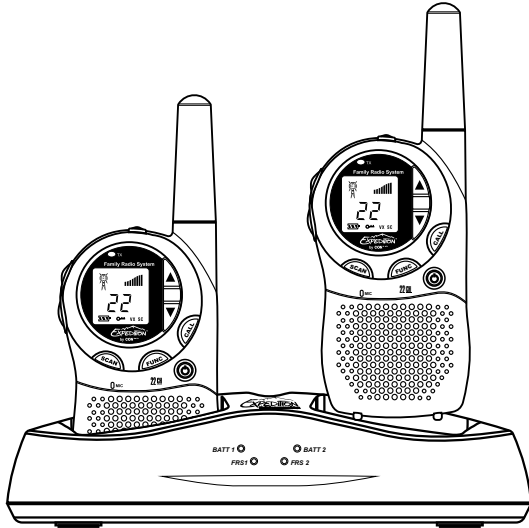




## FRS316

UHF FM TRANSCEIVER (Family Radio Service)



FRS310HT

IB-4833

Printed in China

### IMPORTANT SERVICE INFORMATION

Read this manual before attempting to set up or use this instrument. It contains important information regarding safe installation and use. Keep this manual for future reference. Also save the carton, packing and proof of purchase to simplify and accelerate any needed action.

### SAVE THESE INSTRUCTIONS

## FRS316

### BLISTER PACK CONTENTS

- ☐ FRS316-Two (2) Two-Way Radios
  - ☐ User-Removable Belt Clips\*
  - ☐ Two (2) Rechargeable Battery Packs
  - ☐ FRS Charger with AC/DC Adaptor
  - ☐ User's Manual
  - ☐ FCC Licensing Information Insert
- \* Attached to the units at the time of packing

1

### FCC NOTICE

The FCC requires that you be advised of certain requirements involving the use of this device. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installation. This device uses and can generate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the unit off and on), the user is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**FCC INFORMATION:** This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Privacy of communications may not be ensured when using this equipment.

**FCC WARNING:** This equipment generates or uses radio frequency energy. Adjustment to this unit or replacement of any transmitter component (crystal, semiconductor, etc.) to this unit that could result in violation of the rules.

**SAFETY INFORMATION:** Your wireless hand-held portable transceiver contains a low power transmitter. When the PUSH TO TALK (PTT) button is pushed it sends out radio frequency (RF) signals. The device is authorized to operate at a duty factor not to exceed 50%. In August 1996, the Federal Communications Commissions (FCC) adopted RF exposure guidelines with safety levels for hand-held wireless devices.

2

### FRS PRODUCT DESCRIPTION

The FRS/GMRS is the newest generation in personal two-way communications. The FRS/GMRS operates in a licensed radio band (FCC license is needed for its operation), on any of the GMRS channels.

The FRS316 is a lightweight, compact two-way radio that can be used up to about two miles with family or friends at parks, shopping malls, sporting events, concerts--any indoor or outdoor activity!

The FRS316 is compatible with other brands utilizing the same frequency band (operating in the frequency range from 462.5625MHz to 462.7250MHz).

The FRS316 is a 22-channel UHF two-way radio, featuring a multi-functional LCD panel (which indicates the current channel and various radio status icons). Other features also include electronic volume control and battery save circuitry.

Please read this user's manual thoroughly to get the most out of your FRS316 two-way radio.

**CAUTION:** To maintain compliance with the FCC's RF exposure guidelines hold the transmitter and ANTENNA at least 1 inch (2.5 cm) from your face and speak in a normal voice, with the ANTENNA pointed up and away from the face. If you wear the handset on your body while using the headset accessory, use only the supplied belt clip for this product and when transmitting, take it out of the belt to ensure that the ANTENNA is at least 1 inch (2.5 cm) from your body.

Use only the supplied ANTENNA. Unauthorized antennas, modifications, or attachments could damage the transmitter and may violate FCC regulations.

**NOTE:** The maximum transmission range will vary depending on terrain and environment. Range will be greater in open fields, while the range is shorter within and around buildings or large structures.

3

## SAFETY INSTRUCTIONS FOR BATTERIES

CAUTION: To reduce the risk of fire or personal injury, read and follow these instructions.:



CONTAINS NICKEL-CADMIUM BATTERY.  
BATTERY MUST BE RECYCLED OR  
DISPOSED OF PROPERLY.

1. Use only a CONAIR approved battery pack in FRS316.
  - a. GP35AAAK4BX 4.8V 350mA GPI International Ltd.
  - b. JB35AAANC4BC 4.8V 350mA JB Energy (HK) Ltd.
2. Do not dispose of the battery in a fire, as it may explode. Check with local codes for possible special disposal instructions.
3. Do not open or mutilate the battery. Released electrolyte is corrosive and may cause damage to the eyes and skin. It may be toxic if swallowed.
4. Exercise care in handling batteries in order not to short the battery with conducting materials such as rings, bracelets and keys. The battery or conduction material may overheat and cause burns.
5. Charge the battery (ies) provided with or identified for use with this product only in accordance with the instructions and limitations specified in this manual.
6. Observe proper polarity orientation between the Battery Pack and battery charger.

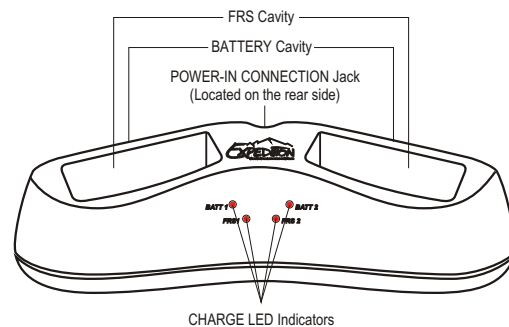


The EPA certified RBRC® - Battery Recycling Seal on the nickel-cadmium (Ni-Cd) battery indicates that CONAIR is voluntarily participating in an industry program to collect and recycle these batteries at the end of their useful life, when taken out of service in the United States or Canada. The RCRC® program provides a convenient alternative to placing used Ni-Cd batteries into the trash or the municipal waste stream, which may be illegal in your areas. Please call 1-800-8-BATTERY for information on Ni-Cd battery recycling and disposal bans/restrictions in your area. CONAIR's involvement in this program is part of our commitment to preserving our environment and conserving our natural resources.

\*RCRC® is a registered trademark of the Rechargeable Battery Recycling Corporation.

4

## CONTROLS DIAGRAM



5

## DESCRIPTION

### FRS316 UNIT

**Ear/Mic Jack** - This jack is used for optional accessories with Ø2.5mm stereo plug (not included).

**Belt Clip** - For your convenience, a removable belt clip is included to secure the radio to a belt, pocket, or any other convenient location.

**Transmit (TX) LED** - Illuminates in red when transmitting (TX).

**PTT (Push To Talk) Button / Switch** - Used for transmitting (making a call).

**Mon (Monitor) Button** - Lets you listen in on a channel for weak signals.

**Scan Button** - Used to activate/deactivate the channel scan.

**Battery Cover Latch** - Secures the battery cover in place.

**Battery Compartment** - Houses rechargeable battery pack (included) or four (4) "AAA" alkaline batteries (not included).

**Power Button** - Press and hold the power button to turn your unit ON/OFF.

**Func (Function) Button** - Allows you to change channels. Press and hold for 5 seconds to LOCK the buttons.

**Call Button** - Send call tones for alert or identification purposes.

**Up (▲) and Down (▼) Buttons** - Used for adjusting the volume level and changing the channel.

**LCD (Liquid Crystal Display) Panel** - A multi-functional display which shows channels and other radio status/icons.

**Antenna** - This is a fixed antenna.

### DESKTOP CHARGER

**FRS Cavity** - Used to charge the FRS unit. The FRS unit should be in upright position.

**BATTERY Cavity** - Used to charge the Ni-Cd rechargeable battery pack (included).

**POWER-IN CONNECTION Jack**

**CHARGE LED Indicators** - Illuminates in red when the Ni-Cd rechargeable battery or the FRS unit is being charged.

6

## INSTALLATION

### Removing the Belt Clip

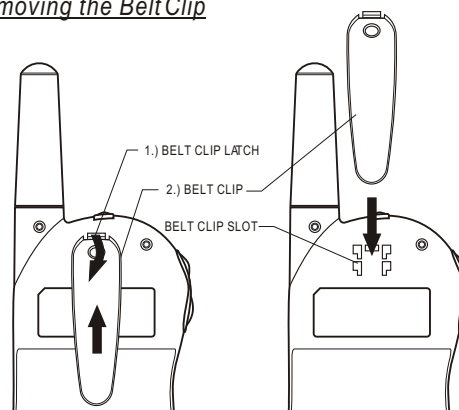


FIGURE 1  
(REAR VIEW)

FIGURE 2  
(REAR VIEW)

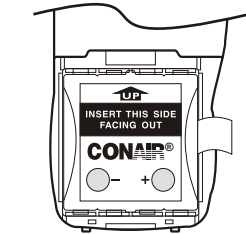
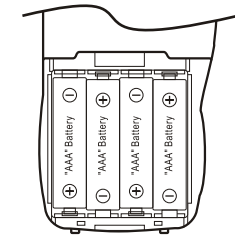
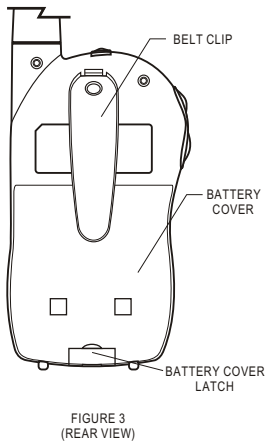
1. Pull the BELT CLIP LATCH (1) away from the unit.
2. While pulling the BELT CLIP LATCH (1), push up on the BELT CLIP (2) to remove it from the unit, as shown in Figure 1.

### Installing the Belt Clip

1. Slide the BELT CLIP into the BELT CLIP SLOT as shown in Figure 2.
2. A "click" indicates the BELT CLIP is locked into position.

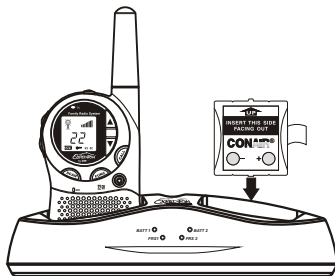
7

## Battery Installation



1. Release the BATTERY COVER LATCH located on the rear side of the unit. See Figure 3.
2. Remove the BATTERY COVER from the BATTERY COMPARTMENT.
3. Install one (1) Ni-Cd rechargeable battery pack (included) or four (4) "AAA" alkaline batteries (not included) following the polarities as shown in Figure 4 and Figure 5.
4. Reinstall the BATTERY COVER and lock the BATTERY COVER LATCH into position.

8



3. The CHARGE LED indicator will remain lit while the unit is in the charger. FRS unit will take approximately 10-14 hours to fully charge before use.

**NOTE:** 1. If the FRS units or the Ni-Cd rechargeable battery packs are not placed in the charger correctly, the CHARGE LED indicator will not light and the unit will not charge.

2. Use only the CONAIR AC adaptor and rechargeable battery packs supplied with this product.

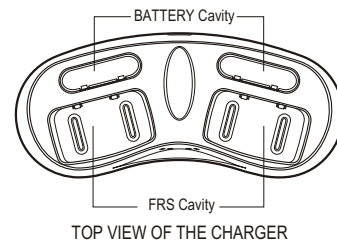
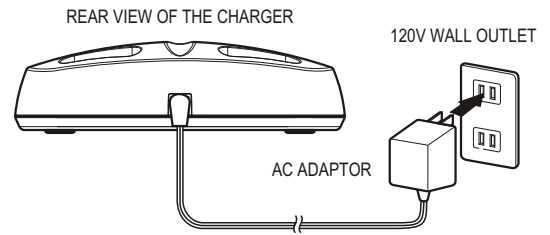
### NOTES:

- The FRS unit has a built-in power saver for maximum battery life. But when the FRS unit is not being used, conserve battery power by pressing the power button to OFF.
- Remove the batteries if the unit will not be used for a long period of time.

## Battery Charging

The battery pack in the unit must be fully charged for 10-14 hours before use.

1. Insert the small plug on the end of the AC adaptor into the POWER-IN CONNECTION Jack at the back of the desktop charger and plug the AC adaptor directly into a standard 120V wall outlet.

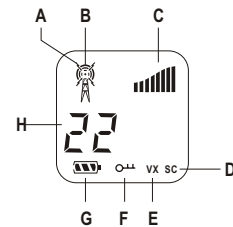


2. Place the FRS unit in the charging base upright and facing outward. The CHARGE LED indicator on the desktop charger will light. If CHARGE LED indicator is not lit, check position of FRS unit to insure charging contacts on the unit are lined up with charging contacts on the desktop charger.

**NOTE:** You can not charge alkaline batteries.

9

## LCD PANEL DISPLAY



A.	- RX icon. Displayed when receiving a signal.
B.	- TX icon. Displayed when transmitting a signal.
C.	- Displays the current VOLUME LEVEL.
D. SC	- Displayed during the CHANNEL SCAN mode.
E. VX	- Displays during the VOX mode.
F.	- Displayed when the unit is in LOCK mode.
G.	- Displays the current BATTERY LEVEL.
H. 22	- CHANNEL NUMBER. Changes from 1 to 22 as selected by user.

## OPERATION

### Turning the Unit ON

Press and hold the POWER button. The unit will "beep" and the LCD panel will display the current channel.

### Turning the Unit OFF

Press and hold the POWER button. The unit will "beep" and the LCD panel will turn blank.

### Adjusting the Speaker Volume

- Press the UP (▲) button to increase the Speaker Volume.
- Press the DOWN (▼) button to decrease the Speaker Volume.
- The Speaker Volume level is indicated by the number of bars displayed in the lower right corner of the LCD panel.

### Receiving a Call

The unit is continuously in the RECEIVE mode when the unit is ON and not transmitting. When you receive a signal on the current channel, the RX icon is displayed. (See "LCD PANEL DISPLAY" for details).

### Transmitting a Call

1. Check the channel activity by pressing and holding the MONITOR button. You'll hear static if the channel is unoccupied. Don't TRANSMIT if someone is talking on the current channel. Press and hold the PTT button to TRANSMIT. The TX LED indicator will light up in red. Hold the unit in a vertical position with the MICROPHONE 2 to 3 inches away from the mouth.
2. While holding the PTT button, speak into the unit using a normal tone of voice.
3. Release the PTT button when you have finished transmitting.

**NOTE:** In order for other people to receive your transmission, they must also be on the same channel you are currently using. Refer to the "Changing Channels" section for more information.

12

### Battery Level / Low Battery Indication

- The LCD panel displays the battery power level according to the number of squares lit inside the battery icon.
- When the battery level is low, the battery icon will flash to indicate that the batteries need to be replaced.

### Sending Call Tones

You can use Call Tones to alert the other user or to identify yourself. You can also use Call Tones to signal the beginning or the end of a transmission.

1. Press the CALL button, the red TX LED indicator will light up and the Call Tone continues for 2 seconds.
2. Release the CALL button. Your Call Tones will transmit to a nearby receivers set to the same channel.

### Locking Function Keys

You can lock your function keys to ensure your settings will not accidentally be changed.

Press and hold the FUNCTION button for 5 seconds until the LOCK icon symbol is displayed.

## SPECIFICATIONS

Channels Available	22 Channels
Output Power (TX)	0.21W (FCC Maximum)
Battery Life	30 Hours (typical)
Range	About 2 Miles

14

### Changing Channels

The unit has 22 available channels. To change channels:

1. Press the FUNCTION button the channel number digit flashes on the LCD panel.
2. While the channel number is flashing:
  - Press the UP (▲) button to move to a higher channel.
  - Press the DOWN (▼) button to move to a lower channel.
  - The channel changes from 1 to 22, or from 22 to 1.
3. Press the FUNCTION button or PTT button to select the desired channel and return to normal mode.

**NOTE:** Refer to the "FRS Channel Table" section of this Owner's Manual for detailed frequency listings.

### Monitor

You can use the MONITOR feature to listen in for weak signals in the current channel.

- Press the MONITOR button for normal monitoring.
- Press and hold the MONITOR button until it "beeps" for continuous monitoring.

### Channel Scan

CHANNEL SCAN performs searches for active signals in an endless loop from 1 to 22.

1. Press and release the SCAN button to activate CHANNEL SCAN. The channel number on the LCD panel changes rapidly until an active signal is detected.
2. When an active signal (one of 22 channels) is detected, CHANNEL SCAN pauses keeping the active signal broadcasted.
3. Press the PTT button to communicate through the active signal channel and CHANNEL SCAN is deactivated.
4. When an active signal (one of 22 channels) is detected, but another channel is desired, press the SCAN button twice to bypass the current channel and continue to search for another active channel.
5. Press the SCAN button to deactivate CHANNEL SCAN mode.

13

## CHANNEL TABLE

CHANNEL NUMBER	FREQUENCY (MHz)	POWER (Watts)	CHANNEL NUMBER	FREQUENCY (MHz)	POWER (Watts)
1	462.5625	0.21	12	467.6625	0.09
2	462.5875	0.21	13	467.6875	0.09
3	462.6125	0.21	14	467.7125	0.09
4	462.6375	0.21	15	462.5500	0.21
5	462.6625	0.21	16	462.5750	0.21
6	462.6875	0.21	17	462.6000	0.21
7	462.7125	0.21	18	462.6250	0.21
8	467.5625	0.09	19	462.6500	0.21
9	467.5875	0.09	20	462.6750	0.21
10	467.6125	0.09	21	462.7000	0.21
11	467.6375	0.09	22	462.7250	0.21

**NOTE:** Channels 1 to 14 are shared with the FRS radio channels. 15 through 22 are exclusively for GMRS radios. Operation of this model on GMRS frequencies (Channels 15 thru 22) requires a license from the Federal Communications Commission (FCC). The maximum transmission range will vary depending on terrain and environment.

## FCC LICENSING INFORMATION

Channels 1 thru 7 transmit on FRS/GMRS frequencies.  
Channels 8 thru 14 transmit on FRS frequencies.  
Channels 15 thru 22 transmit on GMRS frequencies.  
Operation on FRS/GMRS and GMRS frequencies require a license from the Federal Communications Commission (FCC).

Before any station transmit on any channel authorized in the GMRS from any point within or over the territorial limits of any area where radio services are regulated by the FCC, the responsible party must obtain a license for a GMRS system. An individual 18 years of age or older, who is not a representative of a foreign government, is eligible to apply for a GMRS system license.

Application for a GMRS system license is made on FCC Form 605 and you can obtain a copy from the FCC's Web site: <http://www.fcc.gov/formpage.html> or by calling the FCC's Form Distribution Center 1-800-418-FORM(3676), or from the fax-on-demand by dialing (202) 418-0177.

There is a filing fee. For information on fees, see the FCC's Web site: <http://wireless.fcc.gov/csinfo/feeinfo.html>.

15

## TROUBLESHOOTING

SYMPTOM	SOLUTION
<b>No power.</b>	<ul style="list-style-type: none"> <li>• Check batteries. Ensure that the batteries are installed properly.</li> <li>• You may need to charge your Ni-Cd battery pack or replace the old batteries with four (4) new "AAA" alkaline batteries.</li> </ul>
<b>Reception is weak.</b>	<ul style="list-style-type: none"> <li>• Press the UP (▲) button to increase VOLUME.</li> <li>• The receiving signal may be weak and/or out of range.</li> <li>• If this happens, press the MONITOR button.</li> </ul>
<b>Cannot change channels.</b>	<ul style="list-style-type: none"> <li>• To change channels, press the FUNCTION button until the channel number flashes on the LCD panel. Press the UP (▲) or DOWN (▼) buttons to change channels.</li> <li>• Batteries may be weak.</li> </ul>
<b>Range is limited.</b>	<ul style="list-style-type: none"> <li>• Batteries may be weak. Replace with new batteries if the BATTERY LEVEL indicator is low.</li> <li>• The maximum range will vary depending on terrain and environment. Open fields provide the maximum range, while steel/concrete structures, heavy foliage and use in buildings and in vehicles may limit the range significantly.</li> <li>• Wearing the radio close to the body, such as in a pocket or on a belt, will decrease range; change the location of the radio.</li> </ul>
<b>Sound distortion problems.</b>	<ul style="list-style-type: none"> <li>• If you are transmitting, speak in a normal tone of voice 2 to 3 inches away from the MICROPHONE.</li> <li>• If you are receiving, lower the VOLUME to a comfortable level.</li> <li>• Radios too close. Radios must be at least 5 feet apart; increase your distance.</li> <li>• Radios too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear unobstructed conditions.</li> </ul>

16

## SERVICE

According to the FCC regulations, this equipment, which has been certified and registered by the FCC, may only be repaired by authorized persons. If repairs or adjustments are made by an unauthorized person, the FCC certification may be voided. Should you encounter any problems, please call the Conair Electronics toll-free Customer Help Line for assistance.

### FOR IN-WARRANTY SERVICE

Package your units (include all accessories) and ship the unit postage prepaid\* and insured (for your protection) to:

Conair Electronics, DEPT. Warranty Repair,  
7475 N. Glen Harbor Blvd., Glendale, AZ 85307

Be sure to include your return address, proof of purchase, a daytime phone number, \$5.00 for postage and handling\*, and a brief explanation of the difficulties.

**\*NOTE:** California residents need only provide proof of purchase and should call 1-800-366-0937 for shipping instructions.

### FOR OUT-OF-WARRANTY SERVICE

You may call the Customer Service Help Line for the price of a replacement before returning the unit. Please follow all instruction for In-Warranty service (above) to return your unit, and mark the package:

DEPT. Out Of Warranty

If you have called and know the cost of your replacement, please include this information with your return for prompt service.

## LIMITED ONE YEAR WARRANTY

Conair, at our option, will replace or exchange (for a model of equal value) your FRS316 unit for one year from the date of purchase if the unit is defective in workmanship or materials.

To obtain service under this warranty, return the defective product to the service center together with your sales slip and \$5.00\* for postage and handling.

\*California residents need only provide proof of purchase and should call 1-800-366-0937 for shipping instructions.

17

ALL APPLICABLE IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANDISE AND FITNESS FOR A PARTICULAR PURPOSE GIVEN TO YOU BY LAW ARE HEREBY LIMITED IN DURATION OF THIS WARRANTY. UNDER NO CIRCUMSTANCES WILL CONAIR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation 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.

## SERVICE CENTER

CONAIR ELECTRONICS  
7475 N. Glen Harbor Blvd.  
Glendale, AZ 85307

## CONAIR ELECTRONICS

Customer Service Help Line:

**1-800-366-0937**

**8:30 a.m. - 9:00 p.m., Monday - Friday**

**8:30 a.m. - 12:30 p.m., Saturday**

**www.conairphone.com**

18