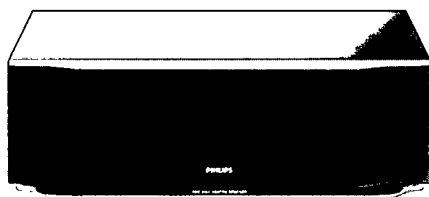


PHILIPS

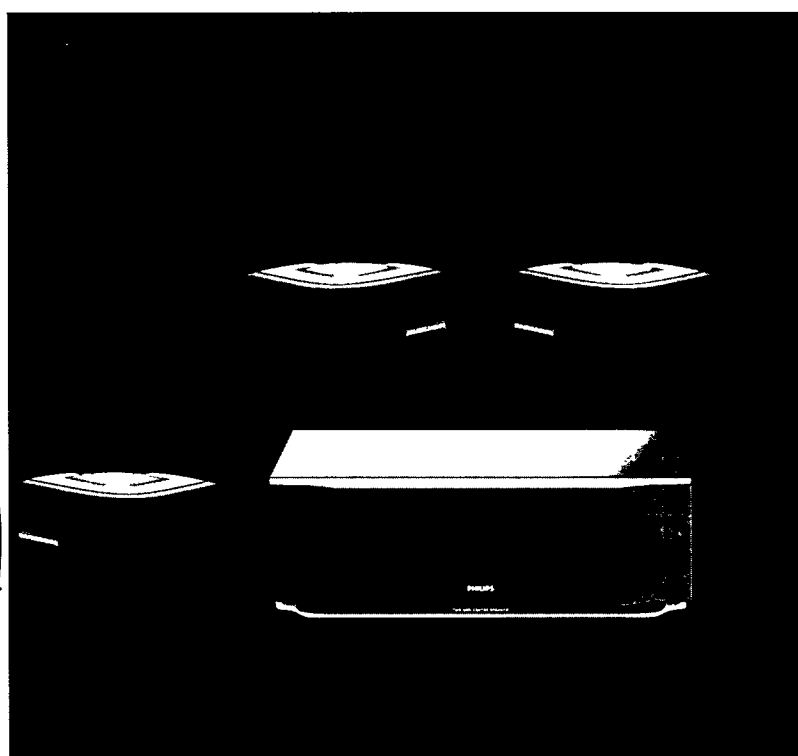
FB 602-603-605 Centre & Surround Sound Speakers



FB 602



FB



Guarantee and Service valid for Australia

The benefits given to the purchaser by this warranty are in addition to all other rights and remedies, which, under the Trade Practices Act or other Commonwealth or State law, the purchaser or owner has in respect of the product.

The Philips product carries the following warranties:

- C-series HiFi-systems 12 months.
- Compact Disc Players: 12 months.
- Home Audio Systems: 6 months.
- Clock radios, portable radios, cassette recorders, cassette players and radio recorders: 90 days.

Any defect in materials or workmanship occurring within the specified period from the date of delivery, will be rectified free of charge by the retailer from whom this product was purchased.

Note: Please retain your purchase docket to assist prompt service.

Conditions of this warranty

1. All claims for warranty service must be made to the retailer from whom this product was purchased. All transport charges incurred in connection with warranty service or replacement will be paid by the purchaser.
2. These warranties do not cover batteries and extend only to defects in materials or workmanship occurring under normal use of the product where operated in accordance with our instructions.

**Philips Consumer Products Division
Technology Park
Figtree Drive, Australia Centre
Homebush 2140
New South Wales**

Guarantee and Service for New Zealand

Thank-you for purchasing this quality Philips product. Philips New Zealand Ltd guarantees this product against defective components and faulty workmanship for a period of 12 months. Any defect in materials or workmanship occurring within 12 months from the date of purchase subject to the following conditions will be rectified free of charge by the retailer from whom this product was purchased.

Conditions

1. The product must have been purchased in New Zealand. As proof of purchase, retain the original sales docket indicating the date of purchase.
2. The guarantee applies only to faults caused by defective components, or faulty workmanship on the part of the manufacturer.
3. The guarantee does not cover failures caused by misuse, neglect, normal wear and tear, accidental breakage, use on the incorrect voltage, use contrary to operating instructions, or unauthorised modification to the product or repair by an unauthorised technician.
4. Reasonable evidence (in the form of a sales docket) must be supplied to indicate that the product was purchased no more than 12 months prior to the date of your claim.
5. In the event of a failure, Philips shall be under no liability for any injury, or any loss or damage caused to property or products other than the product under guarantee.

This guarantee does not prejudice your rights under common law and statute, and is in addition to the normal responsibilities of the retailer and Philips.

How to claim

Should your Philips product fail within the guarantee period, please return it to the retailer from whom it was purchased. In most cases the retailer will be able to satisfactorily repair or replace the product. However, should the retailer not be able to conclude the matter satisfactorily, or if you have other difficulties claiming under this guarantee, please contact

**The Guarantee Controller
Philips New Zealand Ltd.**

☐ P.O. Box 41.021

Auckland

☎ (09) 84 94 160

fax ☎ (09) 84 97 858

Garantia para Brasil

Este aparelho é garantido pela Philips do Brasil Ltda. e a Philips da Amazônia S.A. Indústria Eletrônica, por um período superior ao estabelecido por lei. Porém, para que a garantia tenha validade, é imprescindível que, além deste certificado, seja apresentada a nota fiscal de compra do produto.

1. Philips do Brasil Ltda. e Philips da Amazônia S.A. Indústria Eletrônica asseguram ao proprietário consumidor deste aparelho a garantia de 180 dias (90 dias legal mais 90 dias adicional) contados a partir da data de entrega do produto, conforme expresso na nota fiscal de compra que passa a fazer parte deste certificado.
2. Esta garantia perderá sua validade se:
 - A. O defeito apresentado for ocasionado por uso indevido ou em desacordo com o seu manual de instruções.
 - B. O produto for alterado, violado, ajustado ou consentado por pessoa não autorizada pela Philips.
 - C. O produto for ligado a fonte de energia (rede elétrica, pilhas, bateria, etc.) de características diferentes das recomendadas no manual de instruções e/ou no produto.
 - D. O número de série que identifica o produto estiver de alguma forma adulterado ou rasurado.
3. Estão excluídos desta garantia defeitos decorrentes do descumprimento do manual de instruções do produto, de casos fortuitos ou de força maior, bem como aqueles causados por agentes da natureza e acidentes.
4. Excluem-se igualmente desta garantia os defeitos decorrentes do uso dos produtos em serviços não doméstico/residencial regular ou em desacordo com o uso recomendado.
5. Nos municípios onde não exista oficina autorizada de serviço Philips, as despesas de transporte do aparelho e/ou do técnico autorizado correm por conta do sr. consumidor requerente do serviço.

**Philips do Brasil Ltda.
Philips da Amazônia S.A.
Indústria Eletrônica**

Para informações adicionais sobre o produto ou para eventual necessidade de utilização da rede de oficinas autorizadas, ligue para o centro de informação ao consumidor:

☎ 0800-123123

(discagem direta gratuita)

ou escreva para a caixa postal:

21462 cep 04698-970 São Paulo

Garantía para México

Este aparato está fabricado con materiales de alta calidad y ha sido cuidadosamente verificado. Philips, por lo tanto, da a usted una garantía de 12 meses a partir de su fecha de compra. La garantía ampara la reposición de las piezas defectuosas debidas a fallas en su montaje o en los materiales, incluyendo la mano de obra necesaria para su reemplazo en nuestras Sucursales o talleres autorizados. En caso de fallas en su aparato le rogamos se sirva poner en contacto con su distribuidor. Esta garantía no cubrirá las averías que resulten como consecuencia de una instalación incorrecta del aparato, manifiesto maltrato o uso inadecuado del mismo.

Philips se obliga a reparar y devolver a usted su aparato en un plazo no mayor de 30 días hábiles contados a partir de la fecha de haber ingresado su aparato a uno de nuestros talleres. Con la presentación de la factura o remisión de su aparato podrá hacer efectiva la garantía. Si usted tiene alguna duda o pregunta que no le pueda solucionar su distribuidor, por favor ponerse en contacto con:

**Oficinas Centrales de Servicio,
Av. Coyoacán No. 1051,
Col. del Valle,
03100 México, D.F.
☎ 5-75-20-22 o 5-75-01-00**

(AUS) Australia

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(NZ) New Zealand

Guarantee and service page 2

(BR) Brasil

Garantia página 2

(MEX) México

Garantía página 2

Es necesario que lea cuidadosamente su instructivo de manejo

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1. INTRODUCTION

2. TECHNICAL DATA

INTRODUCTION

We would like to thank you for purchasing these quality Philips Surround Sound Speakers. These speakers have been developed to produce superb sound for many years of listening pleasure.

Please read this manual carefully before connecting your speakers. You will find a number of useful tips for getting the best out of these high-quality speakers.

FB 602 - FB 603 - FB 605

This booklet contains the Instructions-for-Use for as well the centre speaker as the surround speakers. Please read only the applicable chapters.

FB 605

This package contains:

- Two Surround speakers with M5 screwthread for mounting on a floor stand or wall bracket.
- One Centre speaker, magnetically shielded for use near the TV set.
- Stand for the Centre speaker, to tilt the speaker at an angle of +15° or -15°.

FB 602

- One Centre speaker, magnetically shielded for use near the TV set.
- Stand for the Centre speaker, to set the speaker at an angle of +15° or -15°.

FB 603

- Two Surround speakers with M5 screwthread for mounting on a floor stand or wall bracket.

RECYCLING

- All redundant packaging material has been omitted. The packaging is easy separable into three mono-materials:
 - cardboard (box)
 - expandable polystyrene (buffer)
 - polyethylene (bags, protective foam sheet)
- Your set consists of materials which can be recycled if disassembled by a specialized company.
- Please observe the local regulations regarding the disposal of packing materials and old equipment.

The type plate can be found on the bottom or the back of the speaker

This product complies with the radio interference requirements of the European Community.

TECHNICAL DATA

(subject to modification)

Centre speaker

- Impedance 6 Ohms
- Frequency range 130 - 20 000 Hz
- Power handling capacity - continuous 50 Watts
- Power handling capacity - peak 100 Watts
- Sensitivity 89 dB (2.83 Volts / 1 Metre)
- Loudspeakers 2 x 4" woofer
18 mm Polydome tweeter
- Crossover frequency 4 500 Hz
- Connectors screw type, gold-plated
- Material cabinet 15 mm H2
- Material baffle 15 mm H2
- Finish grey foil
- Front fixed cloth
- Volume internal/external 7/7.5 litres
- Dimensions (w x h x d) 435 x 135 x 155 mm
- Weight approx 3.4 kg
- Supplied stand, angle +15° or -15°

Surround speakers

- System diffuse sound field
- Impedance 6 Ohms
- Frequency range 200 - 15 000 Hz
- Power handling capacity - continuous 30 Watts
- Power handling capacity - peak 60 Watts
- Sensitivity 89 dB (2.83 Volts / 1 Metre)
- Loudspeakers 2 x 5 1/4" full range
- Connectors screw type, gold-plated
- Material cabinet polystyrene
- Finish grey painted
- Front fixed cloth
- Volume internal/external 3.6/4.2 litres
- Dimensions (w x h x d) 213 x 150 x 213 mm
- Weight approx 1.6 kg each
- Stand connection M5 screwthread

AVAILABLE ACCESSORIES

- Two floor stands for the surround speakers.
- Two wall brackets for mounting the surround speakers to the wall.

3. ADJUSTMENTS

ADJUSTING THE RELATIVE SPEAKER BALANCE

After installing your Surround and/or Centre speakers, you will have to find a good sound balance between the Surround, the Centre and the Front speakers.

- On the amplifier or receiver, switch on the SURROUND mode.
- In the instruction booklet of the amplifier or receiver you will find a section describing how to adjust the sound level of the Centre and the Surround speakers.
- For the Surround speakers, it may be possible to adjust the delay time as well. This means that the surround sound is reproduced somewhat later than the sound of the front speakers, giving the sound impression of a larger room or even a hall.
- Adjust the sound level of the surround and centre speakers and also the delay time for the Surround speakers at your personal taste. The settings are kept by the amplifier or receiver.

POWER HANDLING

Each amplifier or receiver used at high power over a long period of time can produce distortions which may seriously damage your speakers.

Your ears will warn you, since the speakers will indicate overloading by giving severe distortion.

If this happens, reduce the volume and tone controls to a level where the sound is acceptable again.

Remember

Speakers are most often damaged when they are overdriven by under-powered amplifiers.

MAINTENANCE

- A chamois leather slightly moistened with water is sufficient for cleaning the speakers.
- Do not use cleaning agents containing alcohol, spirits, ammonia or abrasives.
- Do not leave the speakers for any length of time in direct sunlight or other places where high temperatures can occur, such as in the vicinity of heating apparatus.
- Do not expose the speakers to humidity or rain.

4. TROUBLESHOOTING

TROUBLESHOOTING

If a fault occurs, first check the points listed below before taking the speakers for repair

If you are unable to remedy a problem by following these hints, consult your dealer or service centre

WARNING

Under no circumstances you should try to repair the speaker yourself, as this would invalidate the guarantee

PROBLEM – POSSIBLE CAUSE • REMEDY

No sound

- *VOLUME is not turned up*
 - Turn up the VOLUME
- *SPEAKERS A/B switches on the amplifier or receiver are in position off*
 - Press the relevant SPEAKERS A or B switch
- *Headphones are connected*
 - Disconnect headphones
- *Speakers are not (or wrongly) connected*
 - Connect the speakers securely

No sound on left or right side

- *BALANCE control on the amplifier or receiver is not in the middle position*
 - Set the BALANCE control to the middle position
- *One speaker is wrongly connected or the speaker cable damaged*
 - Connect the speaker properly or replace the cable

Reversed left and right sound

- *Speakers are wrongly connected*
 - Connect speakers properly, L to left, R to right; check with BALANCE control

No sound at the surround or Centre speakers

- *SURROUND mode is not switched on*
 - On the amplifier or receiver, switch on the SURROUND mode
- *Surround and/or Centre speakers are not (properly) connected*
 - Connect the speakers properly
- *Only one Surround speaker is connected*
 - Always connect both Surround speakers
- *One speaker is wrongly connected or the speaker cable damaged*
 - Connect the speaker properly or replace the cable

Poor bass sound

- *Speakers are not in phase*
 - Connect speakers properly, ⊕ to ⊕ -pole (red marked or sleeved cable); ⊖ to ⊖ -pole (unmarked cable)

Bad sound

- *Badly matching SURROUND setting for the given type of music*
 - On the amplifier or receiver, choose a matching SURROUND setting for the given type of music

Surround sound level is too low or too high

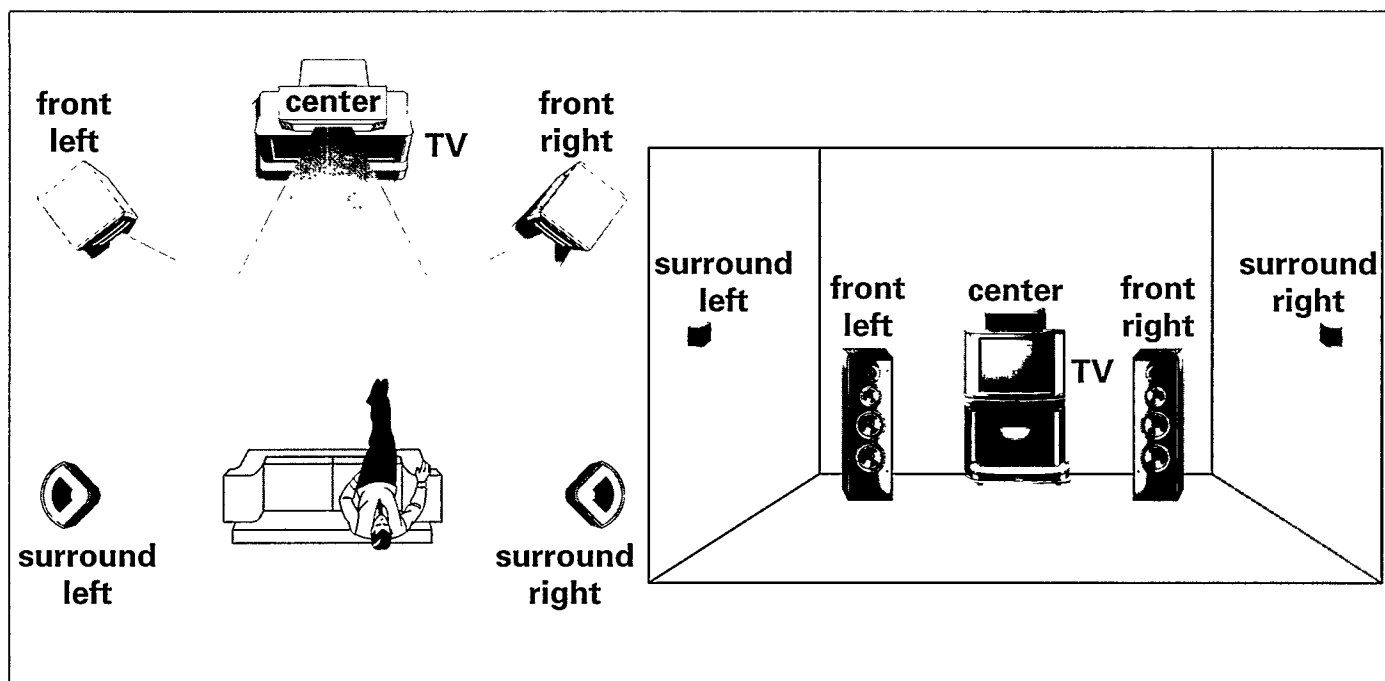
- *The sound level of the Surround sound is not properly adjusted*
 - On the amplifier or receiver, adjust the level and the delay time of the Surround sound

Centre sound level is too low or too high

- *The sound level of the Centre channel is not properly adjusted*
 - On the amplifier or receiver, adjust the level of the Centre channel

5. POSITIONING THE SPEAKERS

English



GENERAL HINTS FOR POSITIONING

- Avoid positioning the speakers in a corner or on the floor, as this will boost the bass tones too much.
- Placing the speakers behind curtains, furniture etc. will reduce the treble response, thus reducing the stereo effect considerably. The listener should still be able to 'see' all speakers.
- Each room has different acoustic characteristics and the positioning possibilities are often limited. You can find the best position for your speakers by experimenting. In general, the speakers should be arranged as symmetrically as possible in the room.

POSITIONING THE FRONT SPEAKERS

- The front speakers (not supplied) should be arranged so that, viewed from the listener's position, the speaker connected to the 'Left' terminals of the amplifier/receiver is on the left and the speaker connected to the 'Right' terminals is on the right in front of the listener in the room. This can be checked with the balance control on the amplifier/receiver.
- The best stereo effect is obtained when the 2 front speakers and the listener build an equilateral triangle.
- The best height for the front speakers is when the high tone speakers (tweeter) are at ear height (while seated).

POSITIONING THE CENTRE SPEAKER

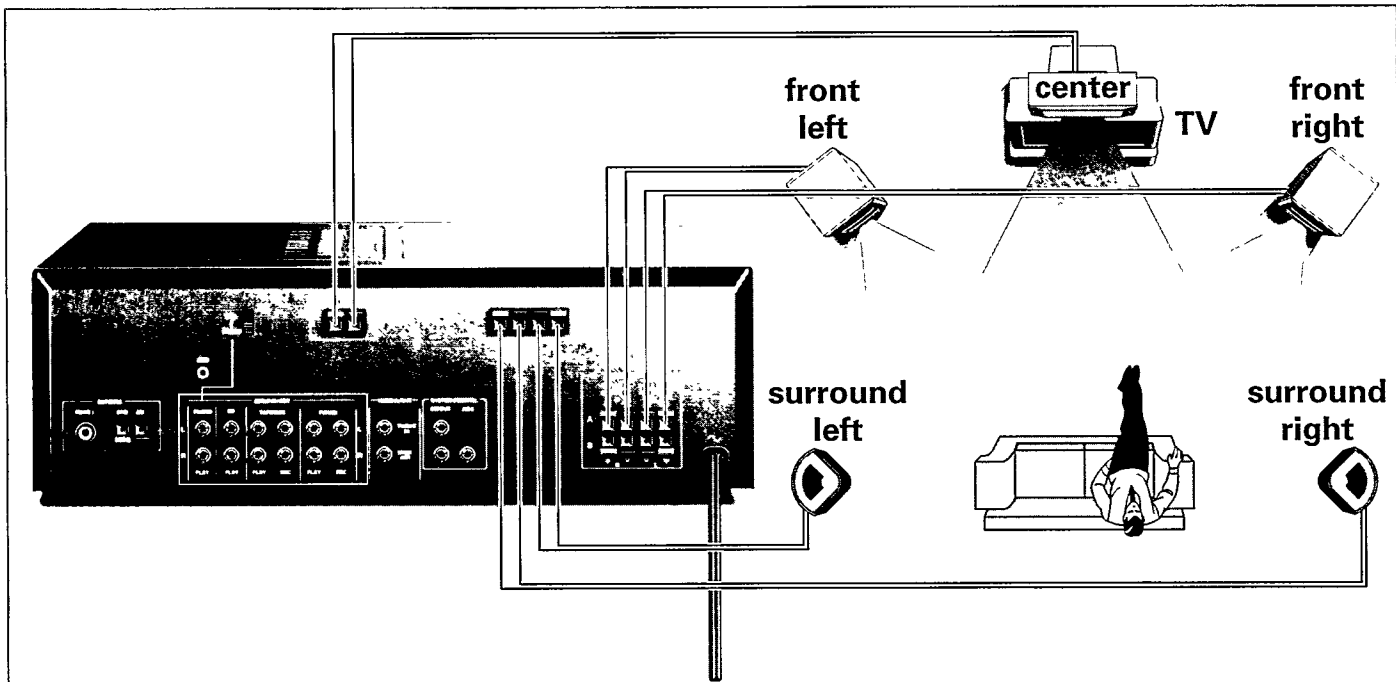
- The centre speaker should be placed in the centre between both FRONT speaker, e.g. underneath or on top of the TV.
- The best height for the centre speaker is at the height of your ears (while seated).
- If necessary, the centre speaker can be directed to the listening position by using the supplied stand. In this way you can tilt the centre speaker at an angle of $+15^\circ$ or -15° .

POSITIONING THE SURROUND SPEAKERS

- The surround speaker connected to the 'Surround Left' terminals of the amplifier/receiver should be on the left and the speaker connected to the 'Surround Right' terminals on the right the listener in the room. This can be checked with the balance control on the amplifier/receiver.
- The surround speakers should face each other and be in line with the listening position.
- The best height for the surround speakers is about 1 metre/-3ft above ear height (while seated).
- For optimal positioning of the surround speakers, you can use floor stands or wall mounting brackets which are separately available.
- When positioning the surround speakers, note that the screw connectors are facing down and the Philips wordmark is facing the room.

6. CONNECTING THE SPEAKERS

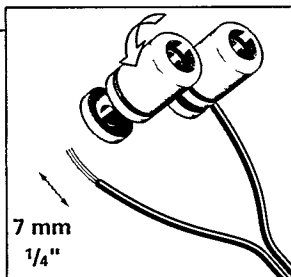
English



Important ! Always switch off your amplifier/receiver before making any connections !

SPEAKER CABLE

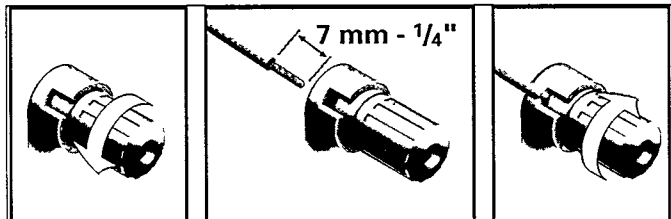
- Preferably use special speaker cable having a section area of at least 0.75 mm².
- Strip off the insulation from the end of each of the two wires; approx. 7 mm.
- One of both speaker wires is usually marked with a colour or a sleeve so that you can distinguish between them. In order to prevent phase problems, make a habit of connecting the marked (coloured) wire to the coloured ⊕ speaker terminal and the unmarked wire to the black ⊖ speaker terminal.



CONNECTIONS ON THE AMPLIFIER/RECEIVER

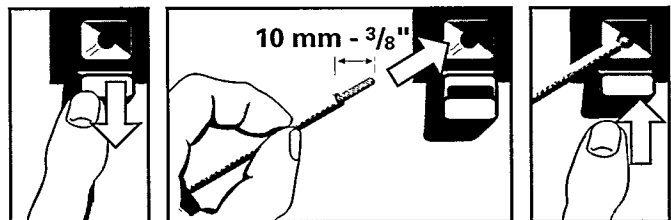
The loudspeaker connections on the amplifier or receiver may be screw connectors or click-fit connectors.

- At the rear of the amplifier/receiver you will find a red or ⊕ terminal and a black or ⊖ terminal for each speaker.
- Connect the marked or sleeved speaker wire to the red or ⊕ terminal, and the unmarked wire to the black or ⊖ terminal of the amplifier/receiver.



CONNECTORS ON THE SPEAKERS

- At the rear or bottom of the speakers you will find the screw connectors, marked ⊕ and ⊖.
- Connect the marked or sleeved speaker wire to the ⊕ terminal, and the unmarked wire to the ⊖ terminal of the speaker.



- After connecting the speakers, do not forget to adjust the relative sound level between the speakers, see chapter 'Adjusting the relative speaker balance'.

Philips FB 602 - FB 603 - FB 605 Centre & Surround Sound Speakers

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