



RADIO ELECTRONICS CORPORATION

111 JERICHO TURNPIKE, SYOSSET, L.I., NEW YORK 11791

403Y5A0

Printed in Japan

LAFAYETTE GUARDIAN 5500 5 BAND BATTERY/ELECTRIC PORTABLE RADIO (Stock No. 99-35453W)

TUNING RANGE:

- [1] AM . : 540–1600 KHz [Standard Broadcast]
- [2] FM : 88-108 MHz [Standard Broadcast]
- [3] SW : 4–12 MHz [Shortwave]
- [4] PB HI : 147–174 MHz [Public Service Communications Police, Fire, Etc.]
- [5] PB LO : 30–50 MHz [Public Service Communications Police, Fire, Etc.]

This Lafayette 5 band portable radio employs an advanced solid-state [transistorized] circuit employing 18 transistors. The radio may be operated from 4 "C" size batteries for portable use, or from 117 volts, 60Hz AC with the built-in AC line cord for home use.



Features include a combined tuning meter/battery condition indicator, an adjustable squelch control to eliminate noise between stations on the FM and police/fire bands, a jack for connection of an external antenna on all bands (except AM), and an earphone jack for private listening.

Although built to withstand a certain amount of abuse, this radio should be treated with the care normally accorded to electronic equipment. Always protect the unit against dirt and water, and avoid severe handling. If properly treated, the only maintenance likely to be needed to maintain peak per formance is the replacement of batteries for portable use.

BATTERY/ELECTRIC OPERATION

A compartment at the rear of the radio houses the batteries needed for portable use and also acts as a storage compartment for the AC line cord. To remove the cover, slide the two catches down.

A 2-position slide switch marked "BATT-AC" is located on the back of the radio. This switch should be placed in the BATT position only when using the radio for portable operation. At all other times, the switch should be left in the AC position to permit operation on house current.



Slide these catches down to release compartment cover (Batteries or line cord within)

Fig. 2





TO USE ON AC [HOUSE CURRENT]

Withdraw the AC line cord from the rear compartment and, after unwinding the cord, plug it into an outlet providing 105-120 volts, 60 Hz AC. Set the BATT-AC switch at the back of the radio to the "AC" position.

TO USE ON BATTERY [PORTABLE]

Carefully withdraw the plastic battery holder from the rear compartment [the holder is attached to the radio by means of two connecting wires]. Insert 4 "C" size 1½ volt batteries into the holder, being sure to observe proper polarity [+ and -], as indicated in the holder [See also Figure 3]. When the batteries have been inserted, replace the holder and back cover, and set the BATT-AC switch to the "BATT" position.

CAUTION: When the radio is used on house current for an extended period of time, the batteries should be removed. Weak or exhausted batteries may leak and cause corrosion of the battery holder contacts. Batteries must also be removed from radios stored or left unused for long periods of time.

OPERATING INSTRUCTIONS

Select the desired band with the Band Selector. Rotate the SQUELCH control fully counter-clockwise to switch the squelch circuit off initially. Rotate the VOLUME control clockwise to switch the radio on and then adjust volume.

For reception on FM, SW, PB HI, PB LO, the VHF telescoping whip antenna should be fully extended. On the FM and SW bands, it may be necessary to move the whip antenna into various positions for best reception [much in the same way as on a portable TV receiver]. On the PB HI and PB LO bands, best reception will generally be obtained with the whip antenna extended vertically [straight up].

On the AM band it may be necessary to turn the radio to find the position which provides strongest reception [the loopstick antenna in the radio acts in a directional manner].

NOTE: In buildings which use a substantial amount of steel in their construction, it may be necessary to place the radio close to a window for better signal pickup on all bands.

TUNING METER/BATTERY CONDITION INDICATOR

This is a signal strength meter which is used both for tuning and also for determining the condition of the batteries [when used]. When the radio is switched on, but not tuned to any station [or only a weak station], the meter acts as a battery condition indicator. If the pointer remains into the green area of the scale, batteries are of sufficient voltage for operation of the radio. When, under "no-station" conditions, the pointer fails to enter the green area of the scale, batteries are weak and must be replaced.

When the radio is tuned to relatively strong stations, the pointer will move from the green area toward the right. Maximum deflection to the right under these conditions indicates that the station is properly tuned in.

NOTE: On SW, where signals are generally of a weaker strength, very little pointer movement may be noticed.

RECEPTION ON THE PUBLIC SERVICE BANDS (PB HI, PB LO)

These two bands permit reception of public services such as fire, police, emergency services, mobile telephone, taxicabs, trucks and others, plus reception of U.S. Weather Bureau forecasts. In many parts of the country, these weather forecasts can be heard on 162.55 MHz and 162.40 MHz [W on the PB HI band]. For actual frequencies in your area, consult your local U.S. weather bureau. It should be noted that Fire and Police calls are generally of short duration, just long enough to communicate the necessary information. Because of the short duration of these transmissions, it is helpful to know the exact frequencies on which your local Fire and Police departments operate, so that you can tune to the proper area on the dial for their reception. If you do not know the frequencies used, you will simply have to tune slowly back and forth over the entire band until you hear one of these transmissions.

IMPORTANT

RECEPTION OF A POLICE FREQUENCY BY UNAUTHORIZED PER-SONNEL IS ILLEGAL IN SOME AREAS. It is the responsibility of the person using the equipment to be sure that the receiver is authorized or cleared through the local police department. Under no conditions can Lafayette Radio Electronics, the manufacturer of this receiver, be held responsible for its unauthorized installation or use.

USING THE SQUELCH CONTROL

The squelch control will enable you to eliminate background noise between stations on the PB HI, PB LO bands. The control is adjustable from "off" to maximum and should be set as follows:

Tune to a place on the dial where there are no stations. You will hear a soft "rushing" noise. Slowly rotate the squelch control clockwise to switch the circuit in [you will hear a "click"]. Advance the control clockwise until the background noise just disappears. Leave the control in this position. As you tune, the stations will break through the silence and be heard. If some noise is still present between stations, increase the squelch slightly. Too high a setting of this control may eliminate some of the weaker stations. If you wish to disable the squelch circuit completely, simply place the control in the OFF position [fully counter-clockwise until switch operates].

In those cases where you wish to monitor a particular frequency for long periods of time, make sure that the squelch control is high enough to silence the radio when no transmissions are present, but low enough to permit the transmission to come through. A little experimentation may be necessary to find the proper setting.

NOTE: At the beginning and end of each transmission you may hear a soft "pop". This is caused by the action of the squelch circuit, and is normal.

EARPHONE LISTENING

For private listening without disturbing others, simply plug the supplied earphone into the jack at the front of the radio marked PHONE. Insertion of the earphone plug will automatically disconnect the built-in speaker.

For replacement purposes, any 6 to 8 ohm dynamic earphone with a subminiature plug [1/8" diam. plug] may be used. An earphone of this type is available from Lafayette under Stock No. 99-25488.

USING AN EXTERNAL ANTENNA

In most cases, the built-in telescoping whip antennas will provide good reception on the various bands. However, the radio is equipped with a special jack [EXT. ANT] at the rear for the connection of an external antenna when the VHF whip fails to provide the desired reception [this jack may be used for all bands except AM]. A subminiature phone plug] Lafayette Stock No. 34-60318] will fit this jack. Simply connect the transmission line from the antenna to the subminiature phone plug. When using an external antenna, the telescoping whip may be collapsed.

It should be noted that the use of an external outdoor antenna for the FM, PB HI or PB LO Bands is generally not practical with a radio of this type. Moreover, the improvement in reception is not likely to be substantial in most cases. However, for those wishing to use an external antenna on the FM band, we have provided a diagram of the recommended plug, showing the manner in which 300 ohm twin lead is connected to it.





Fig. 5

Outdoor antennas for the PB HI or PB LO bands may be connected to the radio by means of a special adapter cable available for Lafayette under Stock No. 99-32476. This cable has a coaxial connector at one end [for connection to the PF-259 plug of the other end for insertion into the EXT. ANT jack on the radio.

For reception on short-wave, a simple external antenna consisting of a 10-20 foot length of insulated wire will sometimes provide improved results. The end of the length of antenna wire should be connected to a subminiature plug as shown in Figure 5. Note that the wire is connected to the shorter contact, ["center"] on this plug. The antenna wire should be extended full length, either vertically or horizontally, to ensure maximum pick-up of short-wave signals.

CAUTION: Besure to use insulated wire and keep it well away from any possible source of electrical current [a child may be tempted to insert the loose end into a nearby AC receptacle, for example].

SERVICE AND MAINTENANCE

If treated with reasonable care, the radio should only require the occasional replacement of the batteries [if the unit is used as a portable for a substantial part of the time]. When operated from AC, the batteries are not used, of course. It should be remembered however, that for AC operation the BATT-AC switch must be set to "AC".

Leaving this switch inadvertently in the "BATT" position will cause the radio to draw its power from the batteries, even though you may have plugged the unit into an AC outlet. If no batteries are installed, the radio will be inoperative when the switch is in the "BATT" position.

BATTERY REPLACEMENT

This radio should require very little service except for occasional replacement of the batteries. Weak batteries generally produce a loss of volume and distortion in the sound output. Replacement 1.5 volt "C" cells are available under the following numbers:

GUARDIAN 5500 PARTS LOCATION



MAIN CHASSIS

	Lafayette	RCA	Burgess	Eveready
Standard:	99-62572	VS035	1	935
Alkaline:	99-63802	VS1335	ALI	E93

If the unit is to be shipped to our main office for service, please read the instructions which follow on page 10.

GUARDIAN 5500 PARTS LOCATION



RETURNING THE UNIT FOR SERVICE

In the event that repair is necessary [either in or out of warranty], we recommend that you return the unit to the store from which it was purchased. In most cases, this will be your fastest and most efficient method of obtaining service.

If you wish to ship the unit to our main service center, please read the instructions which follow.

SHIPPING INSTRUCTIONS

Pack the unit very carefully to avoid damage in transit, preferably in its original carton. If the original carton is not available, use a sturdy carton with at least 3 inches of shredded paper or excelsior around the unit. In the latter case, wrap the unit in paper first to avoid particles of packing material getting into it. If this unit is being returned under warranty, it must be accompanied by a copy of the original sales ticket or shipping documents to establish date of purchase. Also, include with the unit a letter explaining exactly what difficulties you have encountered [remember to add extra First Class postage and indicate on the outside of the carton that First Class Mail is enclosed]. Ship by prepaid express if possible and mark ELECTRONIC EQUIPMENT...FRAGILE. Clearly address the carton as follows:

> SERVICE DIVISION LAFAYETTE RADIO ELECTRONICS CORP. 150 Engineers Road Hauppauge, L.I., N.Y. 11787

> > Downloaded by RadioAmateur.EU

INSIDE OF REAR COVER

SCHEMATIC DIAGRAM



* This Schematic Diagram may be changed for improvement without advance notice.