![Gold Apollo Co., Ltd. logo]

Voice Pager

MODEL：VP220

PAGER PROGRAMMING GUIDE

V1.0.0

Contents

Getting Started

The VP220 Pager Programming Software provides the flexibility to program VP220 pagers to meet individual requirements. To obtain the best results from the product, please take a few minutes to read this instruction guide.

Equipment Required

To install and operate the programmer, you need a system that meets the following minimum requirements:

- A personal computer (PC), or compatible
- Windows 2000 or above operating system (XP or Vista Recommended)
- 128 MB of RAM
- An USB output port

Programming Interface

The Programming interface kit, shown in following Figure, supports VP220 programming Items included with the interface kit consist of the following:

- Programming software
- VP220 Programmer
- USB Cable - Type A to B

VP220 Programmer   **USB Cable - Type A to B**

Installing Programmer Software

Installation

Install the programmer software into a PC as follows:
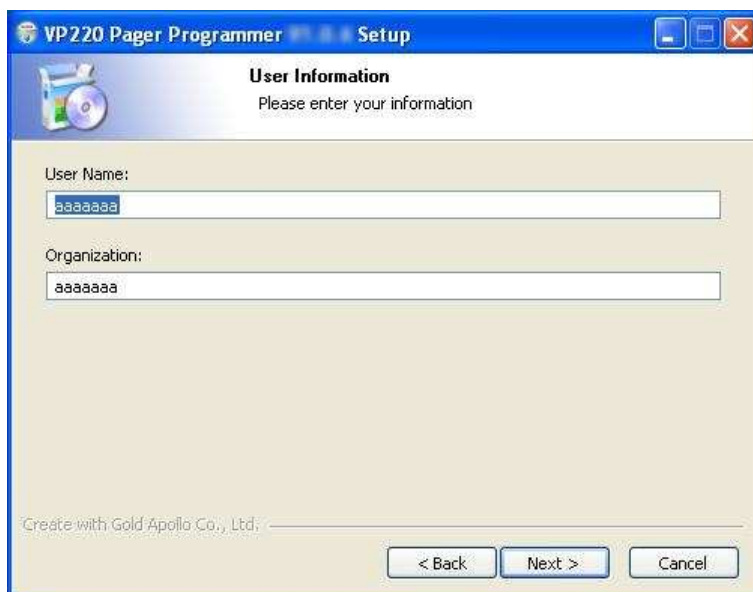
1. Uncompress the VP220_Setup.zip and save them in a temporary directory.

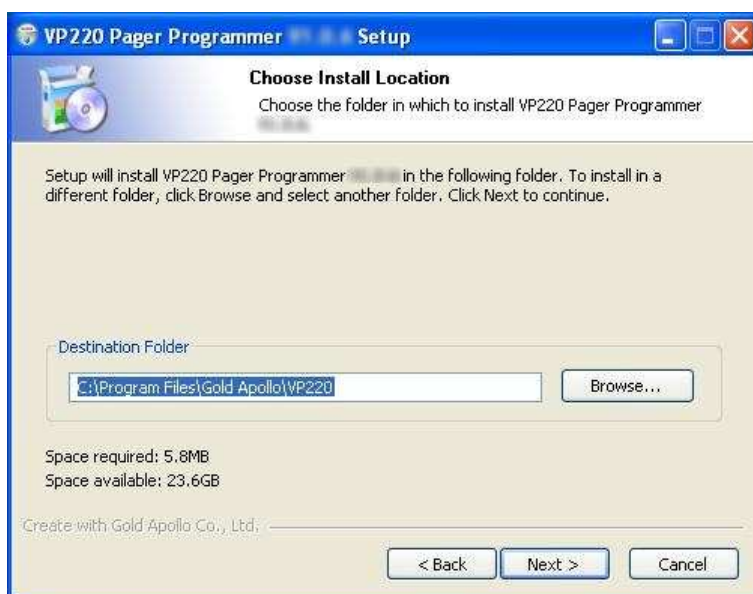2. Double click the setup.exe file. Click on "Y".

3. Click "Next" on the Welcome screen.

4. Enter your user information and click "Next". (Note: you must enter at least a single character "into the company field)
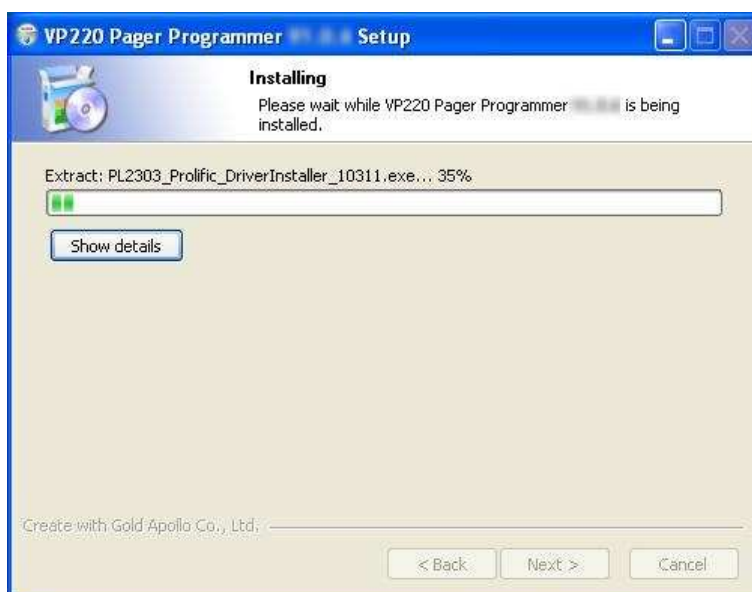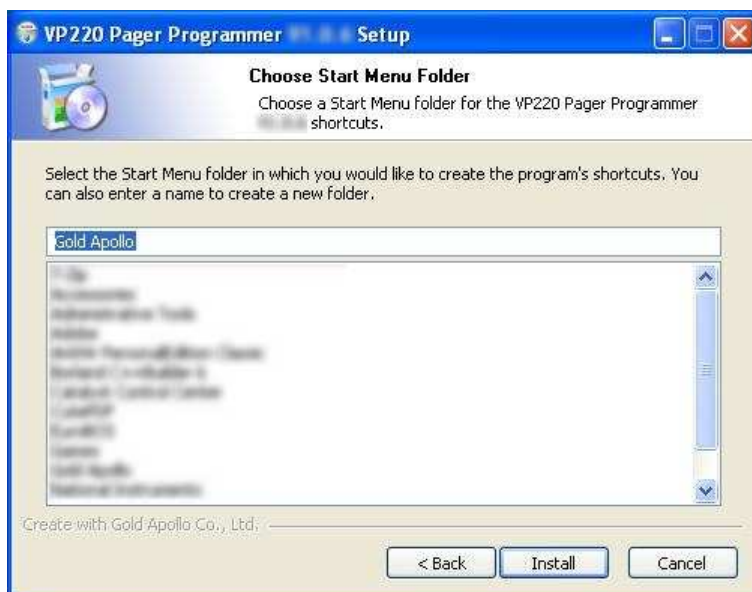

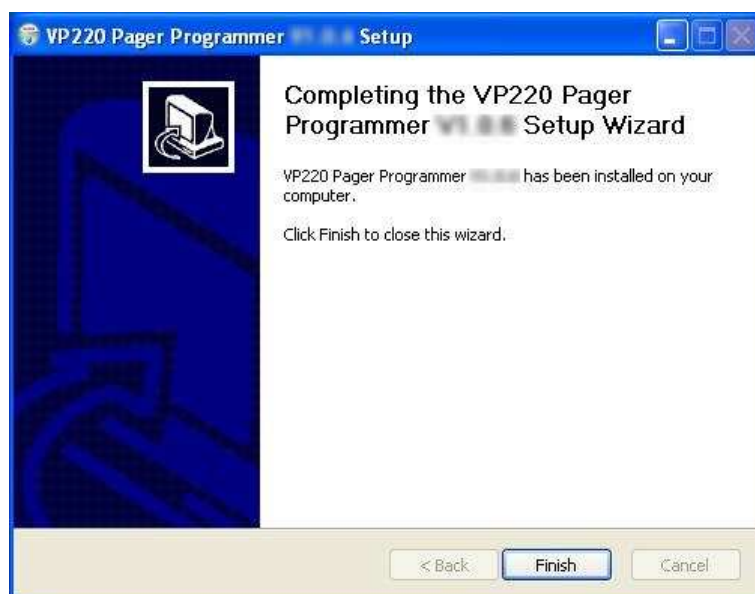5. Choose where the program should be installed and click "Next".

6. On the Select Program Folder screen, choose where you would like the program to show up in your start menu and click "Install".

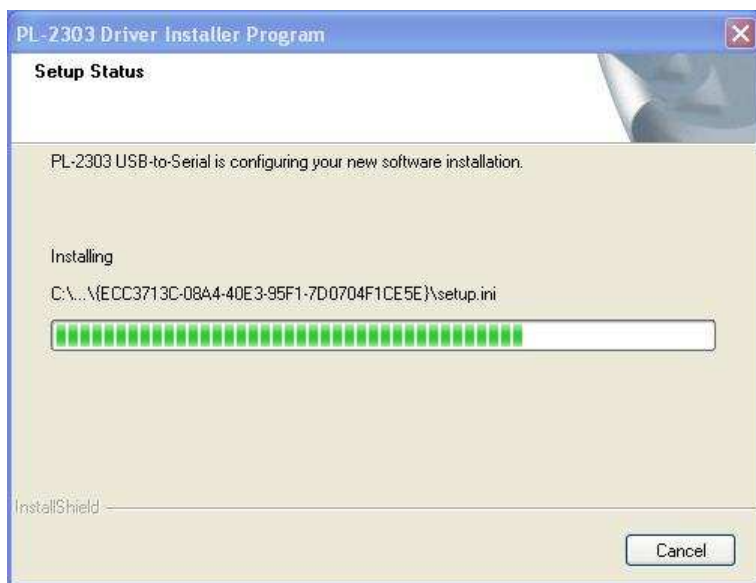7. If you had installed USB driver then click "Finish" on the Setup Complete screen and VP220 Pager Programmer has been installed on your computer.

8. If you did not install USB driver then click "OK" to install USB driver.

9. Please reboot your computer after USB driver and programming software installed.

Running

You now have the program installed. To run it from the Start menu/ Programs/ Gold Apollo /VP220 Pager Programmer.

Connecting Programmer to VP220

Refer to Figure then connect the programmer kit as follows:

1. At the rear of the PC, connect the USB cable Type A Male to the USB port.

2. Plug the USB cable Type B Male into USB connector of the VP220 programmer. Hardware installation is complete.

Figure Programmer Hardware Connections

VP220 Programming

Introduction

The following describes the procedures for using the VP220 programmer to accomplish:

1. Establish a computer hardware configuration.

2. Make sure VP220 has fully charged battery.

Starting the Programmer

1. The application can be launched from Start → Programs → Gold Apollo → VP220 Pager Programmer. The following window appears:

2. Input your password. If key in wrong password for 3 times, the system shuts off automatically. If the password is correct, the following window appears:

3. Now, the system examines that if the VP220 programmer is well installed. If any questions, the following window appears:

4. The system shuts off automatically, please re-check the VP220 programmer and COM port are well installed or not then, re-execute the system. If the connection with

programmer is OK, the system enters the Main Menu.

Main Menu

Menu bar

In the menu bar, there are main menus with submenus like those conventionally used in Windows applications.
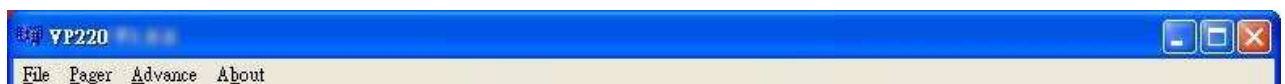
- **File | Open**
  Open a VP220 code-plug file. The file has the extension ".tbl".

- **File | Save**

  Save the current code-plug data to a file. If the code-plug data file has already been saved, VP220 suggests the same filename to you click on Save, the file is overwritten.

- **File | Save As**

  Save the current code-plug data to a file with different filename. If you saved the code-plug data file previously and don't need to change the file name, you can use the Save command instead.

- **Pager | Write**

  Write the current code-plug data to the pager.

- **Pager | Read**

  Read code-plug data from the pager.

- **Pager | Verify**

  Verify the pager data.

- **Advance**

  Set important parameters which requires a password to enter.

- **About**

  Information about the VP220 pager programming version .

Serial Setting

Select the communication port which is connected to your programmer kit. The system will search the available COM port in the computer and define the COM port that has already connected with VP220 programmer as pre-programmed.
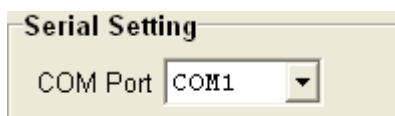
Serial No

The serial number of the VP220. After the scanner reading the serial number, it can only be for use of writing into EEPROM.

SYNC Time

Synchronize the VP220 with the PC.

Tone System

Select the type of system that the address tones will be selected for. If a system other than USER is selected, then tones pertaining to the selected system are the only tones available for programming.

- **Standard Mode**
  If Standard Mode is selected, all call tones must match the tone listed in this table. If a tone frequency other than the tone frequency listed in this table is entered in the call tone field, the VP220 Pager Programmer will round this frequency to the nearest frequency in the table.

- **User Mode**
  If User Mode is selected, then any address tone frequency can be entered if proper tone spacing is maintained and between 280.0Hz and 3500.0Hz. The tone spacing is determined by the bandwidth of decoder chip. Spacing = (bandwidth*2+0.001). The default bandwidth is 0.7%.

- **Plectron**
  If Plectron Mode is selected, all call tones must match the tone listed in this table. If a tone frequency other than the tone frequency listed in this table is entered in the call tone field, the VP220 Pager Programmer will round this frequency to the nearest frequency in the table.

Profiles

> **Initial Profile**

Choose the following VP220 settings when the pager is turning-on:

- Profile Name
- Frequency
- Alert Type

➢ **Profile 1**

■ **Configurations**

● **Profile Name**

Define the "Profile Name" under manual programming mode (1-12 characters).

☑ **ON**

Only the Profiles being selected "on" will be available under the manual programming mode.

● **Channel F1**

♦ **Frequency**

Enter the receiver frequency for under each profile.

♦ **Channel Space**

Select one of the channel spacing. The option has 12.5K, 6.25K, 2.5K or Auto.

♦ **Bandwidth**

If bandwidth selection is "WB", the channel spacing is set to 25 KHz. If selection is "NB", the channel spacing is set to 12.5 KHz. Channel F1 and Channel F2 need to set "WB" or "NB" separate.

♦ **S.Q.L.**

VP220 has five-stage programmable Squelch level through squelch level control, VP220 will access into listening mode if it recognizes the different of signal strength for the channels that monitored, such as: Level 1 requires strong signal power (as opposed to background noise) will enter the listening mode. Level 5 requires weak signal power (as opposed to background noise) will enter listening mode.

● **Function Switches**

Determines the Function Switches. Here is an example for SW-A.

♦ **Alert Type**

The VP220 can alert in one of the following four ways:

1. Beep (will show on the display)

2. Vibrate (will show on the display)

3. Vibrate & Beep (+ will show on the display)

♦ **Mode**

Select one of the pager operation modes. If a pager is set to a single channel pager, only modes regarding F1 are available. The options are Monitor F1, Monitor F2, Selective Call F1, Selective Call F2, Normal Scan, Priority Scan F1 and Silent Scan.

♦ **Push To Listen**

Enable the PTL option. At this time, the Alert Type is changed to Vibrate automatically and disabled the user selection for Alert Type. This option is only available in selective call and silent scan modes.

● **Reset Control**

Determines how a select call pager squelches a message after receiving a page. The option has Auto Reset, Delay N sec Auto Rest, Manual RESET, Time-Out RESET, Revert SQ, Delay AUTO N with Revert. Click **Help** to displays "RESET FUNCTION HELP".
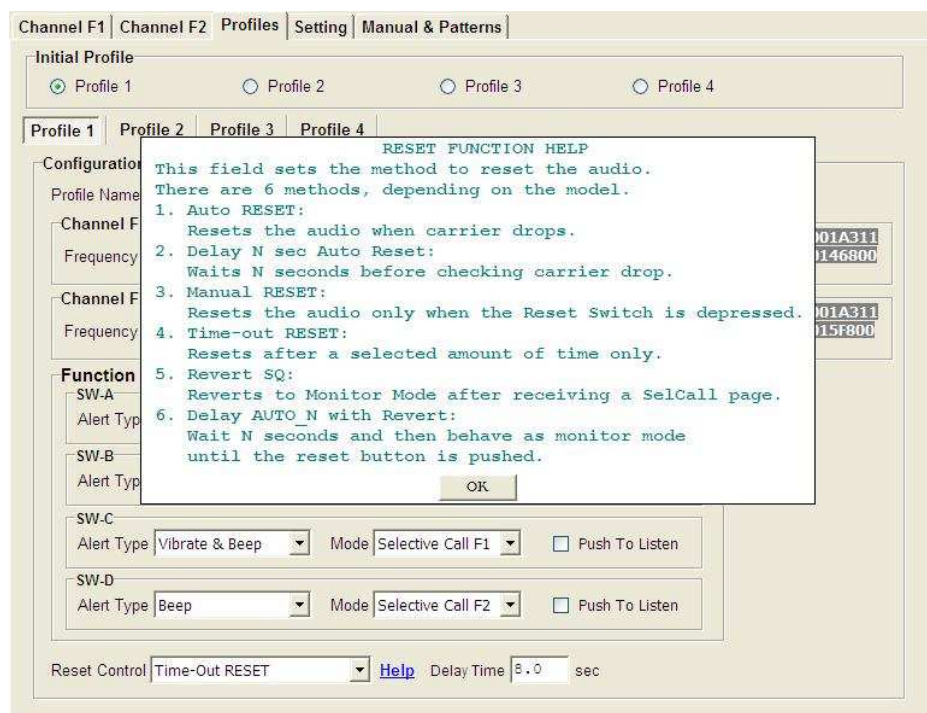
Channel

The model of VP220 is supported with two channels. Here is an example for channel F1.

| Profiles | Channel F1 | Channel F2 | Status Setting | Menu & Alert Patterns |

Call No.	Mark	Tone 1	Tone 2	P1	P2	P3	P4	Alert Tone Type	Alert Pattern	Alert Time		Pr. Alert	Vir.Ch.	SW-A	SW-B	SW-C	SW-D
☑ #1	Addr_1 F1	1285.8	879.0	☑	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☑	☑	☑	☑	☑
☐ #2	Addr_2 F1	1285.8	879.0	☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ #3	Addr_3 F1	1285.8	879.0	☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ #4	Addr_4 F1	1285.8	879.0	☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ #5	Addr_5 F1	1285.8	879.0	☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ #6	Addr_6 F1	1285.8	879.0	☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ #7	Addr_7 F1	1285.8	879.0	☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ #8	Addr_8 F1	1285.8	879.0	☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ Group #1	Group_1 F1	1285.8		☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ Group #2	Group_2 F1	1285.8		☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ Group #3	Group_3 F1	1285.8		☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐
☐ Group #4	Group_4 F1	1285.8		☐	☐	☐	☐	Standard ▼	1 ▼	STD ▼		☐	☐	☐	☐	☐	☐

☑ **Call No.**

Address actively programmed or not actively programmed.

● **Mark**

Define the marking of the addresses in the display (1-12 characters)..

- **Tone 1 / Tone2**

  Make tone field entries. Entries into the tone fields are subject to previous selections of Tone System. If tone system selection is "Standard Mode" or "Plectron Mode", after selecting the desired Call/Tone field and then pressing (F9), the tone tables may be displayed.

		[F9] Open Tone Table		
Call No.	Mark	Tone 1	Tone 2	P1
☑ #1	Addr-000 F1.		871.0	☑

	Mot 1	Mot 2	Mot 3	Mot 4	Mot 5	Mot 6	Mot A	Mot B	Mot Z	Mot 10	Mot 11	GE A'	GE B'	GE C'
0	330.5	569.1	1092.4	321.7	553.9	1122.5	358.9	371.5	346.7	1472.9	1930.2	682.5	652.5	667.5
1	349.0	600.9	288.5	339.6	584.8	1153.4	398.1	412.1	384.6	1513.5	1989.0	592.5	607.5	712.5
2	368.5	634.5	296.5	358.6	617.4	1185.2	441.6	457.1	426.6	1555.2	2043.8	757.5	787.5	772.5
3	389.0	669.9	304.7	378.6	651.9	1217.8	489.8	507.0	473.2	1598.0	2094.5	802.5	832.5	817.5
4	410.8	707.3	313.0	399.8	688.3	1251.4	543.3	562.3	524.8	1642.0	2155.6	847.5	877.5	862.5
5	433.7	746.8	953.7	422.1	726.8	1285.8	602.6	623.7	582.1	1687.2	2212.2	892.5	922.5	907.5
6	457.9	788.5	979.9	445.7	767.4	1321.2	668.3	691.8	645.7	1733.7	2271.7	937.5	967.5	952.5
7	483.5	832.5	1006.9	470.5	810.2	1357.6	741.3	767.4	716.1	1781.5	2334.6	547.5	517.5	532.5
8	510.5	879.0	1034.7	496.8	855.5	1395.0	822.2	851.1	794.3	1830.5	2401.0	727.5	562.5	577.5
9	539.0	928.1	1063.2	524.6	903.2	1433.4	912.0	944.1	881.0	1881.0	2468.2	637.5	697.5	622.5

Enter   Exit

Standard Tone Table

Plectron Format Tones

282.2	366.0	474.8	615.8	799.0	1036.0	1344.0	1743.0	2260.0	2932.0
294.7	382.3	495.8	643.0	834.0	1082.0	1403.0	1820.0	2361.0	3062.0
307.8	399.2	517.8	672.0	871.0	1130.0	1465.0	1901.0	2465.0	3197.0
321.4	416.9	540.7	701.0	910.0	1180.0	1530.0	1985.0	2575.0	3339.0
335.6	435.3	564.7	732.0	950.0	1232.0	1598.0	2073.0	2688.0	3487.0
350.5	454.6	589.7	765.0	992.0	1287.0	1669.0	2164.0	2807.0	

Enter   Exit

Plectron Tone Table

☑ **P1**

Change the active Profile.

● **Alert Tone Type**

Select one of the Alert Tone type. The options has Standard, Continuous, User defines.

● **Alert Pattern**

Define the Alert Pattern numbers from #1 to #8 (under the Manual & Patterns Setting)

● **Alert Time**

Duration of the tone signaling – standard is 5 seconds. It is possible to have 1 to 30 repetitions of the specified tone pattern. The duration of a tone pattern (consisting of 8 tones or tracing) is 1 second.

☑ **Pr. Alert**

If select this check box, the vibrate page alerts are replaced by tone alert for call 1 only.

☑ **Vir.ch.**

Define that the pager vibratior in the charger (Charger) actively. (standard).

● **SW-A**

Select this to enable the call tones individually. If this is not selected, all calls tones will enable. Please note that the call tones will be enabled subject to the selection of the function switch.

Status Setting

> **Status**

☑ **Disable All Vibrator**

If select this check box, the aibrator is disable.

☑ **Disable Vibrator In Charger**

Define that the pager alarm in the charger (Charger) actively.

☑ **Enable Function Announcement**

Enable or Disable the voice prompt when a pager the function switch is turned.
This feature is available with the feature of "Save voice" is enabled.

☑ **Enable Function With Vibration/Alert**

Enable or Disable the vibration or alert prompt when a pager is powered on or the function switch is turned.

☑ **Enable Priority Scan With Monitor**

Enable the monitoring function when entering the priority scan mode.

☑ **Priority Alert MAX. Volume**

If it is selected, the tone alert is at maximum volume regardless of the position of the control.

☑ **Enable Auto Monitor**

In the Auto Monitor mode, the pager will monitor the channel and anything being transmitted will be picked up by the pager. When the transmission ends, the pager will automatically turn off the audio. To enter the Auto Monitor mode, press and hold the reset key for 3 seconds. To enter the Audio Lock mode, press and hold the reset key for 6 seconds.

☑ **Privacy Enable**

If select this check box, it can prevent the reset button from being used to monitor the channel.

☑ **Disable Power Save**
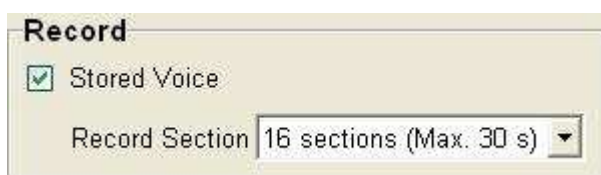
If select this check box, the Power Save is disable.

☑ **FIX Alert**

If select this check box, the pager operates in the "fixed alert" mode. This means the tone alert is at maximum volume regardless of the position of the volume control. If it isn't selected, then the alert tone and voice audio level are adjustable using the volume control.

☑ **One Channel**

Select this to disable all the functions in the "Channel F2", which includes monitor F2, Selective call F2, Normal scan, Priority Scan F1, Silent scan.

➢ **Record**

☑ **Save voice**

Enable or disable stored voice on models with this option.

- ● **Record Section**
  Select the maximum length (in seconds) of a message. This entry is available only on stored voice pagers. This option has 4 sections (120 seconds), 8 sections (60 seconds), 12 sections (40 seconds),16 sections (30 seconds), 32 sections (15 seconds).

- ➢ **LCD Backlight Setting**

  LCD Backlight Setting

  Backlight Auto-Off 10   sec (255:endless)

- ● **Backlight Auto-Off**
  Set the time that the backlight & display will be turned off after the VP220 is not being used.
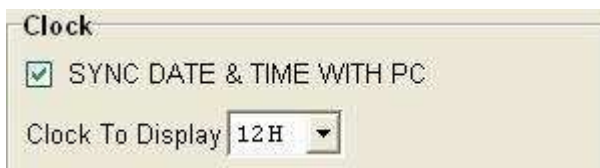
- ➢ **Call Remind Tone**

  Call Remind Tone

  Repetition Time 120 sec

- ● **Repetition Time**
  Call reminder repetition time. The time can be set to between 1 and 255 sec.

- ➢ **Clock**

  Clock
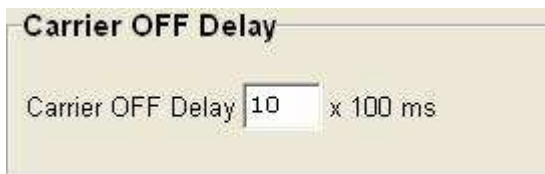 ☑ SYNC DATE & TIME WITH PC
  Clock To Display 12H ▼

- ☑ **SYNC DATE & TIME WITH RTC**
  The VP220 will synchronize with the PC after be programmed successfully.
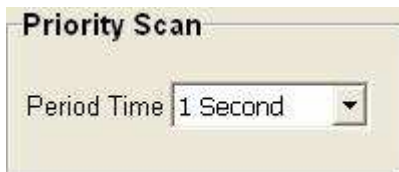
- ● **Clock To Display**
  The time can be displayed in 12 hr or 24 hr.

➢ **Carrier OFF Delay**

Carrier OFF Delay
Carrier OFF Delay 10   x 100 ms

You can set delay time after carrier off.

➢ **Priority Scan**

Priority Scan
Period Time 1 Second   ▼

● **Period Time**
Select this for setting the time staying on F2 when it scans a signal on F2, under the Priority Scan mode. The option has 0.5 second, 1 second, or 2 second increments

➢ **Power On Logo**

Power On Logo
Line 1   APOLLO
Line 2   VP-220   ☑ Show Version

Set the display of "Power On Logo". "Line 2" will show the firmware version if the "Show Version" is being selected.

➢ **Screen Contrast**

Screen Contrast
Contrast   ╞═══════╡═══════ 5

Choose adjust the contrast level of the LCD display.

Menu & Patterns

> ## Menu Prompts

☑ **Clear Read Message**

If it is selected, menu of Clear Read Message Time function will be enabled.

☑ **Set Date and Time**

If it is selected, menu of Set Date and Time function will be enabled.

☑ **Set Contrast**

If it is selected, menu of LCM Contrast function will be enabled.

☑ **Sel Profile**

If it is selected, menu of Set Profile function will be enabled.

➢ **Prompts Edit**

To edit the name of the settings which will be shown on the VP220.

➢ **Alert Patterns**

● **Alert**

Enter in the tones A; B; C; D in the sequence in which you would like them to be heard in the "Alert Tonality". A minus sign "-" creates a short pause. See "Alert Tonality" for tones A; B; C; D.

● **LED**

Set the LED flashing sequence when the VP220 receives a message. The duration of a flash pattern is 1 second (consisting of 8 digits meaning 1/8 of a second). The LED flashes with "1" and dims with "0".

● **Vibrator**

Set the vibration sequence when the VP220 receives a message. The duration of a vibration pattern is 1 second (consisting of 8 digits meaning 1/8 of a second). The VP220 vibrates with "1" and stills with "0".

➢ **Alert Tonality**

To set audio frequencies from 150Hz to 6000Hz.

Alert Tonality

Tonality A 200   Hz

Tonality B 400   Hz

Tonality C 900   Hz

Tonality D 2300 Hz