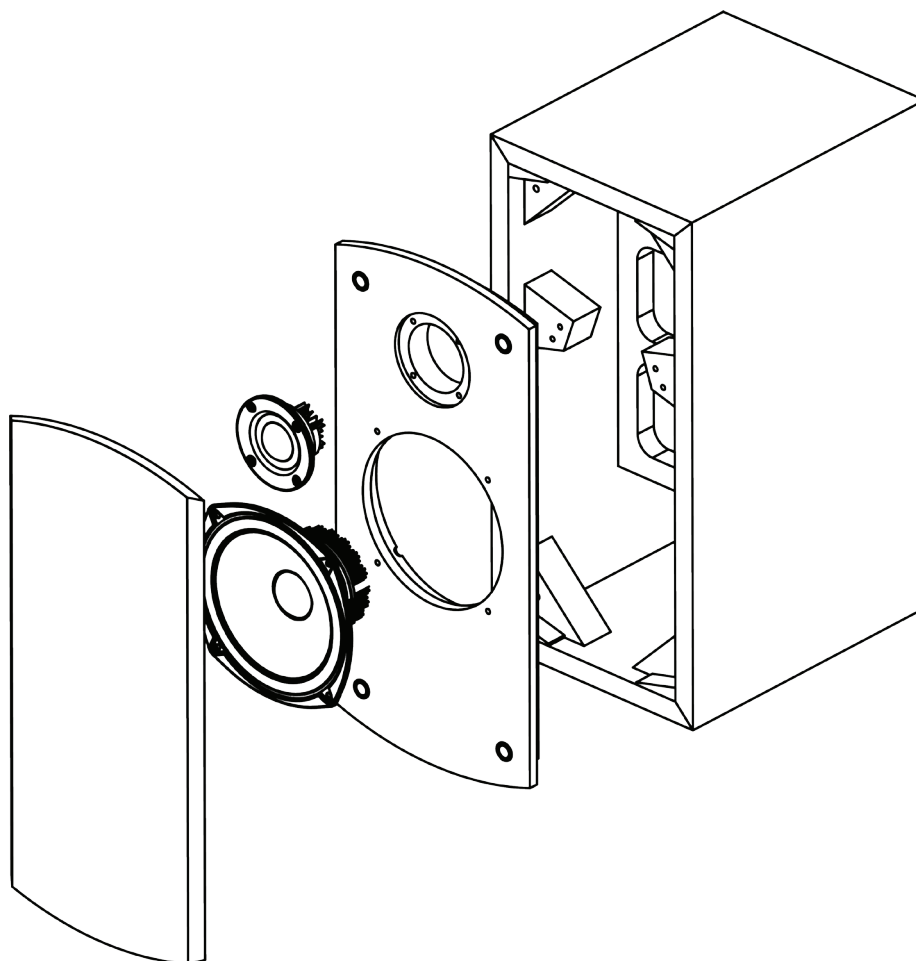


## Evaluation Kit 1



## Evaluation Kit 1

### **Congratulations with your purchase.**

The speaker kit you have purchased is not only designed to give you years of high quality sound. It is also designed as a product that will keep you updated at all times as the loudspeaker technology continues to develop and as Wavecor over time produces new and exiting speaker units. Due to the flexible design of this Evaluation Kit, it is possible to replace the baffle easily and thereby allowing for using other Wavecor drive units when available/required.

The kit is designed in a way so anybody is able to put it together. The only tools required are a soldering iron and a screw driver.

Once put together this kit will take you well into the world of high-end audiophile listening.

Happy listening!

*Wavecor*

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## Evaluation Kit 1

### Package content

If you have purchased your Wavecor Evaluation Kit 1 as a complete kit, the package should contain the following parts:

- 1 piece main cabinet (sides/top/bottom/back panels assembled) including white cabinet stuffing and port tube
- 1 piece mid/woofer model WF160WA01 with gasket for cabinet sealing
- 1 piece tweeter model TW030WA01 with gasket for cabinet sealing
- 1 piece separate cabinet baffle with gasket, including the following screws
  - 4 pcs M5 for the corner holes of the baffle
  - 4 pcs M4 for mounting the tweeter
  - 2 pcs M4 for the lower holes in the woofer frame
  - 2 pcs long M4 screws for the upper woofer holes that also hold the baffle
- 1 piece crossover/terminal cup assembly with gasket for cabinet sealing and 4 wires for connecting the drive units, including 4 pieces wood screws
- 1 piece front grille with grille cloth

### Putting the parts together

Assembly instructions.

**CAUTION! Always work with the cabinet on a soft, clean surface to avoid scratches. Be careful not to over-tighten any of the screws during assembling.**

#### STEP 1

Mount the crossover/terminal cup assembly in the rear cut-out hole. Attach it with the 4 wood screws and make sure the four wires are pulled through the white stuffing inside the cabinet all the way through to where the drive units will be located.

#### STEP 2

Mount the baffle using the four M5 screws. Make sure the baffle hole for the tweeter is in the same end of the cabinet as the port (=upwards).

#### STEP 3

Solder the wires to the woofer terminals (the wide terminal is the positive) and then attach the woofer using the long M4 screws in the two top holes and two of the shorter M4 screws in the two bottom holes.

#### STEP 4

Solder the wires to the tweeter terminals (the wide terminal is the positive) and then attach the tweeter using the four remaining M4 screws.

DONE!

## Evaluation Kit 1

### Getting the best out of your Wavecor Kit

Wavecor Evaluation Kits are designed to be 100% true to the input signal without any coloration or distortion: What goes in also comes out.

The kits are intended to give the most accurate picture of what Wavecor speakers are all about: Details, dynamics, low distortion: Full of life, atmosphere, and reality.

Wavecor speaker kits will work with any audio system but the true qualities are only exposed if connected to a real high-end audio system.

Evaluation Kit 1 is a 4 ohm speaker but not a very difficult load for the amplifier. It can handle significant amounts of power but will also shine with relative small power amplifiers of high quality.

Evaluation Kit 1 is prepared for bi-wiring, which we recommend.

For critical listening we recommend leaving off the front grille. The front grille is designed for minimal influence on the sound and with as open grille cloth as possible. However, the front grille and the cloth do attenuate the treble level around 1dB at 20kHz and the grille does cause limited midrange reflections.

Please read below about positioning of the speakers as this is an important part of obtaining the best possible sound.

### Setting up

#### Height over the floor

The Wavecor Evaluation Kit 1 is designed to be positioned on stable, good quality speaker stands that ensure a correct height for optimal listening. The correct height is obtained when the tweeter is roughly at same height over the floor as the listener's ears.

#### Distance to rear wall

The Evaluation Kit 1 features a rear firing port to minimize the audible effect of any port resonances or midrange sound waves from inside the cabinet.

In order for the rear port to function properly it is recommended that the speaker be placed at least 30cm (1 ft.) from the rear wall. See also fig. 1 below.

The speaker may be moved further away from the rear wall depending on the specific room and on the listener's preferences. Generally, the bass will vary with the distance to the wall in a way so the bass level is reduced when the speaker is moved further away from the wall.

#### Distance to side walls

The side walls will reflect the sound at certain frequencies and may in some cases reduce the accuracy of the stereo image of the speakers. It is recommended to keep some distance ("D" in fig. 1) to the side walls and experiment until the best speaker position is found.

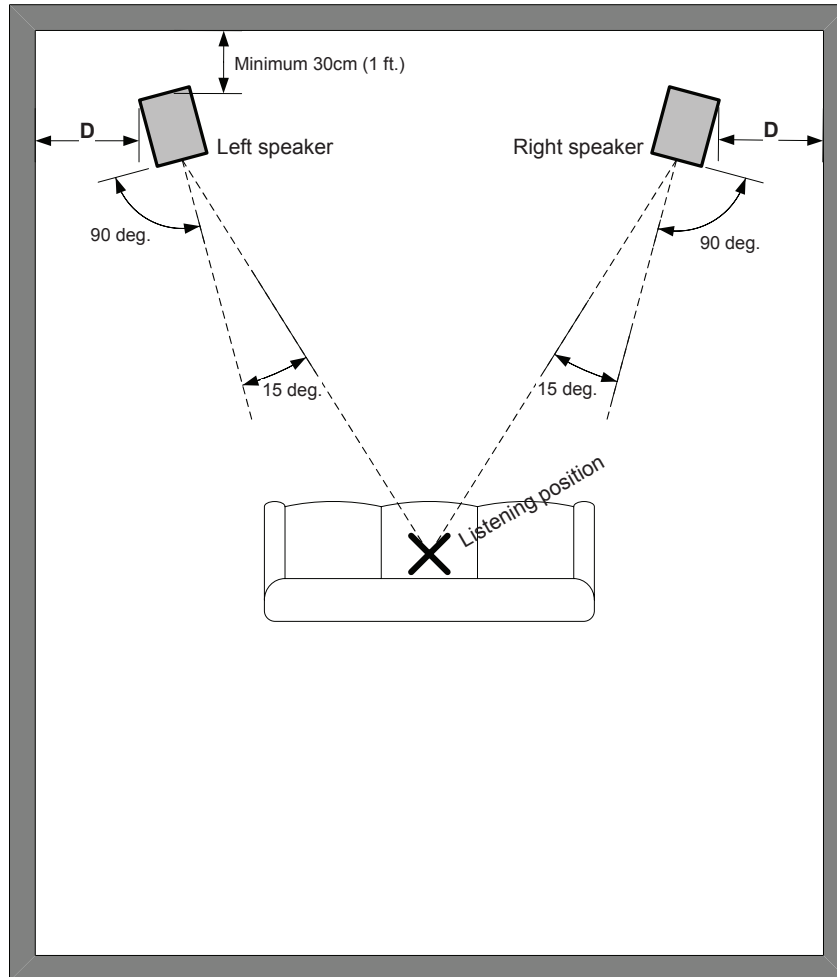
Like the rear wall, approaching the speakers to the side walls may also increase the bass level.

#### Distance to room corners

Placing the speakers close to the corners of the room will boost the bass - in some cases considerably.

Again, it is recommended to experiment with different distances and positions as this may change the low frequency response of the speaker. Do not stop until you have exactly the bass response that you prefer.

## Evaluation Kit 1



**Fig. 1.** Theoretical ideal position and angles for setting up Evaluation Kit 1.

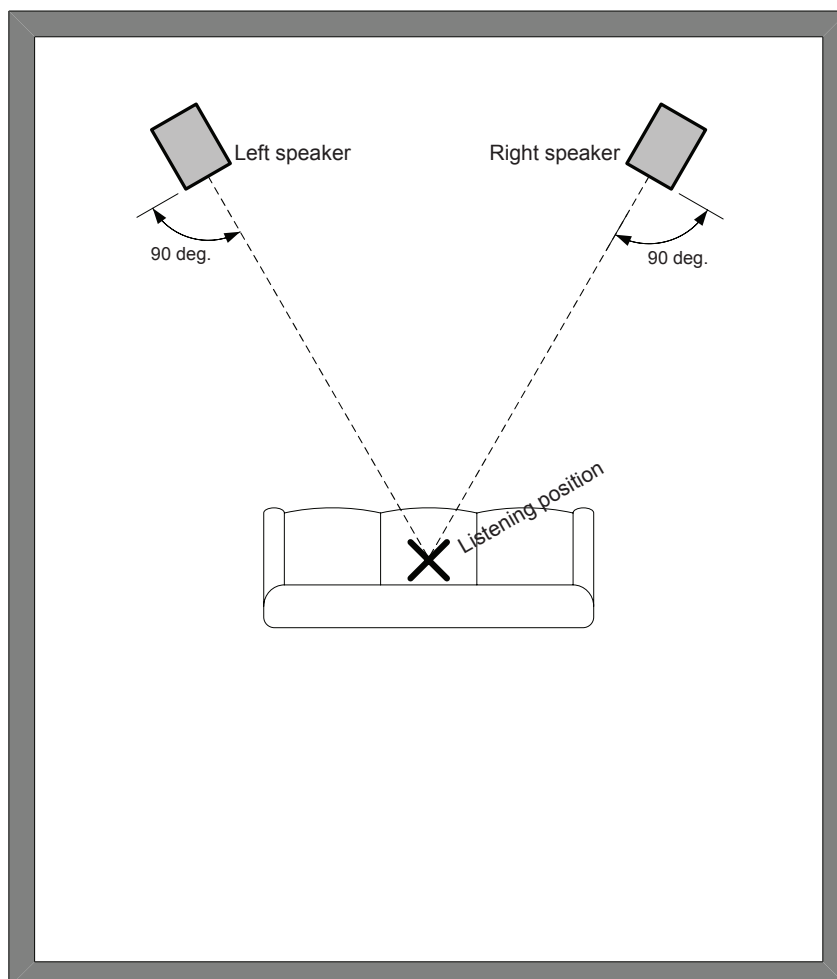
### Listening angle

Evaluation Kit 1 is designed to be toed slightly outwards compared to the listener. If angled outwards around 15 degrees, a completely flat anechoic frequency response is obtained. See fig. 1.

See also the black frequency response curve in fig. 4.

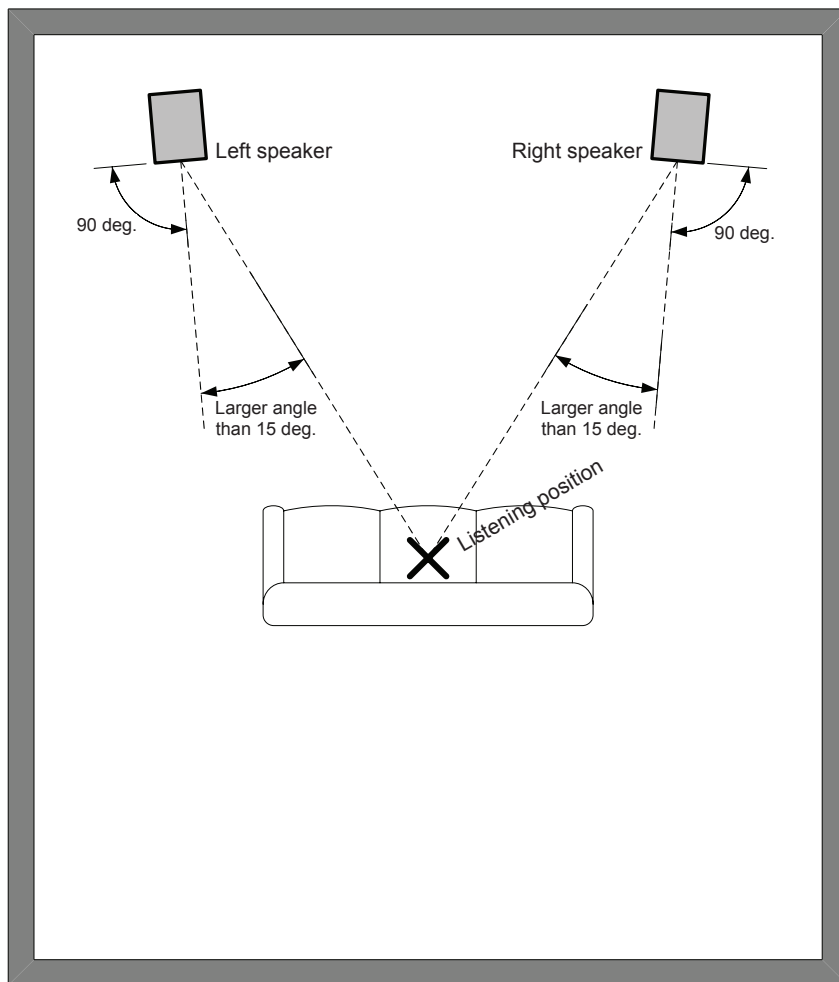
It is recommended to experiment with the angle in order to obtain the best possible sound in the actual setup. Not only does the room influence how the speakers sound, but all the other components in the audio system will make a difference on the sound. As an example, if a very bright amplifier is used, it might be a good idea to increase the speaker angle to more than 15 degrees.

## Evaluation Kit 1



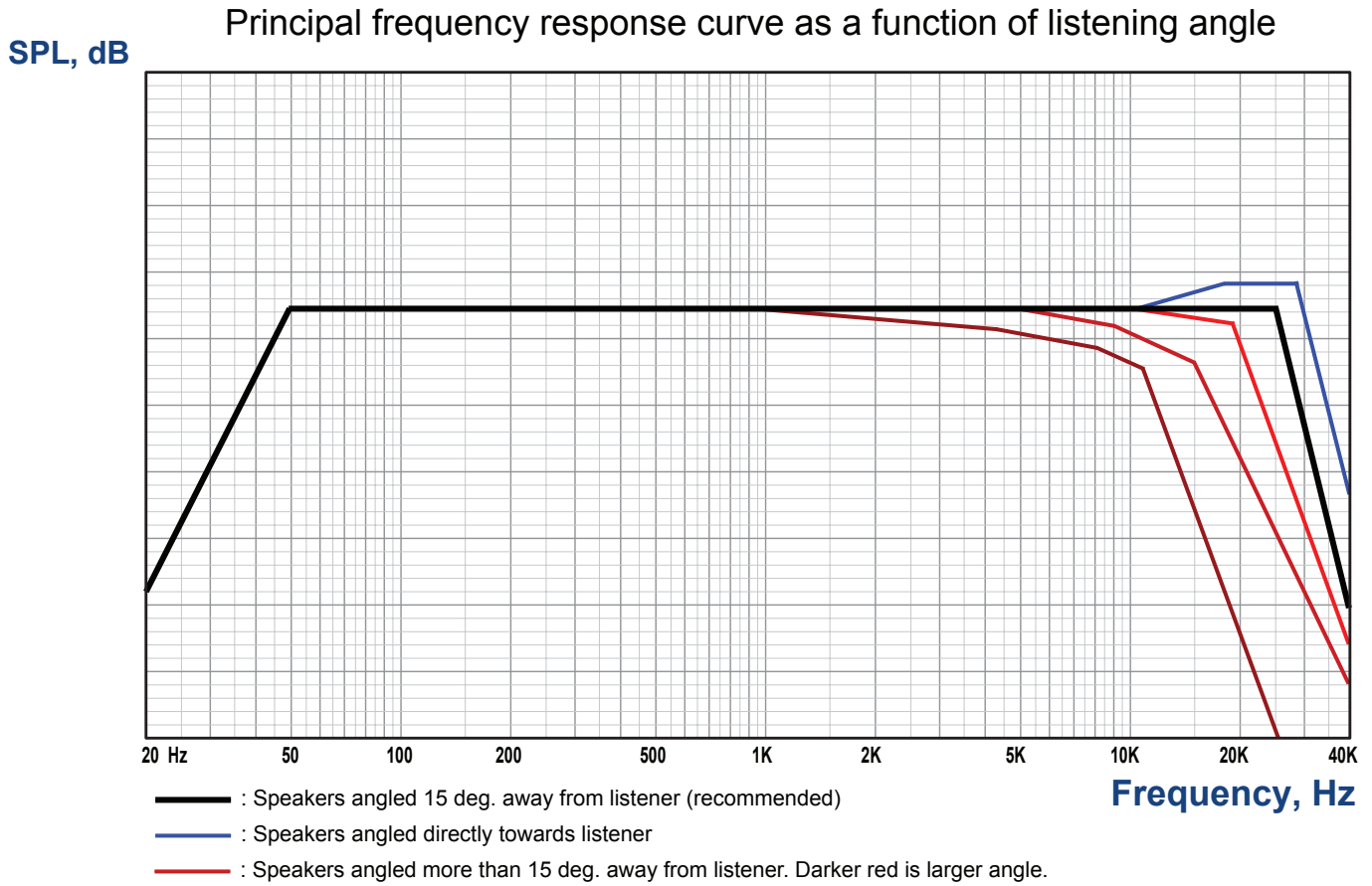
**Fig. 2.** Pointing the speakers directly towards the listener for increased treble level (more “air”). Shown as the blue curve in fig. 4.

## Evaluation Kit 1



**Fig. 3.** Pointing the speakers further away from the listener, meaning angles larger than 15 degrees. This yields attenuated treble response at the listening position - larger angle means more treble attenuation.

## Evaluation Kit 1



**Fig. 4.** Treble attenuation for speaker turned to different angles - in principle.