

Building an effective, high performances, single 18", front loaded subwoofer



Eighteen Sound

A division of A.E.B srl

Via dell'Industria 20 - 45025 Cavriago (Reggio Emilia)- Italy

18" subwoofer kit

- High performance 18 inch subwoofer system.
- Over damped design for better transient response.
- Compact box dimension.
- Flared end vent design for air turbulence reducing.
- Internal bracing for cabinet loss reducing
- Double driver choice is possible: 18ND9300 and 18LW1400 are basically the same speaker concept. Their performances are very similar except for a slightly more damping present in the 18ND9300. The 18ND9300 allows for a lighter weight box design. The "glorious" 18LW1400 can still represent the proper cost effective solution if same performances are required with less restrictive weight limits.

•**18ND9300** woofer key features:

Neodymium magnet

4" interleaved sandwich voice coil

Double Silicon Spider

Double Demodulating Rings

900W continuous pink noise

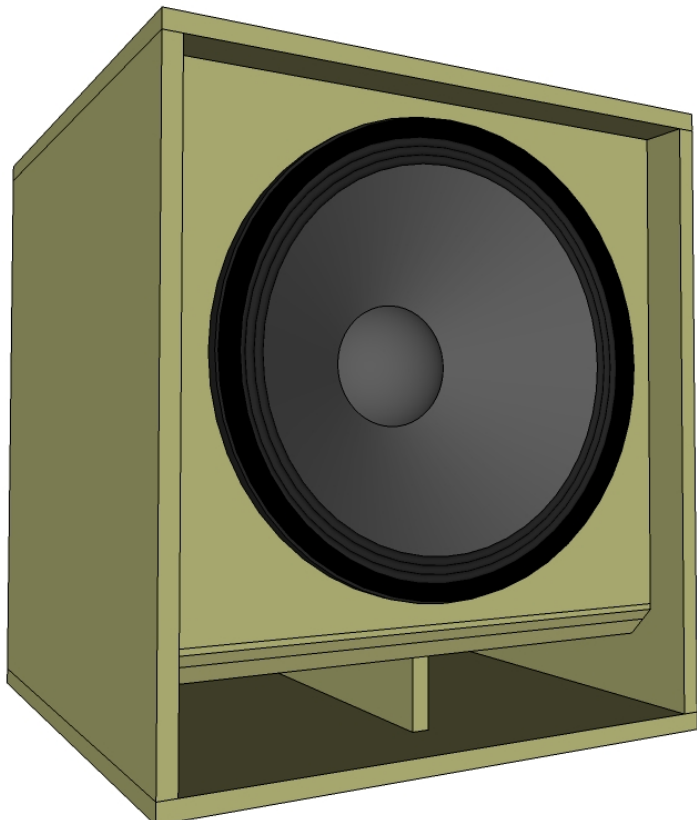
•**18LW1400** woofer key features:

4" interleaved sandwich voice coil

Double Silicon Spider

Double Demodulating Rings

1000W continuous pink noise



18" subwoofer kit

18ND9300



GENERAL SPECIFICATIONS

NOMINAL DIAMETER	460mm	(18 in)
RATED IMPEDANCE	8 ohms	
CONTINUOUS PINK NOISE (1)	900 W	
SENSITIVITY (2)	98 dB	
FREQUENCY RANGE (3)	28 ÷ 2500 Hz	
MAX RECOMM. FREQUENCY	500 Hz	
RECOMM. ENCLOSURE VOLUME	100 ÷ 300 lt.	(3,53 ÷ 10,6 cuft)
VOICE COIL DIAMETER	100 mm	(4 in)
NET WEIGHT	7,6 kg	(16,78 lb)

THIELE-SMALL PARAMETERS (4)

Fs	30 Hz	
Re	5 ohms	
Sd	0,1225 sq.mt.	(189,88 sq.in.)
Qms	7,86	
Qes	0,29	
Qts	0,28	
Vas	322 lt.	(11,37 cuft)
Mms	184 gr.	(0,41 lb)
BL	24,4 Tm	
Linear Mathematical Xmax (5)	± 9,5 mm	(± 0,37 in)
Le (1kHz)	2,02 mH	
Ref. Efficiency 1W@1m (half space)	96,7 dB	

18LW1400



GENERAL SPECIFICATIONS

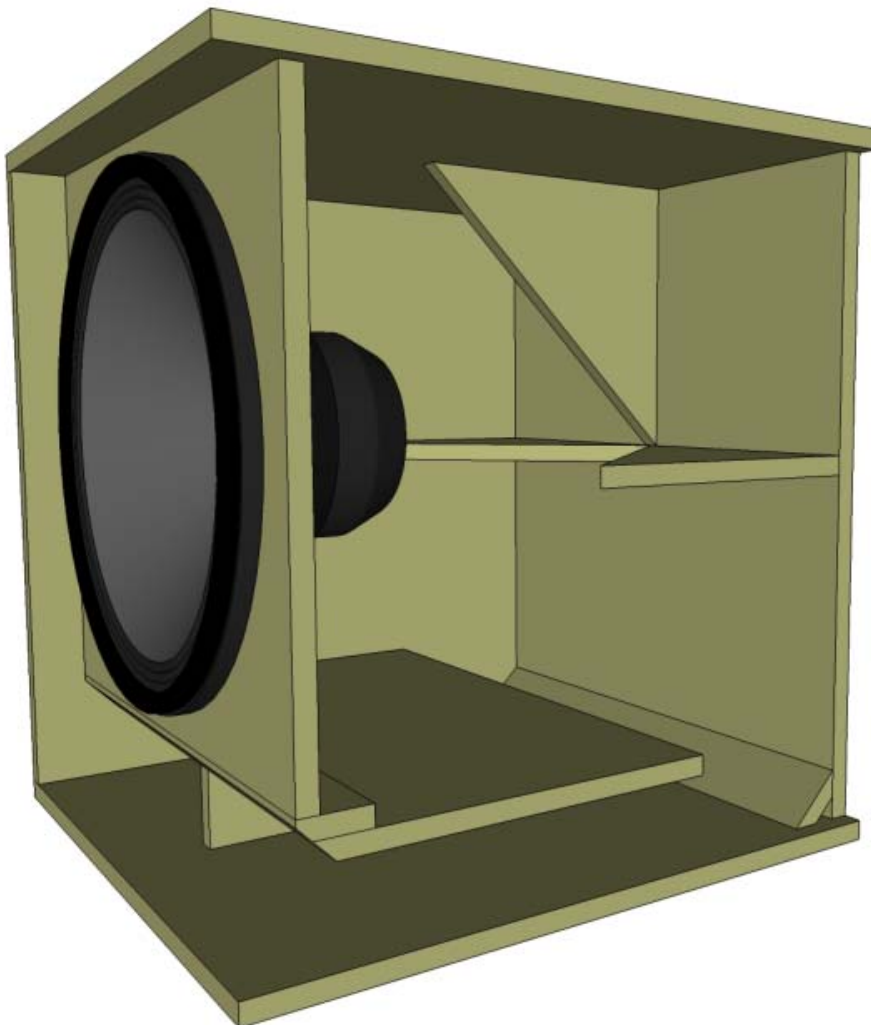
NOMINAL DIAMETER	460mm	(18 in)
RATED IMPEDANCE	8 ohms	
CONTINUOUS PINK NOISE (1)	1000 W	
SENSITIVITY (2)	98 dB	
FREQUENCY RANGE (3)	28 - 2500 Hz	
MAX RECOMM. FREQUENCY	500 Hz	
RECOMM. ENCLOSURE VOLUME	130 - 350 lt.	(4,59 - 12,36 cuft)
VOICE COIL DIAMETER	100 mm	(3,95 in)
NET WEIGHT	13,3 kg	(29,36 lb)

THIELE-SMALL PARAMETERS (4)

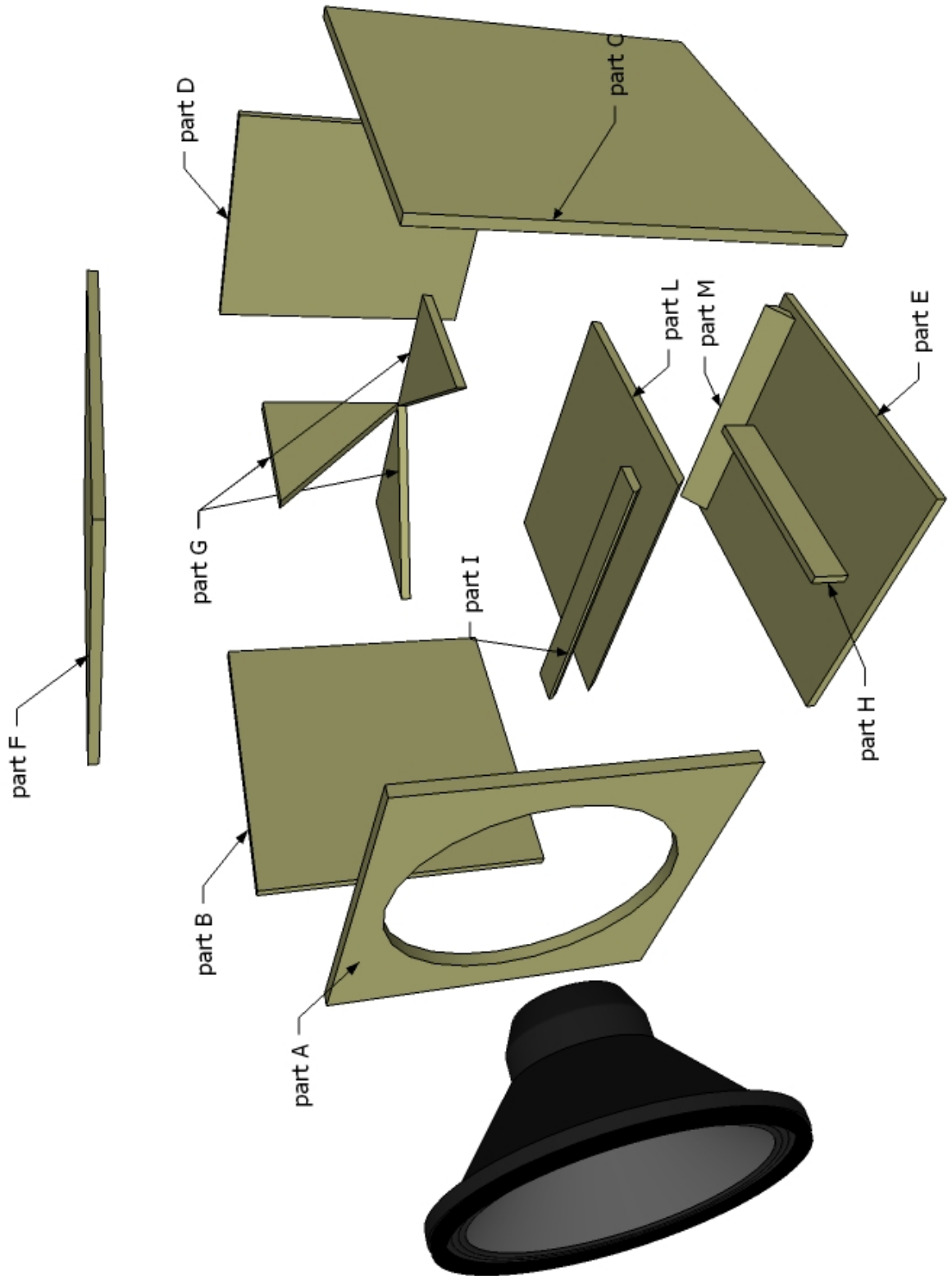
Fs	31 Hz	
Re	5 ohms	
Sd	0,1225 sq. mt.	(189,88 sq. in.)
Qms	7,20	
Qes	0,31	
Qts	0,29	
Vas	297 lt.	(10,49 cuft)
Mms	190 gr.	(0,42 lb)
BL	24,7 Tm	
Linear Mathematical Xmax (5)	± 9 mm	(± 0,35 in)
Le (1kHz)	2,3 mH	
Ref. Efficiency 1W @ 1m (half space)	96,5 dB	

- The enclosure should be made of baltic birch plywood (18mm thickness).
- Bolts should be M5 or M6, 35mm or more length.
- M5 or M6 T-Nuts are recommended.
- Accurate damping of the cabinet interior is highly recommended.
- An high density dampening material, such as Dacron or other synthetic fibers, is required for better performance.
- Handling, rigging and connectors are at user's choice. It's very important that their placement should not influence in any way the proper vent functionality.

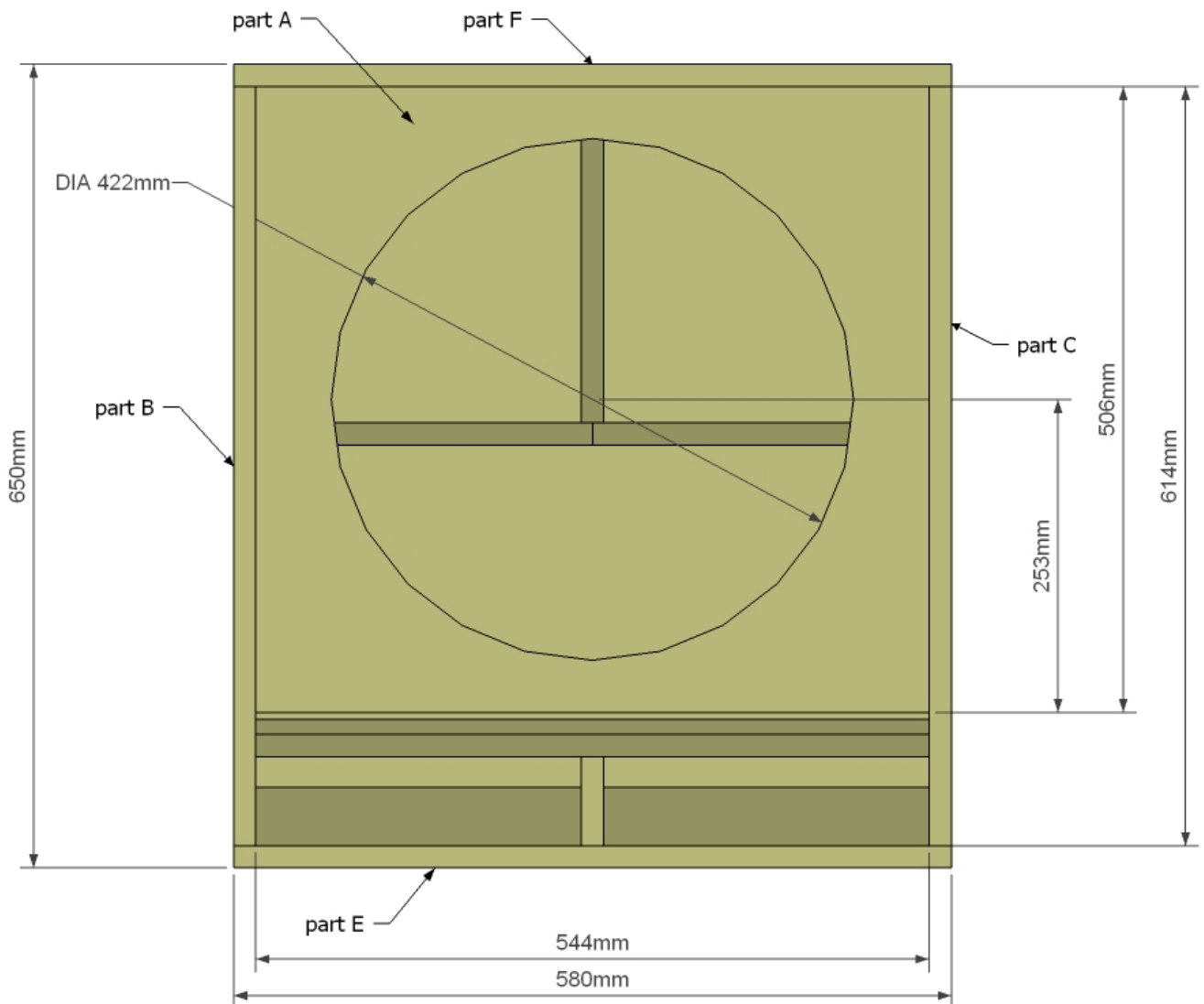
Internal view



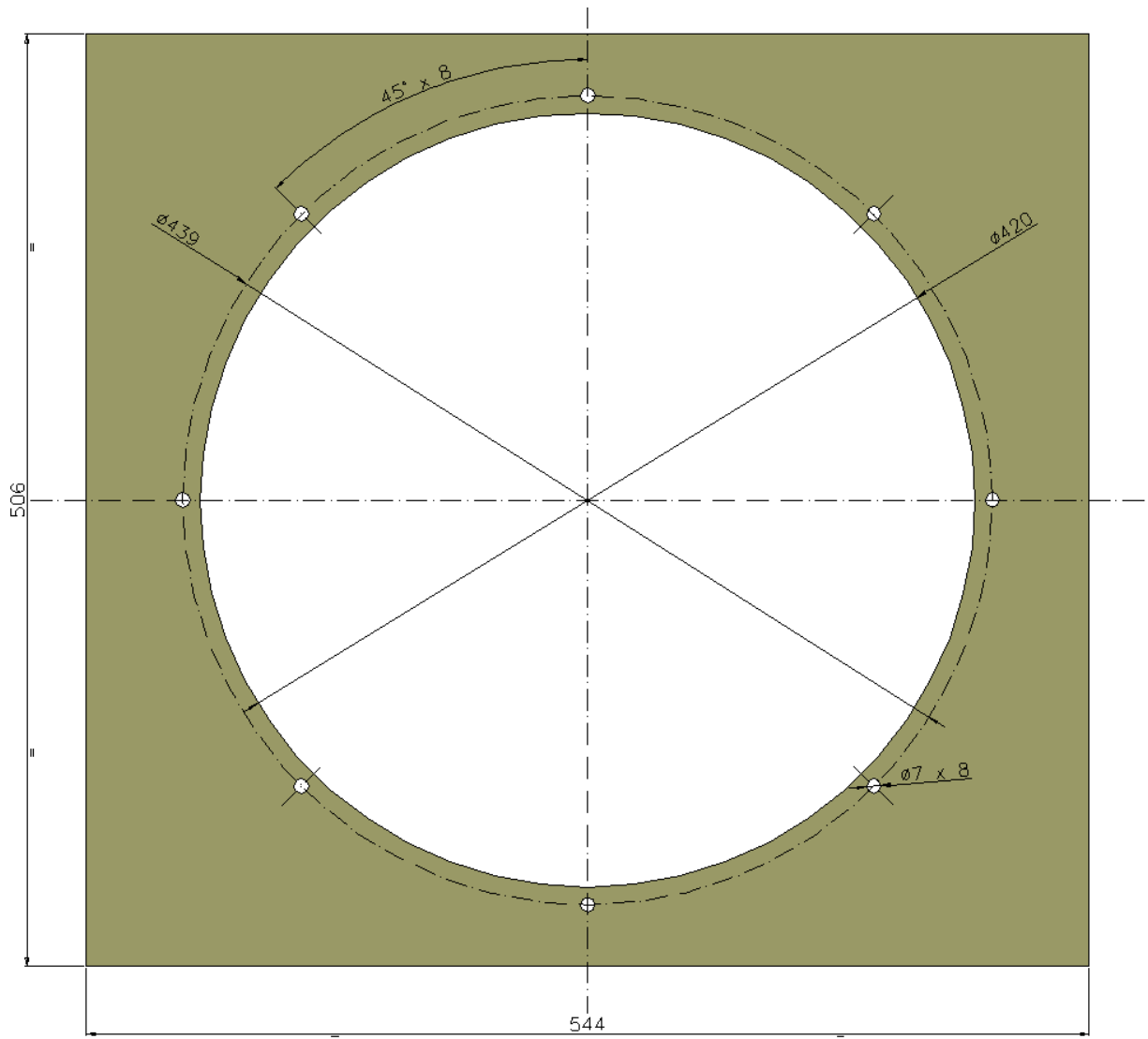
18" subwoofer kit



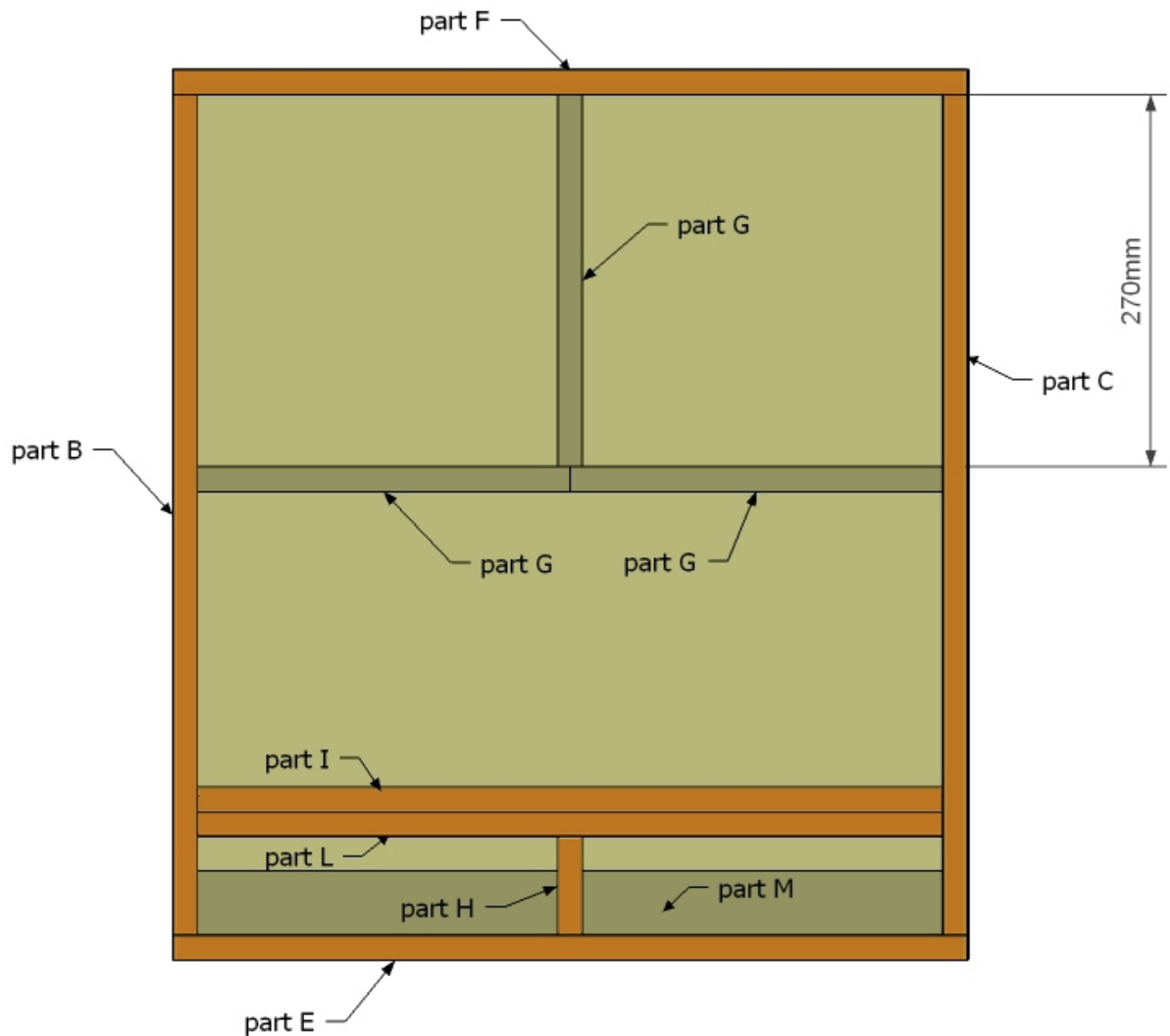
Front view



Front panel bolt holes

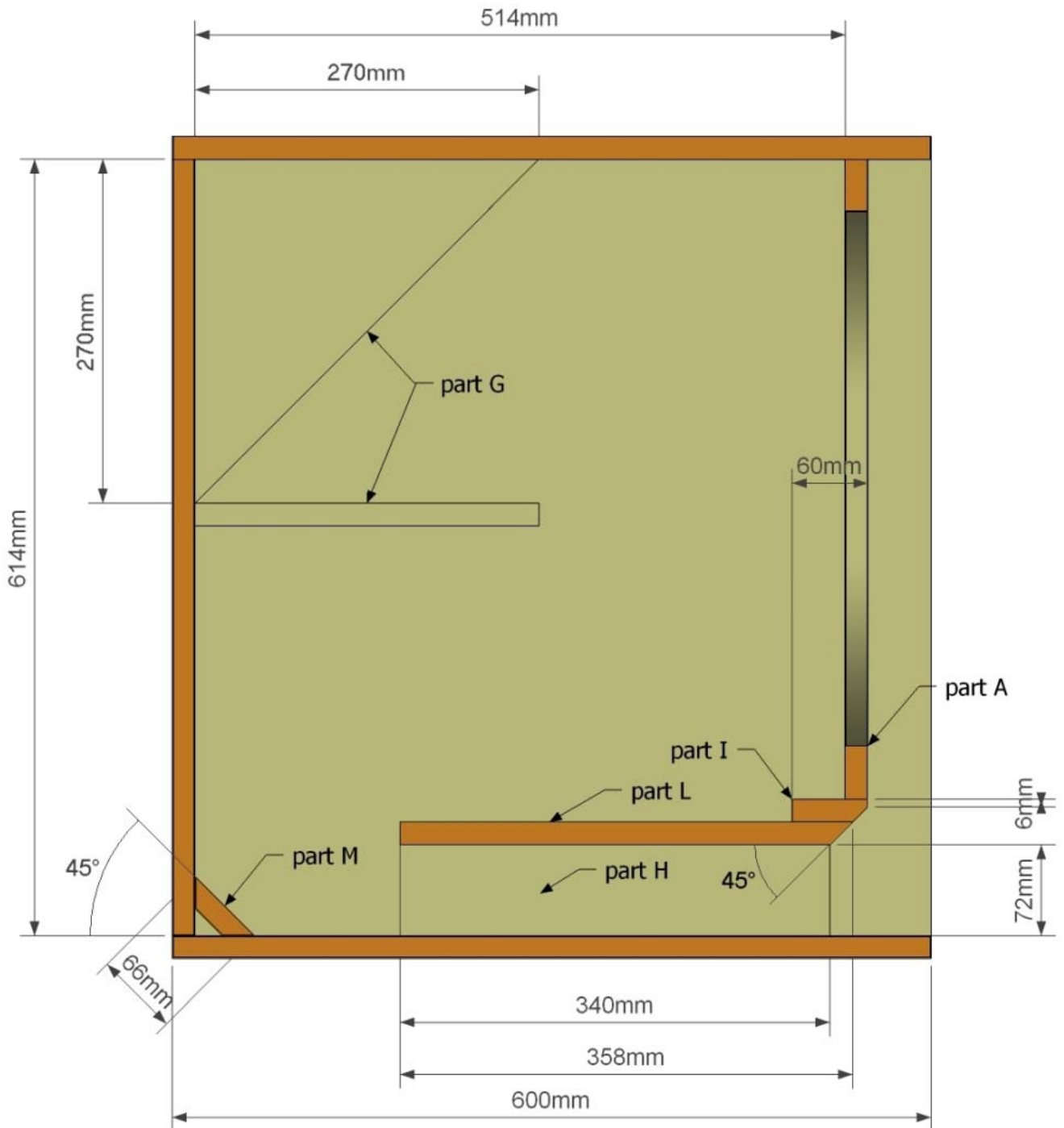


Front section

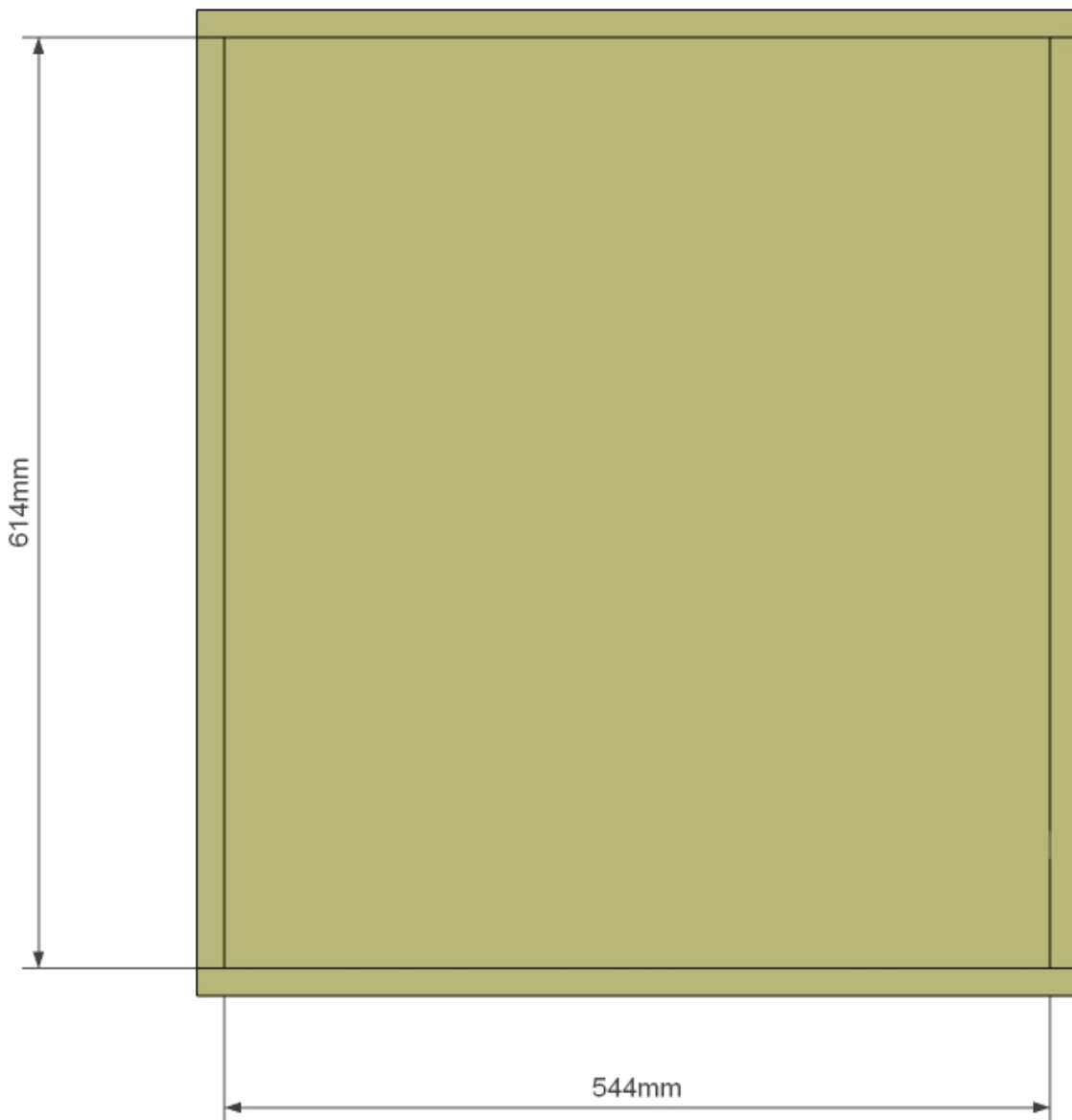


Woofer panel section

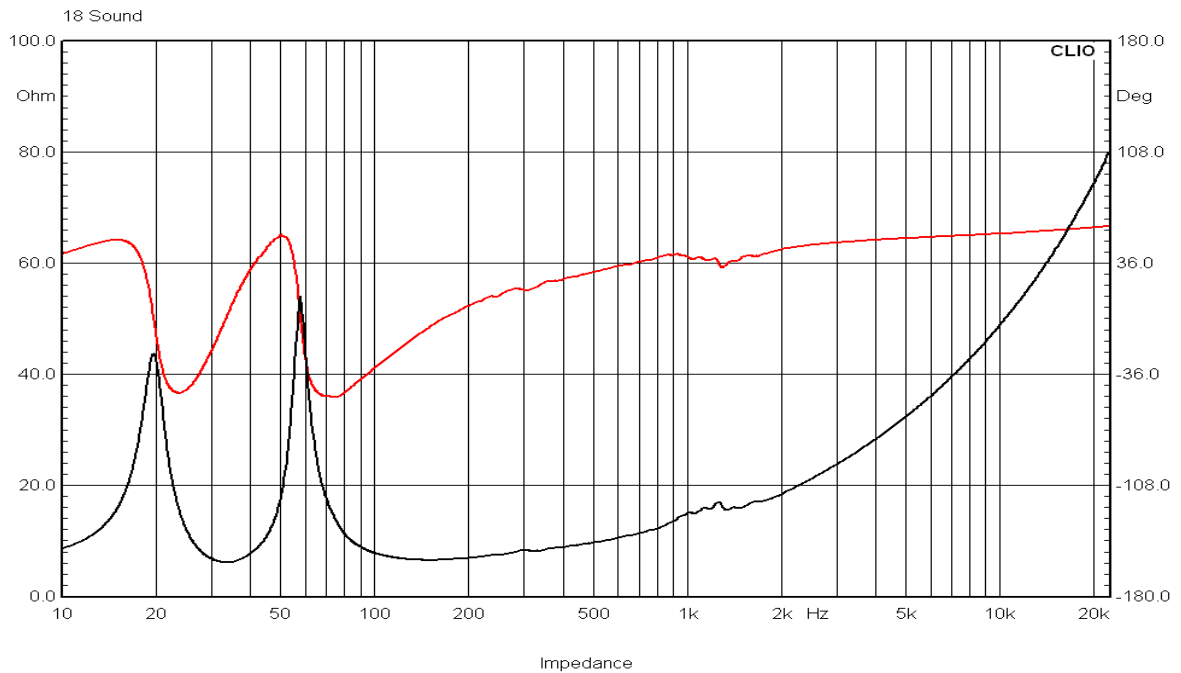
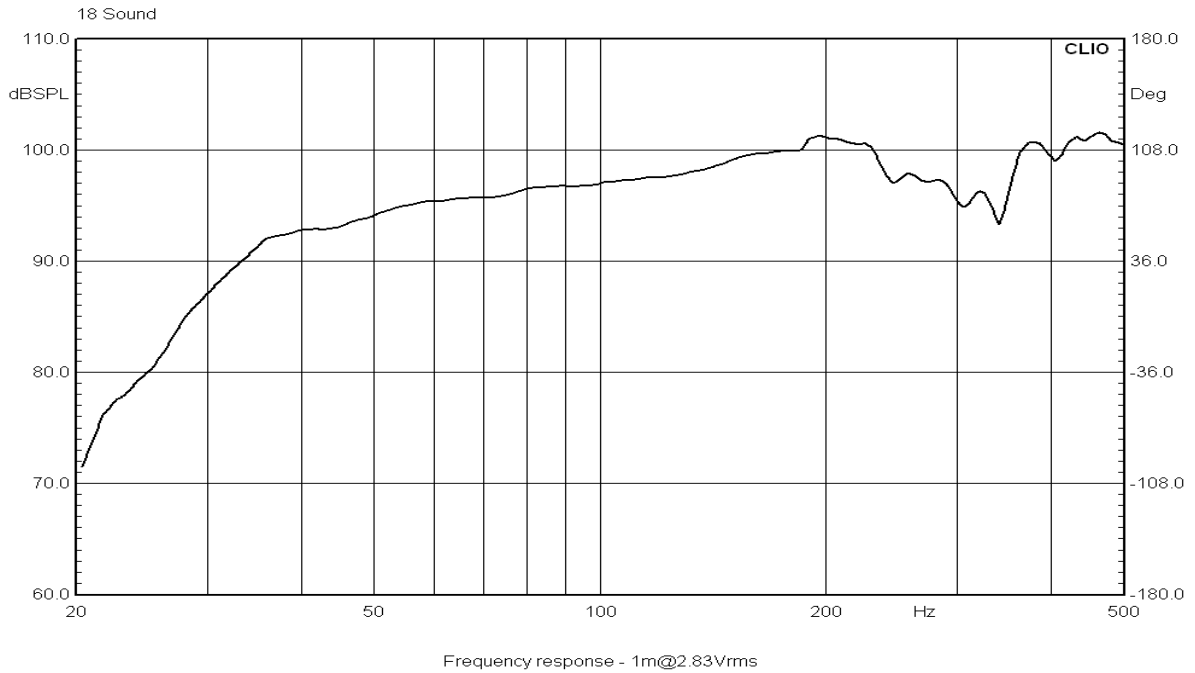
Side section



Rear panel



Measurements: 18ND9300/18LW1400



Equalization settings suggestions

