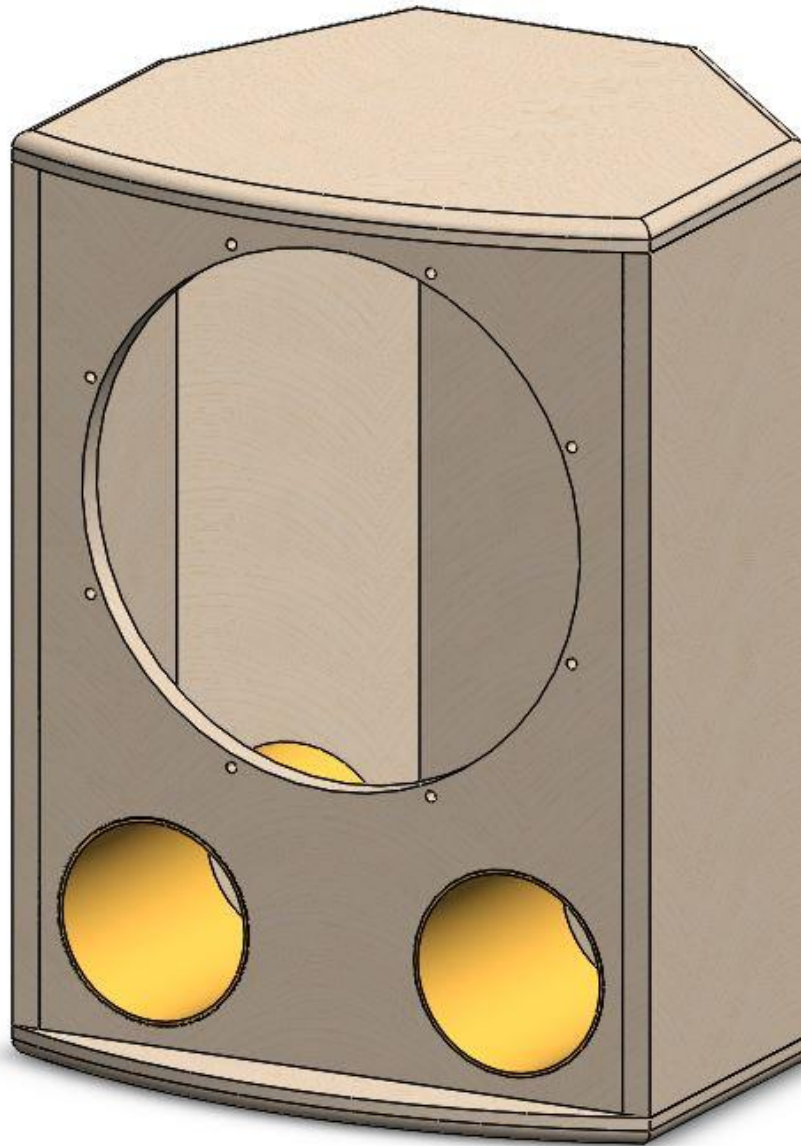




CX14

**Multi-Purpose
14 " Coaxial Speaker**

1x13.5" Coaxial Transducer – 14CXN88 / 8 ohm

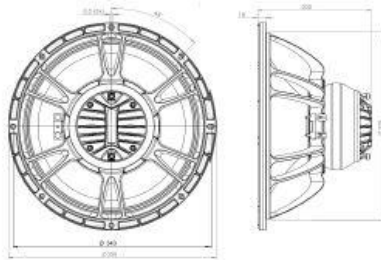


Transducer (14CXN88)

14CXN88

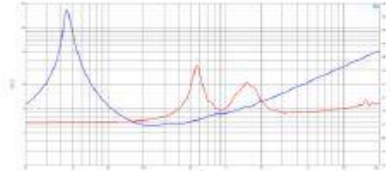
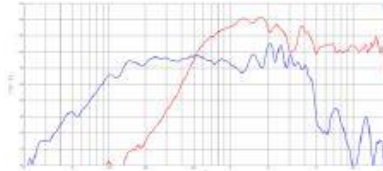
8Ω

Coaxials - 13.5 Inches



- 1000 W continuous program power capacity
- 80° nominal coverage
- 45 - 18000 Hz response
- 99 dB sensitivity
- Single Neodymium magnet assembly
- Aluminium demodulating ring allows a very low distortion figure
- Double silicone spider with optimized compliance

New to the large format coaxial family is the 14CXN88. Like the 12CXN88 and 15CXN88, that were introduced in the spring of 2017, this new 14" addition features an 88mm voice coil woofer and 75mm diaphragm high frequency driver. This motor combination offers an excellent balance between HF and LF output. As a practical compromise between our 12-inch and 15-inch alternatives, the 14CXN88 coaxial (which is actually 13.5-inches in diameter) offers better low frequency output than a 12-inch coaxial, but more balanced midrange performance than a 15-inch coaxial.



SPECIFICATIONS

| | |
|-------------------------------|--------------------------|
| Nominal Diameter | 343 mm (13.5 In) |
| Nominal Impedance | 8 Ω |
| Minimum Impedance LF | 6.8 Ω |
| Minimum Impedance HF | 8.8 Ω |
| Frequency Range | 45 - 18000 Hz |
| Dispersion Angle ¹ | 80 ° |
| Woofer Cone Treatment | WP Waterproof Front Side |
| Magnet Material | Neodymium Ring |

SPECIFICATIONS LF UNIT

| | |
|--|-------------------|
| Sensitivity ² | 99.0 dB |
| Nominal Power Handling ³ | 500 W |
| Continuous Power Handling ⁴ | 1000 W |
| Voice Coil Diameter | 88 mm (3.5 In) |
| Winding Material | Aluminium |
| Flux Density | 1.05 T |
| Former Material | Glass Fibre |
| Winding Depth | 22.0 mm (0.87 In) |
| Magnetic Gap Depth | 11.0 mm (0.43 In) |

SPECIFICATIONS HF UNIT

| | |
|--|----------------|
| Sensitivity ⁵ | 106.0 dB |
| Nominal Power Handling ⁶ | 80 W |
| Continuous Power Handling ⁷ | 160 W |
| Voice Coil Diameter | 75 mm (3.0 In) |
| Winding Material | Aluminium |
| Flux Density | 1.75 T |
| Diaphragm Material | Titanium |
| Recommended Crossover ⁸ | 1.2 kHz |
| Inductance | 0.14 mH |

PARAMETERS

| | |
|---------------------|---|
| Resonance Frequency | 46 Hz |
| Re | 4.7 Ω |
| Qes | 0.27 |
| Qms | 13.0 |
| Qts | 0.26 |
| Vas | 100.0 dm ³ (3.53 ft ³) |
| Sd | 707.0 cm ² (109.59 in ²) |
| ηs | 3.6 % |
| Xmax | 8.5 mm |
| Xvar | 9.0 mm |
| Mms | 83.0 g |
| Bl | 20.7 Txm |
| Le | 0.95 mH |
| EBP | 170 Hz |

MOUNTING AND SHIPPING INFO

| | |
|-----------------------------|---------------------------------------|
| Overall Diameter | 359 mm (14.13 In) |
| Bolt Circle Diameter | 343 mm (323.0 In) |
| Baffle Cutout Diameter | 326 mm (12.83 In) |
| Depth | 200 mm (7.87 In) |
| Flange and Gasket Thickness | 15 mm (0.59 In) |
| Net Weight | 7.3 kg (16.09 lb) |
| Shipping Units | 1 |
| Shipping Weight | 8.9 kg (19.62 lb) |
| Shipping Box | 500x495x275 mm (19.69x19.49x10.83 In) |

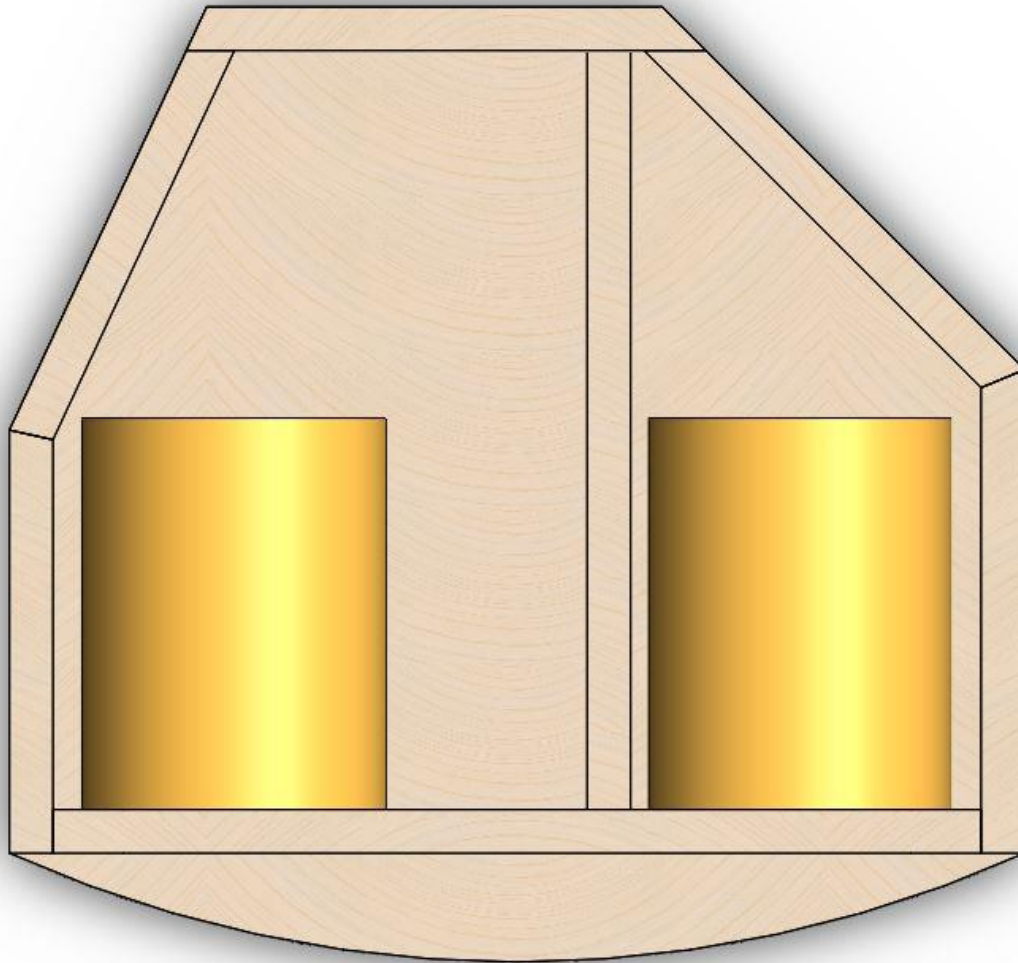
SERVICE KIT

| | |
|--------------------------|------------|
| LF recone kit | RCK14CXN88 |
| HF replacement diaphragm | MM030TN8M |

1. Included by -6 dB down points.
2. Applied RMS Voltage is set to 2.83V.
3. 2 hours test made with continuous pink noise signal within the range 45-10KHz. Power calculated on rated minimum impedance. Loudspeaker in free air.
4. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
5. Applied RMS Voltage is set to 2.83V.
6. 2 hour test made with continuous pink noise signal within the range from the recommended crossover frequency to 20 kHz. Power calculated on rated minimum impedance. Loudspeaker in free air.
7. Power on Continuous Program is defined as 3 dB greater than the Nominal rating.
8. 12 dB/oct. or higher slope high-pass filter.

Enclosure Design

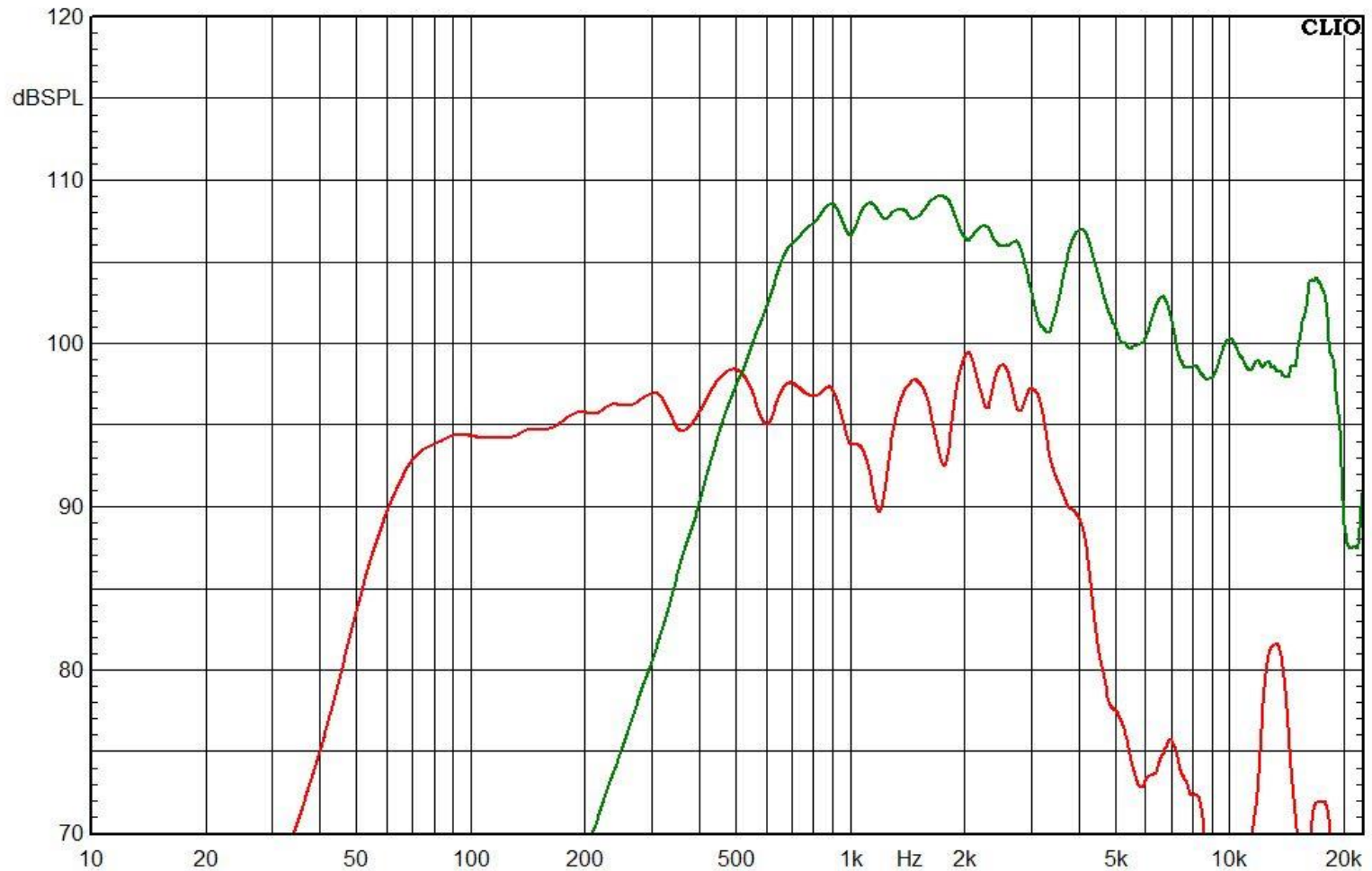
Internal view and notes



- 18mm wood thickness (birch plywood suggested)
- A good dampening material should be placed inside the all cabinet internal panels, leaving the ports free.
- Transducer bolts: M6 suggested
- Cylindrical ports have 120mm inner diameter and 180mm depth.

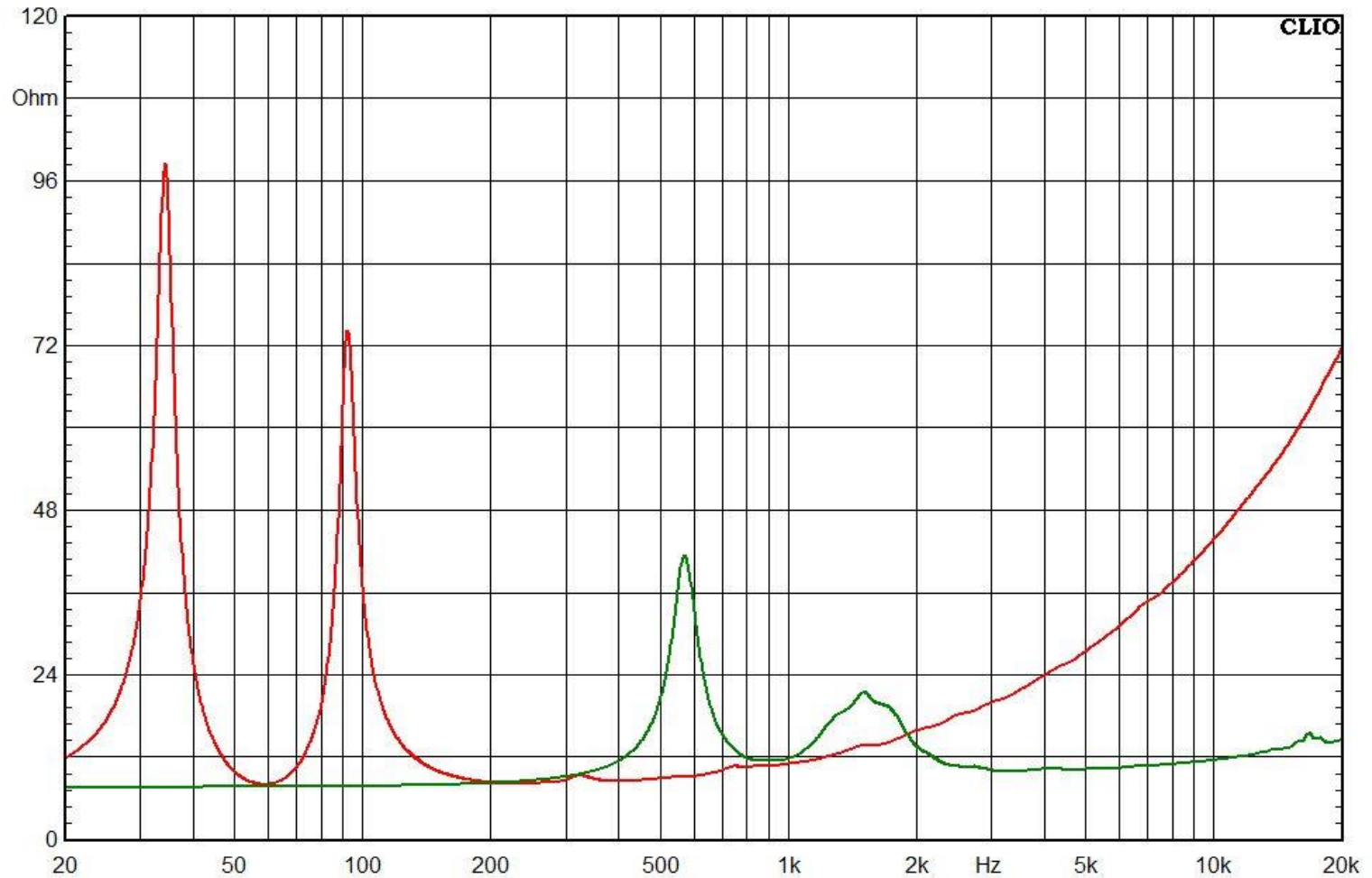
Measurements

Unfiltered Frequency Response 2.83V @ 1mter

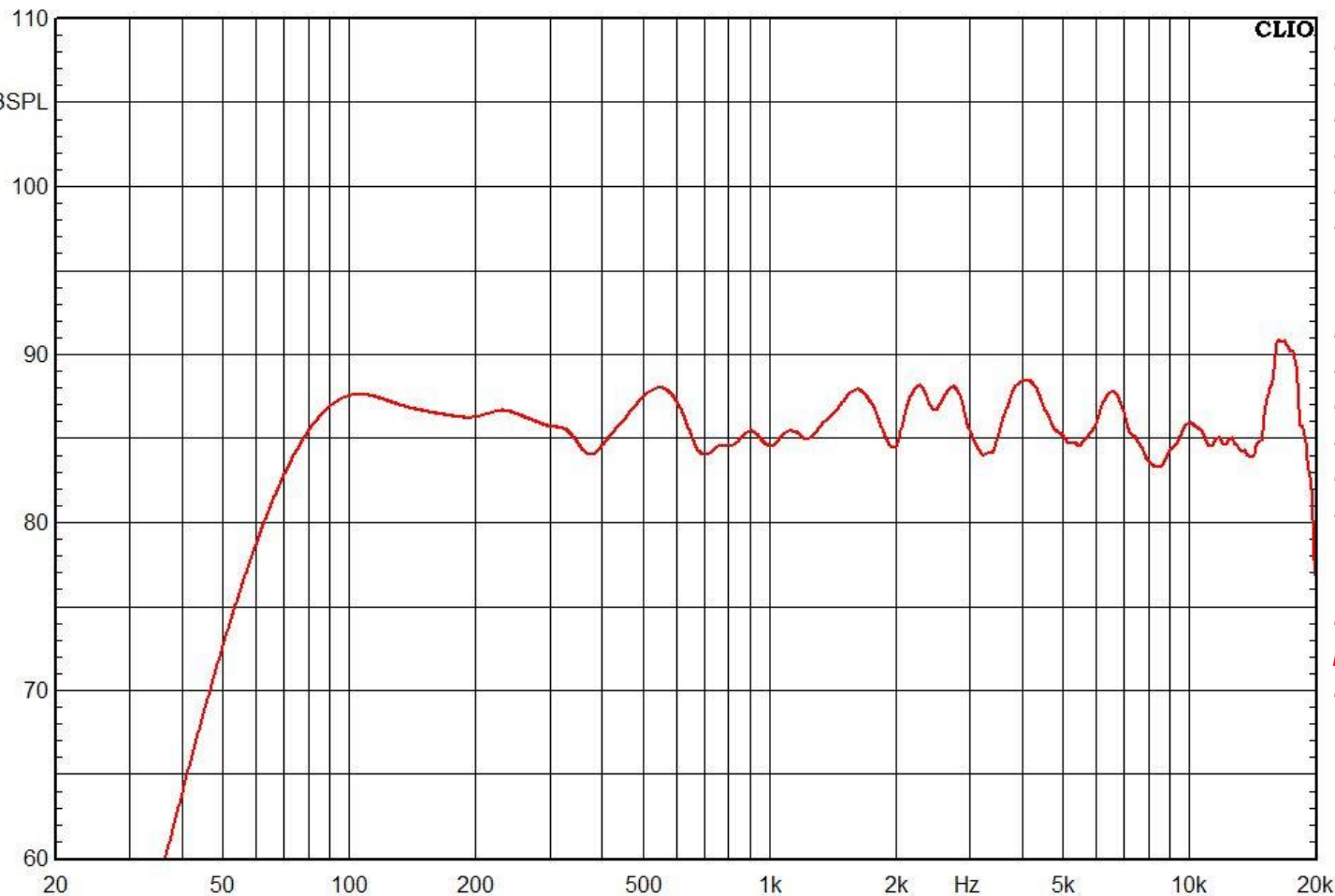


Measurements

Impedance @ -20dBu input



Active DSP Settings



Actively Processed Frequency response

LF:
In: 0dB
HPF: 50Hz – BTW 24dB/Oct
Peaking #1: +4dB – Q:0.5 – Frq:70Hz
Peaking #2: -3dB – Q:3 – Frq:1.5KHz
LPF: 1.8KHz – BTW 24dB/Oct

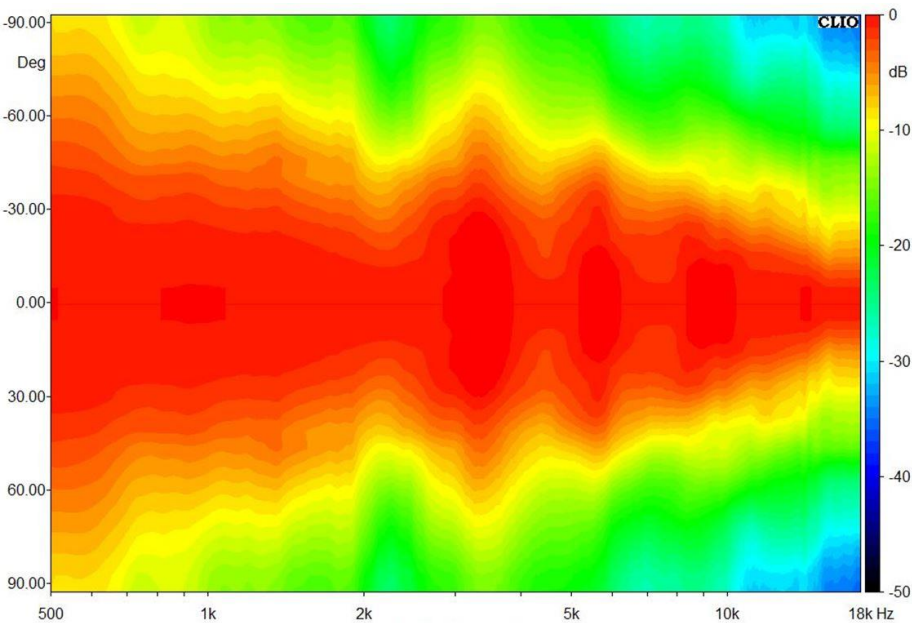
HF:
In: -9dB – Phase inverted
HPF: 2.2KHz – BTW 12dB/Oct
Peaking #1: +3dB – Q:3 – Frq:3.2KHz
Peaking #2: -5dB – Q:5 – Frq:3.9KHz
High Shelving: 5dB – Q:0.5 – Frq:3KHz

*Passive Crossover with
phase match and
HF protection available.*

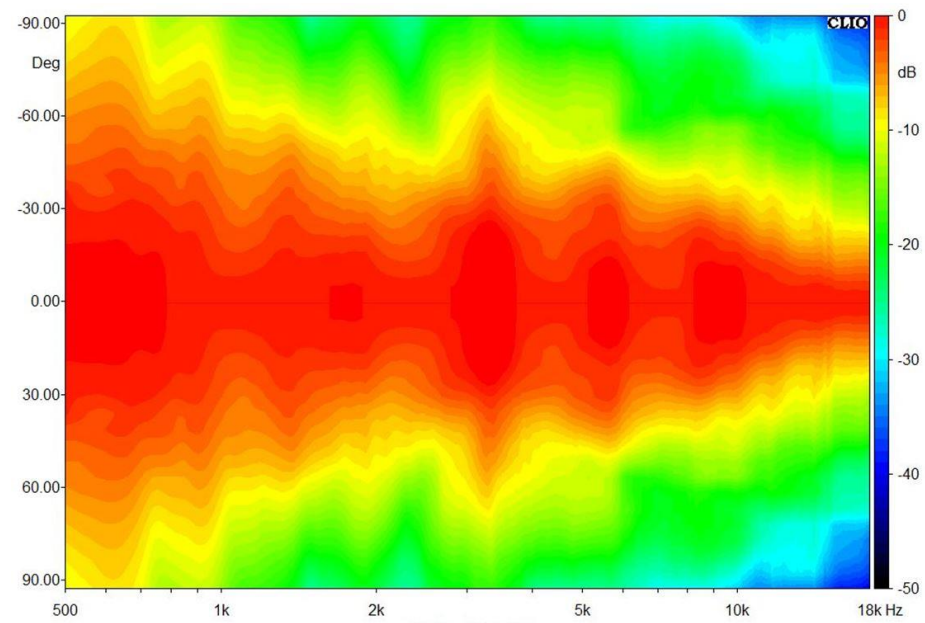


Polar Map

Directivity Index with Active DSP settings.



Horizontal plane

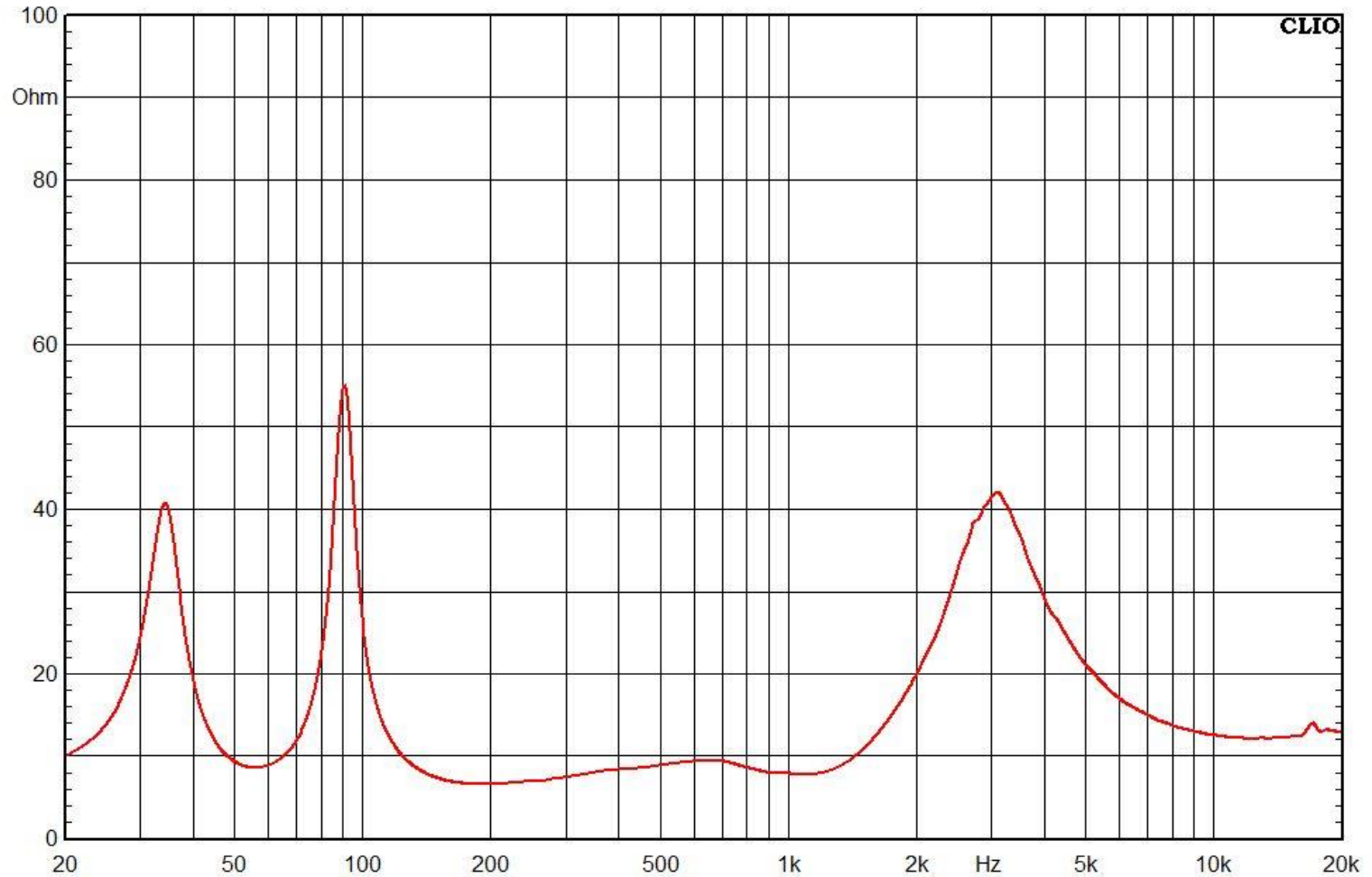


Vertical plane



Measurements

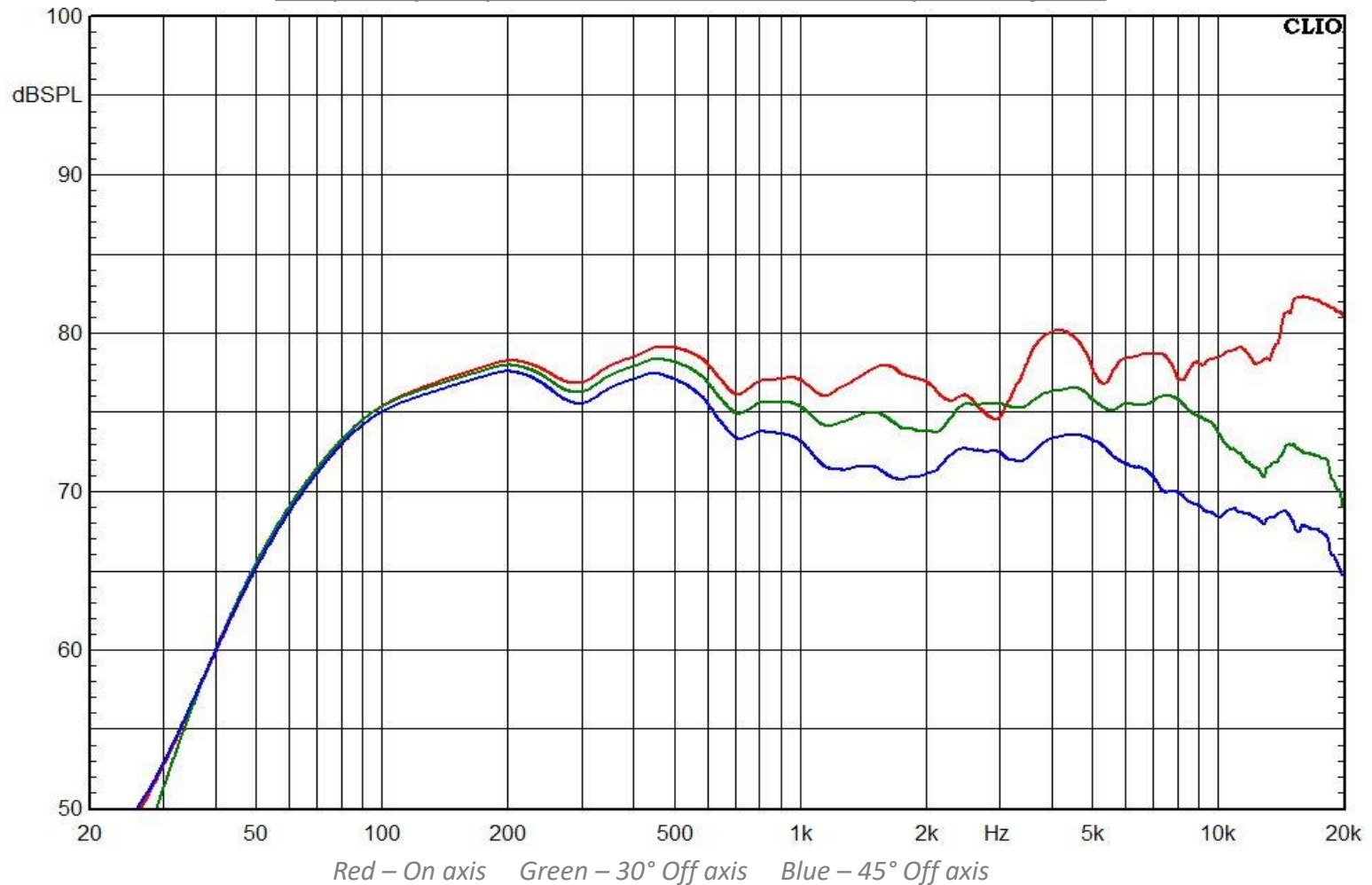
Impedance @ -20dBu input with passive Filter



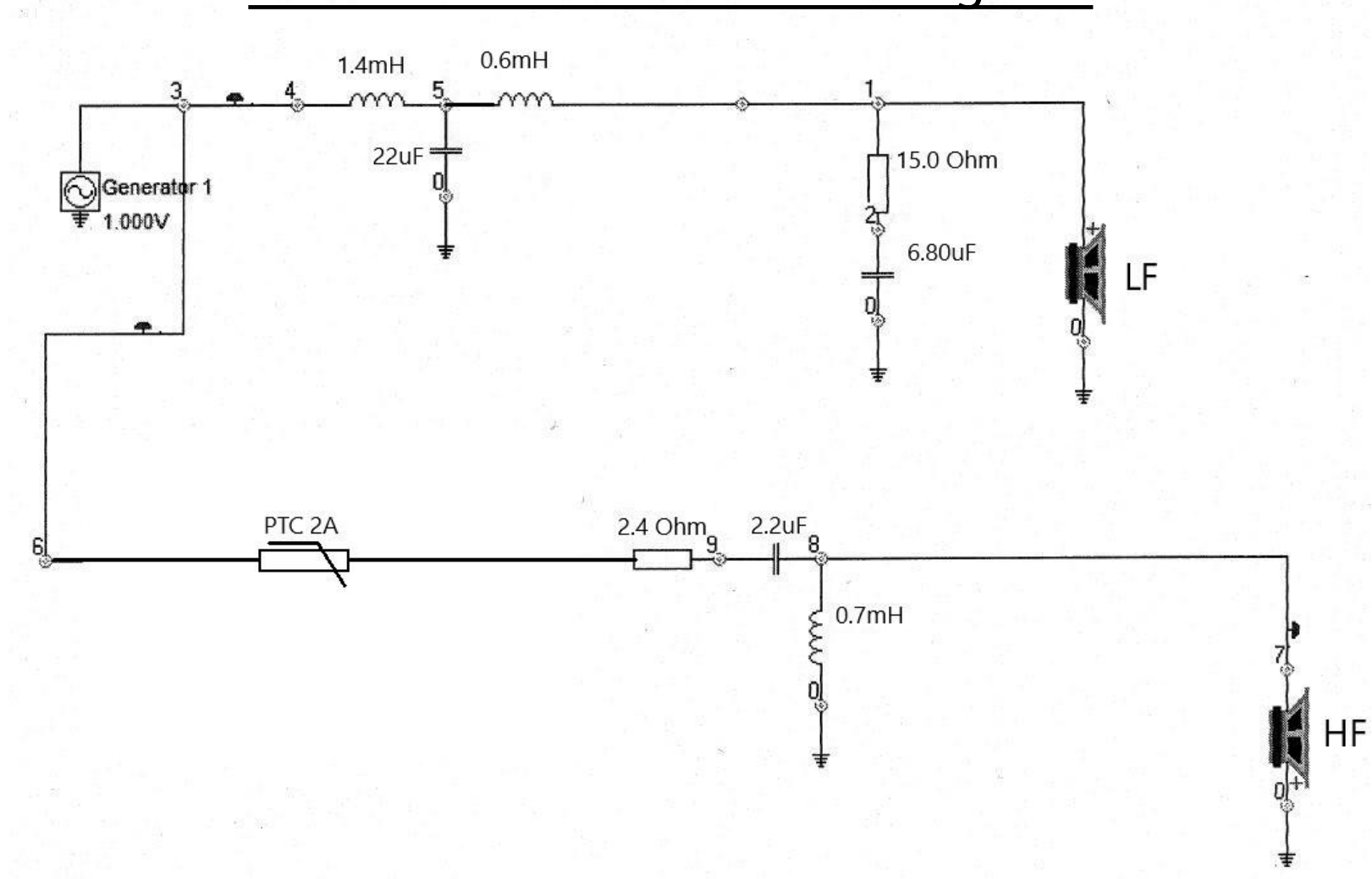


Measurements

Frequency response @ 1W – 1meter with passive filter

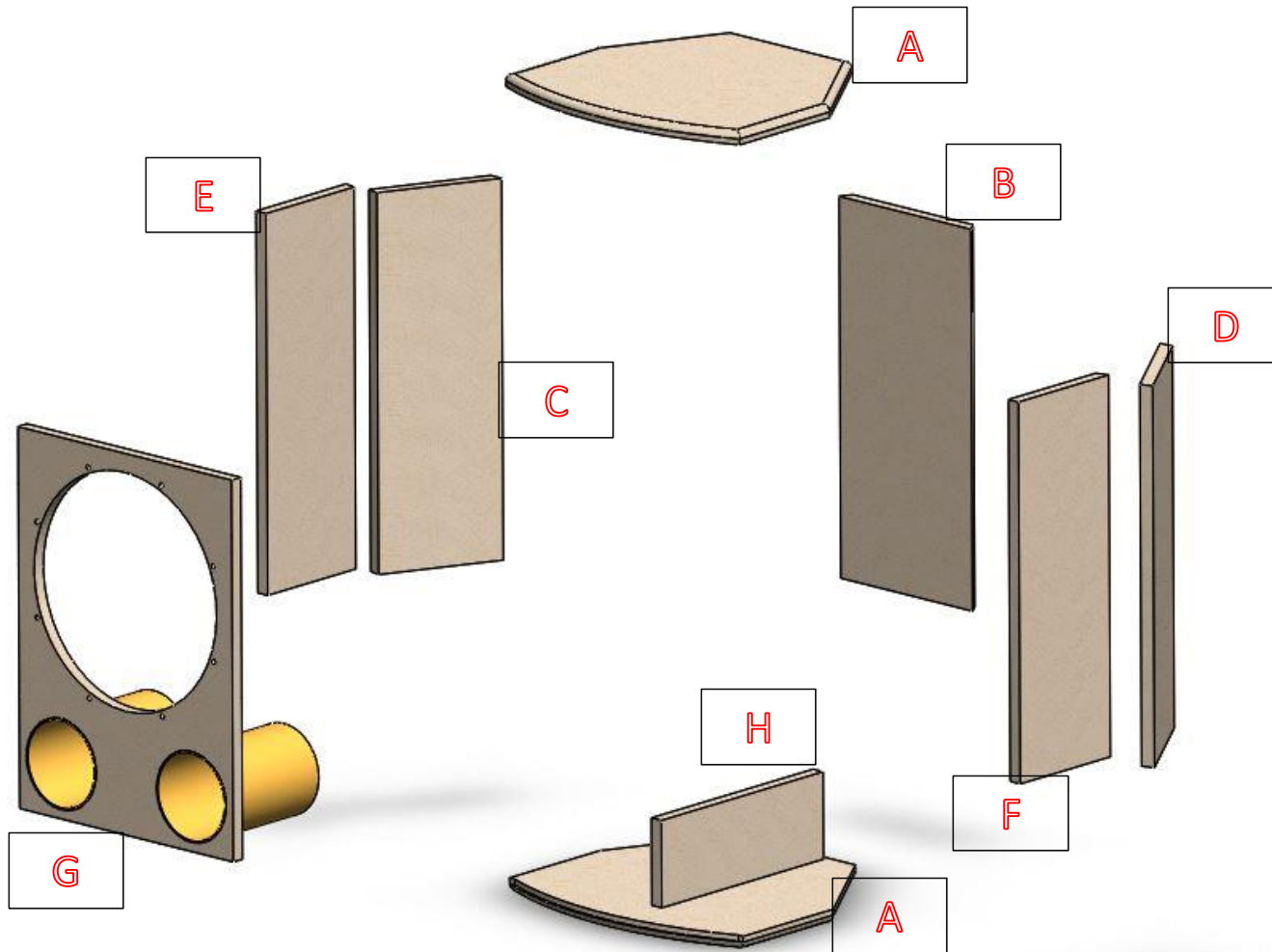


DIY Passive Filter Circuit Diagram



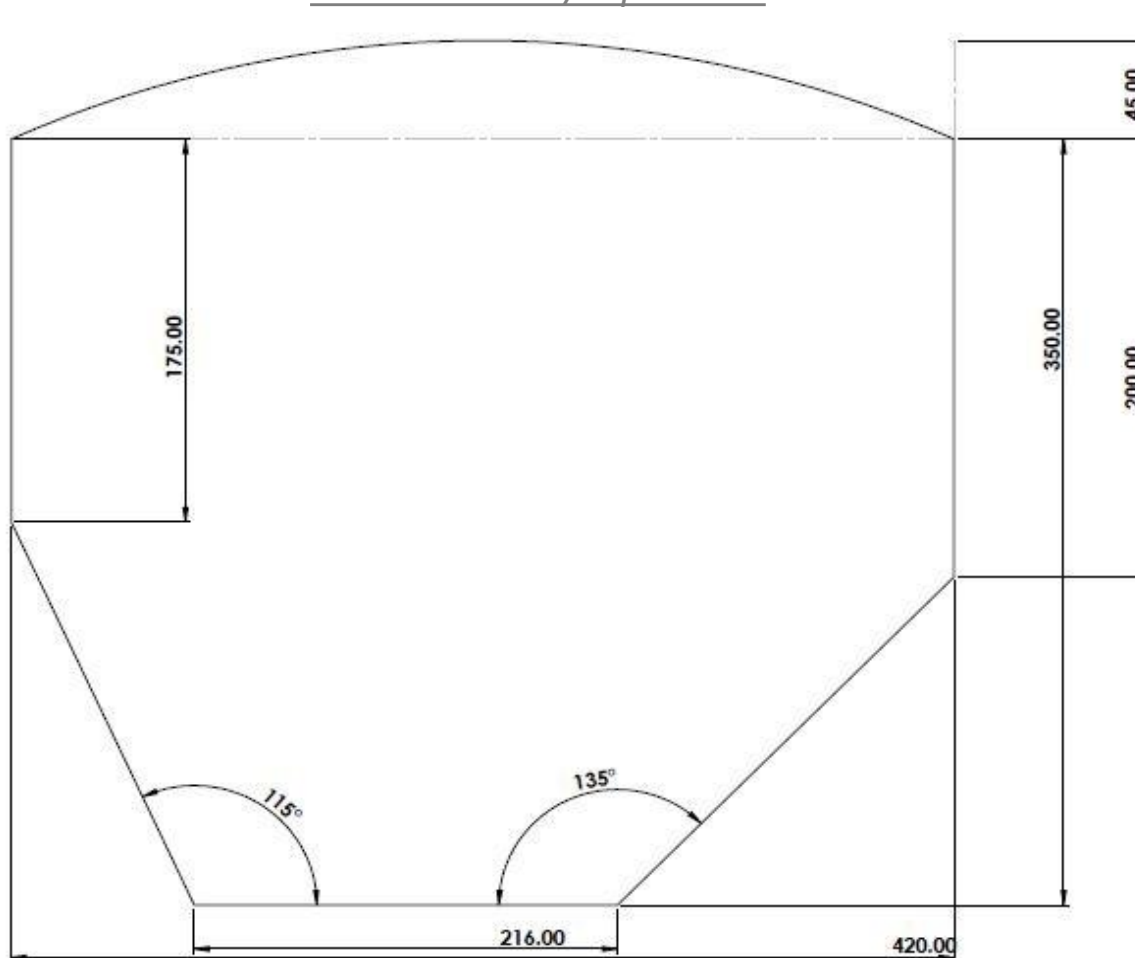
Enclosure Design

Exploded View and Parts



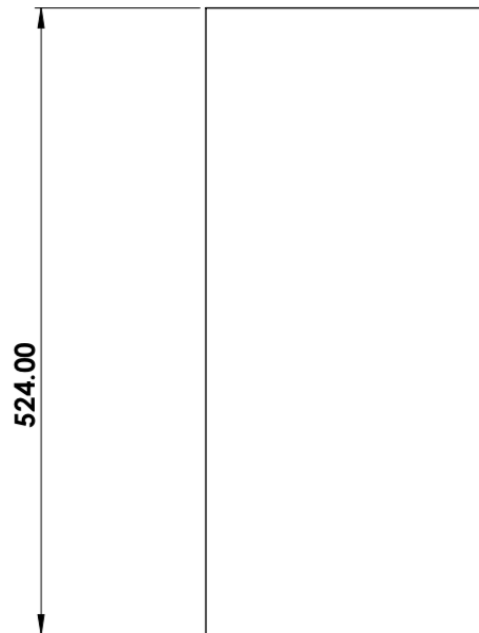
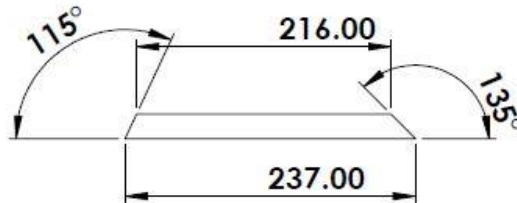
Enclosure Design

Part A: Bottom/Top Panels



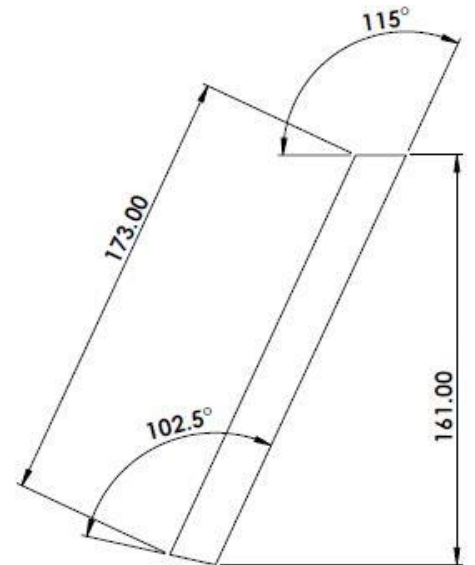
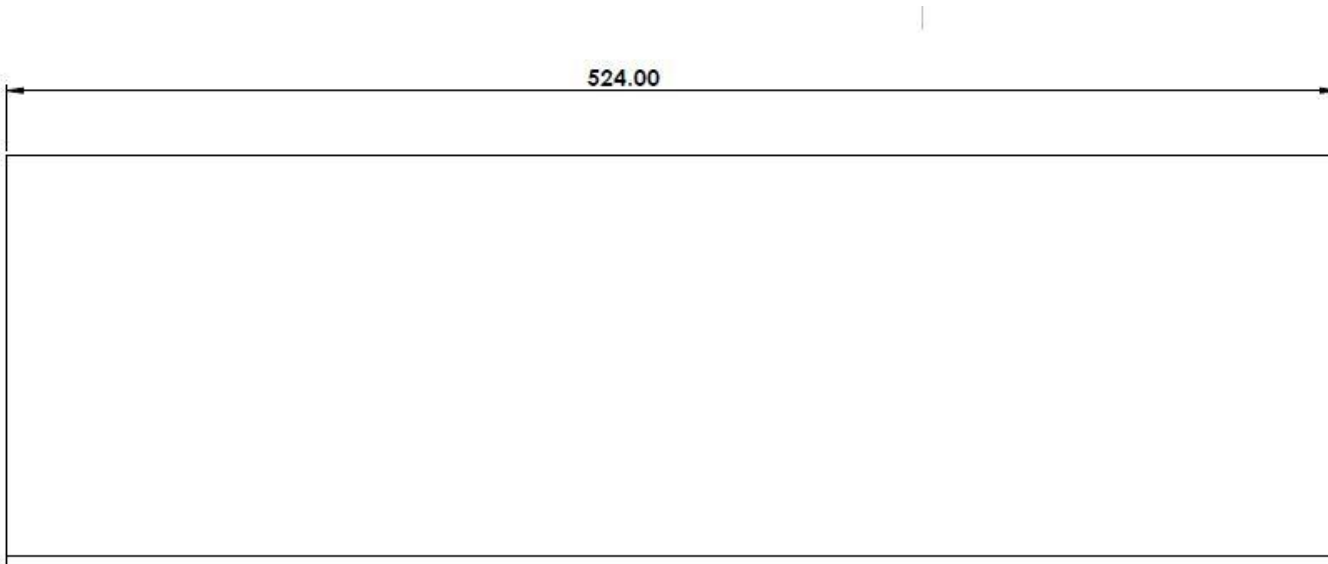
Enclosure Design

Part B: Back Panel



Enclosure Design

Part C: Back Side Panel #1



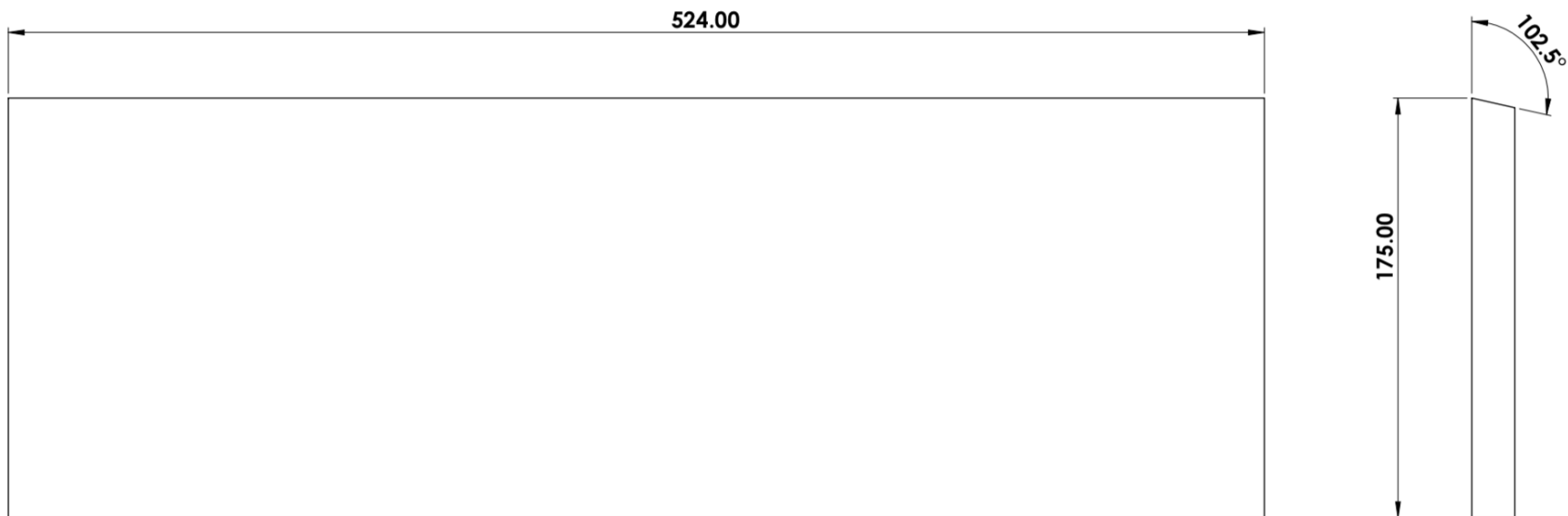
Enclosure Design

Part D: back side panel #2



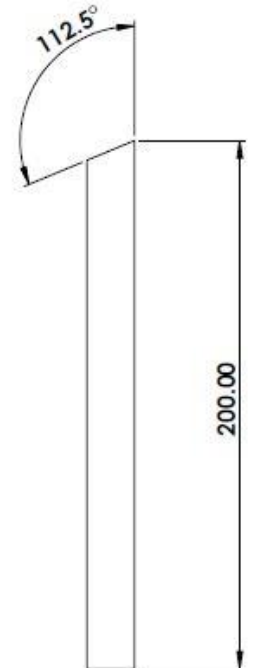
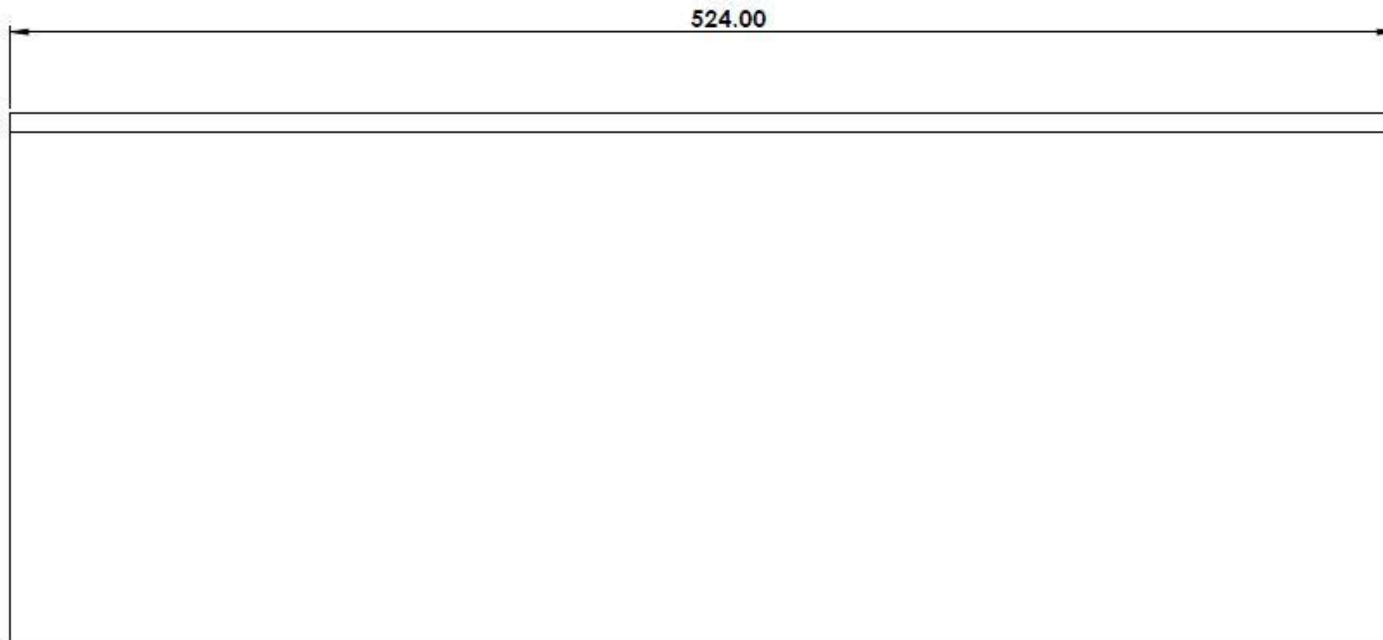
Enclosure Design

Part E: Side #1



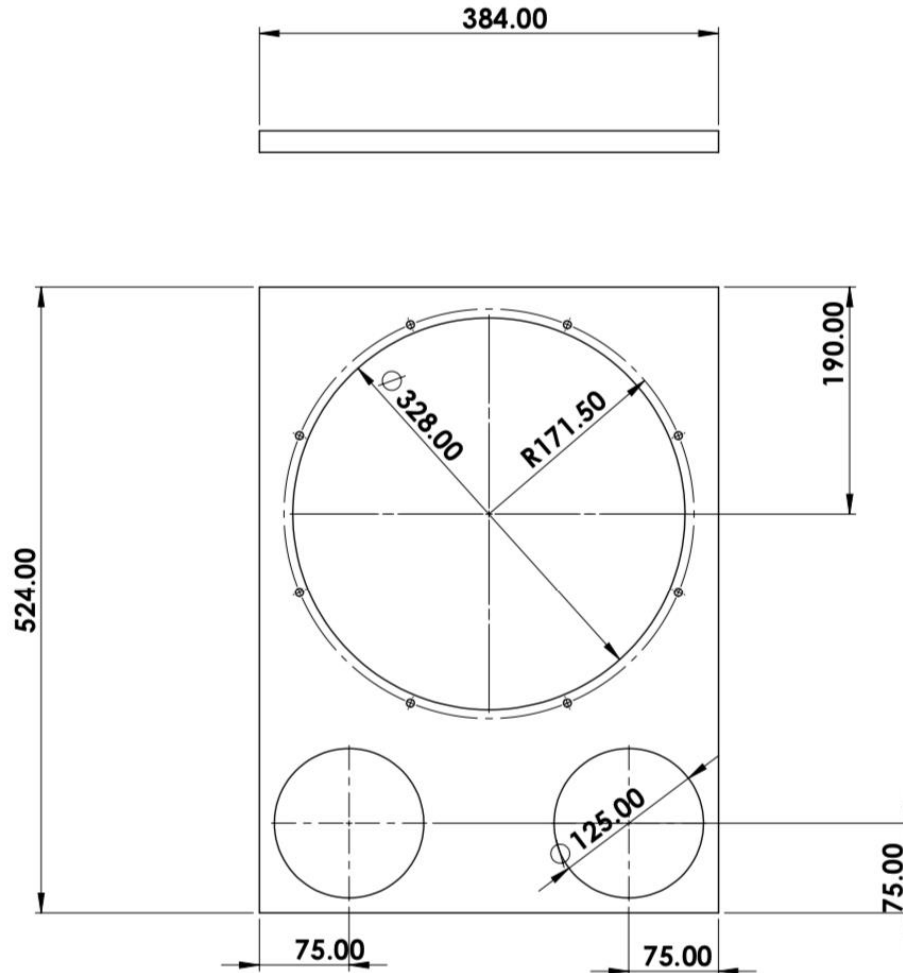
Enclosure Design

Part F: Side #2



Enclosure Design

Part G: Baffle Panel



Enclosure Design

Part H: Internal Reinforcement

