VISTA 200B / 500EX / 1000

PORTABLE PRESENTATION SYSTEM

Solar-Powered Audio & Video



FCC Emissions Information

This equipment complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device must not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio communications. However, there is no guarantee that 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 equipment on and off, the user is encouraged to try 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 the interfering device

Do not make any changes or modifications to the equipment unless otherwise specified in the manual.

Safety Information

Please read this manual carefully before operating this unit and keep it for future reference.

WARNING:

- Only the included battery charger/adapter or solar panel may be used to charge the battery. Use of any other charger may destroy your battery and can result in fire or danger of electrical shock.
- To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture. If this equipment becomes wet from rain or moisture, allow equipment to dry completely before operating.
- Do not look directly into the lens while the projector is on.
- Follow local guidelines regarding the disposal of batteries. Never place battery in fire.
- Do not attempt to crush or puncture battery.
- Store the accessories (battery, etc.) safely out of the reach of children.
- Do not open covers and do not attempt to repair this unit. Refer servicing to qualified personnel.

Table of Contents

ntroduction	1			
Setting Up the Vista 200B	2			
Setting Up the Vista 500EX / 1000	3-4			
Operating the Projector	5			
Charging the Battery	6			
Packing for Transport	7-9			
Packing the Vista 200B	7			
Packing the Vista 500EX	8			
Packing the Vista 1000	9			
Fechnical Specifications10)-13			
Troubleshooting 14				

Introduction

The Vista systems are portable, solar-powered Gospel presentation systems. A single person can carry everything needed for a presentation to be seen and heard by up to 200, 500, or 1,000+ people!

The Vista systems are capable of projecting a 92-115" image in darkness from a microSD card in the projector or any other audio/video player. It can also be configured for showing video in small rooms or large outdoor venues exceeding 1,000 attendees.

All Vista Systems consists of the following components:

- Backpack
- LED Projector (300 lumens)
- Power Plant Battery
- AC Charger and/or AC Adapter
- Flashlight
- All Necessary Cables
- LED Light

The following components are included in the Vista 200B:

- Mini Tripod
- Cube Speaker

The following components are included in the Vista 500EX:

- Mini Tripod
- 2-channel Audio Amp
- Wired Microphone
- Horn Speaker

The following components are included in the Vista 1000:

- 2-channel Audio Amp
- 2 Wired Microphones
- Horn Speaker
- Marine Speaker

- Large Tripod
- Tripod Shelf
- LED Globe Area Light
- 115" Projection Screen

The following components may be added to suit your needs:

- Solar Panel
- 92" Screen / 115" Screen
- Marine Speaker (higher quality sound for 150 people)
- Extra LED area lights
- Extra Battery

Setting Up the Vista 200 Bright

Refer to Vista Quick Start Directions for visual setup instructions.

Power and Audio

- 1. Connect the orange "Projector Power Cable" to the projector and the "Y Cable." The smaller side inserts into the projector.
- Connect the blue "Cube Speaker Power Cable" to the "Cube Speaker" and "Y Cable."
- 3. Connect the green "Audio Cable" to the projector and the blue "Cube Speaker Power Cable."
- 4. Connect the blue end of the "Y Cable" to the "Power Plant 50 Battery DC Out."

Media

- 5. Remove microSD card from adapter.
- 6. Insert microSD card into the microSD slot on the side of the projector.
- 7. Slide the power switch on the side of the projector.
- 8. Navigate to the SD Card memory and select movie.
- 9. Adjust the focus ring to create a sharp picture.

The Vista system can also be powered from wall power by using the included Amp AC adapter and projector AC adapter.

Using the Vista to play music or other media before a presentation will reduce battery charge and presentation length.

Setting Up the Vista 500EX / 1000

Refer to Vista Quick Start Directions for visual setup instructions.

Power

- Connect the blue end of the "Battery to Amp Cable" to Power Plant Battery.
- 2. Check that Renew Amp is powered OFF ("O" is down).
- 3. Connect the purple end of the "Battery to Amp Cable" to the Renew Amp.
- 4. Turn power switch ON ("|" is down). Red power light will turn on.

Video

- 5. Remove projector from bag.
- 6. Connect the orange "Projector Power Cable" to the Amp.
- 7. Connect the other end of the orange "Projector Power Cable" to the projector.
- 8. Connect the green "Audio Cable" to the Projector.
- 9. Connect the other end of the green "Audio Cable" to the Renew Amp.

Speakers

- 10. Connect the "Speaker Cable" to the Renew Amp's speaker port (Speaker 1 or 2) by first aligning the indentation on the plastic tip.
- 11. Connect the other end of "Speaker Cable" to the port on back of Speaker:
 - Top Channel: Speaker 1
 - Bottom Channel: Speaker 2
- 12. Adjust the volume to the desired level on both the projector and the amplifier. Projector volume can be controlled using the left and right arrows.

Media

- 13. Remove microSD card from adapter.
- 14. Insert microSD card into the microSD slot on the side of the projector.
- 15. Slide the power switch on the side of the projector.
- 16. Navigate to the SD Card memory and select movie.
- 17. Adjust the focus ring to create a sharp picture.

Connecting wired microphones:

- 18. The Vista supports up to two wired microphones using standard 1/4" plugs.
- 19. Plug the XLR end of the "Mic Cable" into the wired microphone.
- 20. Plug the ¼" end of the "Mic Cable" into the Renew Amp.
- 21. Turn on the wired microphone using the switch near the connector.
- 22. Adjust the volume knobs on the Renew Amp labeled MIC 1 or MIC 2 respectively.

To reduce power consumption, turn off any devices that you are not actively using. With the projector off, the Vista 500EX and Vista 1000 can be used as a PA system for extended runtime.

The Vista system can also be powered from wall power by using the included Amp AC adapter and projector AC adapter.

Using the Vista to play music or other media before a presentation will reduce battery charge and presentation length.

Operating the Projector

- The projector's power switch is located on the side of the unit. Slide it to turn on the projector.
- Adjust the projector's focus wheel to create a sharp picture. If the
 picture will not become sharp, you may need to move the projector
 closer to or further from the screen.
- For a longer run time, try adjusting the projector's brightness in its menu system under: Setup > Picture > Backlight (gear picture)



Insert microSD Card



Projector's Power Button



Projector's Focus Wheel



Projectors Controls

Charging the Battery

Using the AC Charger

- Charging time is 4-5 hours for an empty battery; the smart charger shuts off when the battery is full. It is a good practice to leave the battery charging overnight and to always have some charge on the battery for storage.
- Connect the charger to an AC outlet. The charger automatically adjusts itself to the available voltage (100 - 240VAC / 50 / 60Hz).
- Connect the output cable of the charger to the battery. The LED light indicator on the charger will briefly show red (indicating that the battery needs to be charged) then will continue glowing red to show that charging is in process.
- Keep battery and charger away from direct sunlight, heat, moisture, and rain while charging.
- When the charger LED light shows green, the battery should be fully charged.
- If the charger LED light flashes alternating red and green, there is a malfunction with either the charger or the battery.
- A fully charged PP150 battery will measure greater than 16.4V.
- A fully charged PP50 battery will measure greater than 12.8V.

Using the Solar Power Charger

- Choose a sunny location for the solar panel with no obstructions to the sun.
- Keep the battery out of direct sunlight. If possible, run the battery
 cable inside while the solar panel is outside in the sun. This is
 important because the battery life will be shortened as the battery
 gets hot. It is best not to charge the battery if either the air or battery
 temperature exceeds 120° F (49° C).
- Angle the solar panel directly at the sun if possible.
- Connect the solar panel to the battery via the included cable.
- The approximate battery charge level can be checked via the fuel gauge.
- A red charge indicator light shows that the battery is still charging. A
 green charge LED and 4 blue LED's on the fuel gauge indicates full
 charge. A green charge LED and <4 blue LED's indicates cloud cover.

Packing the Vista 200B

- The Backpack may be checked through as luggage at the airport. We suggest that you take out the projector and pack it in your carry-on as it is the most sensitive item in the package.
- Check your airline's regulations for transporting batteries.



Packing the Vista 500EX

- The Backpack may be checked through as luggage at the airport. We suggest that you take out the projector and pack it in your carry-on as it is the most sensitive item in the package.
- Check your airline's regulations for transporting batteries.



Packing the Vista 1000

- The Backpack may be checked through as luggage at the airport. We suggest that you take out the projector and pack it in your carry-on as it is the most sensitive item in the package.
- Check your airline's regulations for transporting batteries.



Technical Specifications

Technical Specifications for Vista 200 Bright

- Renew Projector
 - LED based DLP projector (LED life = 20,000 hrs)
 - Brightness: 300 lumens in bright mode
 - Screen size: 120+" maximum
 - Resolution: 1280 x 720 (16:9) native
 - Contrast Ratio: 1000:1
 - Dimensions: 4.5" x 4.1" x "1.8"
 - Weight: 0.9 lbs
 - Input/Outputs: HDMI, miniVGA, Composite A/V, 3.5mm Stereo Headphone, USB-A
 - File Playback: USB Memory Stick Reader, MircoSD card (up to 16GB)
 - Menu Languages: English, Spanish, French, German, Chinese
 - Supported Formats: Mp4/Mp3/Wma/OGG/WAV/AVI/WMV/SMV BMP/JPG/GIF/TXT
- Cube Speaker
 - 12V input
 - 20W maximum continuous power
- PowerPlant 50 Battery
 - Battery Chemistry: LiFePO4
 - Nominal Voltage: 12.8V
 - Capacity (Amp-hours): 4.0
 - Capacity (Watt-hours): 50.0
 - Battery Life: 70% capacity after 1500 charge/discharge cycles
 - Exposure to 120°F (49°C) or above will shorten battery life
- PowerPlant 50 Battery Charger
 - 110-240VAC 50/60Hz input
 - 12VDC/3A output
- 20W Solar Panel (Optional Add-On)
 - Nominal 20W output (cloudless day, direct sunlight)
 - Operating Voltage: 15.4 Volts
 - Operating Current: 1.2 Amps
 - Protect from extreme cold (freezing). Use extreme care in folding/unfolding the solar panel if air temperatures are below 45°F (7°C) to prevent damage.

Technical Specifications for Vista 500EX and Vista 1000

- Renew Projector
 - LED based DLP projector (LED life = 20,000 hrs)
 - Brightness: 300 lumens in bright mode
 - Screen size: 120+" maximum
 - Resolution: 1280 x 720 (16:9) native
 - Contrast Ratio: 1000:1
 - Dimensions: 4.5" x 4.1" x "1.8"
 - Weight: 0.9 lbs
 - Input/Outputs: HDMI, miniVGA, Composite A/V, 3.5mm Stereo Headphone, USB-A
 - File Playback: USB Memory Stick Reader, MircoSD card (up to 16GB)
 - Menu Languages: English, Spanish, French, German, Chinese
 - Supported Formats: Mp4/Mp3/Wma/OGG/WAV/AVI/WMV/SMV BMP/JPG/GIF/TXT
- Renew Amplifier
 - Power: 11V 16.8V DC, 3A nominal
 - Fuse: Internal fuse (PTC). Unplug from power source to reset
 - Temperature: Runs best in temperatures below 98° F (37° C)
 - FCC Class A approved
 - Audio
 - 2x12W channels
 - Stereo output: Left: SPKR1, Right: SPKR2
 - Amp chip protected from short circuit (requires turning off, and then back on to reset amp)
 - Inputs/Outputs
 - Line In (1/8" audio connector)
 - Line Out (1/8" audio connector)
 - Power In
 - Power Out
 - Mic 1 and 2 (1/4" audio connector)
 - Speaker 1 and 2

- Power Adapter for Renew Amplifier
 - 110-240VAC input
 - 12VDC, 3A output
 - LED lights indicate charge status
- PowerPlant 150 Battery
 - Li Polymer battery pack
 - Nominal Voltage: 14.8V
 - Capacity (Amp-Hours): 10
 - Capacity (Watt-Hours): 150
 - UN T1-T8 approved for air transport
 - Battery Life: 70% capacity @ 500 charge/discharge cycles
 - Exposure to 120° F (49° C) or above will shorten battery life
 - Never charge battery if battery temperature is above 120° F (49° C)
- PowerPlant 150 Battery Charger
 - 110-240VAC input
 - 50/60 HZ
 - 16.8VDC/4.0A output
 - LED lights indicate charge status
- Car Battery Adapter/Power Inverter
 - 150W Power Inverter
 - Input Voltage: 12VDC
 - Output voltage:110V-120VAC/60Hz
 - USB Output: DC5V, 3.1A
- 30W Solar Panel (Optional Add-On for Vista 500EX, included in Vista 1000)
 - Nominal 30W output (cloudless day, direct sunlight)
 - Operating Voltage = 15.4 Volts
 - Operating Current = 1.8 Amps
 - Protect from extreme cold (freezing) Use extreme care in folding/un folding the solar panel if air temperatures are below 45° F (7° C) to prevent damage.

Battery Storage:

- Before storage: Batteries need to be stored with a partial charge.
 Leaving the batteries in storage for extended periods with little to no charge will damage them. Charge the battery to 3-4 of the 4 blue power gauge LED's before storing them.
- Every 3 months: Check the charge on the batteries at least every 3 months and recharging as necessary.
- Every 6 months: Fully discharge and fully recharge the battery every 6 months.

Charging Batteries:

- Batteries take a full day in the sun to charge via solar power, and 4 hours to charge via A/C power.
- Keep the batteries out of sunlight while charging.
- To extend the life of the battery, fully discharge and fully recharge the battery every 6 months.

Battery Indicator Lights:

- In order to get an accurate reading from the power gauge LED's, un plug the battery from the charger/solar panel and wait 1-2 minutes before pressing the charge indicator button. At this point, the power gauge LED's will give a good estimate of battery life.
- The PP150 has an indication for when it is empty or very close to empty: the first fuel gauge LED turns red. If the V1000 is used until the battery is empty, the first fuel gauge LED on their PP150 will turn on red when they begin to charge it. This shows that the battery is empty/near empty. The charge LED will also come on red, showing that it is charging. As the battery gains charge, the red light will turn blue.

Troubleshooting

Power Problems

No Power to Renew Amp

- Check battery charge (button on battery activates fuel gauge).
- Check cable connection from battery to Renew Amp.
- Reset by unplugging from power source for 3 seconds or by pressing the reset button on the front of the amplifier (between MIC 2 and LINE OUT)

Experiencing less than 2 hour run time

- The battery must be fully charged for a 2-hour showing. The battery charge status is shown by the LED light gauge on the battery and is activated by pressing the battery's button. Do not start a 2+ hour movie/showing if the battery indicates less than 100% charge.
- Like all batteries, the battery pack in your Vista will gradually lose charge capacity due to aging.
- Battery capacity is also affected by air temperature. Do not allow your Vista battery to be heated directly by the sun at any time. Your battery should be kept room temperature while charging.

After charging all day with the Vista Solar Panel, the battery shows less than 100% charge

- Solar panel charging time depends on several variables:
 - Time Minimum charge time is 6.5 hours of direct sunlight, but typical charge times are 9-12 hours.
 - Directness of exposure to sunlight:
 - Keep the panel angled at the sun if possible.
 - Cloudiness will reduce the charging efficiency.
 - Change the location of the solar panel, if necessary, to minimize shadows throughout the day.
 - Angle of the sun in the sky Charging at latitudes above 40 degrees during winter will be slower. Two days may be necessary for a full charge.
 - Battery charged, LED should be solid red while solar charging. If it is not, try adjusting solar panel placement.

Battery is discharged and you have a showing scheduled

- Power the Vista with your AC power adapter.
- The Power Plant 150 battery may also be charged separately using the AC Charger while the Vista is running from the AC Adapter.

Battery will not charge

- Measure your battery voltage using a Volt Meter.
- Normal battery voltage ranges from 10.5V to 16.8V. A voltage below 10.5V would indicate a failed battery.
- The battery may need several charge/discharge cycles to be reset.
 - Charge the battery for 8 hours. Then, discharge the battery by running the Vista system continuously until the battery is empty.
 - Recharge the battery for 8 hours. If the battery charge indicator light is still blinking, repeat this charge/discharge
 1-2 more times. If the battery charge indicator is solid, then the battery is charging and should operate normally.
- Battery charger should show solid light while charging
- Measure charger voltage. PP50 charger should output 12V. PP150 charger should output 16.8V.

Video Problems

Image is not clear on screen

- Turn focus ring near projector's lens.
- Check that screen is not tilted; it must be straight upright.
- Check for condensation on the projector's lens. This should disappear after several minutes of operation.
- Check for dust on projector's lens and carefully wipe with a clean, soft cloth.
- Screen must be tight on frame with no wrinkles in fabric.
- Screen is two-sided, but image on back side of screen will not be as clear as on the front.

Video will not play from microSD Card

- Ensure that microSD Card is fully inserted into the Projector
- Ensure that all media is in mp4 format.

Audio Problems

No sound, but video is visable on screen

- Check that all speakers and cables are fully connected.
- Ensure that the volume on the projector is turned up.
- Ensure that the Renew Amp has power and the volume is turned up.

Volume is too low

- Check volume control on Projector and set to maximum volume.
- Check volume level on Amp and set to maximum volume.
- Check that all speakers are connected.
- Vista is available with a variety of speakers such as:
 - Marine speakers, which are intended for large groups inside or outside.
 - Horn speakers, which are intended for very large groups outdoors.

VISTA OPTIONS + ACCESSORIES



Universal Adapter



Marine Speaker for 150 people



Area lights



92" Lightweight Projection Screens

OTHER TOOLS FROM RENEW



PAPYRUSSolar audio player for 200+ listeners



TORCHSolar audio player for
50 listeners with a flashlight,
lantern & cellphone charger



LIGHTSTREAM POCKET Gospel Media WiFi & Bluetooth Distributer



MICRO SD CARD Share the Gospel through Mobile Ministry