

KEF CUSTOM SERIES

CR250SW

**READ THESE INSTRUCTIONS FULLY BEFORE COMMENCING WORK.
KEF CUSTOM LOUDSPEAKERS INVOLVE A NUMBER OF STEPS DESIGNED
TO MAKE INSTALLATION UNUSUALLY EASY.**

Applications

KEF Custom in-wall loudspeakers, whilst designed primarily for home hi-fi use, may successfully be used in any environment where high quality transmission of speech or music is required. Typically this might include restaurants, nightclubs, conference rooms and any other location requiring a very high quality, unobtrusive, easy-to-install distributed sound system.

Designed for interior use, KEF Custom speakers are moisture resistant and may safely be used in conditions of high humidity, eg: kitchen, bathroom etc. They should not be installed in any location where liquid may gain direct access to the speaker.

The CR250SW comprises a 250mm (10") polymer coned bass unit with a high and low pass dividing network. It is specifically designed to be used in conjunction with the CR200F to make a fully integrated three-way system, and best results will be obtained when so used. However, it may, if desired, be used to enhance the LF performance of an existing installation provided that the system has a nominal 4 ohms impedance and a similar sensitivity.

Locating the speakers

Placement will largely depend on room furnishings and wall decoration if any, and the location of the CR200.

The CR250 ideally should be mounted immediately below or alongside the CR200, when the latter's longer side matches the side of the CR250. If so mounted, best results will be obtained if the CR200 and CR250 are mounted on opposite sides of a stud. Each speaker then operates into a separate cavity, avoiding the intermodulation effects caused by the bass unit occupying the same 'enclosure' as the midrange.

Due to the low crossover frequency adopted, the CR250 may, if desired, be placed elsewhere on the same wall or in the ceiling. If it is necessary to locate the speaker towards the top or bottom of a section of studding, some LF cancellation due to standing waves within the cavity wall may occur. In this case, the effect may be alleviated by inserting damping material, glass fibre or mineral wool, towards the centre of the cavity a little distance from the rear of the speaker, for maximum effect.

Installation – in existing construction (see below right for new work)

1 First **CHECK THE PARTS LIST**. Note that the speaker bezel and baffle are installed separately, making for easy installation and decorating. Unpack the speaker systems and separate the bezel from the baffle by undoing the four turnbuttons at the corners of the speaker baffle. Identify the terminal screws marked \oplus and \ominus at the corners. The incoming signal cables are to be attached to these terminals.

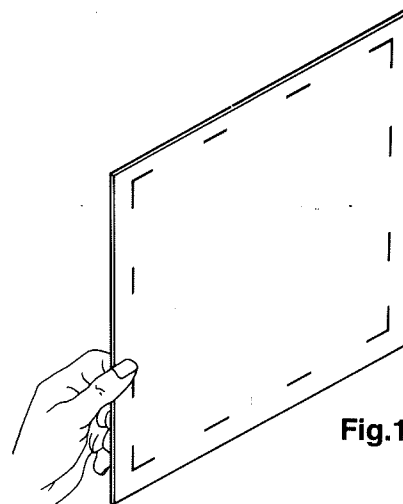


Fig.1

2 **CUT THE APERTURE (fig.1)** using the template supplied. Note that the outer edge of the template corresponds to the outer edge of the bezel and may be used to assist in choosing the speakers location. The location and orientation of this aperture will depend on the position chosen in relation to the CR200.

If the CR250 is to be mounted adjacent to the CR200 there should be a minimum distance of 2" between the edges of the two apertures. In practice this means a gap of 1" between the edges of the two bezels when fixed in the wall. For further information check the section 'Locating the speakers' above.

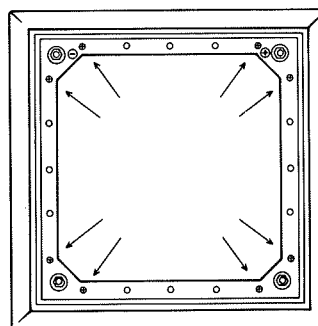


Fig.2

3 **INSTALL THE BEZEL (fig.2 & 3)**. First identify the 8 fixing screw holes indicated. Assemble the 8 clips, with their screws and washers, to the bezel, allowing them to hang loosely. Identify the connecting terminals and insert the bezel into the aperture already cut making sure that the terminals are in the most convenient place to make connection to the CR200. Turn the clips to grip the wall and tighten the screws. Additional screws/clips may be used if necessary to counteract any unevenness in the wall surface.

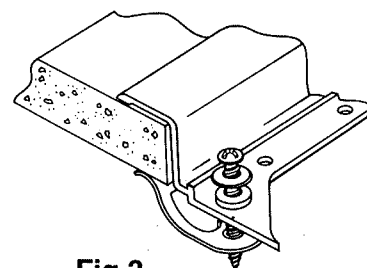


Fig.3

4 **CONNECT THE SIGNAL CABLES (fig.4)**. Observing polarity (amplifier + to speaker +, and - to -) connect the incoming signal cables to the terminals on the bezel of the CR250. Then connect an appropriate length of cable between the connecting block on the lead attached to the CR250 crossover and the terminals on the CR200 (fig.5). Polarity is green to +, black to -.
NOTE: As the KEF Custom mounting bezel is separate from the baffle carrying the speaker system, all the above installation work may be carried out sometime before the main system installation if necessary.

The bezel may be painted to match the colour of the wall. This should be done before the baffle is fitted. Care should be taken not to allow paint to contaminate the connecting terminals.

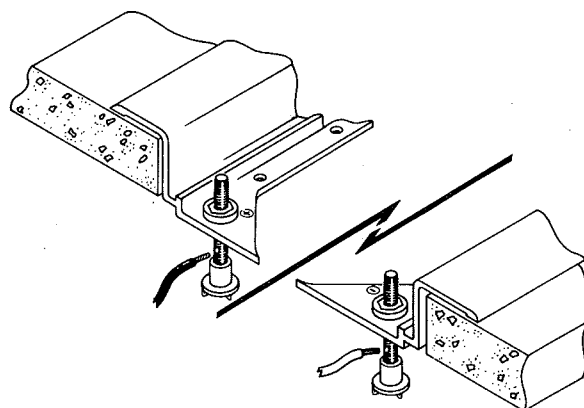


Fig.4

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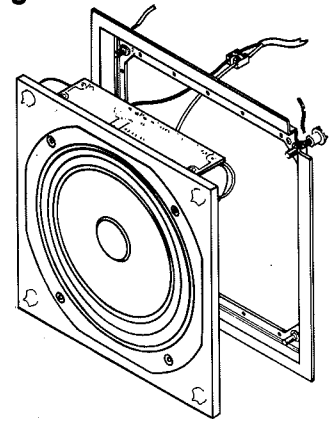
FIT THE BAFFLE (fig.5) securing it by the turnbuttons located at each corner.

Make sure the connecting cables running from the crossover to the connecting points have the washers securely clipped into place.

Make sure the baffle is orientated to make the proper connection to the terminals on the bezel.

If mounted in the ceiling, place the dust barrier cloth over the magnet of the bass driver and tuck in as the baffle is fitted to the bezel.

Fig.5



6

FIT THE GRILLE (fig.6). Press firmly into place, note that the projecting lugs on the rear of the grille carrier fit into the holes in the centre of the turnbuttons.

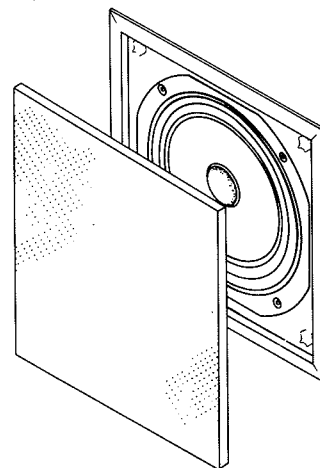


Fig.6

The grille may also be painted. This should be done with the grille off the loudspeakers and care should be taken not to clog up the perforations with paint, nor to allow too much paint to pass through the holes to clog the fabric beneath.

The perforated metal grille may be covered with fabric to match room decor. Any such fabric should be as acoustically transparent as possible otherwise degradation of the sound will occur. To fit, remove the grille, stretch the fabric tightly over the front and glue down around the sides of the grille assembly.

Installation — new construction.

7

(Fig.7)

A roughing-in box (Part No. SP 3090) is available. This should be assembled by screwing the brackets supplied to 4 of the screw holes. The box should then be positioned across the studs with the speaker aperture in the desired position. The brackets should then be fixed to the studs using an appropriate fixing method. Installation then follows the procedures described above.

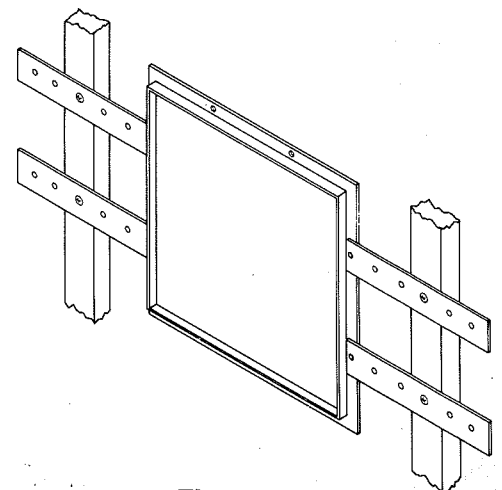


Fig.7

Model	CR250SW	CR200F + CR250SW
Type	SP3088	SP3087 & SP3088
System	Flush mounting subwoofer system with integral high & low pass filters	3-way flush mounting full-range loudspeaker system
Drive Units	LF 250 mm (10-inch) cone driver with high temperature voice coil	LF 250 mm (10-inch) cone driver with high temperature voice coil MF 200 mm (8-inch) cone driver with high temperature voice coil, HF 25 mm (1-inch) soft dome with high temperature voice coil. fluid cooling, auto resetting protection
Frequency Range	±2 dB, 32 Hz — 150 Hz (-10 dB at 25 Hz)	±2 dB, 32 Hz — 22 kHz (-10 dB at 25 Hz)
Maximum Output	112 dB	112 dB
Sensitivity	90 dB per 2.83 V rms at 1 m	90 dB per 2.83 V rms at 1 m
Amplifier Requirement	10 — 150 watts	10 — 100 watts
Nominal Impedance	4 ohms	4 ohms
Finish	Black baffle with white bezel	Black baffle with white bezel
Grille	White perforated metal, can be covered with cloth	White perforated metal, can be covered with cloth
Overall Dimensions	326 (H) x 320 (W) x 98 (D) mm (12 ⁷ / ₈ x 12 ⁵ / ₈ x 3 ⁷ / ₈ inches)	Satellite: 326 (H) x 254 (W) x 92 (D) mm (12 ⁷ / ₈ x 10 x 3 ⁵ / ₈ inches) Subwoofer: 326 (H) x 320 (W) x 98 (D) mm (12 ⁷ / ₈ x 12 ⁵ / ₈ x 3 ⁷ / ₈ inches)
Cutout Dimensions	298mm x 298mm (11 ³ / ₄ x 11 ³ / ₄ inches)	
Depth behind front mounting surface	95mm (3 ³ / ₄ inches)	
Installation criteria	For installation in studded drywall construction of minimum 12.5mm (1/2 inch) thickness, with rear cavity depth not less than 89mm (3 ¹ / ₂ inches). Rough-in box available for location in new construction.	

Packing contents list
24 Spring clips
24 No 8 1 inch self-tapping screws
24 plain washers
1 mounting template
2 dust barrier cloths
2 grille assemblies
2 CR250SW bezel/baffle assemblies.

Also available

Systems			SPARES		
SP3087	CR200F	Full-range	990390E	CR200F	Bezel Assembly
			990383E	CR200F	Grille Assembly
ACCESSORIES			990391E	CR250SW	Bezel Assembly
SP3089	CR200F	Rough-in frame	990388E	CR250SW	Grille Assembly
SP3090	CR250SW	Rough-in frame	990389A	CUSTOM	Hardware Pack

WARRANTY

This precision engineered KEF product is guaranteed against faulty material and workmanship for a period of five years from the date of original purchase subject to the following restrictions:

1. This warranty is only valid in the country of purchase
2. That the equipment has not been disassembled, modified or tampered with by any person other than an expressly authorised representative of KEF Electronics Limited
3. That the equipment has not been abused or operated in conjunction with unsuitable or faulty apparatus
4. That the equipment has not suffered mechanical damage or derangement in transit

Should service be required, notify the dealer from whom you purchased the equipment and have him arrange onward shipment to KEF ELECTRONICS LIMITED or an authorised agent if he confirms the need for factory attention. Do not despatch goods without prior agreement of KEF or their authorised agents.

If asked to return products for inspection and/or repair, pack carefully, preferably in the original cartons and return prepaid.

Insurance is recommended as goods are returned at owner's risk. KEF or their authorised agents cannot be held liable for loss or damage in transit. Packing and insurance and freight on the return journey will be paid by KEF if warranty work proves to be necessary.

Failure to register in no way limits or invalidates the warranty, but in the event of service being required, delay may result since our Service Department cannot begin warranty work until the original sale has been registered.

In the case of difficulty contact the:

Customer Service Department,
KEF Electronics Limited,
Tovil, Maidstone, Kent ME15 6QP. Telephone (0622) 672261
Telex: 96140. Fax (0622) 50653

FOR THE USA

This KEF loudspeaker is warranted to the original purchaser against original factory defects in material or workmanship for a PERIOD OF FIVE YEARS FROM THE DATE OF ORIGINAL PURCHASE.

What we will do

Should your KEF loudspeaker fail to function properly because of a manufacturing defect, KEF will repair or replace it free of charge. If the product is still defective after a reasonable number of attempts by the warrantor to remedy the defect, you may elect a refund of the purchase price or replacement without charge. Before a refund or replacement can be made the product must be free of all liens and other encumbrances.

How to obtain service

Should service be required, contact the dealer from whom you purchased the equipment and have him arrange onward shipment to KEF Electronics Limited or an authorised agent. Ship the product prepaid, only after receiving written authorisation and instructions from the dealer.

Include a written description of the claimed defect, and your original sales slip or other proof of ownership and date of purchase.

We strongly recommend that speakers be packed in their original cartons and packing material and that all shipments be insured (KEF cannot be responsible for loss or damage in shipment).

Packing, insurance and return freight will be paid for by KEF if work covered under the warranty is necessary.

What is not covered

This warranty does not cover a loudspeaker system which has been:

1. damaged while in your possession
2. overloaded, abused, misused or operated with faulty or unsuitable equipment

IN NO EVENT SHALL THE WARRANTOR BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, whether damages result from breach of express or implied warranties, tort, negligence or otherwise.

Some states do not allow exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If you have any questions about this warranty and your dealer has not been able to assist you, please contact: KEF Electronics of America Inc., 14120-K Sullyfield Circle, Chantilly, VA22021.

Telephone (703) 631 8810 Telex 510 100 2304. Fax: (703) 830 7625.

KEF reserves the right to incorporate developments and amend the specifications without prior notice in line with continuous research and product improvement.

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