MODEL : **VP220**

USER MANUAL

TWO TONE VOICE PAGER WITH DISPLAY



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WARNING:

- 1. Do not operate this product in a hazardous atmosphere.
- Do not replace or charge batteries in a hazardous atmosphere. Contact sparking may occur while installing or removing batteries and cause an explosion or fire.
- Do not replace or change accessories in a hazardous atmosphere. Contact sparking may occur while installing or removing accessories and cause an explosion or fire.
- 4. Turn a radio off before removing or installing a battery or accessory.
- Do not disassemble this unit in any way that exposed the internal electrical circuits of the unit.
- **6.** Do not substitute components. This could void the intrinsic safety rating.

BATTERY TYPES

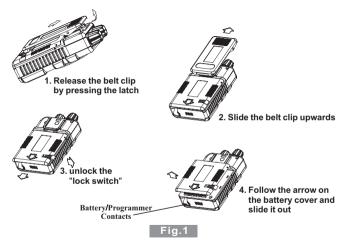
The $\mbox{VP220}$ is powered by 3 rechargeable Ni-MH batteries, type " AAA ".

BATTERY INSTALLATION

NOTE: For optimum performance, the Ni-MH batteries must be fully charged before operating your VP220.

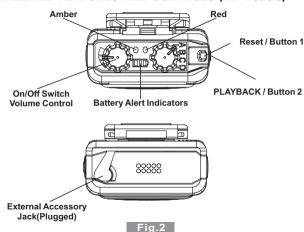
Install your batteries as follows:

- Release the belt clip by pressing the latch, and slide the belt clips upwards. (see Fig.1)
- 2. Unlock the "lock switch" on the battery cover.
- 3. Follow the arrow " " on the battery cover and slide it out.
- 4. After inserting the batteries, slide in the battery cover into place , and then slide the battery cover latch to the locked position.



CAUTION: If the batteries are improperly installed, the **VP220** will not function and the batteries will not charge.

STANDARD FEATURES AND CONTROLS (All Models)



ON/OFF Switch/Volume Control

The ON/OFF SWITCH/VOLUME CONTROL is a combined single control located on the top of the **VP220**. (see Fig. 2)

Turning the control knob a few degrees in a clockwise direction applies power to the receiver, and an audible beep is sounded to indicate that the **VP220** is turned on. As the control is rotated in a clockwise direction, the volume level of any received message and alert tone is increased. Rotating the control in the opposite direction reduces the audio level, and turns the **VP220** off.

Audible/Visual Alert Indicators

When your **VP220** is initially turned on, both the red and amber LEDs on the control panel light and an alert tone is sounded until the decoder circuit power-up is complete. Thereafter, whenever a properly encoded message is received, the red LED flashes and an audio alert is sounded.

If the battery voltage falls below the level required for operation, a low battery pulse tones sounds and the red LED flashes. If in vibration mode, just the red LED flashes to indicate a low battery state.

Function Switch

According to the specific model ordered, the function switch will be configured to 4 positions. Different function modes (monitor/ selective call, scan, etc.) can be configured for any position of the switch.

Channel Monitoring

When the function switch is set to a monitor position, all voice communications on the selected channel is heard through the speaker. When monitoring channel 1 or 2 all ordered alert options are functional.

Reset Button / Batton 1

After receipt of a properly coded message and after completion of that message, the VP220 will automatically reset to the programmed operational mode (see reset on pager 2 options). Some of these reset functions will place the pager in the monitor mode. In these cases, or when the manual reset function is programmed into the pager, press the reset button to return your VP220 to the standby mode.

External Speaker Jack

When the **VP220** is used in high-noise environments or when privacy is needed, an optional <u>Gold Apollo</u> approved lapel speaker or earpiece can be connected to the external accessory jack located at the bottom of the **VP220**. The jack is fitted with a protective plug. (see Fig.2)

NOTE: To prevent entry of dust and moisture, the plug should be inserted whenever the external accessory jack is not being used

LCD Display



- 1. 2 lines / 12 characters per line
 - *Current date and Time.
 - *" indicator of the unread message.
- 2.Beep
- 3. Vibrate
- 4. Setting monitor function
- 5. Setting scan "F1,F2" Function.
- 6.Battery Indicator
- 7. Recording Indicator

OPERATION

Perform the following steps to prepare your **VP220** for operation:

- 1. Set the FUNCTION switch to a tone-alert position.
- Rotate the ON-OFF SWITCH/VOLUME CONTROL clockwise to turn on the VP220. Four short beep sounds occur and both LEDs light, indicating that power is applied.
- 3. Set the FUNCTION switch to a monitor position.
- Listen for a transmission and adjust the volume control to a comfortable listening level
- 5. If no transmission is heard, hold down the RESET button and adjust the background noise to a comfortable listening level. It may be necessary to readjust the volume when a voice signal is present.

- To push play button to play the unread message, display will show as below
 - 6-1 Prompt source
 - 6-2 Receiving time and date
 - 6-3 Timer countdown
 - 6-4 The number of reading message



- Set the FUNCTION switch to the desired operating mode, i.e., selective call tone, selective call vibrate and monitor scan, etc.
- Turn off the VP220 by rotating the ON-OFF SWITCH/VOLUME CONTROL counterclockwise until a click is heard and the mechanical stop is reached.

9. Basic Setting

*To Push button 1 and button 2 at the same time VP220 will enter the setting mode.

*Push button 1 to enter for setting items; Push button 2 to move the cursor

*In setting item mode, the button 1 is to change the number or items, the button 2 is to move the cursor from left to right.
*In setting item mode, turn the function switch to go to stand

by mode without any setting modification.

BATTERY LIFE

Battery life depends upon the number of calls received and length of each call, capacity and charge of the battery, and the mode of operation.

A battery gauge, located between the knobs on top of the pager can be used to determine remaining battery capacity. To enable the battery gauge, press the reset button.

This will illuminate

the LED in the battery gauge. These green LED on the top of the pager show remaining battery strength.

Belt Clip Feature

An integral part of the clip on the back of your **VP220** is a security hook, This hook is intended to allow easy removal of the **VP220**, while at the same time preventing the unit from being pulled off your belt. (see Fig.1)

Scan function (Two-Frequency Models Only)

All **VP220** that are equipped with two frequencies are capable of scanning the two channels for selective call or monitoring purposes.

SCAN OPERATION (TWO FREQUENCY ONLY)

Priority Scan

If the **VP220** is programmed for priority scan, the frequency programmed as frequency 1 (F1) is designated as the priority channel. If there is no traffic on F1, the **VP220** alternately listens to F1 and F2 (Frequency 2) until a transmission is detected. If a transmission is detected on F1, the **VP220** stays on that channel until the transmission ceases. The **VP220** only decodes tones on the F1 channel. No tones are decoded on the F2 channel.

If the **VP220** detects a transmission on F2 it stops on F2 then listens for transmissions on F1. Scan back time is programmable and can be set to 0.5, 1, or 2-second increments. If a transmission is detected on F1, the **VP220** switches to F1 cutting off any transmission on F2. When switching from F2 to F1, the **VP220** listens for any tones and alerts if the proper tones are detected.

It should be noted that the detection of tones is very dependent on the duration of the tone sent over the air. To ensure reliable alerting, it is recommended that this feature only be used when the first tone duration transmitted is one second or more.

Non-priority Scan

If the non-priority scan mode, the VP220 alternately listens on F1 and F2 for any transmission. A transmission on either channel causes the VP220 to stop on that channel until the signal disappears. In non-priority scan, the VP220 decodes tones on either F1 or F2 provided the VP220 has listened to the appropriate channel at the correct time. However, it should be noted that if the VP220 is listening to traffic on F2 and an alert is transmitted on F1, the VP220 will not hear that signal until the transmission on F2 is finished. Therefore, an emergency alert could be missed if the VP220 is listening to traffic on one channel with tones being sent out on the other channel.

Silent Scan

In the silent scan mode, the VP220 alternately listens on F1 and F2 for alert tones. Detection of alert tones on each channel causes the **VP220** to stop on that channel until the signal disappears. In the silent scan mode, the VP220 decodes tones on either F1 or F2 provided the **VP220** has listened to the appropriate channel at the correct time. However, it should be noted that if the VP220 is listening to traffic on F2 and an alert is transmitted on F1, the **VP220** will not hear that signal until the transmission on F2 is finished. Therefore, an emergency alert could be missed if the VP220 is listening to traffic on one channel with tones being sent out on the other channel. Scan back time is programmable. To ensure reliable alerting, it is recommended that this feature only be used when the first tone duration transmitted is one second or more.

Scan/Monitor Positions

In these positions, the message is stored only when a properly encoded message is received. Other communications monitored on the channel that do not alert your monitor are not stored.

Selective Playback of Message(s)

To playback a particular message in memory, press the PLAYBACK button. Pressing once replays the newest message in memory. Twice replays the second most recent message and so on. Messages cannot be played back during message recording.

You may also playback older messages by pressing the PLAYBACK button as you are listening to a message. If you are listening to the most recent message, and want to listen to an older message, press the PLAYBACK button while listening to the current message. The playback switches to an older message if it is still in storage.

Silent Scan

In the silent scan mode, the **VP220** alternately listens on F1 and F2 for alert tones. Detection of alert tones on each channel causes the VP220 to stop on that channel until the signal disappears. In the silent scan mode, the **VP220** decodes tones on either F1 or F2 provided the **VP220** has listened to the appropriate channel at the correct time. However, it should be noted that if the VP220 is listening to traffic on F2 and an alert is transmitted on F1, the VP220 will not hear that signal until the transmission on F2 is finished. Therefore, an emergency alert could be missed if the VP220 is listening to traffic on one channel with tones being sent out on the other channel. Scan back time is programmable. To ensure reliable alerting, it is recommended that this feature only be used when the first tone duration transmitted is one second or more.

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If there are no messages in memory, a "memory empty" one short beep tone is heard while the PLAYBACK button is pressed.

NOTE: A message is considered read if playback has been initiated for the end of the message is reached, whichever occurs first.

FIELD INSTALLED OPTIONS

Fixed-Alert, Audio-Only Volume Control

When this option is installed, the alert tone is factory preset (non-adjustable) at the maximum volume level. Tuning the volume control varies only the voice message volume level.

Time-Out Auto Reset

This feature allows the **VP220** to be automatically reset after a predetermined amount of time. This places the **VP220** back in standby mode to help conserve battery power.

The VP220 has following programmable options:

- Priority Scan
- Non Priority Scan

- Silent Scan
- Alert Duration
- Priority Alert
- Reset Options
 - Carrier reset
 - Delayed N Carrier Reset
 - Manual Reset
 - Revert Reset
 - Time Out Reset
 - Delayed N Revert Reset
- Stored Voice Options
 - Max Message Lengths
 - Call Reminder
- Push-To-Listen

BATTERY LIFE

Battery life depends upon the number of calls received and length of each call, capacity and charge of the battery, and the mode of operation. A battery gauge, located between the knobs on top of the pager can be used to determine remaining battery capacity. To enable the battery gauge, press the reset button. This will illuminate the LED in the battery gauge. These green LED on the top of the pager show remaining battery strength.

ACCESSORIES

Gold Apollo offers these accessories below to increase communications efficiently and provide many unique benefits.

- Desktop Battery Charger
- Desktop Battery Charger Amplifier with Antenna and Relay
- Earpieces

VP220 charger User manual



IMPORTANT SAFETY INSTRUCTIONS-SAVE THESE INSTRUCTIONS

- This manual contains important safety and operating instructions.
- Before using the the charger, read all instructions and cautionary markings on the (1) charger, (2) 3 rechargeable batteries, (3) pager.

WARNING:

- When the pager or batteries are inserted, if the charger flashes green light, it indicates the pager or the charger has Temperature Thermistor Bad. Please re-insert the pager or batteries few times.
 If the problem still occurs, please send the charger back for repair.
- Do not expose charger to rain or snow.
- To reduce risk of damage to electrical plug and cord, pull by the plug when disconnecting the charger.
- Make sure the cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- Do not operate charger with damaged power supply.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged.
- · Do not disassemble charger.
- To reduce risk of electrical shock, unplug charger from outlet before attempting cleaning.

BATTERY CHARGER DESCRIPTION

The single-unit charger is capable of charging batteries in the **VP220** or three spare batteries. Dual colored LED indicators provide information as to which batteries are being charged.

NOTE: It has to charge three batteries at the same time, not available for individual battery.

OPERATION GENERAL

Charging Batteries While in the Receiver

 Insert the transformer output plug into the recessed power receptacle located on the rear of the charger (see below picture).



- 2. Insert the transformer input plug into a 120volt, 60Hz receptacle.
- 3. Insert the VP220, with battery into the charger compartment with the belt clip facing toward the back of the charger. Push the VP220 all the way down until the belt clip latches and an audible snap or click is heard.
- 4. When a pager is inserted in the charger, the PAGER indicator lights on. When the charging process begins, during charging process, the pager indicator light is solid red. When the charging process is complete, the PAGER indicator light will change, in color, from red to green.
- To remove the VP220 alert monitor receiver, press the upper end of the belt clip and lift the VP220 out.
- 6. To charge the three spare batteries, place the batteries into the spare battery slot and push down until a snap or click is heard. When the battery is inserted into the charger, the BATTERY indicator lights on. When the charging process begins, during charging process, the battery indicator light is solid red. When the charging process is complete, the PAGER indicator light will change, in color, from red to green. Removing the batteries after charging (see the below picture).

NOTE:

When a pager and batteries are inserted in the charger at same time, the pager pocket has priority. After the pager has completed rapid charging, then the batteries will follow charging with red LED solid red. Otherwise, the first item inserted, pager or batteries will have priority in the charge cycle. For example, if batteries are in place in the battery slot and then the pager is inserted into the pager pocket, the batteries will be charged first. The BATTERY indicator light will be solidly lit red and the PAGER indicator light will be on. Once the batteries is fully charged, it then will start to charge the pager.



CHARGER INDICATOR LIGHTS

LED STATUS	INDICATION SUMMARY
PAGER light solid orange	Charger is checking battery chemistry, or Charger is waiting for BATTERY charger cycle to complete
PAGER light solid red	PAGER is actively rapid charging
PAGER light green	PAGER rapid charge cycle completed and in the maintenance mode
BATTERY light solid orange	Charger is checking battery chemistry, or Charger is waiting for PAGER charge cycle to complete
BATTERY light solid red	BATTERIES are actively rapid charging
BATTERY light green	BATTERIES rapid charge cycle is completed and in the maintenance mode.

SPECIFICATIONS

Parameter	Model VP220
Input Source	$8.4 \sim 8.8~V~DC~5~Watts$ ($800~amp~DC~max.)$
Weight:	6.17 oz. (175g)
Dimensions:	4.09 x 2.42 x 1.54 (104 x 61.5 x 39mm)
Rapid charging: *Rapid charging method	A. Rapid charging method: Delta voltage TCO: 50°C (typical) Timeout: 2.5 hours (typical) B. Rapid charging current: 350 mA (typical)
Rapid charging time:	Approximately 2 Hours
Temperature Range:	0° C to $+40^{\circ}$ C

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NOTE





