

Ultimate System Set-Up Disc USER GUIDE



1 Introduction

The CD begins with a short audio guide to the disc and how to use it.



2 Channel evaluation

This track establishes that the left and right channels are where they should be. That is on the left and right as you face the loudspeakers. If the result is not as expected check your cable connections from speaker to amp, then from amp to source. Interconnects should go from red to red, white to white and speaker terminals are generally marked for left and right channels.



3 Phase test

If the initial voice is not in-phase when it says it is then the positive and negative or red and white speaker cable connections to the amplifier are not correct. Check at both ends.

Note that some components – usually valve/tube based ones – invert phase, you can compensate for this by wiring the speakers up with phase reversed, ie red on the amp to white on the speaker. The description on the track will tell you when it's correct.



4 Loudspeaker position & adjustment

This is the most fundamental part of set up. Only when the speakers are correctly positioned will they produce the stereo results described on the following tracks.

It starts off with the voice and castanet in each channel so that you can establish that both have the same tonal balance. If they do not make sure that both speakers are the same distance from surrounding walls and that the support system likewise consistent. Excess bass usually indicates that a speaker is too close to room boundaries, you can move them away from walls until you get an even tonal balance that's the same in both channels.

The next part places the image half way between one speaker and the centreline between both speakers. If the sound seems to be coming from the speaker itself move it outwards a bit at a time until the image is to the inside of the speaker.

In the following stage the image should be on the outside of the speakers, if the image is not beyond the speaker but coming directly from it you will need to move it inwards toward the centre until the sound images correctly.

Unless the room is very narrow it should not be too difficult to achieve the results described by the voice with a bit of lateral speaker movement.



5 Introduction to the soundstage test

6 Soundstage test

The castanet clicks move from outside the left channel to the outside of the right one and back again. If this does not happen go back to the final stages of track 4.



7 Introduction to the 360 degree test

8 360 degree test

As the voice describes the 360 degree sweep will give the impression of the castanet clicks circling the room. The success of this will depend on a number of factors such as how much space there is around the speakers and the reflectivity of the walls and ceiling. The clicks get quieter as the castanet goes behind your head. If this does not happen you may need to move the listening seat away from the wall behind.



9 Introduction to stereo image depth

10 Stereo image depth test 1

In the first stereo image depth test the voice is in reverberant soundfield and you should be able to hear the room where the recording was made. The castanet then moves toward each speaker in turn revealing how sound can be projected moving behind the loudspeaker.

11 Stereo image depth test 2

If the results are not as described try making small adjustments to the position and orientation of the speakers relative to the listening position. Adjust toe-in as well by varying the degree to which the drive units face you.

12 Stereo image depth test 3

The castanet circles the speakers revealing the potential of stereo imaging.



13 Frequency range test

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14 The tones on these two tracks reveal if there are any significant peaks or troughs in the tonal balance of the speaker and room combined. Track 13 is increasing frequency – low to high, track 14 is the opposite – high to low.

Listen out for differences in volume between the frequencies and move the speakers away from boundaries to reduce bass output. If the treble is too loud toe the speaker out so that it's not pointing directly at you.