VIKING

TECHNICAL
Practice
TELECOM SOLUTIONS FOR THE 21ST CENTURY

PB-100
Polling Bridge and Phone Line Interface
August 14, 2013

Multi-Purpose PC to Phone Line Bridge with Application Software

The **PB-100** is used to provide status polling of Viking **1600A** Series Emergency Phones or remote programming of **AES-2000** Entry Systems. The **PB-100** can connect to an unused serial port on your PC or use the included RS-232 to USB converter cable to connected to a USB port. A CD is provided with these two applications along with software for programming other Viking products.

When used to poll **1600A** Series Emergency Phones, the application software allows the user to set up a list of phones to call along with a scheduled time for calling. Through the **PB-100**, each phone can be called, its ID code verified and it's mic and speaker tested. When finished, the application software logs the time of the call and the results.

When programming an **AES-2000,** the application software allows the user to manage multiple units with resident's phone numbers and access codes. By using a standard telephone connected to the **PB-100**, the recording of each tenant's name can be done. The software also supports delayed uploading the downloaded statistics.

Features

- Compatible with Windows XP, Vista and Win7

- USB to RS-232 cable provided

- Audio out jack for monitoring

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Applications

Software Provided For:

- **1600A Series** Emergency Phone Polling

- Remote programming of **AES-2000** Accessible Entry System (**DOD# 202**)

- PC programming of **K-2000-DVA** Multi Input Voice Dialer (**DOD# 303**)

Specifications

Power: 120V AC/12V DC 500mA, UL listed adapter provided
Dimensions: 127mm x 127mm x 25mm (5" x 5" x 1.5")
Weight: 1.36 kg (3 lbs.)
Environmental: 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity
P.C. Interface: 9-pin RS-232 or USB port (cable included)
Software/Hardware Requirements:
- IBM Compatible personal computer with an available serial port CD drive, and Windows compatible sound card
- Windows: 95 or 98 (with OLE32 updates), NT 4.0 (service pack 6 or higher), 2000 (service pack 2 or higher), or XP
- 5MB of hard drive space
- 8MB of free physical RAM

Warranty

IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, PLEASE CONTACT: VIKING TECHNICAL SUPPORT AT (715) 386-8666

Our Technical Support Department is available for assistance Monday 8am - 4pm and Tuesday through Friday 8am - 5pm central time. So that we can give you better service, before you call please:
1. Know the model number, the serial number and what software version you have (see serial label).
2. Have your Technical Practice in front of you.
3. It is best if you are on site.

RETURNING PRODUCT FOR REPAIR

The following procedure is for equipment that needs repair:
1. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (RA) number. The customer MUST have a complete description of the problem, with all pertinent information regarding the defect, such as options set, conditions, symptoms, methods to duplicate problem, frequency of failure, etc.
2. Packing: Return equipment in original box or in proper packing so that damage will not occur while in transit. Static sensitive equipment such as a circuit board should be in an anti-static bag, sandwiched between foam and individually boxed. All equipment should be wrapped to avoid packing material lodging in or sticking to the equipment. Include ALL parts of the equipment. C.O.D. or freight collect shipments cannot be accepted. Ship cartons prepaid to:
   Viking Electronics, 1531 Industrial Street, Hudson, WI 54016
3. Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
4. RA number on carton: In large printing, write the R.A. number on the outside of each carton being returned.

RETURNING PRODUCT FOR EXCHANGE

The following procedure is for equipment that has failed out-of-box (within 10 days of purchase):
1. Customer must contact Viking's Technical Support at 715-386-8666 to determine possible causes for the problem. The customer MUST be able to step through recommended tests for diagnosis.
2. If the Technical Support Product Specialist determines that the equipment is defective based on the customer's input and troubleshooting, a Return Authorization (R.A.) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the R.A. number, return the approved equipment to your distributor, referencing the R.A. number. Your distributor will then replace the product over the counter at no charge. The distributor will then return the product to Viking using the same R.A. number.
4. **The distributor will NOT exchange this product without first obtaining the R.A. number from you. If you haven't followed the steps listed in 1, 2 and 3, be aware that you will have to pay a restocking charge.**

LIMITED WARRANTY

Viking warrants its products to be free from defects in the workmanship or materials, under normal use and service, for a period of one year from the date of purchase from any authorized Viking distributor or 18 months from the date manufactured, which ever is greater. If at any time during the warranty period, the product is deemed defective or malfunctions, return the product to Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI., 54016. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number.

This warranty does not cover any damage to the product due to lightning, over voltage, under voltage, accident, misuse, abuse, negligence or any damage caused by use of the product by the purchaser or others. This warranty does not cover non-EWP products that have been exposed to wet or corrosive environments.

NO OTHER WARRANTIES. VIKING MAKES NO WARRANTIES RELATING TO ITS PRODUCTS OTHER THAN AS DESCRIBED ABOVE AND DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

EXCLUSION OF CONSEQUENTIAL DAMAGES. VIKING SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE TO PURCHASER, OR ANY OTHER PARTY, FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED TO THE SALE OR USE OF THE PRODUCT SOLD HEREUNDER.

EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY. WHETHER IN AN ACTION BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR ANY OTHER LEGAL THEORY, ANY LIABILITY OF VIKING SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, OR AT VIKING'S OPTION, REFUND OF THE PURCHASE PRICE AS THE EXCLUSIVE REMEDY AND ANY LIABILITY OF VIKING SHALL BE SO LIMITED.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT EACH AND EVERY PROVISION OF THIS AGREEMENT WHICH PROVIDES FOR DISCLAIMER OF WARRANTIES, EXCLUSION OF CONSEQUENTIAL DAMAGES, AND EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY, ARE SEVERABLE FROM ANY OTHER PROVISION AND EACH PROVISION IS A SEPARABLE AND INDEPENDENT ELEMENT OF RISK ALLOCATION AND IS INTENDED TO BE ENFORCED AS SUCH.

Hardware Installation

The **PB-100** comes complete with a telco cord, USB to RS-232 converter cable, audio cables and a 12V DC power adapter.

Step 1.	Using the telco cord, connect a phone line to the rear panel jack labeled "**LINE**". If the **PB-100** is to be used to make AES-2000 audio recordings. A standard phone can be plugged into the "**PHONE**" jack.
Step 2.	Connect one end of a 9 pin serial cable (not included) into the jack labeled "**SERIAL DATA**" and the other end into an open serial port of the PC. If a serial port or serial cable is not available, use the included RS-232 to USB cable to connect to a USB port.
Step 3.	If audio is to be used through the **PB-100**, connect the "Audio In" or "Mic In" of the sound card to the "**AUDIO OUT**" port of the **PB-100**.
Step 4.	Plug the 12V DC power adapter (included) into the rear panel power jack.
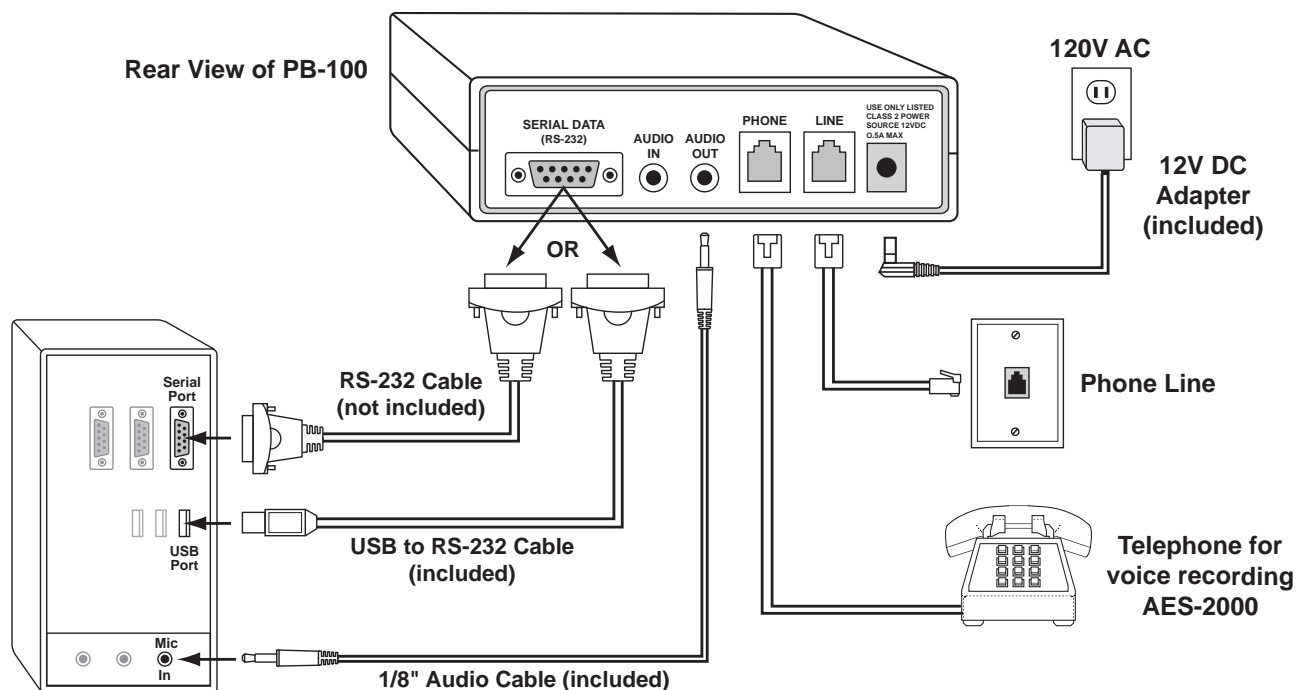
Software and Installation

A. About the Software

The CD that is included with the **PB-100** contains several different applications. The following is a brief description of the programs.

1. 1600A Series Polling Software

This software will automatically test the functionality of **1600A Series** emergency telephones on a repeating schedule. It can use up to (10) **PB-100**'s at once to dial each phone and test it for ID codes and microphone/speaker function, keeping a time-stamped log of all results. The software can also be used to automatically program units in the field.

2. AES-2000 Programming Software

The **AES-2000** Accessible Entry System can be programmed remotely using the **PB-100** and the **AES-2000** Programming Software. Both data and audio can be uploaded to the **AES-2000** including names, phone numbers, audio queues and other required programming variables. For more information, see **DOD# 202**.

3. Smart Terminal Diagnostic Software

Smart Terminal is diagnostic program that allows the user to send and receive data directly to a COM port of your PC. ASCII, Hex and Decimal data can be entered, decoded and sent out the selected ports. Two separate display areas allow the user to view data coming in on either port. This utility is useful for troubleshooting the connection between the **PB-100** and your PC. If an "H" followed by Enter is received by the **PB-100**, it will send back a "K" and a carriage return. Do this to assure you have the correct com port configured for the **PB-100**.

4. K-2000-DVA Programming Software

The **K-2000-DVA** Multi-Input Voice Dialer can be programmed using the included software. All phone numbers and calling parameters can be easily updated. The **K-2000-DVA** does not require the use of a **PB-100**, but rather connects directly to your PC using the included serial cable or the USB to RS-232 converter cable. Audio recordings are not supported by the PC software, see **DOD# 303**.

5. Entry Logger Software

Entry logger software provides transaction logging for the **ES-1**, **K-1900-3** and **C-4000** Entry Controller systems. Compatible with any Windows based PC running Windows 98 or higher, the software adds time and date stamps to each transaction, and allows user printing, record saving, and complete search capabilities. The Entry Logger software uses the Log Bus that is on each of these products and a serial port on the PC. The logging software does not require a **PB-100**.

6. C-4000 Programming Software

View, modify and save programmed telephone numbers and programming parameters for the **C-4000** Entry Controller using a serial cable connection. Compatible with any Windows based PC running Windows 98 or higher. The **C-4000** is programmed without the use of the **PB-100**.

7. K-6000-DVA Programming Software

The **K-6000-DVA** Automated Voice Message Delivery System is programmed using the included software. The **K-6000-DVA** does not use the **PB-100** for programming, but rather connects directly to a PC using a spare serial port or to a USB port using the included conversion cable. The software can handle up to 1000 names per unit and it can maintain a database for up to 8 units. Recordings on the **K-6000-DVA** can only be made through the phone line and not loaded directly from the PC.

8. SLP-4 Programming Software

The **SLP-4** Single Line Paging Controller with CD quality audio comes with pre-recorded audio sounds but if a custom sound is required, the included software can be used to load the wave file. The **SLP-4** does not use the **PB-100** for loading the wave files, instead it connects directly to a PC using the USB port.

9. CTG-2 Programming Software

The **CTG-2** Advanced Clock Controlled Tone / Message Generator is programmed using the included software. The **CTG-2** does not use the **PB-100** for programming, instead it connects directly to a PC using a USB port. The software creates and maintains a database for the **CTG-2** that includes up to 1000 events as well as the names and locations of any wave files used. Audio wave files can be directly transferred from the PC to the **CTG-2** using the **CTG-2** Programming Software.

10. Wake Up Caller Software

This software allows a small hotel or motel to use the **PB-100** to make scheduled wake up calls to any phone number. Set up alarms to repeat on certain days, announce the time and play a message.

B. System Requirements

1. Hardware Requirements

- IBM Compatible personal computer with: Windows XP (service pack 2 or higher), Vista, or Win7
- **PB-100** hardware
- Available RS-232 serial port or USB port
- Male sub-D 9 pin cable or USB to RS-232 converter cable (provided with **PB-100** hardware)
- Windows compatible sound card
- 5MB minimum free hard drive space for each installation
- 8MB of free physical RAM for each **Viking** application running

2. Software Requirements

- Internet Explorer or Netscape Navigator Version 4 or newer to navigate CD contents.
- Adobe Acrobat Reader® version 4.x or newer to view Product and Software Documentation.

C. Installing Software

Step 1.	Connect the hardware as shown in "Hardware Installation".
Step 2.	Insert the **Viking** master CD to start the program.
Step 3.	Follow the instructions on the CD.

Note: If you have disabled the "Auto-Run" feature on your computer and the CD does not automatically start, double click the setup.htm file in the root directory of your CD drive.

D. Un-Installing Software

Step 1.	Go to "**Control Panel**", then select "**Add/Remove Programs**".
Step 2.	Select the **Viking** software you want to remove.
Step 3.	Click "**Remove**".

Programming
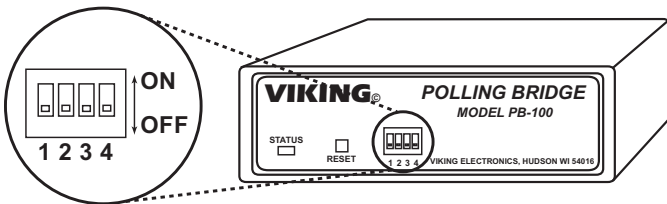
Switch	ON/OFF	Description
1	OFF	**1600A Series** PB-500 mode enabled
1	ON	**1600A Series** PB-500 mode disabled
2	OFF	**AES-2000** programming disabled
2	ON	**AES-2000** programming enabled
3	OFF	**1600A Series** mic/speaker test disabled
3	ON	**1600A Series** mic/speaker test enabled
4	OFF	Audio attenuation disabled
4	ON	Audio attenuation enabled

A. 1600A Series Polling

For polling **1600A Series** products, set Dip switches 1 and 3 to ON, 2 and 4 to OFF.

B. AES-2000 Programming

Using the **PB-100** is the only way to program the **AES-2000**. The **PB-100** provides the modem for data transmission as well as a phone connection for recording the audio directory. Dip Switches 1 and 2 must be in the ON position 3 and 4 OFF. On some phone lines, there may be excessive noise and the **AES-2000** may have trouble receiving the data from the **PB-100**. If this happens, set Dip Switch 4 to the ON position to attenuate the unwanted noise.

Product Support Line...715.386.8666   *Fax Back Line...715.386.4345*