

PHASE  **TECH™**

Phase Coherent (PC) Series

OWNER'S MANUAL

I would like to take this opportunity to thank you for investing in Phase-Tech Speaker Systems. The confidence you have expressed in choosing Phase-Technology will be rewarded by many years of listening enjoyment.

Backed by over 30 years of innovative design and manufacturing experience, Phase-Tech's PC series represents the latest in "state-of-the-art" loudspeaker designs. These speakers are designed to handle and accurately reproduce today's more dynamic digital source materials.

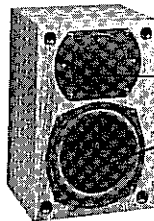
All Phase-Tech PC series speakers utilize a unique phase coherent design. Our patented soft-dome tweeters and solid flat RPFTM drivers when passed through our sophisticated crossover networks create a highly accurate, realistic, three-dimensional stereo image. Close your eyes and see the musicians.

Phase Technology, through the audio specialty dealer from whom you purchased our product, stands ready to satisfy any questions or needs that might arise today or in the future. Feel free to contact us. Please take a few moments to read the enclosed information which will insure proper setup and care of our products, and thereby maximize your listening experience.

Cordially,

William Hecht

Model _____ Serial # _____ Date Purchased _____



1" Soft Dome*
Tweeter
5 1/4" solid flat
RPFTM Piston**
Woofer

PC 40

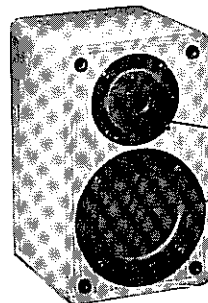
2-Way, 2-Speaker System

Frequency Range: 70 Hz-
20 kHz

**Recommended
Amplifier Power:** 15-80 Watts
Sensitivity: 89 dB SPL (2.83 V.,
1 meter)

Impedance: 4 ohms
Crossover Frequency: 1,500 Hz
Speaker Protection: 2 Amp Fuse
Dimensions: 6 1/2"Wx9 3/4"Hx
5 1/4"D

Finish: Genuine Walnut, Dark
Oak and Light Oak
Veneers



1" Soft Dome*
Tweeter
6" Solid Flat
RPFTM Piston**
Woofer

PC 60

2-Way, 2-Speaker System

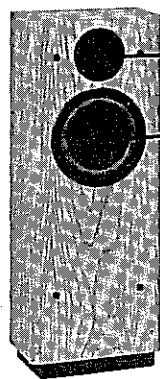
Frequency Range: 40-20,000 Hz

**Recommended
Amplifier Power:** 15-80 Watts
Sensitivity: 87 dB SPL (2.83 V.
1 meter)

Impedance: 4 ohms
Crossover Frequency: 1,200 Hz
Speaker Protection: 2.5 Amp
Fuse

Dimensions: 8"Wx13 1/4"Hx8"
Finish: Genuine Walnut, Dark
Oak and Light Oak
Solids and Veneers

FULL RANGE SPEAKER SYSTEMS



1" Soft Dome*
Tweeter

8" Solid Flat
RPFM[™] Piston**
Woofer

PC 600_{HO}

Frequency Range: 35-20,000 Hz

Recommended

Amplifier Power: 25-125 Watts

Sensitivity: 91 dB SPL (2.83 V, 1 meter)

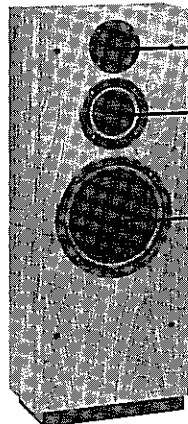
Impedance: 4 ohms

Crossover Frequency: 1,400 Hz

Speaker Protection Circuit: 2.5 Amp Fuse

Dimensions: 12"W x 31¼"H x 8½"D

Finish: Genuine Walnut and Dark Oak Veneers



1" Soft Dome*
Tweeter

5¼" Solid Flat
RPFM[™] Piston**
Midrange

10" Solid Flat
RPFM[™] Piston**
Woofer

PC 800_{HO}

Frequency Range: 30-20,000 Hz

Recommended

Amplifier Power: 25-150 Watts

Sensitivity: 91 dB SPL (2.83 V, 1 meter)

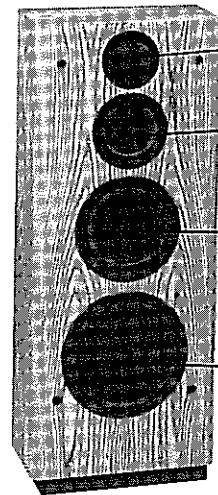
Impedance: 4 ohms

Crossover Frequency: 200 Hz, 2000 Hz

Speaker Protection: 3 Amp Fuse

Dimensions: 14½"W x 34¾"H x 8½"D

Finish: Genuine Walnut and Dark Oak Veneers



1" Soft Dome*
Tweeter

5¼" Solid Flat
RPFM[™] Piston**
Midrange

8" Solid Flat
RPFM[™] Piston**
Woofer

10" RPFM[™] Solid
Piston**

PC 1000_{HO}

Frequency Range: 25-20,000 Hz

Recommended

Amplifier Power: 25-200 Watts

Sensitivity: 93 dB SPL (2.83 V, 1 meter)

Impedance: 4 ohms

Crossover Frequencies: 70 Hz, 200 Hz, 2000 Hz

Speaker Protection: 3 Amp Fuse

Dimensions: 15½"W x 38"H x 8½"D

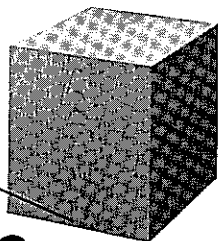
Finish: Genuine Walnut and Dark Oak Veneers

* U.S. Patent No. 3328537

** U.S. Patent No. 4566178

SUB WOOFER MODULE

8" bottom firing
Solid Flat RPF™
Piston** Woofer with
1½" long throw
dual voice coil and
25 oz. magnet.

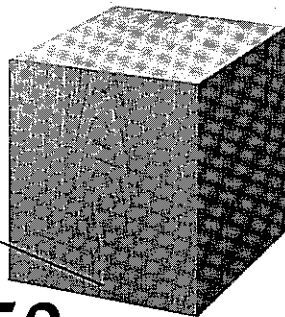


PC 30

Frequency Range: 35-150 Hz
**Recommended
Amplifier Power:** 15-150 Watts
Sensitivity: 89 dB
Impedance: 4 ohms
Crossover Frequency: 150 Hz
Dimensions: 11"Wx12"Hx13"D
Finish: Genuine Walnut, Dark Oak
and Light Oak Veneers

NOTE: This bass-enhancing module was designed for use with the PC 40 or any pair of speakers with an efficiency of 89 dB (1W, 1 meter) or less.

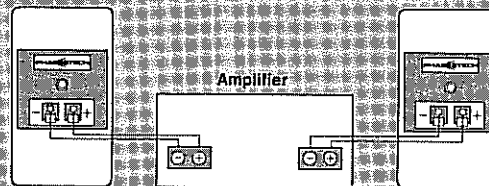
10" bottom firing
Solid Flat Piston**
Woofer with 2"
dual voice coil and
25 oz. magnet.



PC 50

Frequency Range: 30-150 Hz
**Recommended
Amplifier Power:** 25-200 Watts
Sensitivity: 87 dB SPL (1W, 1 meter)
Impedance: 8 ohms
Crossover Frequency: 150 Hz
Dimensions: 13"Wx14"Hx15"D
Finish: Genuine Walnut, Dark Oak
and Light Oak Veneers

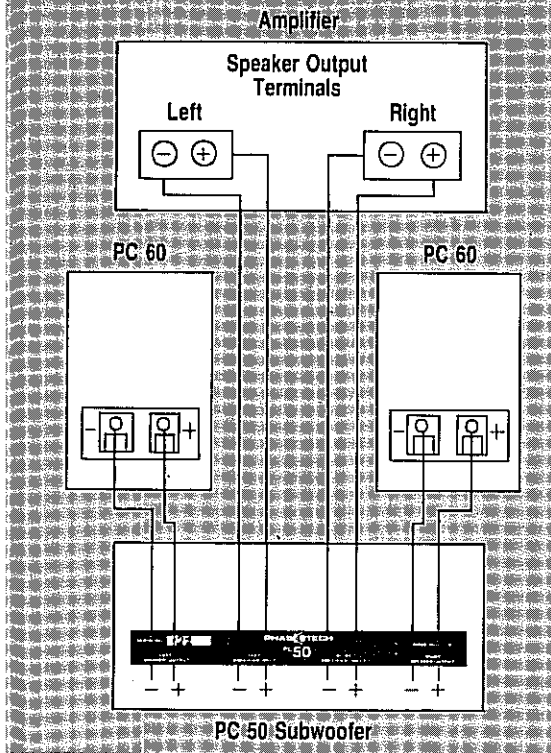
NOTE: This bass-enhancing module was designed for use with the PC 60 or any pair of speakers with an efficiency of 87 dB (1W, 1 meter) or less.



CONNECTING THE SPEAKERS

Full Range

The output connections of amplifiers or receivers are marked to identify polarity. Connect the speakers to the speaker output terminals of the amplifier, making certain that the black (-) terminal on the rear of the left and right speakers is connected to the amplifier's corresponding ground terminals (generally indicated by black color, COMMON, COM, or GND). Then connect the red (+) corresponding terminals of each speaker to the corresponding terminals of the amplifier (generally indicated by red color, (+) or OUTPUT).



Connecting the PC 40 and PC 50 Subwoofer Systems:

Connect the subwoofer "amplifier input" terminals to the "speaker output" terminals of the amplifier. Polarity indications must correspond (+ to +, - to -). Then, connect the right and left full range speakers to the

3-Piece Phase Coherent Speaker System

The bass module can be located on the floor anywhere in the "sound field" of the full range modules. Placement in the sound field is not critical. Low frequency bass energy is omnidirectional. Therefore, the subwoofer can be located between the full range speakers, on one side, next to a chair or used as an end table, with glass placed on the top. Experiment with room placement. Location of the subwoofer will affect the output of bass frequencies. If the bass module is placed on heavy carpeting, we suggest using the feet extenders included with the system. Phase Technology suggests positioning the full-range speakers as close to ear level as possible. They can be placed on the optional stands, a shelf, bookcase, on a wall, etc... They should be approximately 6 to 8 feet apart and pointed toward the listening area.

SPEAKER PLACEMENT

2-Piece Phase Coherent Full Range Speaker System

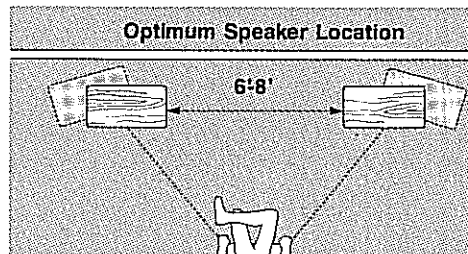
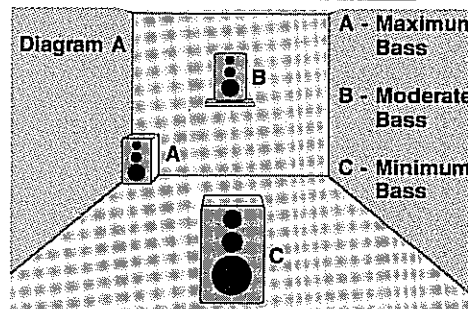
The location of your speakers within a room will affect the balance of bass and higher frequencies. There may be an audible increase in bass as the speakers are placed closer to the periphery of the room.

(See diagram A.)

Experiment with speaker locations to find the most pleasing sound. Routine tonal adjustments may then be performed with the preamplifier or receiver tone controls.

The following hints can be used as a guide:

1. Place speakers 6 to 8 feet apart. If the room necessitates more space between speakers, compensate by slightly angling the speakers toward the center of room. (See diagram B.)
2. Place the speakers opposite seating arrangement.
3. Optional Phase Technology real wood veneer speaker stands are available for each model.



WIRING

PHASE-TECH recommends 18 gauge wire for distances up to 15 feet, and 16 gauge for up to 50 feet. Most 2-conductor wire is coded to facilitate identification of the wire leads at both ends. (Look for two wire colors or a ridge in one-half of the insulation.) To be "in phase," each speaker must be connected to its amplifier channel in the same way.

To obtain maximum performance from your system we recommend the use of "a premium grade wire" which will offer subtle but noticeable sonic improvements. Please consult your audio specialty retailer for his specific recommendations and advice.

AMPLIFIER

To assure low distortion on program peaks, carefully follow the recommended minimum and maximum amplifier power as specified on page 2 of this book. Amplifiers with power ratings that exceed the maximum recommended power should be used with caution.

SPEAKER PROTECTION

All PHASE-TECH speakers are protected by a fuse (except PC 50 and 30), located on the back of your speaker system. The fuse protects the system from damage due to excessive input, an abnormal signal or a malfunctioning amplifier. If sound from the speaker system is interrupted while in use:

1. Turn off amplifier.
2. Check to be sure all equipment in your system is functioning properly.
3. Check fuse, and replace with recommended value.

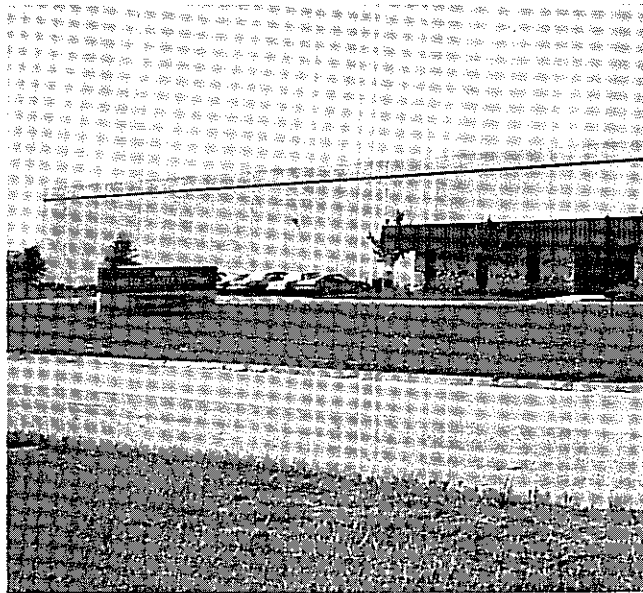
IMPEDANCE

PHASE-TECH Speaker Systems are compatible with any amplifier or receiver having a specified load impedance between 4 and 16 ohms. Check page 2 for the impedance specifications of your speakers and refer to your amplifier's instructions.

CARE OF ENCLOSURE

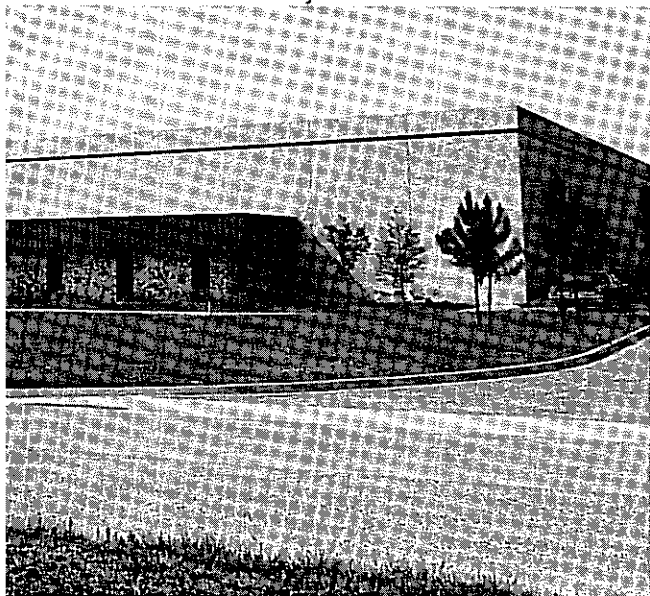
The enclosure of your PHASE-TECH Speaker System is rigidly constructed of genuine oak or walnut solids and veneers.

To ensure the long lasting beauty of the cabinet, Phase-Tech recommends the use of a fine furniture polish or wax.



SERVICE

In the unlikely event your PHASE-TECH Speakers ever require service, contact your local authorized dealer from whom you purchased the product. He has the necessary factory authorized parts as well as the trained technicians to quickly restore your speaker to its original performance specifications. Please note that repair of your PHASE-TECH Speakers by an unauthorized service agency will void the warranty.



New Phase Technology 60,000 sq. ft. Manufacturing Facility

CONSUMER PRECAUTIONS

1. Always turn the volume control down to a low level when using a compact disc. Compact discs, because of their wide dynamic range, (up to 90db) can cause an amplifier to play very loud even though the volume control level is low. Playing a compact disc with too high a volume level can cause your amplifier to clip, possibly causing damage to your speakers.
2. Always turn the volume down to a minimum before "cueing" a record on your turntable. A very sharp high power transient is created when a tonearm is accidentally dropped onto a record. If the amplifier volume is high, serious damage to your speaker system may occur.
3. Always turn the amplifier off before connecting or disconnecting any cables.
4. Lower the amplifier volume before changing the mode/source switch (for example, FM to Phono). Never change the input source at high volume levels.
5. Switch on the LOW or SUBSONIC filter whenever playing a record. "Subsonic" energy can be produced by warped playing surfaces at frequencies below the audible range. These frequencies may be amplified by your amplifier and thus drive unnecessary power into your speakers.
6. Reduce the volume as soon as distortion is noted. This could mean your amplifier is clipping.
7. If you suspect that one channel of your amplifier has failed, have your equipment checked immediately by a qualified technician. Damage may occur to both speaker systems if you delay or "switch" from one channel to another to verify the trouble source.

The craftsmen at Phase Technology Corporation have put over a quarter of a century of experience into your new PHASE-TECH Speaker Systems. We wish you many years of listening pleasure.



PHASE  **TECH**™

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