



KRIESLER

Multi-Sonic

**HIGH FIDELITY STEREOGRAM
MODEL 11-95**



MODEL 11-95

with
sensational Hi-Fi electrostatic
**6-SPEAKER
SOUND SYSTEM**
plus
MUSIC HOBBY CENTRE

COMPLETE WITH MICROPHONE WHICH MULTIPLIES ITS USES

OPERATING INSTRUCTIONS AND GUARANTEE



KRIESLER The Best in Sight and Sound
MULTI-SONIC High-Fidelity Stereogram *Model 11-95*
WITH HI-FI ELECTROSTATIC 6 SPEAKER SOUND SYSTEM
OPERATING INSTRUCTIONS and GUARANTEE

With the "Multi-Sonic" Hi-Fi Stereogram, you can enjoy the best in music, plus multiple uses—to entertain, to educate, to become a hobby!

Detailed operating instructions for radio and record-playing are overleaf, together with a full description of how to get greatest benefits from the microphone, tape-recording and extension speaker facilities.

Below is an abbreviated list of "Multi-Sonic" multiple uses. Other uses will suggest themselves to you.

1. Plays radio programmes through the twin amplifiers and electrostatic 6-speaker system.
2. Plays monaural or stereophonic records. Speeds 78, 45, 33 $\frac{1}{3}$, 16 $\frac{2}{3}$, automatic or manual record changing. The 16 $\frac{2}{3}$ speed enables you to enjoy complete plays and recordings by world-famous artists . . . a playhouse in your home—for entertainment and education.
3. You can plug in the microphone to amplify sounds in the home, children's recitations and other educational activities. You can rehearse, tape-record and playback speeches. You can use "Multi-Sonic" as an amplifier at parties, or as a "paging" or public address system. All this can be done with or without musical accompaniment from gramophone records. And, if you own a

tape-recorder, it can all go on tape simultaneously—for immediate playback. You can use the balance control on the receiver to turn music up and voice down, or voice up and music down.

With two microphones plugged in, you can carry on a debate, and control the sound channels with the balance control on the receiver.

4. If you own a tape-recorder, you can record radio programmes or recorded music from the "Multi-Sonic."
5. You can record a musical programme for a colour-slide or home movie show, and add your commentary through the microphone. You can sing, speak or accompany popular musical stars.
6. One or more Extension Speakers can be used in various ways for extra entertainment and utility. They can be arranged in the room to give special sound effects. They can be used to extend sound to other rooms—bedrooms, kitchen, rumpus room, workshops, laundries, outside on the patio, in the garden, with complete electrical safety. With the balance control you can swing the sound anywhere. With the microphone you can call people in other rooms—just like a paging system.

Truly, Kriesler "Multi-Sonic" has multiple purposes . . . a wonderful entertainment centre and hobby for the whole family.

SECTION 1 OPERATING INSTRUCTIONS — RADIO AND RECORD PLAYING

Installation:

AERIAL. This receiver is fitted with an inbuilt ferrite-rod aerial which will provide good pick-up of most signals. For weak signal locations, an external aerial may be connected to the red lead at the rear of the cabinet; a 15 to 30-foot length of aerial wire will usually suffice.

EARTH. Efficient earthing is provided through the three-core flex supplied. No other form of earthing is required.

MAINS SUPPLY. This receiver is designed for operation on a mains supply of 200 to 260 volts, 50 c.p.s. Your Kriesler retailer will adapt the receiver to suit your local mains supply voltage. **Warning:** Disconnect this receiver from the power supply before attempting any internal adjustments.

Controls:

The master control panel is conveniently located on top of the cabinet for finger-tip control without stooping. The record-playing equipment is covered by its easy-closing lid, and records can be played with lid open or shut. Lid may be left closed while radio is playing, protecting automatic changer from dust.

ON/OFF. To switch the radio receiver **ON**, press the button marked "Radio." The dial will light up.

To switch the record player **on**, press the button marked "Gram." The compartment will be illuminated.

To switch the set **Off**, press the button marked "OFF."

SPEAKER SELECTOR. By pressing the button marked "6," all six speakers are brought into operation for true Hi-Fi sound—two 12" bass speakers, two middle range speakers and two

electrostatic high frequency speakers. By pressing the button marked "2," only the 12" speakers operate, the electrostatic and middle range cones are disconnected, and the higher frequency sounds suppressed. This is useful when playing old, scratchy records.

TUNING. Tune carefully to the "centre of strength" for the desired radio station for best reception.

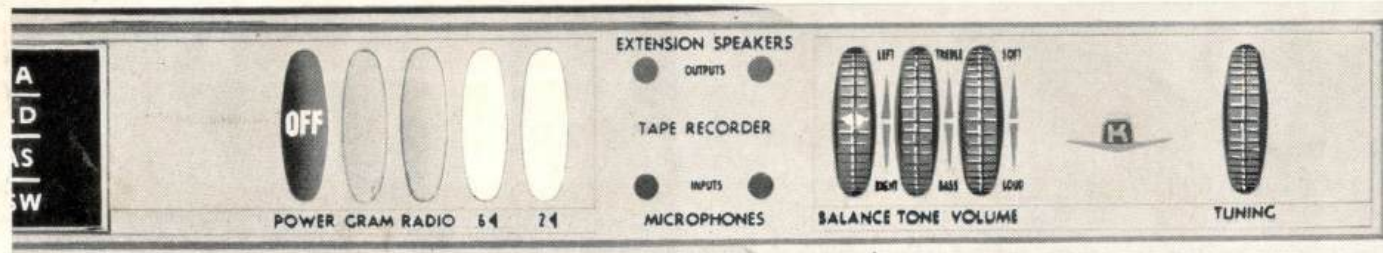
VOLUME. Use this control in the normal way and, for best stereo effect, make sure you use adequate volume.

STONE. Adjust this control to obtain your desired choice of tone. Best stereo effect will be obtained with the control in its maximum treble position and with the six-speaker button pressed.

BALANCE. With this control you can "swing" the sound from one side to the other. For **Radio** and **Monoaural Records**, set the control to give approximately equal volume from each side, by turning the knob until the spot is at the centre. Since both sound systems are playing the same programme, the position is not critical. When standing in front of the cabinet, the sound should seem to come from the centre.

The receiver is now also balanced for **stereophonic** recordings.

RECORD CHANGER OPERATION. Your "Multi-Sonic" is equipped with a special Laboratory Series record changer. Read the separate Instruction Manual carefully and operate as described. The pick-up is a tropic-proof ceramic cartridge of the "turn-over" type and is fitted with dual-tipped stylus—diamond for microgroove and stereo records, and sapphire for the old-style 78 r.p.m. records.



To play **Microgroove Monaural or Stereo Records**, turn the lever on the pick-up head to the "L.P." position.

To play **78 r.p.m. Records**, turn the lever to the "78" position. Select the correct speed for the record to be played.

WARNING. Do not play L.P. records with the "78" stylus (or vice versa) as permanent record or stylus damage may result.

STYLUS REPLACEMENT AND RECORD CARE. With normally careful usage, the diamond microgroove and stereo stylus can be expected to last almost indefinitely.

From time to time the stylus should be cleaned with a camel-hair brush. Unlock the pick-up head locking collar, remove pick-up head and brush off dust and fluff. Make sure the diamond stylus shaft is centred in the plastic "V." When replacing head, tighten locking collar firmly in a clockwise direction.

Note: If pick-up has been dropped or mishandled, and stereo reproduction is not normal, check to ensure stylus is centred in "V." Stylus Type—N9TASD, Cartridge Type—Sonotone 9TA.

STYLUS PRESSURE. This has been set at the Kriesler factory to suit the Hi-Fi cartridge.

RECORDS. Care should be taken always to remove records from the turntable or spindle immediately after use. Records should be carefully cleaned, kept in a cool place and in their dust covers.

Note: For best reproduction and record care, the turntable should be levelled with a spirit level, by adjusting the three spring suspension screws built into the deck of the changer. (See page 10 of Record Changer Manual: "Pick-up Tracking.")

CARE OF CABINET. Do not stand cabinet in direct sunlight or expose to extreme temperatures. Use only good quality furniture polish or reviver. Do not apply furniture or metal polish to the gold-plated trim. Clean this with a soft, dry cloth only when necessary.

SERVICE. In the event of your receiver becoming faulty or unoperative, switch off immediately at the set, disconnect from the mains and seek the advice of your retailer. For further information and service consult the Kriesler retailer from whom your receiver was purchased.

SECTION 2

MULTI-PURPOSE OPERATION

All controls and sockets for plugging in microphones and tape recorder, are conveniently grouped and clearly marked on the "Sound Monitor" Control Panel. If in any doubt, consult your Kriesler retailer. He will be glad to advise on methods and equipment. Two plugs to fit "Multi-Sonic" sockets are supplied with the receiver. Your Kriesler retailer can supply additional plugs if needed for other purposes, such as set out below.

Use of one or two microphones, electric guitar or similar instrument through the "Multi-Sonic" amplifiers and speaker system.

Your "Multi-Sonic" is supplied complete with a dynamic microphone. Should you wish to use another one, your Kriesler retailer will be able to supply a good quality unit at moderate cost. Kriesler Part No. 90-4732.

GENERAL NOTE: The microphone will only operate when the "Gram" button is pressed down.

1. The microphone lead can be plugged into either the right hand or left hand panel sockets marked "Input Microphones." Sound will come from either the left hand or right hand sides of the receiver respectively. (This "positioning" of sound may be important if extension speakers are being used.)

2. Two channels can be used simultaneously—a microphone plugged into one socket, a musical instrument into the other, or two microphones simultaneously. Each channel will reproduce its respective sound.

3. A microphone can be plugged in and used in conjunction with a monaural record programme—use **balance control** to bring music up or down.

GENERAL. Avoid "howl" by keeping microphone away from the front of the speakers. Volume Control and Tone Control should be adjusted for best results. Endless interesting, entertaining and practical uses will suggest themselves to owners of Kriesler "Multi-Sonic."

Using a tape recorder with your "Multi-Sonic." Any type of tape recorder can be used . . . A.C. mains recorders (high, medium or low power), or transistor battery-operated models.

Kriesler "Multi-Sonic" can be used in many ways with a tape recorder, through the sockets on the "Multi-Sonic" control panel. Two plugs, already wired, to fit the "Multi-Sonic" sockets are supplied with the receiver.

1. To play a tape recording through "Multi-Sonic." FIRST, read carefully the section of your tape recorder Instruction Book dealing with playback through an additional amplifier system. A lead for this purpose is usually supplied with your recorder. **Connect it to the plugs supplied with "Multi-Sonic."** Consult your retailer if in doubt.

Some high-power recorders have two output sockets—high and low. The Low Output is generally preferable. Use "Multi-Sonic" controls for volume and tone.

First: Press the "Multi-Sonic" button marked "GRAM."

To play your tapes you will have already connected the two plugs (supplied) to your tape recorder lead. Now insert the two plugs into the two "Multi-Sonic" control panel sockets marked "Microphone Input."

Note: If the tape recorder has no "Low Output" socket, use the normal output socket of the recorder, and turn the recorder volume control down low, and its Tone Control to full brilliance. Use "Multi-Sonic" Volume and Tone Controls instead. You will now be playing tape through "Multi-Sonic" Hi-Fi amplifiers and electrostatic six-sound source speaker system.

Stereo tape can be amplified stereophonically or monaurally. Refer to your tape recorder instruction book.

2. To put a radio programme, or a monaural or stereo recording on tape.

You can enjoy the full room volume of your radio or recorded music while it is being recorded on tape. However, it is important to adjust the tape recorder control to maintain correct recording level without overload.

Insert the two plugs on your tape recorder lead into the "Multi-Sonic" sockets marked "Extension Speakers Outputs."

To put a stereo recording on stereo tape, insert the two stereo input leads into "Multi-Sonic" sockets marked "Extension Speakers Output 1 and 2." Refer to your tape recorder instruction book.

Note 1: The microphone can be plugged in on the control panel at the same time—for recording, singing or speaking voice with recorded music being put on tape from records. Useful for singing with record, for commentary with music background for film and slide shows, or for public address occasions.

The "Multi-Sonic" Balance Control is used for adjusting the music level—fading music behind voice or raising to full level as required.

The Volume Control is used to raise or lower the overall volume of both voice and music. Remember that the tapes can be played back through the "Multi-Sonic" amplifier and speaker systems.

Note 2: Study your tape recorder handbook for details of recorder connections, method of recording, etc.

Use of Extension Speakers

There are two different ways of using extension speakers:—

1. The Control Panel has two sockets to plug in speakers.
2. The Terminal Strip on the back of the receiver.

1. CONTROL PANEL CONNECTION

When radio or monaural records are being played, either or both sockets will give the complete sound. You can plug a speaker into either socket, or use two speakers—one in each socket.

However, stereo records provide two channels of sound. So, when stereo records are played, one sound channel is available from one extension socket, and the other sound channel from the second

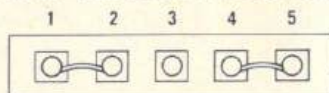
socket. You need two extension speakers to extend the complete twin-channel sound—one plugged into each socket. Adjust Volume Control to compensate for extra speakers.

The six speakers in the "Multi-Sonic," and the Extension Speakers, are all operating together.

If an extension speaker is plugged into one socket, the volume may be reduced from one side of the receiver only. Swing the Balance Control to restore the balance of sound, and turn up volume—if required.

2. TERMINAL STRIP CONNECTION (on back of receiver)

The terminal strip has five terminals (see illustration). Terminals 1 and 2, and 4 and 5, are bridged by wires. The



centre terminal (3) is the common connection. **Terminals 1 and 2 tap the right-hand sound channel. Terminals 4 and 5 tap the left-hand sound channel.**

Note: Correct phasing of the speakers is important. To determine correct phasing, change over connections of one extension speaker and select the arrangement that gives the best bass response. There are many ways in which one or more speakers can be connected to each channel. Three main ways are:—

1. To connect extension speakers to both channels, with the full six sound sources in the receiver continuing to operate.

The additional speakers may be on short leads close to the receiver, or used as remote speakers on long leads, as in far corners of the room or in other rooms.

To connect, attach leads to terminals 1 and 3, and 5 and 3 respectively, leaving the bridging wires in position.

2. To connect an extension speaker (or speakers) to one channel only—with all receiver speakers continuing to operate.

Connect to terminals 1 and 3, OR 5 and 3 for right hand or left hand sound extension respectively, leaving bridging wires in position.

3. To have sound only from extension speakers—silencing receiver.

- (a) Disconnect bridging wires between terminals 1 and 2, and 4 and 5.
- (b) Connect extension speaker leads to terminals 2 and 3, and 4 and 3.
- (c) Press the button on the control panel marked "2." Only the extension speakers will operate.

Note: If the button marked "6" on the control panel is pressed, the two middle range and the two electrostatic speakers in the receiver will play as well as the extension speakers. But the two bass 12" speakers in the receiver will not operate.

GUARANTEE

In the event of any defect becoming apparent in this receiver, due to either faulty material or workmanship, within a period of 90 days from date of delivery, such defect will be rectified without cost to you for either labour or material at the premises of the accredited retailer from whom the receiver was purchased or at the factory of Kriesler Australasia Pty. Limited provided:—

1. *The receiver shall have been purchased at the standard price payable at the date of purchase from one of our authorised retailers.*
2. *In the event of the receiver being subject of a Hire Purchase Agreement, all payments thereunder shall have been made when due and payable.*
3. *That the receiver has not at any time been repaired by any person other than the accredited Kriesler retailer nor altered nor tampered with in any way whatsoever and that the serial number has not been altered, defaced or removed and that the defect is not due to misuse, negligence, accident or similar cause, nor to connection to incorrect power supply.*
4. *That the cost of transportation both ways either to the retailer's premises or, if necessary, to the Kriesler factory, is paid by the claimant.*
5. *That the date of original delivery is clearly established.*

Model No. 11-95 Chassis No. 3587

Retailer's Name _____ Purchase Date _____

NOTE: *No claim recognised unless chassis No. is quoted.*

Manufactured and guaranteed by **KRIESLER AUSTRALASIA PTY. LIMITED.**
12-30 CAWARRA ROAD, CARINGBAH, N.S.W.