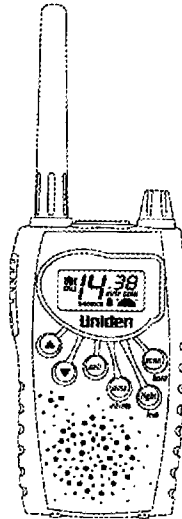


# User Manual

DRAFT COPY OF THE INSTRUCTION MANUAL

## **FRS500 Product Definition**



Document Number: UAC-FRS500-PPG-001

**UNIDEN AMERICA CORPORATION  
PRODUCT PLANNING GROUP**

## Table of Contents

<b>Executive Summary</b>	3
<b>Background</b>	3
<b>Product Specifications</b>	3
Keys/ Controls	3
Packaging Specifications	4
<b>Key Operation</b>	4
ON/OFF/VOLUME	4
PTT/MONITOR	4
UP/DOWN Arrow Keys	4
CALL Key	5
SCAN/HOLD Key	5
LIGHT/LOCK Key	5
CTCSS/VIBRATE Key	5
SPEAKER/MICROPHONE Jacks	6

### Technical Support and Service:

Your Uniden dealer can provide you with technical assistance and information. If your marine radio does not perform properly, take it to a Uniden dealer for servicing. The radio contains no user-serviceable parts. Unauthorized adjustment will void the warranty and may cause illegal radio operation. Be sure that a qualified technician services your radio equipment.

### Caution:

Changes or modifications to this product not expressly approved by Uniden, or operation of this product in any way other than as detailed by this Operating Guide, can void your authority to operate this product.

**1. Executive Summary**

The FRS500 is designed to give UAC an entrance into the Family Radio Service category. This radio is targeted as a mid line model. The FRS500 will be competing with the following manufactures: Cobra, Midland, Radio Shack, Oregon Scientific, Motorola, and other Pacific Rim imported models.

**2. Background**

The FRS500 will be one of three models in a series of FRS Radio's. The three models will be marketed as a basic, mid-level, and high end. The concept is to have a family look and share a common tool. These will be sold to our existing customer base comprised of mass merchants, dealers, and distributors.

**3. Product Specifications**

Channels	14
Frequency coverage	See Below

FRS Channels	Frequencies
1	462.5625
2	462.5875
3	462.6125
4	462.6375
5	462.6625
6	462.6875
7	462.7125
8	467.5625
9	467.5875
10	467.6125
11	467.6375
12	467.6625
13	467.6875
14	467.7125

LCD Display	Icons, 2 digit-(1 <sup>st</sup> character is 2 segment, 2 <sup>nd</sup> character is 7 segment)
Headset/Speaker Microphone	Same size jacks as the FRS1400, headset speaker microphone is not included
Power Requirements	3 AA Alkaline batteries only, no NiCd capabilities. Batteries not included
Vibrate Alert	Yes
VOX	No
CTCSS	Yes

<b>Keys and Controls</b>	
On/Off/Volume Knob	Yes
Antenna	Yes
Speaker/Microphone Jack	Yes
PTT/Monitor Key	Yes
UP/DOWN Arrow Keys	Yes
CALL Key	Yes
SCAN/HOLD Key	Yes
LIGHT Key	Yes
LOCK Key	Yes
<b>Packaging Specifications</b>	
Display Box	Yes 4 color, film to be submitted by UAC
Inner Carton	Cardboard
FCC Approval	Yes
Model number and ID label	Yes
Product UPC Code	0 50633 55017 5
Owners Manual	Yes, UAC to supply film, UJ to write the Manual for UAC review
Warranty	Included in the Owners Manual
Registration Card	Yes, Separate card UAC to issue film
Belt Clip with screw	Packaged in plastic bag

## 4. Key Operation

### 4.1 ON/OFF/Volume Knob

Rotate clockwise to turn on. Continue to rotate clockwise to increase volume levels. Rotate counterclockwise to decrease volume and turn off. The knob will have a click feel upon turn on and turn off.

### 4.2 PTT/MON Key

When the radio is turned on, pressing the PTT (Push To Talk) section of the key will allow the user to make a voice transmission. This portion of the key will have a click feel to it. When the PTT is depressed the transmit icon will be displayed in the LCD screen. When turned on, the MON (Monitor) key can be depressed to open up the threshold level of squelch in order to receive distant or faint transmissions. This key will also have a click feel upon depression. There will be no LCD indication for the MON feature.

### 4.3 UP/DOWN Arrow Keys

When the radio is turned on for the first time the channel on the LCD indicator will display 1. Pressing the UP arrow key once will move the channel number to 2. The up arrow key will be able to move through all fourteen channels. If the user is on the fourteenth channel and presses the UP key, the display will go back to channel 1. If at any time the UP arrow key is pressed and held down the channel indicator will quickly show the number of the channels moving higher until the key is released. The DOWN arrow key will function the same as the UP arrow key except move the channels in a decreasing order. If the user is on channel 1 and presses the DOWN arrow key, the channel information will display 14.

*Note: Every time the radio is turned off, the radio will remember the channel it was last on. The next time the radio is turned on the last used channel setting will be displayed.*

#### 4.4 CALL Key

When the radio is turned on, the CALL key will transmit a tone over the selected channel displayed in the LCD screen. The tone can be used to alert other users to switch to another channel or for other purposes. The call icon will display in the LCD upon depression of the CALL key. The tone will be transmitted as long as the CALL key is depressed.

*Note: Please check FCC regulations regarding length of continuous tone transmission.*

#### 4.5 SCAN/HOLD Key

When the radio is on, the user may press the SCAN key to make the radio scan through all 14 channels until a transmission is detected. The SCAN icon will appear in the display and the channel digits will continue moving incrementally in the increasing direction until a transmission is detected. Once a transmission is detected the radio will stop on the active channel to allow the user to listen to the transmission. After the transmission is complete, the radio will have a 2 second built in delay before it continues scanning. If the user wishes to stay on an active channel the SCAN/HOLD key may be depressed a second time to hold on that channel. If the SCAN/HOLD key is pressed again, the unit will start scanning again. If the user holds on a channel, the scan icon will flash until the user either starts scanning again or presses the UP/DOWN key to go back to manual channel selection mode.

#### 4.6 LIGHT/LOCK Key

When the radio is on, the user can depress the LIGHT key to activate the back lit LCD screen. Pressing the key will activate the light for 5 seconds after which it will shut off. Pressing and holding this key will activate the Lock function. The Lock function will disable the functions of the following keys: UP/DOWN keys,

SCAN/HOLD, and CTCSS keys. To unlock the feature press and hold the LIGHT/LOCK key for 2 seconds and the radio will return to normal operations. When the Lock feature is activated the icon will appear in the LCD screen.

#### 4.7 CTCSS/VIBRATE

When the radio is on the user can press the CTCSS key and the LCD will show 00 next to the channel number that is currently displayed. The user will use the UP/DOWN arrow keys to choose from one of the 38 CTCSS codes. When the correct tone code is selected the user will press the CTCSS key again to program that channel with the tone code. Whenever this channel is displayed (with a code assigned), the CTCSS code number will also show in the LCD. For the user to have no tone code setting for the channel, the user would select 00 and press the CTCSS key. To activate the VIBRATE feature the user will press and hold the CTCSS/VIBRATE key. This will make the radio vibrate anytime that there is an incoming transmission on a channel with a CTCSS code assigned. To deactivate the feature the user will press and hold the CTCSS/VIBRATE key. When this feature is active, the icon for vibrate will be shown in the LCD screen.

#### 4.8 SPEAKER/MIC Jacks

These jacks will allow for the input of an external speaker/microphone. These jacks will be covered by a piece of rubber for protection.