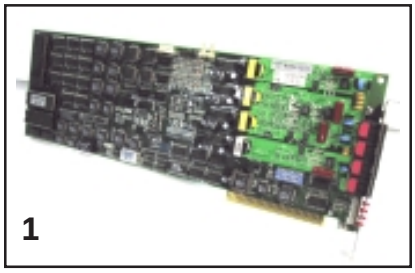
VLR Kit Installation Guide

1. Package Content

1-1 VP894AS-M11 Voice Card Package

1. VP894AS-M11 Voice Card (x1)
2. Y Connector (x4)
3. RJ11 Telephone Cord (x4)
4. 2-pin Monitor Cable (x1)
5. VLR System Software Diskettes (not provided for OEM customers)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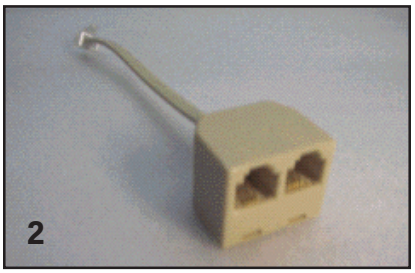
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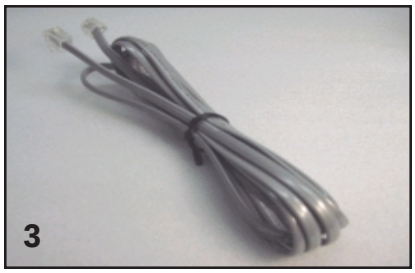
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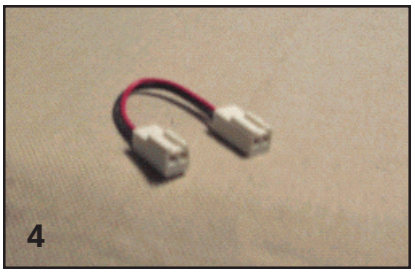

4

1-2 VRP-116 Speaker Package (optional)

1. Speaker
2. Power supply
3. Audio Patch Cord


1


2


3

2. General System Requirements

1. Used as a recording interface, the VP894AS-M11 voice card must be installed into a PC (regular or industrial) with full length ISA slots. Up to 16 cards can be installed into a single system. If a regular PC is to be used, make sure it has enough ISA slots for the voice cards.
2. Minimum requirements for Windows NT 4.0 SP4 based systems:
   - Pentium MMX-233, 64 MB RAM

   Minimum requirements for Windows 2000 based systems:
   - Pentium MMX-233, 128MB RAM
3. VLR system requires two hard disk partitions to operate. It uses the C: partition (recommended size = 2 GB) for the operating system and application software. The entire D: partition is used to store voice records, therefore the D: partition should be as large as possible. The two partitions may be on the same hard disk, or on two different hard disks. Voice records are stored on a separate partition to prevent data loss due to system crashes.
4. Voice replay device: Using the VRP-116 speaker is recommended.

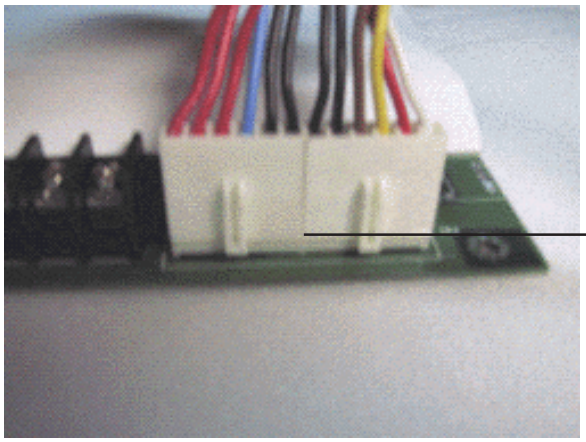
3. IPC Based System Assembly (a 64-ch example)

3-1 System Requirements (64-channel example)

1. IPC case with 20 expansion slots.
2. Backplane with 20 ISA slots.
3. 350W (or more) switching power supply.
4. Pentium class CPU card - must have SCSI interface if using SCSI HDD or backup device.
5. CPU = Pentium MMX-233 (or better).
6. RAM = 64 MB (Windows NT) or 128 MB (Windows 2000).
7. HDD = 4.3 GB (or larger).
8. Backup device = MO drive or DAT drive
   * For DAT drive, we recommend HP-C1599A (DDS2) and HP-1554C (DDS3).
9. 1.44MB floppy drive.
10. Mouse and keyboard.
11. CDROM drive - can be removed after Windows is installed.

3-2 Assembly Instructions

1. Install RAM onto the CPU card.
2. If using SCSI HDD, MO or DAT drive, set its ID number properly. Usually HDD is ID0, while MO or DAT is ID3. No configuration is needed for IDE devices.
3. Assemble all components with screws.
4. Connect the power supply to the backplane. Make sure the black wire on P8 and P9 are next to each other.

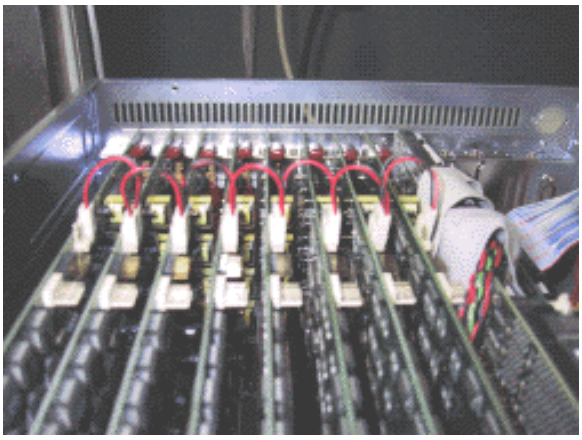


Black wires are next to each other

5. Connect the cables for HDD and MO/DAT drives. If IDE devices are used, connect HDD drive to the primary IDE and MO drive to the secondary IDE. Make sure the IDE cables are not connected backwards - the red wire on the cable indicates pin 1. SCSI cables are keyed and can not be connected backwards.

Red wire is near the power connector.

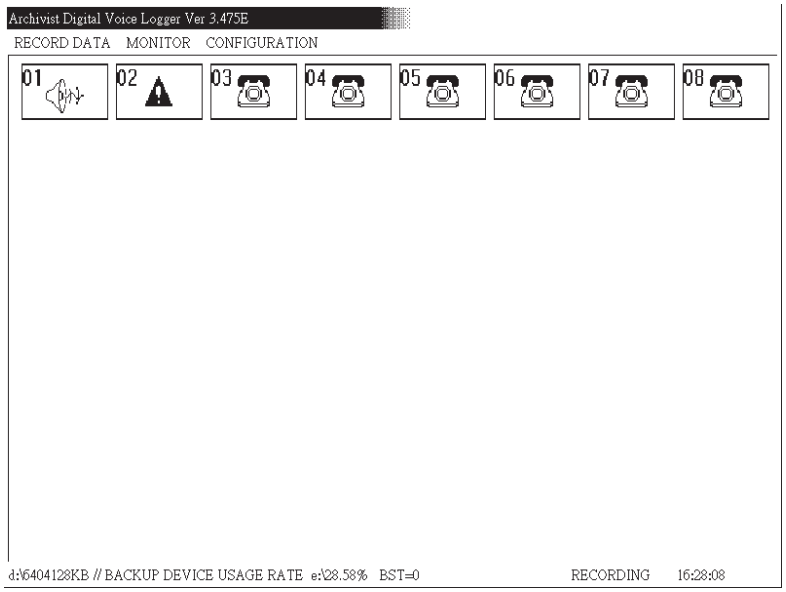
6. Connect CDROM drive to the secondary IDE. If the MO drive is on the secondary IDE already, set the MO drive as master and the CDROM drive as slave.
7. Connect the cables for COM1, COM2 and Printer ports.
8. Connect the cables for mouse and keyboard, if necessary.
9. Connect the power cables for all components.
10. Plug in mouse, keyboard and monitor. Turn on system power.
11. While the system is booting up, press the DEL key to enter BIOS setup screen. Set BIOS configuration according to Appendix A. Note that your BIOS screens may look a little different, but should be mostly the same.
12. Install Windows onto HDD partition C: and format partition D:.
13. Turn off the system and install VP894AS-M11 cards. All cards should be configured properly before installation. Each card must have a unique card number, but all cards use the same IRQ and memory address. Refer to Appendix B for details.
14. When installing two or more cards, connect the 2-pin monitor cable between cards, as shown in the picture below.



15. Connect the VRP-116 speaker to channel #1 of card #0.

3-3 Archivist Software Installation

1. Insert disk #1 into the floppy drive. Run setup.exe and follow the instructions on screen to finish installation. You will be prompted to restart the system after installation.
2. Archivist program will be executed automatically after the system restarts.
3. If there is only one voice card in the system, the screen will display channel #1 ~ #4 only. If there are two voice cards in the system, the screen will display channel #1 ~ #8, and etc. The display should be similar to the following:



4. Regular PC Based System Assembly

4-1 System Requirements

1. PC case.
2. Pentium class motherboard with at least one ISA slot.
3. 250W (or more) switching power supply.
4. SCSI interface card if using SCSI HDD or backup device.
5. CPU = Pentium MMX-233 (or better).
6. RAM = 64 MB (Windows NT) or 128 MB (Windows 2000).
7. HDD = 4.3 GB (or larger).
8. Backup device = MO drive or DAT drive
   * For DAT drive, we recommend HP-C1599A (DDS2) and HP-1554C (DDS3).
9. 1.44MB floppy drive.
10. Mouse and keyboard.
11. CDROM drive - can be removed after Windows is installed.

4-2 Assembly Instructions

1. Install CPU and RAM onto the motherboard.
2. If using SCSI HDD, MO or DAT drive, set its ID number properly. Usually HDD is ID0, while MO or DAT is ID3. No configuration is needed for IDE devices.
3. Assemble all components with screws.
4. Connect the power supply to the backplane. Make sure the black wire on P8 and P9 are next to each other.
5. Connect the cables for HDD and MO/DAT drives. If IDE devices are used, connect HDD drive to the primary IDE and MO drive to the secondary IDE. Make sure the IDE cables are not connected backwards - the red wire on the cable indicates pin 1. SCSI cables are keyed and can not be connected backwards.
6. Connect CDROM drive to the secondary IDE. If the MO drive is on the secondary IDE already, set the MO drive as master and the CDROM drive as slave.
7. Connect the cables for COM1, COM2 and Printer ports.
8. Connect the cables for mouse and keyboard, if necessary.
9. Connect the power cables for all components.
10. Plug in mouse, keyboard and monitor. Turn on system power.
11. While the system is booting up, press the DEL key to enter BIOS setup screen. Set BIOS configuration according to Appendix A. Note that your BIOS screens may look a little different, but should be mostly the same.
12. Install Windows onto HDD partition C: and format partition D:.
13. Turn off the system and install VP894AS-M11 cards. All cards should be configured properly before installation. Each card must have a unique card number, but all cards use the same IRQ and memory address. Refer to Appendix B for details.
14. When installing two or more cards, connect the 2-pin monitor cable

between cards.

15. Connect the VRP-116 speaker to channel #1 of card #0.

4-3 Archivist Software Installation

1. Insert disk #1 into the floppy drive. Run setup.exe and follow the instructions on screen to finish installation. You will be prompted to restart the system after installation.
2. Archivist program will be executed automatically after the system restarts.
3. If there is only one voice card in the system, the screen will display channel #1 ~ #4 only. If there are two voice cards in the system, the screen will display channel #1 ~ #8, and etc.

5. Trouble Shooting Tips

Follow the steps until the problem is solved.

5-1 The Archivist program can not find any voice cards.

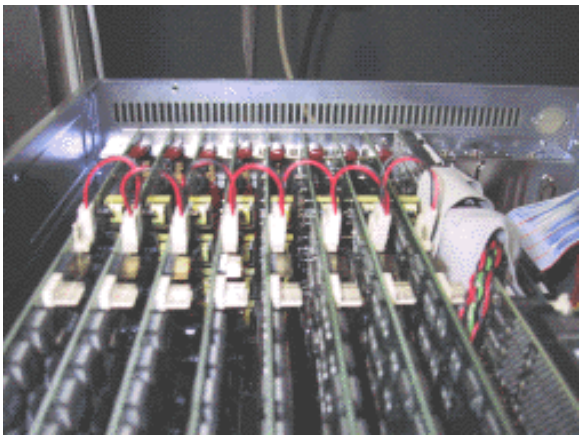
A. Check and make sure switches S1-1 and S1-6 on voice card #0 are set to ON.
B. Refer to the manual of the CPU card/motherboard and set IRQ7 to “Assigned to legacy ISA” in the BIOS setup.
C. Change voice cards’ memory address to a different one.
D. Remove unnecessary cards (such as sound card) from the system.
E. Remove all voice cards except card #0. Check the card and make sure jumper IRQ7 is closed, switches S1-1 and S1-6 are ON, and all other switches are OFF. Re-install other voice cards after the hardware conflict is eliminated.

5-2 The speaker has no sound.

A. If the power light is off, make sure the power adaptor is properly plugged in. Otherwise, make sure the RJ11 cord is properly connected to channel #1 on voice card #0.
B. Replace the RJ11 cord.

5-3 Can not monitor channels.

A. Check card #0 and make sure jumper JP8 is closed. JP8 on all other cards must be open.
B. Make sure 2-pin monitor cables are properly connected, as shown below:



5-4 The system will not record.

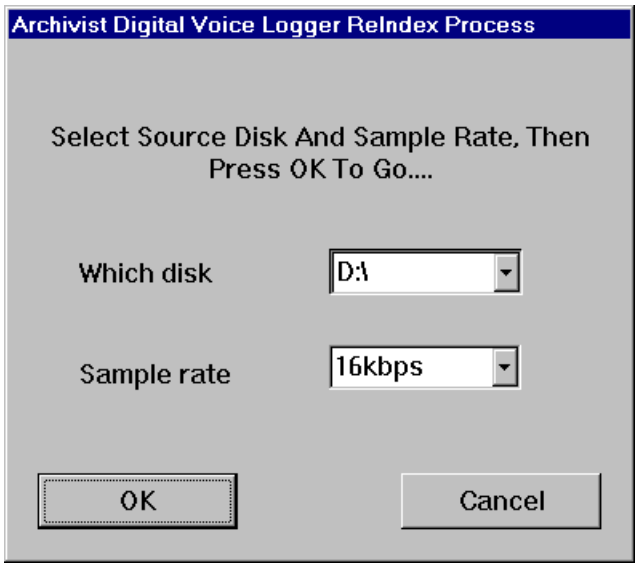
A. Make sure partition D: exists and is properly formated.
B. Make sure partition D: is larger than 200MB.
C. Select the proper activation method (Local Phone or Energy).

5-5 The system will record, but can not find the voice records.

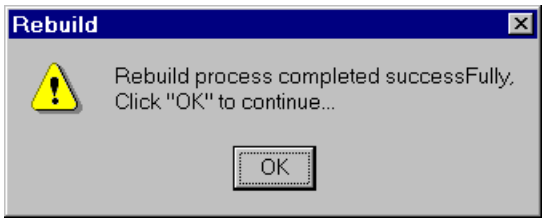
A. Make sure the correct drive, channel(s) and Dialed Digits (if any) are selected in the Record Data Search menu.

B. The index file may be corrupted due to abnormal system shutdown. UPS (Uninterruptable Power Supply) should be used to avoid such shutdowns due to power outage. Exit the Archivist program and run the Rebuild.exe program to re-construct the index file.

Click *"Start > Programs > Archivist Digital Voice Logger > Rebuild"* to open the Rebuild window.



Click *"OK"* to rebuild. It may take serveral minutes to 2 hours to rebuild depending on the size of partition D:. The following dialog will appear when the rebuild is finished.



Click *"OK"* and the rebuild procedure is done.

Appendix A
BIOS Settings

ROM PCI/ISA BIOS (2A59IAK9)
STANDARD CMOS SETUP
AWARD SOFTWARE, INC.

Date (mm:dd:yy) : Fri, Dec 15 2000
Time (hh:mm:ss) : 8 : 31 : 11

HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master	Auto	0	0	0	0	0	0	AUTO
Primary Slave	Auto	0	0	0	0	0	0	AUTO
Secondary Master	Auto	0	0	0	0	0	0	AUTO
Secondary Slave	Auto	0	0	0	0	0	0	AUTO

Drive A : 1.44M, 3.5 in.
Drive B : None

Video : EGA/VGA
Halt On : All Errors

Base Memory:	640K
Extended Memory:	64512K
Other Memory:	384K
Total Memory:	65536K

ESC : Quit ↑ ↓ → : Select Item PU/PD/+/- : Modify
F1 : Help (Shift)F2 : Change Color

ROM PCI/ISA BIOS (2A59IAK9)
CHIPSET FEATURES SETUP
AWARD SOFTWARE, INC.

Auto Configuration	: Enabled
DRAM Timing	: 60ns
DRAM Leadoff Timing	: 10/6/3
DRAM Read Burst (EDO/FP)	: x222/x333
DRAM Write Burst Timing	: x222
Fast EDO Lead Off	: Enabled
Refresh RAS# Assertion	: 4 Clks
Fast RAS To CAS Delay	: 3
DRAM Page Idle Timer	: 2 Clks
DRAM Enhanced Paging	: Enabled
Fast MA to RAS# Delay	: 2 Clks
System BIOS Cacheable	: Enabled
Video BIOS Cacheable	: Enabled
8 Bit I/O Recovery Time	: 1
16 Bit I/O Recovery Time	: 2
Memory Hole At 15M-16M	: Disabled
PCI 2.1 Compliance	: Disabled

CPU Warning Temperature : Disabled
Current CPU Temperature : 32°C/ 89°

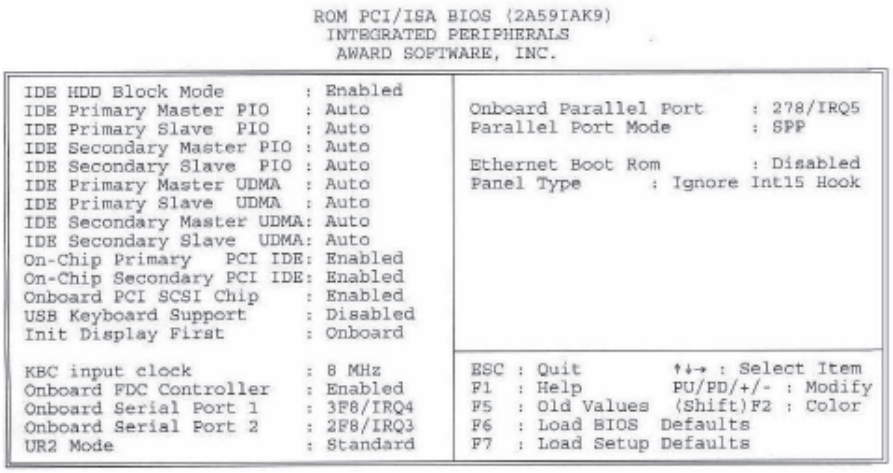
ESC : Quit ↑↓→ : Select Item
F1 : Help PU/PD/+/- : Modify
F5 : Old Values (Shift)F2 : Color
F6 : Load BIOS Defaults
F7 : Load Setup Defaults

ROM PCI/ISA BIOS (2A59IAK9)
BIOS FEATURES SETUP
AWARD SOFTWARE, INC.

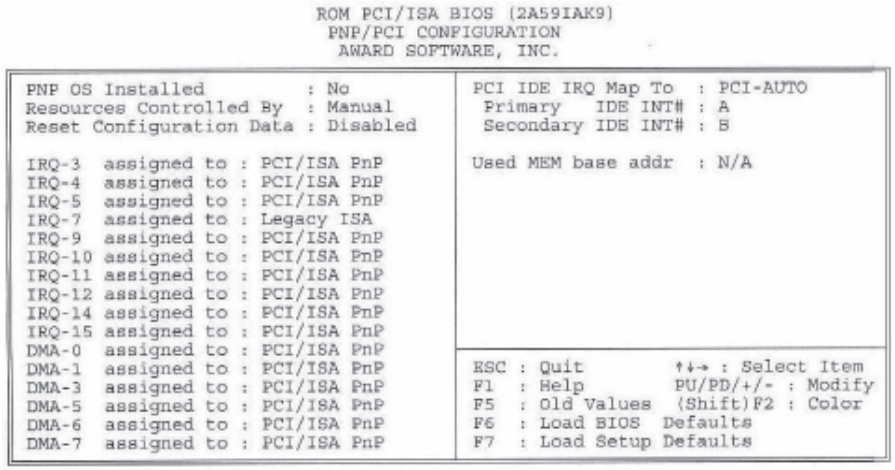
Virus Warning	: Disabled
CPU Internal Cache	: Enabled
External Cache	: Enabled
Quick Power On Self Test	: Enabled
Boot Sequence	: A,C,SCSI
Swap Floppy Drive	: Disabled
Boot Up Floppy Seek	: Enabled
Boot Up NumLock Status	: Off
Boot Up System Speed	: High
Typematic Rate Setting	: Disabled
Typematic Rate (Chars/Sec)	: 6
Typematic Delay (Msec)	: 250
Security Option	: Setup
IDE Second Channel Control	: Enabled
PCI/VGA Palette Snoop	: Disabled
OS Select For DRAM > 64MB	: Non-OS2

Video BIOS Shadow	: Enabled
C8000-CBFFF Shadow	: Disabled
CC000-CFFFF Shadow	: Disabled
D0000-D3FFF Shadow	: Disabled
D4000-D7FFF Shadow	: Disabled
D8000-DBFFF Shadow	: Disabled
DC000-DFFFF Shadow	: Disabled

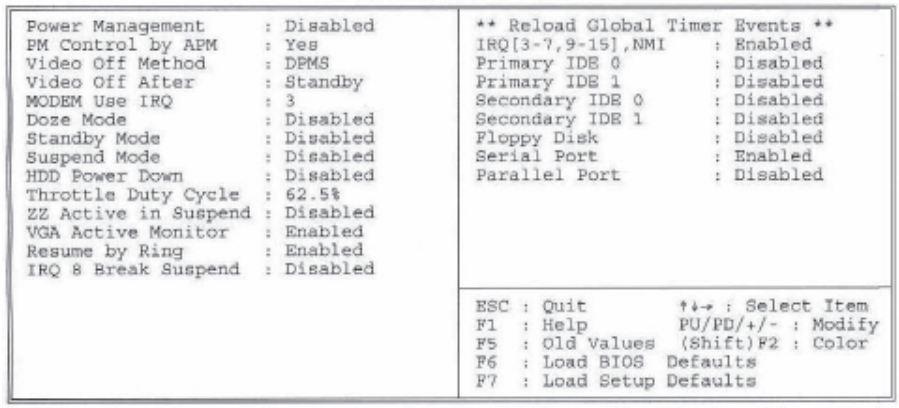
ESC : Quit ↑↓→ : Select Item
F1 : Help PU/PD/+/- : Modify
F5 : Old Values (Shift)F2 : Color
F6 : Load BIOS Defaults
F7 : Load Setup Defaults



Set Parallel Port to IRQ 5.



Assign IRQ 7 to Legacy ISA.



Disable “Power Management”.

Appendix B
VP894AS-M11 Card Jumper Settings

Board Number 0 **JP8 = Closed** **IRQ = 7**

Board Number 1 **JP8 = Open** **IRQ = 7**

Board Number 2 **JP8 = Open** **IRQ = 7**

Board Number 3 **JP8 = Open** **IRQ = 7**

Board Number 4 **JP8 = Open** **IRQ = 7**

Board Number 5 **JP8 = Open** **IRQ = 7**

Board Number 6 **JP8 = Open** **IRQ = 7**

Board Number 7 **JP8 = Open** **IRQ = 7**

Board Number 8 **JP8 = Open** **IRQ = 7**

Board Number 9 **JP8 = Open** **IRQ = 7**

Board Number 10 **JP8 = Open** **IRQ = 7**

Board Number 11 **JP8 = Open** **IRQ = 7**

Board Number 12 **JP8 = Open** **IRQ = 7**

Board Number 13 **JP8 = Open** **IRQ = 7**

Board Number 14 **JP8 = Open** **IRQ = 7**

Board Number 15 **JP8 = Open** **IRQ = 7**