

# REL Carbon Special Subwoofer

...clear in my mind that a subwoofer can offer the best pound-for-pound upgrade you can make to a decent HiFi system



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## REL CARBON SPECIAL

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I've appreciated REL since first hearing one with the Jern 14DS loudspeakers in 2017. Those loudspeakers were designed with a subwoofer in mind since their frequency response only started near 100Hz, a subwoofer was, therefore, part of the design. That Jern chose REL to market their loudspeakers says much about REL's reputation in this market. Since then, however, REL has revolutionised the ranges and product offerings it offers across the board.

The Carbon in REL Carbon Special



## Design

REL started their carbon driver journey initially with the S/812 as the starting point, however, they quickly realised that a new amplifier was needed if they were to take advantage of the carbon technology. Then REL realised a new cabinet was required, needing thicker MDF to deliver the rigidity that is necessary due to the huge power available with this driver configuration. In the end, therefore, this is a whole new product in the S range with a new cabinet a new amplifier and a new carbon driver configuration.

This REL Carbon Special subwoofer features a 'third generation BlackWidow' carbon fibre 300mm (12") driver powered by a NextGen 5 digital power amplifier with a claimed 1,000W of power.

The driver boasts a 100mm of fore-and-aft stroke to shift the air in the room with ease. This means the Carbon Special has twice the power of the recently reviewed S/510 and a larger passive radiator.

Facing downwards at the bottom of the cabinet is a new bespoke 300mm (12") passive driver, also made of (a slightly different) carbon fibre, augmenting the bass line delivery and floor engagement.

The Carbon Special has the High-Level Input that is a direct signal and offers a faster response. The REL Carbon Special can be configured wirelessly with the REL Airship wireless system, apparently with no loss of timing. There is a Low-Frequency Effect (LFE) input if needed but this is not what this product is all about.

Additionally, they can be placed in an array, stacked in a connected threesome, often. The screws and braces are included in the boxes.

The REL Carbon Special is quoted to roll off -6dB at 19Hz. This is the frequency that the subwoofer can support which is basically crazy low if you think a low organ pipe is 30Hz. This 19Hz figure is fairly academic as it is conditional on the room layout and many other factors but it serves as a point of reference.



Sleek handles



# Quality

Obviously, the Carbon Special is in the piano black finish, featuring the 12 lacquer coats that REL is renowned for. This lacquer additionally supports the rigidity of the cabinet. It is a beautiful thing to look at, with softly polished steel handles on both sides to shift this 38.7 kg (85.3 lbs.) cabinet, which is 430 x 455 x 539 mm (17 x 18 x 21.25 inches (W x H x D)).

In the UK the REL Carbon Special is priced at £3,799 (July 2023).



REL badge detail

# Performance

## Review Equipment

The Reference System here at HF&MS is the Moor Amps Angel 6 power amplifier supported by the matching Angel preamplifier with Tellurium Q XLR Ultra Black II XLR cables between them.

The Reference Source is an iFi Pro iDSD as a DAC (only) with the Chord 2Go/2Yu combination as a streaming transport, full-fat BNC into the DAC. There is a Chord Company GroundARRAY in the Ethernet slot to reduce HF noise because we are not using the streaming platform in the iFi Pro iDSD.



The rear of the REL Carbon Special, detail

Separately, there is a Michell GyroDec turntable with a Rega Phono stage to the preamplifier.

The amplifiers benefit from Atlas Eos power cables in an Eos Distribution block. The loudspeaker cable is a 5m pair of Black Rhodium Charleston from the Moor Amp.

## Physically

I have the Neutrik SpeakOn cable (supplied) wired HF into the power amplifier. The setup follows a defined process and REL's Rob Hunt is the Grand Llama of subwoofer placement. I know enough to understand, for example with my own REL T/5i subwoofer, that closer placement to a wall can add 3dB to the effect of the subwoofer (so +6dBs in a corner).

Finding the correct phasing initially for the subwoofer is an important process, designed to ensure the sub is pulsing in sync with the speakers. For this, a track called *Cosmo...Old Friend* from the Sneakers film soundtrack is used. This soundtrack is legendary as it is hard to get hold of, fortunately, I have a copy for such purposes.

I have the Titans around 3 meters apart and I'm around 3m away too, the REL is around 50cm from the rear wall in the centre. In the space that I have this placement is less of an issue given the power on offer from the Carbon Special.



Selecting the correct phase angle

## Kudos Titan 505

The Titans are solid, fast, and punchy in the bass, extending to 40Hz and easily getting there in this listening space with the Moor Amps Angel 6. Having set up the subwoofer using the tried and trusted method (see the Musical Interlude Playlist below) I immediately went for my reference bass-heavy tracks; the *2049 Soundtrack*, *GHOST TOWN* by Benson Boone and, of course, *Teardrops* by Newton Faulkner. Sure enough, as my tea rippled at 1'30" of *Teardrops*, it was clear this is a bass experience in the 'Champions League places' of the highest league (since the football season has just drawn to a close).



The Carbon Special is lifting the soundstage to reveal greater detail in the Titans. This subwoofer could probably take the tiles off the roof; however, I'm finding it is in more nuanced tracks that the full scope of this Carbon Special is revealed.

Turning the volume down to 9 o'clock from past 10 o'clock and listening to a full run-through of *Every Kingdom* (Vinyl, Island Records) proves the point. It is produced with subtle depth and the REL delivers the support the Titans can't realise, despite their Isobaric design and having the benefit of the high current Angel 6 amplifier. It is the detail and space released in quieter tracks, like *Promise*, that the finest reward can be drawn. The same happens with a new, fresh out-of-the-cellophane copy of Taylor Swift's *folklore* (Vinyl, Republic Records), this is quite a realisation when it hits you.

## Serhan Swift Mu2 MkII

The Serhan Swifts offer the same exceptional level of detail from their modestly sized cabinets. With a bass extension to 45Hz, the support from the Carbon Special is, well, *Special*. Again, I check out Ben Howard's album, and that nuanced bass line is replicated; this is such a subtle yet complex modern album.

Stepping back nearly forty years, Simply Red's incredible track *Jericho* (Vinyl, Elektra), similarly refined, has this delicate bass, and the fast support from the Carbon Special lifts this slightly old recording to new heights in the detail and vocals.

Indeed, whilst stumbling across Mahler's *6th Symphonie* on CD with an equally fresh out-of-the-box Audiolab 7000CDT, it is clear the subwoofer supporting the Serhan Swifts is a trick not previously realised. The presentation is fulsome, powerful, open and demanding in this most challenging of classical pieces.

Being a reviewer with a subwoofer, I am compelled to play Aphex Twin's *Windowlicker* as an example of fast bass. I wouldn't really listen to it otherwise; I simply do not get Aphex Twin. However, it is fairly clear that the bass response is coherent and fast, making the track almost listenable.

## The HF&MS Musical Interlude

Here's the Tidal Musical Interlude Playlist for the REL Carbon Special. Scan this QR code.



## Thoughts

Clearly a magnificent piece of equipment but in my review space, I feel as if it is a fraction too big. However, at a lower volume, it is perfect in this space. I would like to move it into my lounge where I have a Naim-based setup in a larger room, however, this REL is way too heavy for me to move up and down the stairs.

I am, however, clear in my mind that a subwoofer can offer the best pound-for-pound upgrade you can make to a decent HiFi system, I'm thinking of expensive loudspeaker cables, power cables and the like. Yes, the Carbon Special is expensive but in the context of this system, it offers a huge upgrade to the soundstage here.



...CLEAR IN MY MIND THAT A SUBWOOFER CAN OFFER THE BEST POUND-FOR-POUND UPGRADE YOU CAN MAKE TO A DECENT HIFI SYSTEM



## Overall

If money was no object, I would unreservedly want one, or three, of these. There is no doubt in my mind that if you have a pair of speakers that have an exceptional soundstage, detail, and timing this is the vehicle for lifting that experience a level or three up, no matter how much your loudspeakers cost.

### Love

- Plenty of power
- Fast bass
- Stealth bomber styling



### Like

- Control at all volume levels
- Auto standby mode
- Best pound-for-pound system upgrade

### Wish

- I could move it easily