

### ATB20RXF: Spare wheel subwoofer from Axton



# Shallow subwoofer for the trunk floor

► To accommodate a subwoofer for everyday use is a great thing. The spare wheel well is an obvious choice for this, when one is available. From Axton you can now get a super shallow spare wheel woofer that is fine even when there are space constraints.

The spare wheel well is the optimal place for a subwoofer – here it takes up no trunk space and remains out of sight. That is great if the vehicle has a spare wheel well, which is by no means a certainty. Often the spare wheels are thin or there is only a can of tire bead sealer spray. In this case only a subwoofer can help that is flat enough to always fit in. Therefore Axton has brought out the ATB20RXF, a fully-fledged subwoofer that is only 12.5 centimeters high. Thus emergency wheels are no problem, and many trunk false floors will take the shallow Axton without any trouble. As already mentioned, the ATB20RXF is no cheap little pokey solution — we are looking at a solid wooden cabinet with a flexible MDF casing 10 millimeters thick. A section is cut away from the 58-cen-

timeter circle where the bass reflex tunnel opens out and can breathe freely. Woofer and amplifier modules are let into the cabinet lid to save installation height. For this purpose a mounting frame is envisaged to hold them firmly in place. The cone of the woofer chassis is protected by a grille; moreover a hole in the middle of the cabinet helps with anchoring the unit to a spare wheel hold down bolt. The woofer itself works with a rather shallow fiber glass cone; with a nominal diameter of 20 centimeters it fits exactly between the centre hole and the edge of the cabinet. Nothing has been spared on the magnet: here a thick 134 x 20 mm ferrite magnet ensures the 38-mm voice coil gets a good wallop. The amplifier module turns out to be singularly un-

spectacular. We find plug connectors for the cable harness and the included level remote control. In addition, there



The small amplifier module sits in a matching cutout in the lid



**AXTON has put together a fully-fledged 20 cm bass driver that would also cut a good figure in any other enclosed woofer**

are sensitivity, low pass filter and bass boost controls. The amplifier circuitry itself does not even take up the space of a cigarette packet. The only visible detail is an aluminum heat sink for the power carrying components — a pair of transistors and the amplifier chip. It works analogously to the good old class AB principle so that there is no fear of any incidental interference.

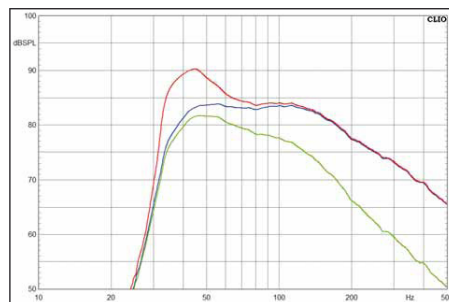
### Measurements and Sound

Notwithstanding the small design, AXTON has still managed to provide the 20 centimeter woofer with adequate power. An output of 100 watts is totally adequate for an inconspicuous active subwoofer. And to ensure that every watt hits home the woofer is equipped with a relatively low impedance 2-ohm voice coil. We measured 94 watts with a completely non-critical distortion of under 0.2 %. In addition, the power amp comes with a subsonic filter built in, and a basic enhancement of the deep bass frequencies around 45 Hz is envisaged. And on top of that comes the bass boost that adds up to 12 dB in a narrow band at about 40 Hz. The acoustic result can be described as perfect: the ATB20RXF runs linearly down to 40 Hz, thereby offering the potential for authentic deep bass.

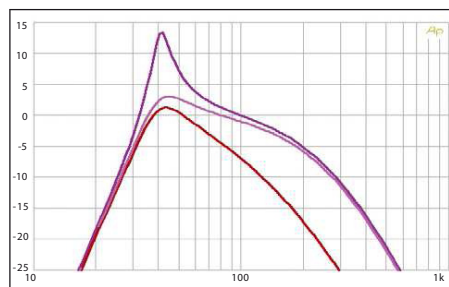


**At the rear of the amplifier module an unassuming aluminum heat sink block indicates that here we are dealing with power electronics**

Here it pays off to have an internal volume of 27 liters so there is plenty of working volume available for the 20 cm woofer; optimal deep tuning is therefore no problem. So it is not surprising that the sound is so good. The Axton behaves very maturely and does not shy away from deep bass frequencies. Double bass comes over as a voluminous body of sound, while bass drums sound full and fat. Another domain of the AXTON is that of deep synth bass tones that are reproduced clean and contoured." During loud R'n'B beats perhaps the whole car body does not shake but the achievable levels make for a lot of fun. Overall the package is very well balanced with a superb frequency response and performance to match.



**The acoustic frequency response of the Axton is optimal, with superb reproduction of all bass frequencies down to below 40 Hz**



**The frequency response of the power amp shows an enhancement at the lower end, and a fixed subsonic filter to protect the woofer from ultra low frequencies**

### Summary

The ATB20RXF is more than just a problem solver for those who do not want to sacrifice trunk space for the subwoofer. It offers a fully-fledged bass experience and still fits in shallow compartments under the trunk floor.



### Axton ATB20RXF

Price	about 260 Euro
Distributor	ACR, CH-5330 Zurzach
Hotline	info@acr.eu
Internet	www.acr.eu

### Summary

Sound quality	30 %	1,3	■■■■■
Bass foundation	7,5 %	1,0	■■■■■
Pressure	7,5 %	1,5	■■■■■
Accuracy	7,5 %	1,5	■■■■■
Dynamics	7,5 %	1,0	■■■■■
Lab	40 %	1,4	■■■■■
Frequency response	10 %	1,0	■■■■■
max. volume	10 %	1,5	■■■■■
Amp power	20 %	1,5	■■■■■
Practice	30 %	1,2	■■■■■
Features	10 %	1,0	■■■■■
Workmanship electr.	10 %	1,5	■■■■■
Workmanship mech.	10 %	1,0	■■■■■

### Technical Data

Width	58,0 cm
Height	12,5 cm
Depth	53,0 cm
Volume	BR 27 l
BR port (d x l)	51 cm <sup>2</sup> x 30 cm
Weight	11,9 kg
Chassis diameter	20 cm
Nominal impedance	2 ohms
Coil diameter	38 mm
Power @ nominal impedance	94 W
Sensitivity max mV	120 mV
Sensitivity min V	1,2 V
THD+N (<22 kHz) 5 W	0,07 %
THD+N (<22 kHz) half load	0,18 %
Signal/Noise Ratio dB(A)	72 dB

### Features

Lowpass	70 – 150 Hz
Bass-boost	0-12 dB/45 Hz
Subsonicfilter	30 Hz/24 dB, fixed
Phaseshift	pole switching 180°
Low-Level inputs	•
High-Level inputs	•
Autosense	•, DC
Start/Stop compatible	• (7,3 V)
Remote	•, Gain
Other	spare wheel well

### Axton ATB20RXF

**Upper-Class 1,3**

**CAR&HIFI** 6/21

Price/performance: very good

"Fully-fledged bass for shallow spare wheel wells."