

# PHI SERIES

# 7 LCR 53

## Owners manual



## Introduction & a little background

Thank you for choosing a GamuT product. All GamuT products are made for you to enjoy and live with for many years to come.

With the PHi series we begin a new chapter in pursuing the highest sonic performance possible, where the natural number PHI (1.618) has played an important role in creating the resonance controlling groove in the cabinet, as well as designing the exterior looks. These new solutions along with our DC coupled midrange and NRLI network technology and our new self locking & easily adjustable feets, present a new and unique solution in bringing optimum sound quality into your living room.

## Unpacking

Your Phi's comes with a pair of GamuT "stretch to fit" mounting gloves.

Use these gloves or take off your rings and watches to avoid scratching the delicate surfaces. All Phi are fully assembled and tested at the factory, so no parts needs mounting. All Phi are delivered in white cotton bags for protection. All is ready for use when the protective bag is removed. Phi5 & Phi7 both comes with our new non resonant feet. Remove the tape that holds the feet against the bottom, and fold the front feets forward and the rear feets backwards.

*The Phi LCR comes with an extra front cover to be mounted if the LCR is used in its vertical position, either as a stereo speaker or rear speaker.*

## Setting up – simple & fast

Speakers are acoustic instruments working with your room.

Placement of the speaker and the listening position will always have an influence on the final sound quality, and following the minimum recommendations will assure you a good overall sound quality.

*Minimum recommendations:* Position your speaker at a minimum of 70 cm from the side wall (measured from the tweeter position), and at a minimum of 60cm from the back wall, also measured from the tweeter position.

Point the speakers straight, and tilt the speakers so that the tweeter axis aims approximately at your ears.

## Toe-in

We recommend no toe-in, at least as a starting option.

This results in a listening angle of app. 20 degrees off axis to the listener, in an optimum listening setup.

*Why toe-in:* The maximum tweeter level is on axis. The more off axis you listen the lower the high frequency level will be in the listening position. Use toe-in to adjust/increase the high frequency level, and to reduce the high frequencies being reflected off the side walls.

## Adjusting the feet

Hold the speaker in its vertical position with one hand, and use your other hand to tighten all 4 knobs as hard as you can by hand. The special geometric design of the feet will now use gravity and friction to lock the adjusting knob when sufficient force is on the foot. If you need to tilt the speaker front/back or sideways, push the speaker to its desired position and again tighten all 4 knobs. You may need to adjust the tilt of the speaker to fit your seating height. See the instructions later.

## Connecting to the amplifier

*Single wire connection:*

Connect the positive cable to one of the red terminals, and the negative wire to the black terminal.

*Bi-wire connection:*

Unscrew all 4 nuts from the terminals and remove the two brackets. Connect one pair of cables to the lower input, positive to red (right hand side), negative to the black terminal, and one pair to the upper pair of terminals.

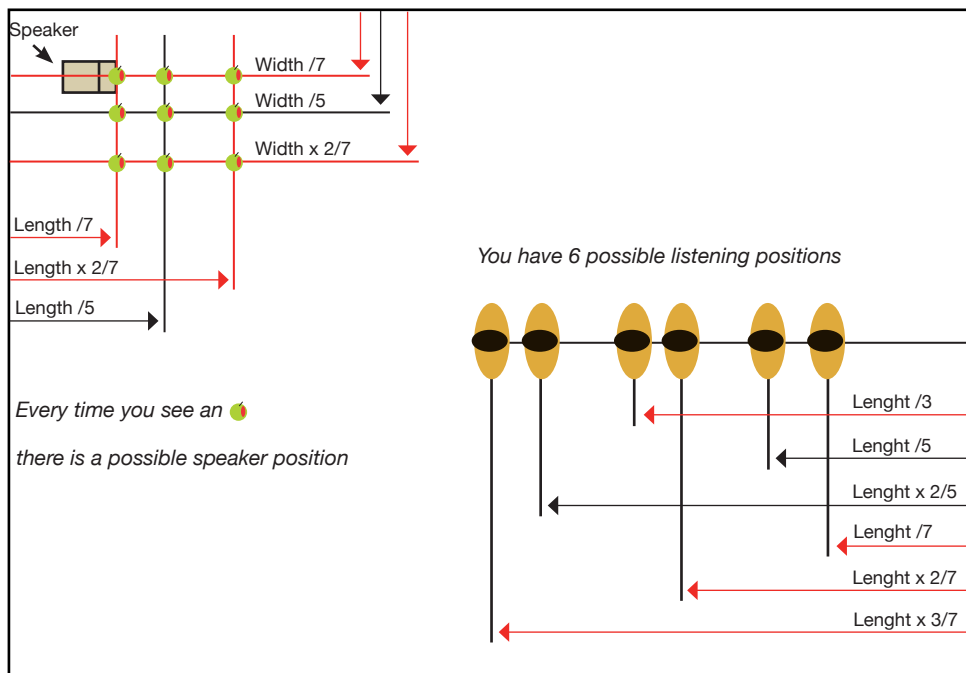
## Optimizing the sound - running in

Speakers are Electro-mechanical devices. They need a run-in period to reach their optimum performance level. We suggest letting the speakers run at high Levels for at least 6 hours before judging the sound quality.

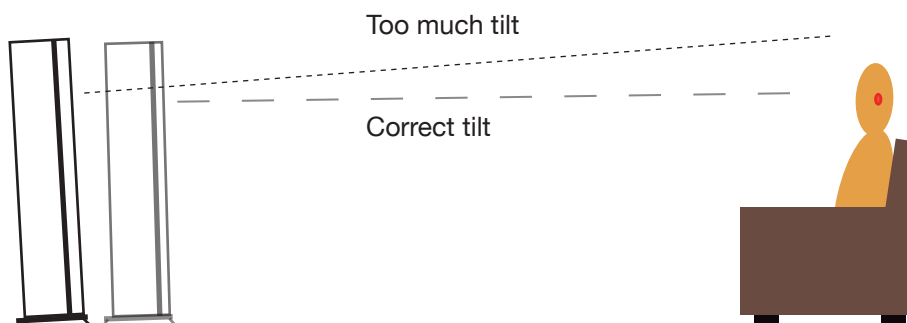
The process of running in can take up to 200 hours of music playing at high levels, and ageing of the materials as well will also play an important role in reaching the maximum performance. Expect your speakers to reach maximum performance in approximately 6 months time.

Use the 2 diagrams below to determine the best setup positions for your speakers and your listening position. As can be seen there are quite a few options. Choose the ones that exceeds the 60 cm distance to the back wall and 70 cm to the side walls. Remember all measures are taken from the tweeter position.

Example							
	Measures	Results					
		Divided by 7	Divided by 5	2 x divided by 7	Divided by 3	2 x divided by 5	3 x divided by 7
Example width	5 meters	0,72	1,0	1,44	1,67	2,0	2,16
Example length	7 meters	1,0	1,4	2,0	2,33	2,8	3,0
Your measures							
	Measures	Results					
		Divided by 7	Divided by 5	2 x divided by 7	Divided by 3	2 x divided by 5	3 x divided by 7
Your measured width type here							
Your measured length type here							



The correct tilt is where the tweeter axis is aiming directly towards your ears. Why tilting: The tilt of the cabinet determines the timing between the tweeter and the mid range/woofers. Tilting the speaker backwards delays the tweeter, where a forward tilt does the opposite. Tilting the speakers forward gives a brighter character with more emphasis on high frequency transients, where a backwards tilt gives less focus on the high frequency transients.



## Setting up

### - advanced

Calculating the optimum position

## Positioning the speakers the scientific way

## Advanced tilting technique

## Care & Maintenance - keep the good sound coming

All connections, even very good ones will slowly deteriorate over time. A good choice is to keep the connections clean by using a clean cloth & spirit.

The knobs on the terminals will over time loosen as the cable gives in to the pressure from the knob, tighten the connections in between.

## Keep the looks

Clean the lacquered and cloth surfaces using a clean damp cloth with a light detergent or a soft brush.

Be careful not to deform the diaphragms of the drive units while cleaning. Bending or deforming a diaphragm will compromise the performance and durability of your speaker.

## Be a master of sound trimming.

-get more information from [www.gamutaudio.com](http://www.gamutaudio.com)

Want to know about all the other GamuT products? Check out our website and be inspired.

	Phi3	Phi5	Phi 7	Phi LCR
System	2-way	3 way	3 way	2 way
Bass/midrange driver units	1 x 150 mm	2 x 150 mm 1 x 150 mm	4 x 150 mm 1 x 150 mm	2 x 150 mm
Tweeter	25 mm dual concentric ringradiator	25 mm dual concentric ringradiator	25 mm dual concentric ringradiator	25 mm dual concentric ringradiator
Frequency response +/- 3dB	58-40.000 Hz	42-40.000 Hz	40-40.000 Hz	58-40.000 Hz
Impedance	4	4	4	4
Sensitivity	86,5 dB	88,5dB	90,5dB	86,5dB
Size (WxHxD)	170 x 330 x 240	170 x 1050 x 270	170 x 1200x 310	170 x 510 x 240
Vægt	7 kg	19 kg	27 kg	10 kg