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DWARF

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Introducing the DWARF

The DWARF is a very high audio quality ultra compact multi-purpose pro-audio active speaker. (Passive version with separate amplifier also available.)

As a general rule *HiFi speakers do not play loud* and *PA speakers do not sound like HiFi speakers*.

Well, the unique DWARF hybrid speaker breaks all the rules, it is loud enough to be a small PA speaker whilst still sounding like a top end HiFi speaker, and has a sub response that is just astonishing for such a small full range box.

It is an audio "shapeshifter", being able to adapt and excel at performing in a variety of different uses.

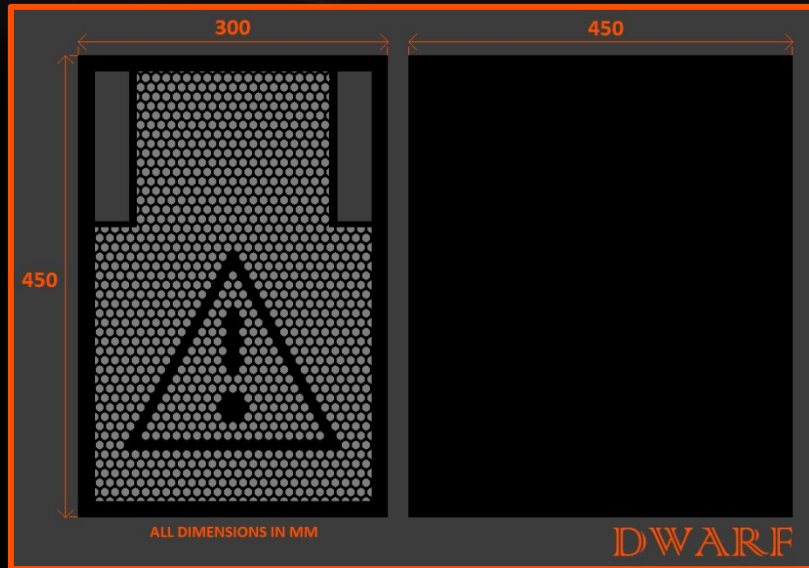
The DWARF's operational modes include:-

- In "PA mode" when it operates as an ultra compact full range general purpose PA speaker, with sufficient output for small events, bars and parties, etc.
- In "Mid/High mode" when it can produce greater output level for use with separate bass speakers at larger events, whilst retaining an unusually HiFi audio quality.
- In "HiFi mode" when it can operate at lower volume levels with a breathtaking HiFi audio quality such as you would expect from much more expensive HiFi speakers, whilst maintaining an astonishing sub response down to 32hz.

The DWARF's features include:-

- Adjustable mode for full range PA or mid/high or HiFi response
- Inbuilt limiters and LIMITIZA for managing headroom at high SPL levels
- Unique analogue signal processing with negligible latency, including an automated Dynamic Bass EQ system which helps the DWARF make the most of the music.
- Inbuilt high fidelity class AB power amplifier (400W RMS), driving a high power 10 inch driver and 1 inch compression driver.

Specifications



Dimensions:	450h x 300w x 450d
Weight:	25kg approx
Mounting hardware:	35mm pole socket in base - additional hardware available by request
Frequency Response:	approx 32hz to 20Khz in HiFi mode or 50hz to 20Khz in PA mode or 120hz to 20Khz in Mid/High mode
Power requirement:	230v ac, typically average up to 1 amp, max approx 2 amps Other voltages available by request
Audio connections:	Signal via balanced XLR in
Power connections:	20A Powercon connector inlet
Controls on rear:	Input gain, power switch & mode/response adjustment
Amplifier:	400W RMS / 800W peak class AB amplifier
Speaker Drivers:	10 inch driver in reflex enclosure & 1 inch compression driver
Electronics:	Analogue signal processing with limiters and negligible latency Automated Dynamic Bass EQ system RC Audio LIMITIZA circuit
Display on rear:	Blue power on indicator & Red high level signal indicator



Other than standard Black finish, the DWARF is also available in wood finish or can be customised with other colour finishes.



Unique technologies

DWARF analogue processing system, including automated Dynamic Bass EQ and limiters.

The Dwarf's unique processing is 100% analogue and low latency. It is designed to achieve the best possible sound quality from the speaker.

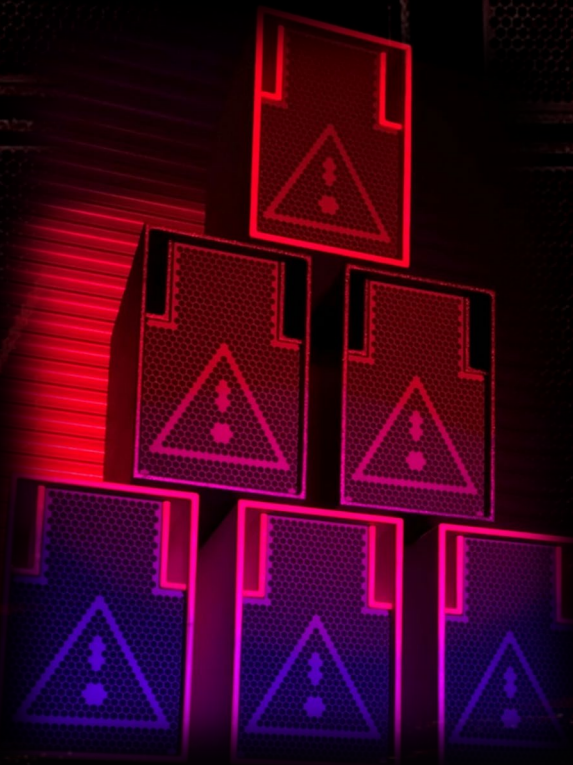
The operational mode is user variable between HiFi mode, through full range PA to Mid/High mode. This gives the DWARF a unique ability to be perform very well in a variety of different applications.

The automated Dynamic Bass EQ monitors the headroom and driver excursion, allowing the DWARF to maximise its ability at bass/sub whilst adapting automatically as required to prevent this generous bass/sub response compromising the performance across the remaining frequencies.

The "Limitiza" circuit to prevent the DWARF sounding overdriven.

It is not unusual for active speakers to be accidentally significantly overdriven. When this happens the sound is spoiled as it is crushed by limiters, and the distortion and decreased crest factor that results can compromise reliability.

The DWARF's "Limitiza" circuit monitors the limiters for activity, and if the speaker is overdriven significantly then it will slowly reduce the input gain to avoid continuous hard limiting. For this reason, unlike most other active speakers, the DWARF never compromises its sound or reliability when overdriven.



Passive Version

The DWARF is a really good solution for music bars and smaller venues that require moderate loudness levels and would like to benefit from an exceptionally good HiFi type sound quality. Multiple Dwarfs can be deployed as needed around the venue and the resulting sound is audibly superb.

In such applications it is often preferable to install passive speaker boxes and keep the amplifiers in a rack in a designated place. For this reason we offer the option of passive DWARF speakers with a separate DWARF POWER STATION stereo 2U rack mount dedicated drive processor/amplifier. Each DWARF POWER STATION can power up to four passive DWARFs (two per channel).

The passive DWARF speakers also benefit from being smaller enclosure volume than the active ones, which makes them easier to fit into tight spaces, and they can be painted in custom colours if required to blend into the venue.



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