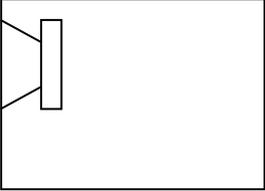
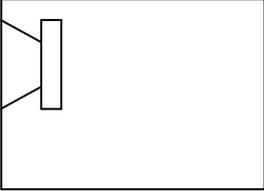
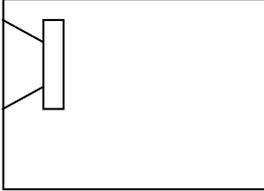
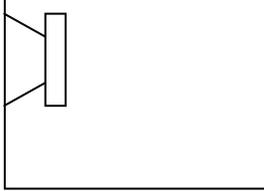
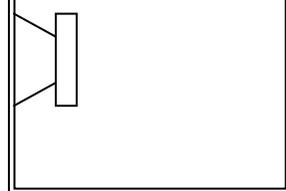
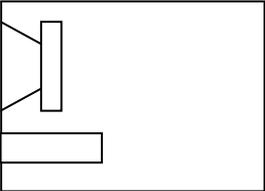
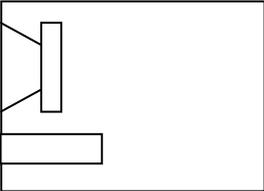
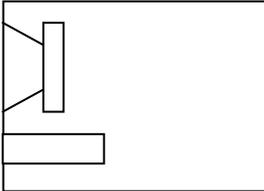
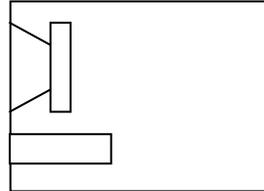
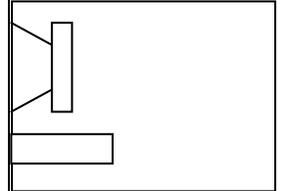
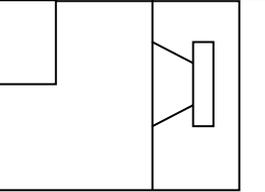
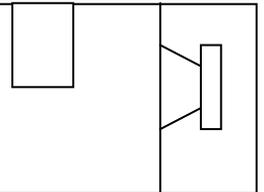
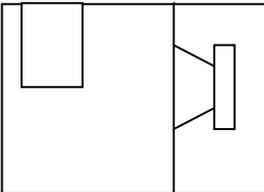
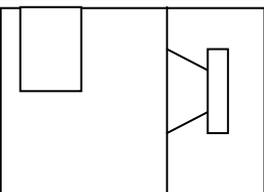
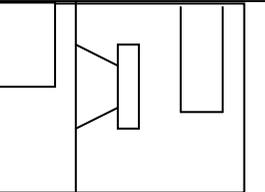
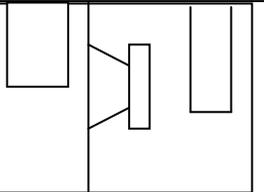
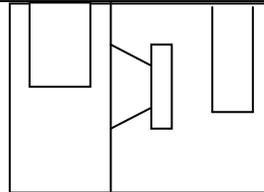
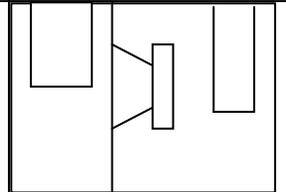


Construction plan AUDIO SYSTEM Subwoofer (Volume includes. Subwoofer and Port)

BOX	X - ION 10 PLUS	X - ION 12 PLUS	X - ION 15 PLUS	X - ION 12 / 800	X - ION 15 / 1000
SEALED (Geschlossen)	 V = 20 l f = 54 Hz	 V = 32 l f = 53 Hz	 V = 60 l f = 49 Hz	 V = 32 l f = 50 Hz	 V = 60 l F = 45 Hz
PORTED (Bassreflex)	 V = 35 l d = 10 cm l = 23 cm f = 40 Hz	 V = 48 l d = 10 cm l = 22 cm f = 39 Hz	 V = 95 l d = 15 cm l = 25 cm f = 40 Hz	 V = 60 l d = 10 cm l = 20 cm f = 36 Hz	 V = 95 l d = 15 cm l = 25 cm f = 38 Hz
IISOBARIC 5th (Einfach-ventilierter Bandpass)	 V ₁ = 23 l V ₂ = 13 l d = 12,5 cm l = 28 cm f = 65 Hz	 V ₁ = 33 l V ₂ = 17 l d = 15 cm l = 31 cm f = 62 Hz	 V ₁ = 50 l V ₂ = 30 l d = 20 cm l = 30 cm f = 63 Hz	 V ₁ = 33 l V ₂ = 17 l d = 15 cm l = 30 cm f = 62 Hz	
IISOBARIC 7th (Doppel-ventilierter Bandpass)	 V ₁ = 18 l V ₂ = 30 l d ₁ = 12,5 cm d ₂ = 7 cm l ₁ = 16 cm l ₂ = 20 cm f ₁ = 90 Hz f ₂ = 40 Hz	 V ₁ = 25 l V ₂ = 50 l d ₁ = 15 cm d ₂ = 10 cm l ₁ = 24 cm l ₂ = 30 cm f ₁ = 78 Hz f ₂ = 36 Hz		 V ₁ = 25 l V ₂ = 50 l d ₁ = 15 cm d ₂ = 10 cm l ₁ = 18 cm l ₂ = 22 cm f ₁ = 85 Hz f ₂ = 40 Hz	 V ₁ = 44 l V ₂ = 76 l d ₁ = 20 cm d ₂ = 12,5 cm l ₁ = 22 cm l ₂ = 29 cm f ₁ = 76 Hz f ₂ = 36 Hz
ORIGINAL-BOXESI	X-ION 10 G X-ION 10 BR	X-ION 12 G X-ION 12 BP X-ION 12 BR X-ION 12 BR2	X-ION 15 G X-ION 15 BR	X-ION 12/800 BR und BR2 X-ION 12/800 BP X-ION 12/800 G	X-ION 15/1000 BR X-ION 15/1000 BP X-ION 15/1000 G

Thiele Small Parameter

X - ION 10 PLUS

f_s = 32 Hz
Q_{ts} = 0.35
V_{AS} = 49 L

X - ION 12 PLUS

f_s = 40 Hz
Q_{ts} = 0.5
V_{AS} = 30 L

X - ION 15 PLUS

f_s = 39 Hz
Q_{ts} = 0.48
V_{AS} = 67 L

X - ION 12 / 800

f_s = 39 Hz
Q_{ts} = 0.55
V_{AS} = 24 L

X - 15 / 1000

f_s = 33 Hz
Q_{ts} = 0.43
V_{AS} = 50 L