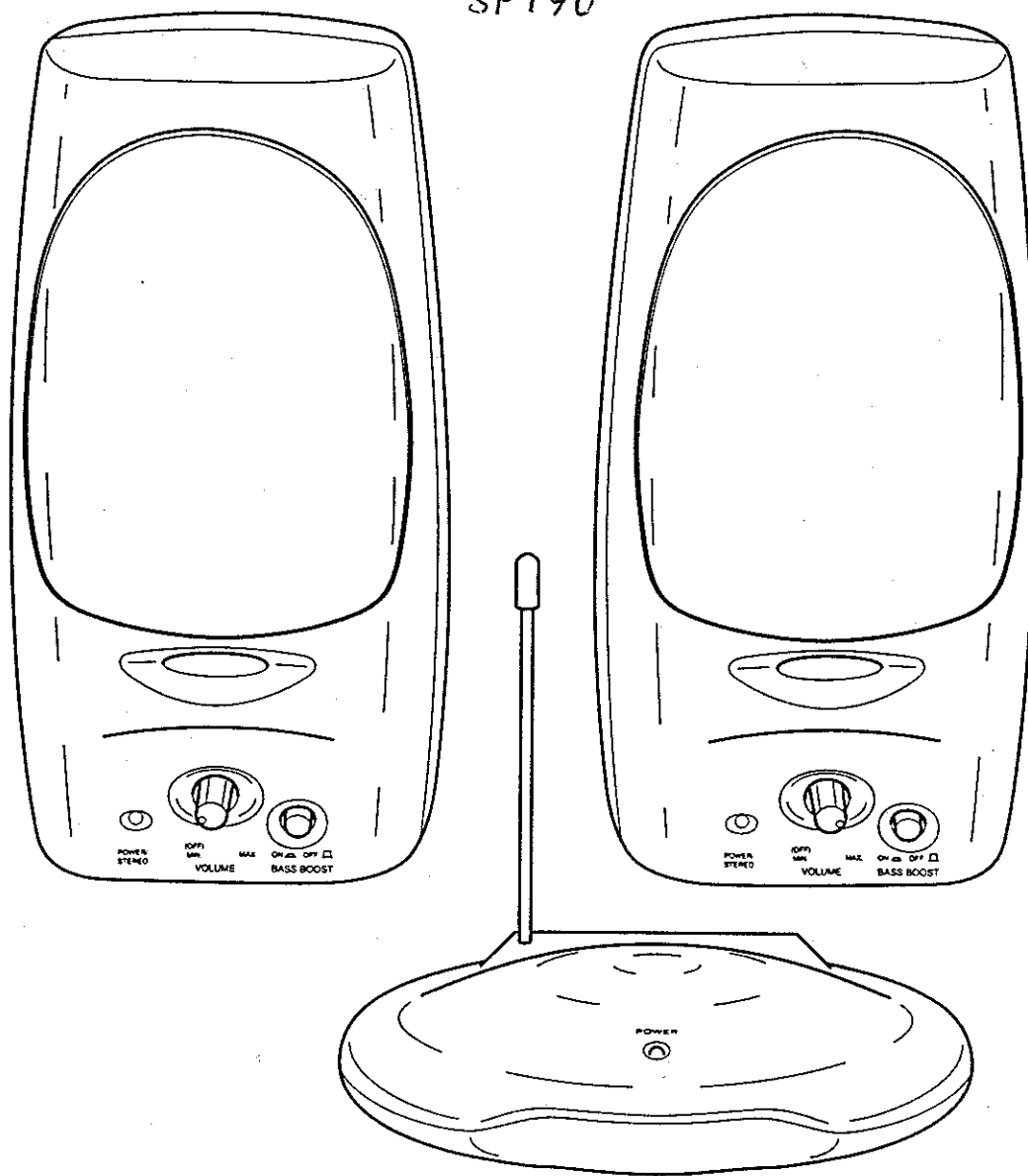


SPEAKER

SP190

Stereo Radio Frequency Loudspeaker Set

SP190



User Manual

on purchasing this modern stereo radio frequency loudspeaker set.

They are particularly suitable for connecting to computers, CD players and tape decks, and they can also be connected to TVs or audio systems. We hope you have much pleasure from using them.

How they work:

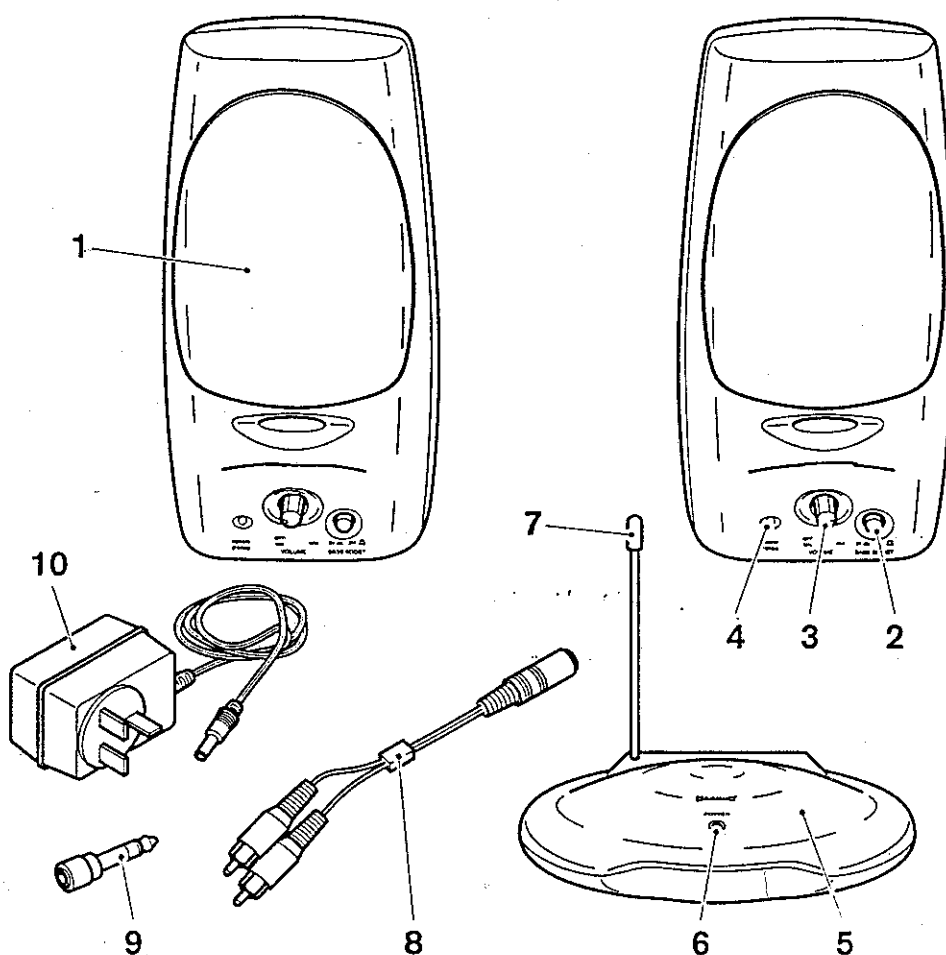
The transmitting station is connected to the sound source, such as CD player, tape deck or computer etc. The transmitting station sends the sound in the form of radio waves to the speakers. These in turn convert them into sound.

The radio waves from the transmitting station allow music and speech to be sent to the speakers without a cable connection. This allows the speakers to be placed up to 50 metres from the transmitting station.



Please read the safety information carefully. To prevent accidental injury or damage, take care to use the loudspeakers for the intended purpose only and as described in these instructions. Keep these instructions for future reference.

Components



- 1 Speakers
- 2 Bass boost
- 3 Volume; on/off
- 4 Status lamp: on (red); optimum signal reception (green)
- 5 Transmitting station
- 6 Status lamp on/off
- 7 Aerial
- 8 Splitter cable
- 9 6.3 mm adaptor plug
- 10 Power adaptor
(1 x 200 mA for transmitting station;
2 x 450 mA for the speakers)

Safety information

Follow the instructions for the equipment carefully in all respect

Danger

- Do not use the equipment if it is visibly damaged.
- Connect the power adaptor only to a correctly installed 110V / 60 Hz socket.
- Keep the power cords away from sharp edges or sources of heat (oven rings etc.). Arrange the power cords so that they do not constitute a trip hazard.
- Do not use the equipment if there is visible damage to the power cords.
- Under no circumstances must fluids or condensing moisture penetrate the equipment. Make sure that water may neither drip on to the equipment nor be sprayed on to it. Do not place containers such as vases or drinking glasses on the equipment. Do not use the equipment in rooms where there is high humidity, such as bathrooms. Moisture can cause a risk of electric shock or fire.
- Do not unscrew the covers of the equipment. Only a qualified service engineer should undertake any repairs. Unskilled repairs can cause serious danger to the user.

Caution

- The equipment is for use for private purposes only.
- Use only the power adaptor supplied, or one of identical technical rating, otherwise the equipment can be damaged.
- We advise that during thunderstorms the power adaptor should be disconnected from the mains, since during storms equipment connected to the electrical mains can be damaged.
- Unplug the equipment when not in use, since all power adaptors draw a certain continuous current.
- Do not connect the transmitting station to the speaker outputs of an amplifier, since this can damage it. The transmitting station should be connected only to the headphone or audio output sockets.
- Place the speakers out of reach of small children.
- Do not place the equipment near to air conditioners, heaters, or radio equipment.
- Avoid heat, extreme cold, vibration or other mechanical stress.
- Naked flames such as candles must not be placed on the equipment.
- So that the equipment is sufficiently well ventilated, please allow a minimum clearance of 20 cm between the equipment and other objects such as books, curtains etc. Also do not cover the equipment with papers or cloths etc.

Note:

- The equipment has non-slip rubber feet. Since it may be placed on a variety of different surfaces, which may have been polished with various agents, it is possible that some of these substances may have an effect on the rubber and soften it. If necessary, lay a non-slip mat under the feet.

Safety information

Batteries

- Do be sure to use only the recommended types of batteries.
- Check the contacts on the equipment and the batteries for cleanliness. If necessary, clean them with a damp cloth, then dry them. The batteries must be installed with the correct polarity (+ and -).
- Do not permit children to change batteries unsupervised by an adult. Small batteries must be kept out of reach of children.
- Do not mix old and new batteries or different types of batteries (e.g. different electrochemical systems, different types or brands).
- Do not attempt to resuscitate used batteries by warming them, by charging them or by any other means.
- Do not subject batteries to short circuits.
- Do not heat batteries or throw them on to a fire.
- Do not take batteries apart.
- Do check that the equipment is switched off after use.
- Remove batteries from the equipment if it will not be used for an extended period.
- Store batteries in a cool dry place away from direct sunlight.

Environmental protection:

- Do not dispose of batteries in household rubbish
- All consumers should conform to legal obligations by disposing of batteries and rechargeable batteries, whether or not they contain poisonous materials, in their local authority collection point or trade disposal scheme, so that they can be disposed of without damaging the environment.
- Only dispose of batteries and rechargeable batteries in the fully discharged state.
- If the equipment is no longer usable, check with the local waste disposal authorities about appropriate methods of disposal.

Preparation

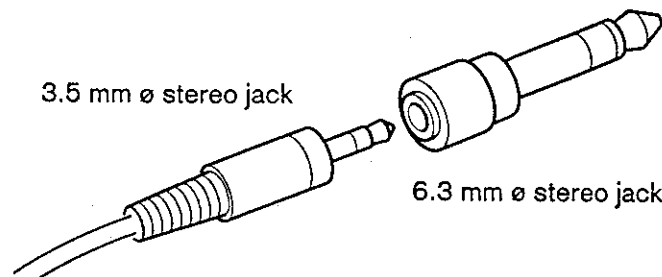
Before connecting to the power supply, all other connections should be made.

Connecting the transmitting station

1. Choose a suitable position for the transmitting station:

The position should not be adjacent to a TV, radio, cordless phone, fluorescent lamp or low energy light bulb, since these can cause interference.

2. Fit the flexible plastic sleeve over the cable aerial.
3. Plug the cable aerial (7) into the socket on the transmitting station, making sure it is fully home.
4. Switch the audio device (radio, CD player etc.) off.
5. Plug the jack plug on the audio cable into the headphone socket or into an audio output socket:



- If the 6.3 mm adaptor (9) fits the socket on the device, plug it in. If not, remove it.
- If necessary, use the splitter cable (8) supplied.
- Consult the user manual for the device in question.

Caution

Do not plug the transmitting station into the speaker output socket of an amplifier or radio, this can damage it.

Speaker batteries

The speakers can also be powered with batteries. They require 6 x type AA batteries each. Since however the current consumption is very high, this is recommended only in exceptional circumstances:

1. Push the battery compartment cover to one side.
2. Insert 6 batteries or rechargeable batteries into each speaker, taking care to observe the polarities shown within the battery compartment.
3. Close the battery compartment.

Power consumption

The transmitting station (5) and the power adaptor (10) will be warm when the power is connected. This is normal, it is not a fault.

The transmitting station should be connected to the power supply using the smaller (200 mA) adaptor.

1. Plug the ends of the power adaptor cable into the connection sockets provided at the rear of the transmitting station and the rear of the speakers.
2. Plug the power adaptor into a 110 V 50 Hz mains socket.

Switching on and checking

1. Turn the speaker (1) VOLUME control (3) anticlockwise, to the minimum setting.
2. Switch on the device that is linked to the transmitting station.
 - If the transmitting station is connected to an audio output, the volume control of the audio device should not be changed.
 - If the transmitting station is connected to the headphone socket set the audio device to normal volume for playing in a room. Most devices disable the speakers when the headphone socket is in use. In that case, remove the transmitting station jack plug temporarily from the audio system, so the volume control can be set.
3. As soon as the transmitting station is receiving a signal, it will automatically switch on and the red POWER status lamp (6) will illuminate. The transmitting station will switch itself off automatically if no signal has been received for about 2 minutes. The speakers will then start to buzz.
4. Switch the speakers (1) on by turning the VOLUME control (3) clockwise from "Min (OFF)" towards "Max".

The POWER / STEREO lamp (4) will illuminate:

Red, if the speakers are switched on but the signal from the transmitting station is not optimised;

Green, at the ideal setting; see point 6.
5. Adjust the volume using the VOLUME controls (3) to a comfortable level.
6. Turn the TUNING control at the rear of the speakers slowly to find the optimum setting for the transmitting station.
 - When the POWER/ STEREO lamp (4) changes to green, that signifies that reception is sufficient for stereo operation. The speakers will of course only operate in stereo mode if the source is delivering a stereo signal to the Transmitting station (5).
 - Adjust the orientation of the speakers as necessary to obtain better reception.
7. If the reception at the speakers from the transmitting station is not optimal, set the CHANNEL switch at the rear of the transmitting station to channel 1, 2 or 3, and try again by turning the TUNING control to receive the transmitting station.
8. To boost the bass, press the BASS BOOST button (2) in.

Switching off

1. The transmitting station will switch itself off automatically if no signal has been received for about 2 minutes. The speakers will then start to buzz.
2. Switch the speakers (1) off by turning the VOLUME control (3) anticlockwise towards "Min". It will click when it reaches "off".
3. Unplug the power adaptor from the power supply socket, since all adaptors consume a small amount of power even under no-load conditions.

Care of the speakers and transmitting station

Wipe the speakers and transmitting station with a dry lint-free cloth as necessary.

Faults / Remedies

The transmitting station does not switch on

- Check that the audio device is set to normal volume.

Buzzing

- If the speakers buzz and receive no signal, then either the transmitting station is switched off or the speaker is not set for optimal reception. Check that the Status lamp (6) on the Transmitting station (5) is illuminated. Adjust the speaker reception by turning the TUNING controls.
- If the sound volume from the audio device is very low, there may be a low buzzing noise at the speakers. In this case, turn the volume up on the audio device, and down on the speakers.

Whistling noises

The sound volumes from the headphone output may not be equalized. Interference such as whistles can occur if you connect the transmitting station to a TV.

- Increase the volume on the TV and reduce it at the speakers, until the whistling stops. When connecting to a TV, remember that some devices have a separate volume control for the headphones.

Other faults in reception

TVs, radios, cordless phones, computers or fluorescent lamps etc. can cause interference such as whistling:

- Move the transmitting station and / or speakers to different positions.
- Reception quality and range will reduce if there are walls of metal objects in line between the transmitting station and the speakers.

Technical Data



Transmitting station

System:	Stereo radio frequency transmission
Voltage supply:	Power adaptor Input - 120 V ~ 60 Hz Output - 19V 80 mA Centre pin negative
Transmission frequency:	900 MHz
Range:	max. 50 metres
Frequency range:	35 Hz - 7 kHz
Connection cable:	3,5 mm jack plug, stereo
Adaptor cable:	from 3,5 mm jack plug to 2 x cinch plugs

Speakers

Voltage supply:	Power adaptor Input - 110 V ~ 60 Hz Output - 12V 450 mA Centre pin negative
Alternatively:	batteries or rechargeable batteries 6 x 1.5 V AA mignon batteries type LR06 / R06 Or: 6 x 1.2 V AA mignon rechargeable batteries. Recommended minimum 700 mAh (Batteries or rechargeable batteries are not included)

Reception frequency:	900 MHz
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NOTE: Changes or modifications not expressly approved by the party responsible for compliance to the FCC Rules could void the users authority to operate this equipment