SM

Studio Monitor (SM) Series

Models SM-165, SM-185, SM-195, SM-205, SM-215, SM-225, SM-255

Owner's Manual

Part #333292-001

Infinity®

Declaration of Conformity

CE

We, Infinity Systems A/S
Kongevejen 194B
DK-3460 Birkerød
DENMARK

declare in own responsibility, that the products described in this owner's manual are in compliance with technical standards:

EN 50 081-1/1992

EN 50 082-1/3.1995

Steen Michaelsen
Infinity Systems A/S
Birkerød. DENMARK. 2/98

Unpacking The Speakers

Thank you for purchasing Infinity loudspeakers. We know you will enjoy their performance. Please inspect your speakers carefully after unpacking. If they have been damaged in transit, call your dealer or the trucking firm that delivered them for instructions on how to file a claim.

Positioning For Audio

Proper positioning of the speakers within the listening room is of primary importance in order to achieve the best possible sound. Room reflections, furniture placement, heavy draperies, window reflections, and so on can influence sonic quality, balance and the stereo image. It is essential to experiment with different locations to determine which placement offers the best overall balance and imaging.

For best stereo effect, the speakers should be placed at least 7-10 feet apart. At times, angling the speakers slightly inward toward the listening position will add to overall spaciousness and deliver a more realistic soundstage. Try to avoid placing floorstanding speakers directly against the wall, or in corners of the room, because this may sacrifice depth of image and create excessive boominess. If you must place the speakers higher than ear level, tilt them downward to direct the tweeters toward your ears.

For optimum performance, bookshelf speakers should be placed either on a bookshelf, a pedestal or wall-mounted.

Positioning For Home Theater

There are a number of ways to position the speakers for proper playback in a home theater installation. If the speakers are positioned properly for home theater they will be suitable for audio and video playback.

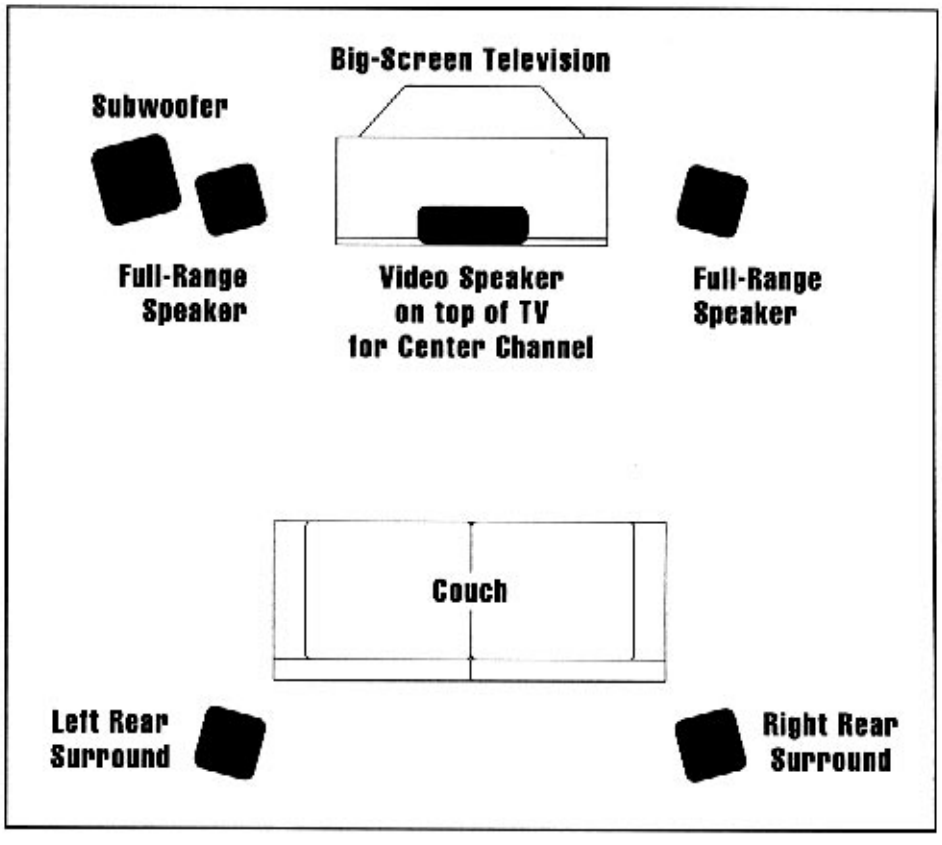
The left and right front speakers should be placed alongside the TV monitor; however, they should be at least 24" away to prevent color smearing. The Video Speaker can be placed on top of the TV monitor (since it is specially shielded to prevent stray magnetic radiation from interfering with the picture) or placed on the floor below the TV, tilted upward toward the listener for maximum sonic impact.

The subwoofer's primary location should be on the same line with the left or right front speaker. If bass response is not adequately deep, then the subwoofer may be moved closer to a wall, or for maximum bass, moved into a corner.

The rear speakers can be placed alongside, or behind, the listener's position. Final placement will depend on room acoustics, availability of space and listener's preference.

Many listeners do not like having a sound source coming directly from behind. Placing the rear speakers on the side and slightly to the rear may provide a more balanced surround sound field.

Study this drawing to help determine the placement that best suits your needs.



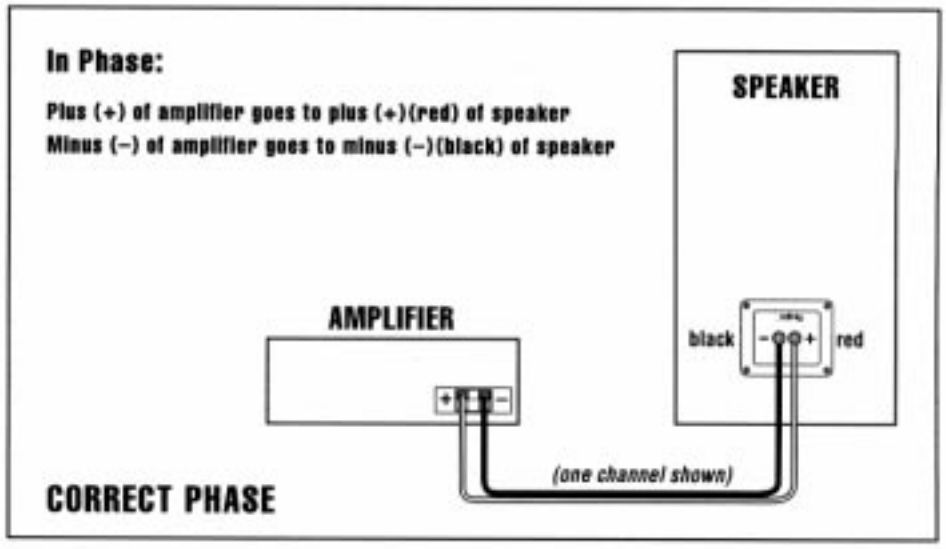
Setting The Controls On The Passive Crossover

The SM-195, 205, 215, 225 and 255 employ a tweeter level control. This control is located on the front of the speaker to the right of the tweeter. It should be set to match room acoustics by listening to various types of program material. Generally, once set, the controls will remain at the chosen settings until the speakers are relocated.

Connecting The System

IMPORTANT: Make sure all equipment is turned off before making any connections.

Connect your power amplifier to your speakers by using heavy gauge (#16, 14 or heavier) wire with polarity coding. The side of the wire with a ridge or other coding should be considered plus (+). The speakers must be connected in phase (both woofers always moving in the same direction at the same time) and every precaution must be taken to insure proper in-phase hookup (see diagram). If the speakers are out of phase (one speaker moving outward while the other moves inward) the result will be cancellation of bass frequencies and a floating effect preventing instruments and vocalists from stabilizing in their proper perspective.



Setting The Audio System Controls

Always turn down the volume of your system completely when changing a record or switching inputs from phono or CD to FM, etc. Excessively loud transients, which can result from a dropped stylus on a record or from improperly designed switches, can result in severe damage to your speakers.

Furthermore, when changing wires, pulling plugs, etc., always turn off all the equipment to prevent transients from entering the speaker. Use caution, and your speaker will repay you with many years of trouble-free service.

Never operate your audio system with the equalizer, tone and loudness controls set to maximum boost. This will place undue strain on the amplifier and could also result in damage to the speakers.

The position of the volume control setting is of little consequence in judging the amount of power a system generates. Loudness is a function of audio gain, which in itself is unimportant to the user. The only important consideration is the loudness level at which the system can be played, regardless of where the volume control is set.

Acoustic Feedback

If, after connecting your system, you find the bass response to be boomy (or lacking in tightness and solidity) or if the bass driver cones produce excessive movement, the cause can usually be attributed to acoustic feedback – vibrations from the speakers reaching a turntable and tone arm, creating a resonance. In turn, this vibration is fed back to the electronics and speaker. Since Studio Monitor Series speakers extend to very low frequencies, isolating the turntable from vibrations becomes an important procedure.

The turntable should be placed on a heavy, solid support located as far from the speaker as possible. At times, using a shock-mounted base helps reduce the vibration that causes feedback. If the problem still exists, contact your dealer for assistance.

NOTE: CD players are also susceptible to acoustic feedback and should be placed on solid supports to isolate them acoustically. Another method to isolate the CD player is to place it on four isolation feet, which are available at your local dealer.

Care Of Your Speaker System

Your Infinity speaker cabinets are covered with a high-quality vinyl which requires very little maintenance. Dust the enclosures with a damp cloth, or a name-brand furniture polish. The grilles may be cleaned by using a vacuum cleaner on the low power setting.

In The Event Of Trouble

Note that you can use your amplifier's two channels of information for simple trouble-shooting. If the sound quality is distorted, listen to each speaker separately to check if the fault is present in both. If it is, then the trouble is likely to be elsewhere in your system. If the fault is in one channel only, reverse the outputs from your amplifier to the speakers (right-to-left and left-to-right). If the distortion moves to the other channel, the fault is not in the speaker. (This technique may also be used to locate a fault between the signal source and preamp/receiver and/or between preamp and power amp(s).)

If you have been unsuccessful in locating the specific source of trouble (or if you have located it, but have been unable to correct it), make inquiries in the following order:

- Consult the Authorized Infinity Dealer where you purchased the system. Infinity Dealers are audio specialists and can be of great assistance.
- Get the name and address of the Authorized Infinity Service Facility nearest you by writing or calling Infinity at (800) 645-7484. **Please ask for Customer Service**. You may be instructed to take or send the problem part to a service facility for service under the terms of the warranty.

NOTE: Do not ship any parts or whole speakers for service without prior approval ("RETURN AUTHORIZATION"), and do not ship without enclosing a copy of your original bill of sale.

If there is no Authorized Service Facility near you, or in the unlikely event that the service facility cannot solve the problem:

- Write, phone, or FAX:

  Infinity Systems, Inc.
  CUSTOMER SERVICE
  250 Crossways Park Drive, Woodbury, NY 11797
  PHONE (800) 553-3332 / FAX (516) 682-3516

Describe the difficulty as specifically as possible. The Service Department will then advise you as to the action you should take.

SPECIFICATIONS

SM-165

PERFORMANCE DATA

Power Rating:	10 ~ 100 Watts
Frequency Response:	76 ~ 20,000Hz ± 3dB
Crossover Frequency:	4kHz
Sensitivity:	95dB spl @ 2.83V @ 1 Meter
Impedance:	Compatible with 4 to 8Ω

DRIVE UNITS

Woofer:	6 1/2" Polypropylene-Coated Woofer
Tweeter:	3/4" High-Output Fastglass™ Fiberglass Dome

DIMENSIONS*

(Width, Height, Depth)	8" x 13 1/4" x 7 1/2"

SM-185

PERFORMANCE DATA

Power Rating:	10 ~ 125 Watts
Frequency Response:	70 ~ 20,000Hz ± 3dB
Crossover Frequency:	3kHz
Sensitivity:	98dB spl @ 2.83V @ 1 Meter
Impedance:	Compatible with 4 to 8Ω

DRIVE UNITS

Woofer:	8" Polypropylene-Coated Woofer
Tweeter:	1" High-Output Fastglass™ Fiberglass Dome

DIMENSIONS*

(Width, Height, Depth)	11 3/4" x 18" x 10 1/2"

SPECIFICATIONS

SM-195

PERFORMANCE DATA

Power Rating:	10 ~ 150 Watts
Frequency Response:	68 ~ 20,000Hz ± 3dB
Crossover Frequency:	600Hz / 2.5kHz
Sensitivity:	99dB spl @ 2.83V @ 1 Meter
Impedance:	Compatible with 4 to 8Ω

DRIVE UNITS

Woofer:	8" Nylon-Laminated w/Cast-Alloy Basket
Midrange:	5 ¼" Nylon-Laminated w/Cast-Alloy Basket
Tweeter:	1" High-Output Fastglass™ Fiberglass Dome

DIMENSIONS*

(Width, Height, Depth)	11⅜" x 24⅜" x 9⅜"

SM-205

PERFORMANCE DATA

Power Rating:	10 ~ 150 Watts
Frequency Response:	65 ~ 20,000Hz ± 3dB
Crossover Frequency:	600Hz / 2.5kHz
Sensitivity:	100dB spl @ 2.83V @ 1 Meter
Impedance:	Compatible with 4 to 8Ω

DRIVE UNITS

Woofer:	8" Nylon-Laminated w/Cast-Alloy Basket
Midrange:	5 ¼" Nylon-Laminated w/Cast-Alloy Basket
Tweeter:	1" High-Output Fastglass™ Fiberglass Dome

DIMENSIONS*

(Width, Height, Depth)	11⅜" x 29⅜" x 9⅜"

SPECIFICATIONS

SM-215

PERFORMANCE DATA

Power Rating:	10 – 175 Watts
Frequency Response:	58 – 20,000Hz ± 3dB
Crossover Frequency:	450Hz / 2.5kHz
Sensitivity:	100dB spl @ 2.83V @ 1 Meter
Impedance:	Compatible with 4 to 8Ω

DRIVE UNITS

Woofer:	10" Nylon-Laminated w/Cast-Alloy Basket
Midrange:	5 1/4" Nylon-Laminated w/Cast-Alloy Basket
Tweeter:	1" High-Output Fastglass™ Fiberglass Dome

DIMENSIONS*

(Width, Height, Depth)	13 1/4" x 32 1/2" x 12 1/2"

SM-225

PERFORMANCE DATA

Power Rating:	10 – 200 Watts
Frequency Response:	48 – 20,000Hz ± 3dB
Crossover Frequency:	450Hz / 2.5kHz
Sensitivity:	101dB spl @ 2.83V @ 1 Meter
Impedance:	Compatible with 4 to 8Ω

DRIVE UNITS

Woofer:	12" Nylon-Laminated w/Cast-Alloy Basket
Midrange:	5 1/4" Nylon-Laminated w/Cast-Alloy Basket
Tweeter:	1" High-Output Fastglass™ Fiberglass Dome

DIMENSIONS*

(Width, Height, Depth)	14 3/4" x 37" x 14 3/8"

SM-255

PERFORMANCE DATA

Power Rating:	10 – 300 Watts
Frequency Response:	42 – 20,000Hz ± 3dB
Crossover Frequency:	400Hz / 2.5kHz
Sensitivity:	103dB spl @ 2.83V @ 1 Meter
Impedance:	Compatible with 4 to 8Ω

DRIVE UNITS

Woofer:	15" Nylon-Laminated w/Cast-Alloy Basket
Midrange:	Two 5 1/4" Nylon-Laminated w/Cast-Alloy Baskets
Tweeter:	1" High-Output Fastglass™ Fiberglass Dome

DIMENSIONS*

(Width, Height, Depth)	17 3/4" x 42 1/2" x 14 3/8"

* Cabinet depth dimensions are with grille removed.