.86	6.26	6.45	6.69	
Vas (L)	26.85	30.12	63.02	65.22	
Cms (mm/N)	157.62	176.82	184	190.62	
Mms (g)	179.45	159.89	220.19	193.2	
Xmax (mm)	22.	.5	22.5		
Qes	.67	.66	.54	.66	
Re (Ω)	3.93	7.47	3.83	7.45	
Z (Ω)	4	8	4	8	
BL (Tm)	14.08	18.33	15.74	18.19	
MAX Power	1,00	0w	1,200w		
RMS Power	500	)w	600w		
Qts	.61	.60	.49	.60	
SPL (1W/1M)	82.20dB	82.75DB	84.50dB	84.38dB	
Impedance	DVC 2 Ω	DVC 4Ω	DVC 2 Ω	DVC 4Ω	

## **ENCLOSURE DESIGN & WOOFER INSTALLATION**

Vehicle conditions, amplifier, music preferences, & other variables make it difficult to give you exact dimensions for an enclosure deisgn. For enclosure designs tailored to your specific needs, please contact us at tech-support@precisionpower.com, or 1-800-724-1377.

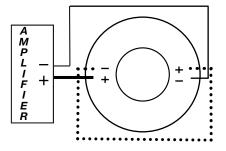
All enclosures should be made of .75" (3/4") material only. When possible, make the baffle 1.5" (1 ½) thick and add .75" (3/4") to the depth of the enclosure to compensate. All volumes INCLUDE vent/port and subwoofer displacements. DO NOT change the volume unless you plan on adding a substantial amount of bracing. For added performance, applying a coat of fiberglass resin to the interior walls will greatly improve sealing the enclosure. Adding a thin layer of poly-fill will improve response by smoothing out reflections within the enclosure.

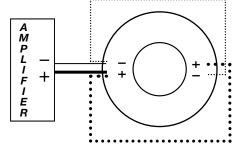
Below are recommended enclsoure designs and their expected performance:

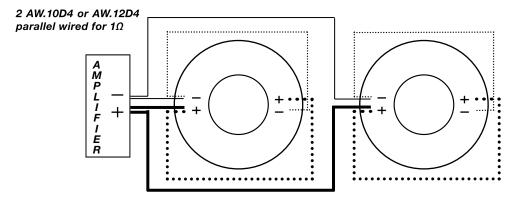
	Recommended Sealed Enclosures			Recommended Ported Enclosures		
	Airspace	QTC	Tuning	Airspace	Round Port	Tuning
Min.	0.75 ft³	.884	52.5 Hz	1.75 ft³	4" x 15.25"L	33.3 Hz
Opt.	1.00 ft³	.785	50.3 Hz	2.00 ft <sup>3</sup>	4" x 14.5"L	31.1 Hz
Мах.	1.25 ft³	.725	49.5 Hz	2.25 ft³	4" x 14"L	29.3 Hz

1 AW.10D2 or AW.12D2 series wired for  $4\Omega$  1 AW.10D4 or AW.12D4 series wired for  $8\Omega$ 

1 AW.10D2 or AW.12D2 parallel wired for  $1\Omega$ 1 AW.10D4 or AW.12D4 parallel wired for  $2\Omega$ 







## LIMITED 90-DAY CONSUMER WARRANTY LIMITED ONE-YEAR CONSUMER WARRANTY WITH PURCHASE AND INSTALLATION BY A PRECISION POWER AUTHORIZED RETAILER

PrecisionPower promises to the original purchaser, to repair or replace this product with a new or refurbished unit (at PrecisionPower's sole and absolute discretion) should it prove to be defective in workmanship or material under normal use, for a period of one year from the date of purchase from the PrecisionPower authorized retailer, PROVIDED the product was purchased and installed by a PrecisionPower authorized retailer. During this one year period, there will be no charge for product repair or replacement, PROVIDED the unit is returned to PrecisionPower, return shipping pre-paid, along with the required proof of installation, the bill of sale or other dated proof of purchase, and the consumer's contact information.

If the unit is installed by anyone other than a PrecisionPower authorized retailer, the warranty period will be 90-days from the date of purchase. This warranty is nontransferable and does not apply to any unit that has been modified or used in a manner contrary to its intended purpose, and does not cover damage to the unit caused by installation or removal of the unit. During this 90-day period, there will be no charge for the repair or replacement PROVIDED the unit is returned to PrecisionPower, return shipping prepaid, along with the bill of sale or other dated proof of purchase and the consumer's contact information.

This warranty is void if the product has been damaged by accident or unreasonable use, neglect, improper service or other causes not arising out of defects in materials or construction. This warranty does not cover the elimination of externally generated static or noise, or the correction of antenna problems or weak reception, damage to speakers, accessories, electrical systems, cosmetic damage or damage due to negligence, misuse, failure to follow operating instructions, accidental spills or customer applied cleaners, damage due to environmental causes such as floods, airborne fallout, chemicals, salt, hail, lightning or extreme temperatures, damage due to accidents, road hazards, fire, theft, loss or vandalism, damage due to improper connection to equipment of another manufacturer, modification of existing equipment, or Product which has been opened or tampered for any reason. Units which are found to be damaged by abuse resulting in thermally damaged voice coils are not covered by this warranty but may be replaced at the absolute and sole discretion of PrecisionPower. Unit must be returned to PrecisionPower, postage pre-paid, with bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number, and address, authorized retailer's name and address, and product description. Please contact PrecisionPower's warranty office at 800-724-1377, email to repairs@PrecisionPower.com, or visit PrecisionPower.com/warranty to obtain a Return Authorization Number prior to shipping the product.

Note: This warranty does not cover labor costs for the removal and reinstallation of the unit. IN ORDER FOR THE ONE YEAR WARRANTY TO BE VALID, YOUR UNIT MUST BE SHIPPED WITH PROOF OF PURCHASE & INSTALLATION BY A PRECISIONPOWER AUTHORIZED RETAILER. ALL UNITS RECEIVED BY PRECISIONPOWER FOR WARRANTY REPAIR WITHOUT PROOF OF PRECISIONPOWER AUTHORIZED DEALER INSTALLATION AND PURCHASE WILL BE COVERED BY THE LIMITED 90-DAY WARRANTY.

BY PURCHASING THIS PRODUCT, ALL WARRANTIES INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY ARE EXPRESSLY EXCLUDED TO THE MAXIMUM EXTENT ALLOWED BY LAW, AND PRECISIONPOWER NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT. PRECISIONPOWER HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS. BY PURCHASING THIS PRODUCT, THE CONSUMER AGREES AND CONSENTS THAT ALL DISPUTES BETWEEN THE CONSUMER AND PRECISIONPOWER SHALL BE RESOLVED IN ACCORDANCE WITH CALIFORNIA LAWS IN LOS ANGELES COUNTY, CALIFORNIA. Some states do not allow limitation on how long an implied warranty lasts. In such states, the limitation or exclusions of this Limited Warranty may not apply. Some states do not allow the exclusion or limitation of incidental or consequential damages. In such states, the exclusion or limitation of this Limited Warranty gives you specific legal rights, and you may have other rights which vary from state to state.

REGISTER YOUR WARRANTY FOR THIS PRECISIONPOWER PRODUCT ONLINE AND RECEIVE SPECIAL OFFERS & NEW PRODUCT UPDATES!!! precisionpower.com/product

