## ATW16 | ATW20 SUBW00FERS

# INSTALLATION & OPERATION MANUAL / EINBAU- & BEDIENUNGSANLEITUNG



Thank you and congratulations! You have purchased one of the finest subwoofers available in its respective price class. This AXTON ATW subwoofer will give you great bass performance and true audiophile sound quality. To maximize the performance of your sub, it is recommended to follow the enclosure suggestions given in this manual. If for some reason, the provided system/enclosure data can not be applied within your specific vehicle or car audio installation, please contact your authorized AXTON dealer to ask for further assistance.

#### **KEY FEATURES ATW WOOFERS**

- 6.5" / 8" BACK VENTED STEEL BASKET
- 120 MM HIGH EFFICIENT SINGLE MAGNET
- HIGH STRENGTH FIBERGLASS/FOAM/PAPER CONE
- LONG-THROW CONEX™ SPIDER
- LONG-LASTING RUBBER SURROUND
- TSL VOICE-COIL FORMER
- 1.5" COPPER WIRE DOUBLE VOICE COIL
- HYPER-EXTENDED CENTER POLE
- WOVEN TINSEL WIRES
- RUBBER MAGNET BOOT
- GOLD PLATED TERMINAL

#### **CABINET CONSTRUCTION & DAMPING**

For best results, use 19 mm to 22 mm MDF or birch plywood to build the enclosure. All enclosure volumes given are precise internal chamber volumes, where displacement of driver and port(s) have been included already.

Each enclosure, no matter what tuning principle, needs internal damping: The sealed and ported cabinets should be lined out internally with "eggcrate" PU-foam.

TECHNICAL SPECIFICATIONS	ΙTΑ	N16	AT	W20
Usable Frequency Response	65 – 400	Hz	55 – 300	Hz
Continuous Power Handling	75	W RMS	75	W RMS
Peak Power Handling	150	W max	150	W max
Nominal Impedance	2 x 2	ohms	2 x 2	ohms
Voice Coil Diameter	38	mm	38	mm
Sensitivity	84	dB	86.7	dB
Mounting Diameter	145	mm	184	mm
Mounting Depth	79	mm	80	mm

THIELE-SMALL PARAMETERS					
Free-Air Resonance	(Fs)	47.1	Hz	36.34	Hz
DC Resistance	(Re)	4.5	ohms	4.4	ohms
Electrical Damping	(Oes)	0.63		0.35	
Mechanical Damping	(Qms)	6.23		7.98	
Total Damping	(Ots)	0.34		0.33	
Equivalent Volume of Compliance	(Vas)	7.15	liter	21.49	liter
Moving Mass incl. Air Load	(Mms)	42.4	g	57.86	g
Electrically Limited Cone Excursion	(Xmax p-p)	6.7	mm	6.7	mm
Effective Cone Surface	(Sd)	136.8	cm <sup>2</sup>	213.8	cm <sup>2</sup>

RECOMMENDED ENCLOSURES		
SEALED ENCLOSURE		
Internal Volume	10 I	15 I
PORTED ENCLOSURE		
Internal Volume	18 I	20 I
Port Diameter/Length	1 x 7 cm – 20 cm	1 x 7 cm – 25 cm

### LIMITED WARRANTY

AXTON warrants any ATW woofer to be free of defects in material and workmanship for a period of TWO YEARS from the original date of purchase at retail, contingent upon installation being performed or approved by an authorized AXTON dealer. Should service be necessary during the afore mentioned period, AXTON will at its own discretion repair or replace the defective speaker at no charge. Damage caused by the following is NOT covered under warranty: Abuse of speaker due to excessive amplifier power, clipping, inappropriate enclosure design, or any further physical damage (during transportation).

