

USER MANUAL



• • • • VP200 Charger/Amplifier • • • •

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VP200 Charger/Amplifier



IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

- This manual contains important safety and operating instructions.
- Before using **VP200** Charger/Amplifier, please read all instructions and cautionary markings on the (1) charger, (2) batteries and (3) pager.



WARNING

- ⚠ Do not expose charger to rain or snow. Use of an attachment not recommended may result in risk of fire, 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 cord or plug – replace them immediately with an approved power supply only.
- ⚠ Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. Replace damaged charger immediately with approved charger only.
- ⚠ Do not disassemble charger.
- ⚠ To reduce risk of electrical shock, unplug charger from outlet before cleaning.

CHARGER/AMPLIFIER DESCRIPTION

The charger/amplifier models listed below are accessories for **VP200** only. The charger/amplifier could charge batteries while in the **VP200** or an individual spare batteries. Dual colored LED indicators provide information as to which one is being charged.

All models have two separate charging compartments. One charging compartment accommodates a pager with the batteries installed, the other one for charging spare batteries. A charging-status LED indicator is provided for each charging compartment. These are labeled BATTERY and PAGER. The BATTERY indicator lights when spare batteries are being charged. The PAGER indicator lights when a pager with installed batteries, is being charged. If the pager is turned on when it is installed in the charger/amplifier, reception of a valid page causes the red ALERT LED to light and the audio message to be heard through the charger/amplifier speaker. (see **Fig.2**)

GENERAL OPERATION

When a pager is inserted into the charger/amplifier, the setting of the pager's on-off switch determines the operating mode of the charger/amplifier. When the pager is turned off, only the charger section of the charger/amplifier is functional. The time required to completely charge fully discharged batteries in the spare batteries compartment is approximately 2 hours. Approximately 2 hours of charge time is required in the main charging compartment. It takes 4 hours to complete both charge cycles.

To charge 3 batteries , proceed as follow:

1. Place 3 batteries into the battery door; it is locked when you hear an audible click.
2. The BATTERY indicator light on the charger will begin blinking red. Then the charging process begins, the BATTERY indicator light will stop blinking and remain solidly lit. When the charging process is completed, the BATTERY indicator light will change in color from red to green.
3. To remove the batteries, open the battery door and lift the batteries out.

Charging-Only Mode Pager Charging Compartmentce

The pager-charging compartment accommodates a **VP200**. (see **Fig.2**)

To charge batteries installed in the pager, proceed as follows:

1. Turn the radio off by rotating the on-off volume knob fully counterclockwise until a click is heard and the mechanical stop is reached.
2. Press the upper end of the belt clip and slide the pager part way into the charging compartment.
3. Release the belt clip and continue to slide the page into the charging compartment until an audible click is heard.
4. When a pager is inserted into the charging compartment, the PAGER indicator light on the charger will begin blinking red. When the charging process begins, the PAGER indicator light will stop blinking and remain solidly lit. Then the charging process is complete, the PAGER indicator light will change in color, from red to green.
5. To remove the pager from the charger compartment, press the upper end of the belt clip and slide the pager out of the compartment.

NOTE:

1. If either indicator continues to blink (does not change to solid red) after a pager or battery has been inserted to the charger, the charging process has not begun.
2. When a pager and batteries are inserted in the charger at the same time, pager pocket has priority. After pager pocket has completed rapid charging, then the batteries follows with rapid charging (BATTERY LED solid red). Otherwise, charging is completed on first come first charged basis. As pager and battery may be inserted in the charger simultaneously. The first item inserted, pager or batteries will have priority in the charge cycle. For example, if the batteries are placed in the battery slot and then the pager in 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 orange. Once the batteries are fully charged, the pager will be charged. (see **Fig.2**)

STANDARD FEATURES

External Antenna

The charger/amplifier is supplied with an external antenna for improved fringe area reception. The external antenna input jack is located on the rear of the charger/amplifier housing. (see **Fig.1**) When the proper antenna is connected, the RF signal is conducted through a cable to a pair of interconnect pins located in the charging compartment. When a pager is inserted into the charger compartment, an electrical path is established between the pager and the charger/amplifier via the interconnect pins.

Audio Amplifier and External Speakers

The charger/amplifier contains an external speaker jack (2.5watt audio amplifier) and an internal speaker. An external speaker jack, located on the rear of the charger/amplifier housing (see **Fig.1**), allows the user to disable the internal speaker and route alerting and voice audio to external speakers or devices. (see **P.9 Remote Speaker Audio**)

Power Adapters/Cables

Each charger/amplifier model includes an adapter for converting AC voltages from a commercial power source to the required DC operating voltage.

Charger/Amplifier Relay Feature

The accessory connector on the back of the charger/amplifier provides a relay interface for a 2.5 watt un-switched speaker audio with ground, a pair of dry relay contacts, and a pair of pins to select the operation of the relay timing. (See **P.10 Relay Closure Timing Control**)

INSTALLATION

1. Connect the power adapter to the charger/amplifier by plugging the DC connector on the end of the cable into the receptacle marked DC12V on the rear of the unit. (see **Fig.1**)
2. Plug the other end of the power adapter into an appropriate AC100~240-volt, 50~60 Hz receptacle.

CHARGER/AMPLIFIER MODE

Desktop Operation

1. Attach the external antenna shipped with the charger/amplifier on the antenna connector on the back of the unit. (see **Fig.1**)
2. Select the proper function switch setting on the pager, if applicable, and rotate the on-off volume control clockwise to turn the pager on.
3. Insert the bottom of the pager part way into the charging compartment, with the belt clip down and the speaker facing up.
4. Open the belt clip and slide the pager fully into the charging compartment. When the pager is properly inserted, the clip snaps, securing the pager into the compartment.
5. While monitoring the channel or listening to background noise, as described in the user guide for your pager, adjust the volume control on the charger/amplifier to obtain a comfortable listening level from the charger/amplifier speaker.

A speaker jack on the rear of the charger/amplifier provides a connection to an external 4-ohm speaker, if desired. The internal speaker is disconnected when an external speaker is plugged into the jack.

Relay Mode

The charger/amplifier includes a relay that is energized whenever an alert is received, and a 8-pin DIN accessory connector is located on the rear of the unit. The 8-pin mating plug for these models may be wired to provide the following functions:

Remote Speaker Audio (Pins 1 and 7)-

An external 4-ohm speaker may be connected to the charger amplifier via pin 1 (audio) and pin 7(ground return) of the plug, to provide both remote speaker audio and internal speaker audio at the same time.

Relay Dry Contact Closure (Pins 3 and 6)-

When the accessory relay is energized, its contacts close and present a short across pins 3 and 6 of the connector. The relay contacts are rated for 1 A & 120VAC /24VDC.

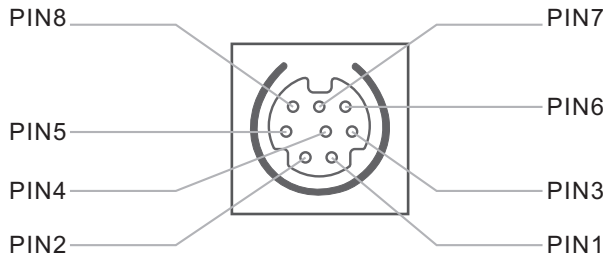
CAUTION

DO NOT use relay contacts for loads above rated maximums. This results in damage to the contacts and shortens the unit functional life. (see **P.15 Relay contact Rating**)

Relay Closure Timing Control (Pins 4 and 5)

Accessory connectors, pins 4 and 5, are used to select the time duration of the \ relay contact closure. If these two pins are shorted, the relay remains energized for approximately 10seconds after an alert is received. If pins 4 and 5 are opened, the relay remains energized until the reset button on the front of the charger/amplifier is pressed. Pressing the reset button causes the contacts to open to turn off the ALERT LED.

ACCESSORY



- PIN1** External Speaker (+)
- PIN2** NC (No use)
- PIN3** Relay Common
- PIN4** Relay Closure
- PIN5** Relay Closure
- PIN6** Relay No (nomal open)
- PIN7** External Speaker (-)
- PIN8** Relay NC (nomal close)

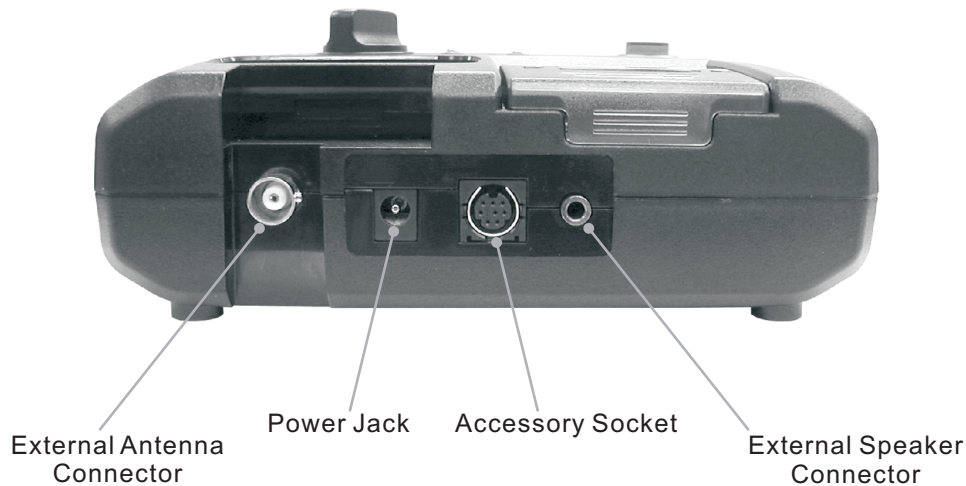


Fig. 1. Charger Amplifier Pin-Outs

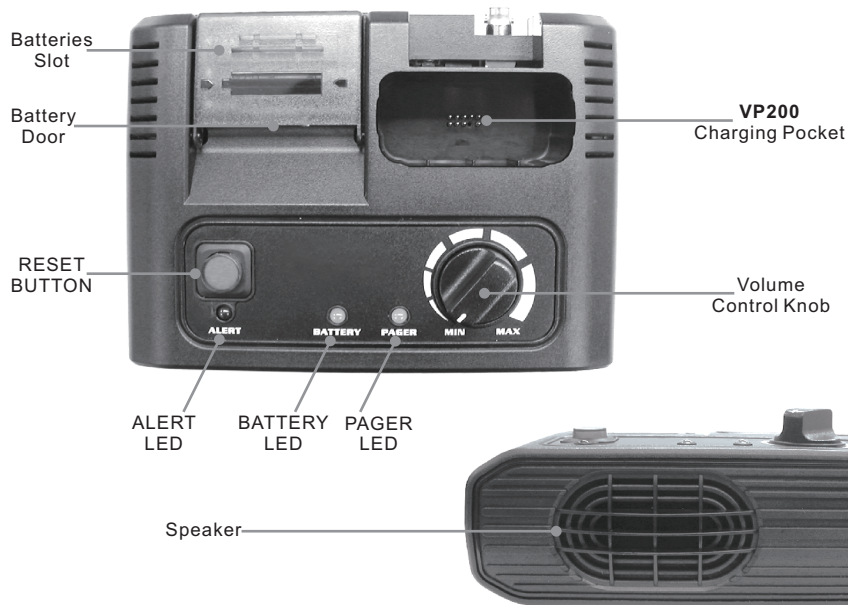


Fig. 2. Charger Amplifier Front View

CHARGER INDICATOR LIGHTS

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

SPECIFICATIONS

Parameter	Units with Relay
Input Source	12VDC , 1A
Rapid charging: * Rapid charging method	A. Rapid charging method: <ul style="list-style-type: none">• Delta voltage (typical: 1°C/1 minute).• TCO: 50°C (typical)• Timeout: 2.5 hours (typical) B. Rapid charging current: 400 mA (typical)
Full Recharge Time:	Spare batteries Approximately 2 Hours Radio battery Approximately 2 Hours To complete the charge takes 4 hours
Amplifier Output Power	2.5 Watts minimum into 4 ohms @less than 8% distortion
Relay contact Rating:	1A: 120VAC / 24VDC
Weight:	1 3/8 LB (base only)
Dimensions:	6 5/8 x 3 1/8 x 4 4/5 inch
Temperature Range:	0°C to +40°C
Alert Indicate Response Time:	Less than 250mSeconds

