

REL Habitat 1 subwoofer

by Alan Sircom

This review marks the end of my subwoofer journey. This is 'it' for me – there are perhaps subwoofers that go deeper than the REL Habitat 1 (some of which I've tested), but none that combine the Hab's ease of connection, discreet installation and just general all-round 'rightness'. For now, at least, the subwoofer game is over, and someone else will carry the subwoofin' baton now.

As the name might suggest, the Habitat 1 is designed for integration into the domestic habitat. I'm not one for 'Wife Acceptance Factor' (I find the term somewhat sexist and derogatory, and my long-suffering wife has to put up with a room filled with bits of hi-fi and a hallway filled with cardboard boxes so frequently that the term has no functional meaning, *chez Sircom*), but a subwoofer can be a big, square box too far in the domestic-harmony stakes. The last one I tested ended up being in the 'perfect storm' position, making it almost impossible to access the last third of the room without knee damage, and being the cat equivalent of an aircraft carrier for launching animals into shelf units, with disastrous – yet entertainingly predictable – consequences. A blanket ban on anything that low and square ensued. And yet, the additional bass depth and imaging improvements to the mid and top that a sub brings to the party is sorely missed.

The Habitat 1 solves these problems. It's a box, the length, breadth and depth of a small central-heating radiator, and is designed to be bolted to a wall, so it looks like a radiator with a speaker grille. The top panel has a set of basic subwoofer controls (high- and low-level settings, roll-off point of the

speakers and a phase switch), to blend performance with a speaker system and all it needs is a nearby 13A plug. Where it gets clever is it also comes with a little white box that connects to the system, and wirelessly talks to the subwoofer. So, that other great no-no in audio – the long black cable draped across the floor – isn't a problem. The 'Longbow' wi-fi controller also has a toggle switch to pair sub to hub, but it will auto detect line-level, LFE or speaker level outputs. If your DIY skills are up for the task, the mounting bracket template means you should have the sub on your wall inside of an hour (remember to attach the IEC cable before you 'offer up' the Hab 1, or you'll be scrabbling round the skirting board, and swearing may occur), and you'll integrate speaker to sub soon after. There is an optional floor mount if wall hanging is out of the question.

There is nothing to this layout that hasn't been covered at length in any review of a subwoofer, in a hi-fi or even a home cinema magazine. There is a slight advantage to having the controls on the top of the subwoofer, for ease of access during set-up, as long as you don't have a small child who thinks every knob is theirs to twiddle, that is. The 'Longbow' wireless connection plugs into the LFE output or the speaker terminals. ▶





► It's likely the best positions for the sub are either roughly in line with the speakers, or in line with the listener, but the speaker position is probably best. While we at *Hi-Fi Plus* aren't big on the whole home cinema thing, if your TV is free-standing on a dedicated table, the Habitat 1 can easily fit behind the TV, and helps bring out the sound here, too (it works wonders with soundbars).

The speaker layout of the Habitat 1 is very different to most subs. The 150W on-board Class D amplifier drives two, front firing 165mm long-throw bass drivers, with a 250mm passive unit in a steel chassis bouncing off the wall. In subwoofer terms, that all means the Habitat 1 is no gut-cruncher. REL cites a lower frequency response of -6dB at 30Hz, which seems fair in use. However, if you are using a set of decent floorstander speakers, you might question the use of the Habitat 1, because your speakers will probably already reach down to the same regions. However, the weird thing about bass is that might not be the case at all, but in fairness if you expect the Habitat 1 to act as bass reinforcement to a pair of full-range speakers, these aren't the subs you're looking for. It's closer to room treatment and bass management.

Again that old REL adage of better bass means better mid and treble holds here. On a speaker where the sound reinforcement is needed (most bookshelf models, for example), you get a double-whammy; the sort of bass that could keep up with most dynamic models (although the ELAC and the Raidho in this issue are fast-paced exceptions to the rule) and you get the sorting out of the midrange and upper frequencies, that spells a better all-round sound from your

system. In other systems though, you just get the improved stereo imaging and smoother midband that comes with the bass management.

To recap, this needs relatively careful matching with the loudspeaker system, ensuring the subwoofer makes so little imprint on the sound of the system, you sometimes wonder if it's on. To do this, set everything to its lowest possible position and gradually turn the level control up until you can hear the REL playing. Then, slowly turn the crossover control up until you hear the bass increase. At this point you should back down on the crossover point until it that increase in bass goes away. From here, fine-tune the subwoofer output, which in most hi-fi settings means tuning the level control down a notch. ►

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▶ The difficulty with discussing the sound quality of a subwoofer set for hi-fi is it shouldn't have any. Its influence should be simply to improve the performance of the system its connected to, bringing out the essential properties of the speakers you selected for the reasons you selected them. Fortunately, the Habitat 1 imparts no character changes on a system, just helps smooth over the iniquities of the room's bottom end to help the system on its merry way.

How this influences the system does depend on the room, but in most cases it will end up tightening up the bass, making the mid-range response smoother (which has a knock-on effect of making the imaging more focused) with more definition and separation of instruments within the soundstage, and often a wider soundstage. This can also extend to the treble too, depending on how even handed the high-frequency response of the accompany loudspeakers are. Put simply, when done properly, the REL Habitat 1 makes your system sound like it's not having to work so hard to do its job, and as such does it that bit better. Musically, this can best be summed up by 'Never Give All The Heart' from the Chieftains *Tears of Stone* CD from 2009; the atmospheric Anúna choir is better placed in the room, the Bodhrán in the introduction has greater 'space' between the fast beat notes and Brenda Fricker's reading of the Yeats poem is more impassioned. These elements will apply universally; they may vary depending on how sorted your room is and how well your system integrates to the room, but those elements will be improved. In fairness, they are improved by the careful integration of any good subwoofer, but most of those are a lot larger and more physically in the room than the Habitat 1.

The REL Habitat 1 is the pragmatic solution to bass 'management' without more drastic changes to system or room. It's performance in this respect will not better a good

DSP solution or a well-sorted room acoustic treatment package, nor will it out-shine a really meaty subwoofer that sits in between the speakers like a big square monolith. But that's not the point – all of those things are too often routinely rejected for being too intrusive to system or living space. The Habitat 1 is neither. It's simply a bloody good subwoofer that hangs on the wall, making your hi-fi a bit better and your home cinema a little more fun. Best of all, it's small enough to sneak another one or two around the room... +

TECHNICAL SPECIFICATIONS

Type: Sealed, two front-firing active woofers, one back-firing passive woofer

Drive Units: Two 165 mm long-throw, steel chassis, front firing

Passive Unit: 250mm, steel chassis, rear firing

Lower Frequency Response: 30Hz at -6dB in room

Input Connectors: High-Level Neutrik Speakon, Low-Level single phono, LFE single phono

Input Impedance High-Level: 150kOhms

Low-Level/LFE: 10kOhms

Gain Control Range: 80dB

Power Output: 150 Watts (RMS), Class D

Dimensions (WxHxD): 63.5x40.6x11.4cm

Weight: 23kg

Finish: Gloss Piano Black or Gloss White Lacquer

Price: £1,299

Manufactured by: REL Acoustics Ltd

Tel: +44(0)1656 768777

URL: www.rel.net