Paging Interface Adapter
Model PIA3264
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PAGING INTERFACE ADAPTER
PIA3264

The Paging Interface Adapter unit is an alarm contact input device with 16 inputs and upgradeable to 64. The unit is programmable by the user, using Microsoft™ Web browser program. Each unit has its own IP address. Simply enter the IP address on the address line. All data is password protected. The PIA can be programmed from a stand alone PC with an Ethernet card using a supplied RJ45 Crossover cable, or over the Local Area Network or anywhere from the internet. The PIA has added protection; it can be programmed to sending a health check page at a time selected by the user. This will notify the user the system is operating properly.

The PIA will accept Dry (no voltage) contact closure or Voltage, high or low, input. Voltage input range is 6 to 45 volts AC or DC. Each input is fused to protect the inputs in case voltage is applied to a contact input that has been configured for no voltage. Each contact can be configured for a different individual pager ID (cap code), Alert type (A, B, C, or D) and repeats ranging from none, 1-4, or until Change of State. Time interval between repeats can be select from 1 minute to 59 minutes. The paging protocol is a global setting of either Scope™, Motorola™ TAP v1.8, COMP2 and WaveWare™. In addition the PIA supports shift changes, escalation of pages and 2 pulse rates.

The Unit is designed with a 59 Mhz processor and a 1 GB removal SD Micro card. This SD card will store all logs, Contact programming information and Database information. The card is removable allowing the user to save all the programmable data onto a Laptop or Desktop PC in case reprogramming is necessary. The complete procedure will be explained later in this manual.

The PIA can be daisy chained together via RS485 Cat 5 RJ45 cabling or connected to a Local Area Network to support up to 576 contact inputs.

comPPage’s Paging Interface Adapter (PIA3264) is a unit that was Designed, Developed and Manufactured in the USA. Each unit has a Limited Lifetime Warranty.
The **Paging Interface Adapter (PIA3264)** is upgradeable to 64 inputs by installing additional Logic Cards (CTBD4) that will activate four inputs per card.

Fuse for Non-Voltage Operation *(Always install to the outside)*

**Main Board**
- 12 volt supply LED
- 3 volt supply LED
- 5 volt Supply LED

**Processor Board and 1GB Storage Card**

**Input Terminal Strip**
- 1 – 32 inputs (TB1 +, TB2 -)

**Contact Logic Board**
- Indicates Ethernet Connection
  - 2-Green, 1-Yellow
- Indicates SD Card Present
  - Present

**Fuse Holder In Front**

**ENSURE ALL POWER IS REMOVED BEFORE INSTALLING OR REMOVING THE CONTACT LOGIC BOARD AND/OR MICRO SD STORAGE CARD**
All IP addresses on a network or stand alone PC must be in the same IP address string. I.e., 192.168.1.100

If your system does not support the IP series 192.168.1.239, which is the IP string address the PIA is shipped with, you must re-assign the IP address of the PIA or your local PC. This can be done by following the steps below.

**Note:** Be sure to check with your network administrator before proceeding.

**CHANGING PC IP ADDRESS**

1. Locate and Change IP Address.
   a. Select *Start, Connect To, Show all Connections.*

2. Right click on your Local Area Connection and select *Properties.*
3. Right click *Internet Protocol (TCP/IP)* and select *Properties.*
4. Select *Use the following IP address.* This will un-select Obtain an IP address automatically.
5. To the right of the IP address enter the new IP address. **192.168.1.235.**
6. Enter the Subnet mask **255.255.255.0.**
7. Select *OK* to exit the screen.

8. Re-boot your PC and you are ready to log onto the PIA.
DEFAULT USER ID and PASSWORD
The unit is shipped with a default log on User ID and Password. You should change the log on and password before proceeding.

User Name: comppage
Password: pia3264

LOGGING ON TO THE PIA3264

1. Connect the PIA to a stand alone PC using the supplied Network Cross Over cable or connect to your network hub using the supplied Network Patch cable.
2. Apply power to the PIA and turn on unit, the GREEN power light will illuminate.
   It will take approximately 40 seconds from power up for the unit to become operational.
3. On the PC Internet Explorer Browser address line, enter the Paging Interface Adapter IP address. The IP address can be found on the main board. (192.168.1.239)
4. The following screen will appear.

5. When configuring the operation of the PIA with a Host System, select Configuration Settings.
6. Enter the default User Name and Password. [Use id: comppage, Password- pia3264]
7. Click OK.
8. The Global Setting screen will appear.
9. If you are authorized to view and print reports, select Reports.
10. Enter the default User Name and Password. [Use id: default, Password- pia3264]
11. Report selection is only active on the Master Unit.

Note: Do Not Check [Remember My Password]. Anyone with access to the computer Has the ability to access the programming or reports on the PIA3264.
CHANGING USER ID and PASSWORD

1. Select the Change Programming Authentication Settings button at the bottom of the screen.
2. The Change UserID / Password screen will appear.

2. After entering your new information, select Set Progm Auth.
3. The new information will be effective the next time you log onto the PIA3264.
4. Save this information in a secure place. If it is lost there is NO way to log onto the unit.
5. The same procedure is used for changing the Log on and Password for the Reports.

Note: You may use the same password for both Programming and Reports but may not use the the same Log On ID.
LOCAL AREA NETWORK INSTALLATION

Note: Unit Must be Ordered with Network Firmware before the units can be placed on a network.

Changing PIA3264 IP Address on the Master

If you are installing the PIA3264R2 as a single master unit or with additional slave units on a Local Area Network, all IP addresses have to comply with the numbering sequence of the network you are installing the units.

If the default IP address on the PIA3264 is not compatible with your network, you need to access it from the Internet browser screen and assign a new IP address. You must log on to the PIA3264 to change the IP address.

1. Connect the PIA to a stand alone PC using the supplied RJ45 Cross Over cable.
2. Apply power to the PIA and turn on unit, the GREEN power light will illuminate.
3. On the PC Internet Explorer Browser address line, enter the Paging Interface Adapter IP address.
4. When the log on screen appears, enter your log on information.
5. The following screen will appear.

6. On the Global Setting page, in the space next to the Master’s IP Address, enter the new IP address. Be sure to record the new IP address. If you forget the new IP Address, there is no way to access the PIA3264. If no Slave Units are going to be connected, disregard the IP Address after Unit ID and Netmask and Gateway. These will be explained later in this manual.
7. After entering the new IP address, go to the bottom of the page and click on **Save Database**. This will write the new address to memory.

8. **You MUST** cycle the power on the PIA3264 before the new IP address will be effective.

**IP Addresses of Slave Units**

Each Slave unit must have a different IP Address and different from the Master Unit. However, it must be in the same number string. I.e 192.168.1.... If Slave units are to be connected to the master via RS485 or connected to the Local Area Network, you must assign new IP Addresses. If connected to a LAN check with the network administrator for correct Sub Mask and Gateway numbers. It may not be necessary to change these numbers.

On each Slave you must enter the Master’s IP Address and the Slave’s IP Address. At the same time you will select which Slave unit you are programming. Select from the drop down next to the Unit ID. Selection is from S1 to S8.

**Network Connection**
RS485 Installation
If installing a Master PIA3264R2 and additional Slave units, each unit must have a different IP address. However, the IP addresses must be in the same number sequence.

Changing PIA3264 IP Address on the Master or Slave
If the default IP address on the PIA3264 needs to be changed, you need to access it from the Internet browser screen and assign a new IP address. You must log on to the PIA3264 to change the IP address.

1. Connect the PIA to a stand alone PC using the supplied RJ45 Cross Over cable.
2. Apply power to the PIA and turn on unit, the GREEN power light will illuminate.
3. On the PC Internet Explorer Browser address line, enter the Paging Interface Adapter IP address. [192.168.1.239]
4. When the log on screen appears, enter your log on information.
5. The following screen will appear.

<table>
<thead>
<tr>
<th>GLOBAL SETTINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date: 09/11/2008</td>
</tr>
<tr>
<td>Unit ID: Master</td>
</tr>
<tr>
<td>Protocol: Scopi</td>
</tr>
<tr>
<td>Device To Transmitter Port Setup: 9600-N-8-1</td>
</tr>
<tr>
<td>Total Number of Contacts: 16</td>
</tr>
</tbody>
</table>

Monitoring Pager:
Pager ID 1: 00000000 Alert Type: None
Pager ID 2: 00000000 Alert Type: None

System OK Check
Pager ID: 00000000 Alert Type: None Interval: 2 Min

Shift Schedule: 
Shift 1 - 00:00 to 00:00 Shift 2 - 00:00 to 00:00 Shift 3 - 00:00 to 00:00

6. On the Global Setting page, in the space next to the IP Address, enter the new IP address you want the unit to have. Be sure to record the new IP address some where, if you forget it there is no way to access the PIA3264 once you log off. If no Slave Units are going to be connected, disregard the IP Address after Unit ID.
7. After entering the new IP address, go to the bottom of the page and click on Save Database. This will write the new address to memory.
You MUST cycle the power on the PIA3264 before the new IP address will be effective.
PROGRAMMING OVERVIEW

Global Settings
All programming is accomplished on the Master unit.
Any Field not filled in will be disregard.

Date and Time
The unit has a RTC (real time clock). You must set the clock to the current time so all Logs and Reports will reflect the correct date and time.
1. Date – type the complete date including slash marks. (05/01/2008).
2. Time – the unit use a 24 hour clock. You must enter all digits include colons.(02:15:00)

Master IP Address
The Address of the Master unit being programmed.

Host System
Select the Host Nurse Call System you will be attaching this unit. The program will automatically set the correct sample rate for the Slow and Fast pulse rate. If a host system selection is not required, and you are using a momentary contact closure, select Fast Trigger Input. This will set the input contact closure time for detection to less than 75 mS. This will accommodate both Voltage and Non-Voltage input. Not for use with pulsing inputs.

Unit ID
Select the type of unit to be programmed. Each unit must be identified as a Master or Slave 1 thru 8.
1. Master
2. S1 – S8

IP Address of Slave
Enter the IP Address of the Slave unit you are programming.

NetMask
Enter the netmask number obtained from your network administrator if required.

Default Gateway
Enter the Gateway number obtained from your network administrator if required.

Master/Slave Port Setup
This setting is use to control the data speed on the RS485 bus. It is factory set and should only be changed if you are having EXTREME difficulty with the master unit communicating with the slave(s) units.
**Paging Protocol**
1. Select the paging protocol of the paging encoder installed.
   a. Scope™
   b. Motorola Comp2™
   c. WaveWare™
   d. Motorola TAP V1.8™

**Communications Port Parameters**
This setting must match the port settings of the paging encoder installed.
1. 9600 n-8-1
2. 9600 e-7-1
3. 2400 n-8-1
4. 2400 e-7-1
5. 1200 n-8-1
6. 1200 e-7-1

**Total Number of Contacts**
Each PIA3264 has a capacity for 64 inputs. This selection is where you will enter how many inputs are installed in the unit you are programming. (maximum of 64)
1. Master with 64 inputs – Enter 64
2. Master with Slave attached – Enter 64
3. The Master will know which contacts are on the Slave and which are on the Master.
   **Example:** Master with 64 inputs and 1 slave attached with 16 inputs. On the Contact Programming screen you would program the first 64 contacts with the information of the inputs connected to the master. The next 16 contacts (65-80) you would program for the information of the inputs connected to the Slave.

**Monitoring Pagers**
This option has two global pager IDs that can be identified so all alarm notification will be sent to the Monitoring Pagers, as well as other pager IDs that are for specific alarms.
1. Enter Pager Cap Codes and Alert type [A,B,C or D].
   **Note:** This option is not available when using Non-Voltage (Dry) input.

**System OK Check**
This selection allows the user to select a pager ID and time interval for the system to transmit a SYSTEM OK check-in message.
1. Enter Pager ID. (after the screen has refreshed the leading zero will not be displayed, this is Normal)
2. Enter Alert Type
3. Select the time interval.
Shift
This option allows for shift change paging automatically.
1. Check Shift Schedule (All Shifts must be on the same day)
2. Select the start time of Shift One..ie 00:05, select the ending time ..ie 06:00.
3. Select the start time of Shift two. ie 06:00. Continue for all three shifts.
   **Note:** The ending and start time of shifts will overlap. However, any call that is activated during a 1 minute time frame of the overlap, will be sent to both shifts paging receiver.
4. If the Shift three is not completely filled out to complete the 24 hour period, the unused time will be considered as Shift three and any page during that time will go to shift three pager.

Save Database
After selecting all the global settings, select **SAVE DATABASE** to write all the parameters to the processor memory. Changes will not be effective unit you have saved them to the database.

Function Button

**Save Database**
Select to write programmed data to on board processor.

**Contact Settings**
Displays the Contact Input zones to be programmed.

**Program Authentication Settings**
Allow the user to change log on ID and Password for Contact Programming

**Report Authentication Settings**
Allow the user to change log on ID and Password for Creating/Viewing/Printing Reports

**Contact Input Definition**

1. Dry Normally Closed (N/C).
   a. Active Message **Open state**.
   b. Reset Message **Closed State**.
   c. Repeats will occur on **Open state**.

2. Dry Normally Open (N/O)
   a. Active Message **Closed state**.
   b. Reset Message **Open state**.
   c. Repeats will occur on **Closed state**

3. Voltage Alert Low
   a. **Active Message** and **Repeats** when NO voltage is present.
   b. **Reset Message** when voltage (6-50 Volts AC/DC) is present.

4. Voltage Alert High
   a. **Active Message** and **Repeats** when Voltage IS present.
   b. **Reset Message** when NO voltage is present.
Note: The above description of the contact inputs does not affect the installation using either 1 or 2 Pulse Rates. All functions of the unit will be triggered from the original selection of Voltage High or Low. Pulsing is not available when Dry Contact input is selected.

**Contact Input Screen**

All contact programming is accomplished on the Master Unit. **Any field not filled in will be disregarded**

Contact Input Programming

Each contact input can be programmed for individual messages for each state. The user can select the type of input, Voltage or Non-Voltage and normal state of that contact. Each contact can be programmed with different Pager IDs, Repeat times and Escalations. The PIA is shipped with 16 inputs standard, upgradeable to a total of 64 in blocks of 4. The unit can be set for all voltage or all dry (no voltage). In addition the inputs can be divided into voltage and dry inputs. If the unit is divided voltage and non-voltage, it must be in blocks of 4. **Example.** 1-4 Voltage, 5-8 Dry
Programming Contacts for Elapse Time Reports

If the PIA3264 is being connected to a Nurse Call Host system and Elapse Time reports are required, ensure the room number is used as part of the Active, Reset, Pulse one and Pulse two message. The system will compare the time the Zone was activated to the time it was reset. It must have some means to determine one zone from another. Since the room number may not always be the same as the zone number, it is recommended to use the room number. It is recommended to use three digit. (001-999).

PROGRAMMING INPUTS

Create Default File
All programming is accomplished on the Master unit. The Slave only has to have a Unit ID, IP Address and how many contact inputs are available, and if connecting to a Call System that outputs Pulsing, select the correct Host System. Example: if four logic cards are installed in the slave, the selection would be 16 contacts. If you are installing a master and 1 slave, the master has 64 inputs and the slave has 16. You would select Master and 1 slave on the Global Setting Screen of the master. On the Slave you would select S1 and 16 contacts on the Global Setting Screen. When you program the Contact Screen information you enter the data for ALL the input on the master unit, 1-64 and the information for the inputs on the S1 unit, 65-80.

Voltage Input (Contact Programming Screen)
Start on Zone input #1

1. Select the Type of inputs. (see page 10 for definition)
   a. Voltage Alert High
   b. Voltage Alert Low

2. Enter Room No. 001-999 if applicable. If Bed Identifier is used select A thru E. Be sure to include that identifier in the message text.

3. Enter Active Message
   This is the message that will be sent to the pager when the zone is activated. I.e., Steady Voltage applied or No Voltage

4. Enter Reset Message
   This is the message that will be sent to the pager when the zone is reset. Example Alarm Panel: Zone1 Alarm Reset or Cancelled
   Example Nurse Call System: Room XX Reset, Cancelled, Cleared

5. If a Host System was Selected from the drop down menu on the Global Setting Screen, you MUST check Pulse 1 or Pulse 2 or both for the correct message to be sent to the Pager when a slow or fast pulse is detected.
   a. AiPhone
   b. Cornell
   c. Dukane
   d. Engineered Electronics
   e. Heritage MedCall
   f. TekTone
7. Enter the message to be sent to the pager when Pulse 1 and Pulse 2 is activated.

8. If Shift was not checked on the Global Setting, pager Id information will only come from shift1 Pager row. If Shift was selected on the Global Setting, all three columns must be filled in.
   a. Pagers for Shift 1 are shown on the first row.
   b. Pagers for Shift 2 are shown on the second row.
   c. Pagers for shift 3 are shown on the third row.

### Active Msg Pager IDs

<table>
<thead>
<tr>
<th>Shift 1 Pager:</th>
<th>Pulse One Pager IDs</th>
<th>Pulse Two Pager IDs</th>
<th>For shift 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>0300800 A</td>
<td>0301600 B</td>
<td>0302400 C</td>
<td></td>
</tr>
<tr>
<td>Shift 2 Pager:</td>
<td>0000000 None</td>
<td>0000000 None</td>
<td>0000000 None</td>
</tr>
<tr>
<td>Shift 3 Pager:</td>
<td>0000000 None</td>
<td>0000000 None</td>
<td>0000000 None</td>
</tr>
</tbody>
</table>

### Escalation Per Contact

<table>
<thead>
<tr>
<th>Escalation</th>
<th>Repeat: 5</th>
<th>Interval: 2</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Repeat</th>
<th>Interval</th>
<th>Escalation</th>
<th>Pages Sent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>----</td>
<td>----</td>
<td>Original Page only.</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>Original , 2 min later 1st Repeat, 1st Escalation will activate at the end of the time entered in the box next to the Alert type.</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>3</td>
<td>Original , 2 min later 1st Repeat, 2 min later 2nd Repeat, 1st Escalation the time set, 2 Esc. The same for the 3rd Esc. When zone is physically reset, Original and Esc pagers will be notified.</td>
</tr>
<tr>
<td>RUR(repeat until reset)</td>
<td>5</td>
<td>0</td>
<td>Original , and every 5 minutes till the point is reset .</td>
</tr>
</tbody>
</table>

**Note:** Resets will not be transmitted or logged unit the zone is physically reset.

### Repeat/Intervals

8. Pager ID
   a. If no pager number is required, the blank must have 7 zeros entered.
   b. Protocol selections determine what type of pager IDs are used. Example: Scope – 0100800 (7 digits) TAP – 100 (3 digits), WaveWare – 100 (3 digits) Comp2 –100 (3 digits).
   c. Select the alerts type for each pager id entered. Alerts A – D.

9. Select the number of Repeats and Interval for each contact.
   a. Repeat 0 -5 or RUR (repeat until reset)
   b. Interval 2 ,5,10,15,20,30 Minutes, 1 or 2 hours.
   c. Escalation time up to 1 hour. Enter in minutes.
10. Select **Save to Zone** -
In order to reduce redundant key strokes, you can duplicate your original entry and then edit the area that requires changing.
   a. Enter the zone you are copying in the first blank.
   b. Enter the ending zone you want to program.
      I.e., Save to: 2 to 32. This will copy all data from zone 2 to 32.
   c. The screen will refresh and display Zone 32 (the last zone number you entered.
   d. Select Save to Zone

11. Editing Default file using **FIND ZONE**
   a. In the box next to **Fine Zone**, enter the number of the contact you want to edit.

12. Select **Fine Zone**.

13. The zone information for the zone you entered will appear. You can now make changes.

14. Editing Default file using **Prev or Next**
   a. In the box next to **Fine Zone**, enter the number of the contact you want to edit.
   b. Select **Fine Zone**.
   c. The zone information for the zone you entered will appear.
      You can now make changes.

15. Select Next to display the next input to be programmed
   a. Continue until all inputs have been programmed.

**Non-Voltage Input (default)**
If the unit was ordered for Non-Voltage input, you must have the Fuses inserted and the black Jumper attached to **JP3** for non-voltage input contacts 1-32 or **JP4** for non-voltage input contacts 33-64. JP3 and JP4 is located at the top(where the power connector is located) of the PIA on the right and left side of the unit.

**Start on Zone #1**
1. Select the Input Alert Type.
   a. Dry N/O
   b. Dry N/C

2. Enter Room Numbers 1-9999 if applicable.

3. Enter the Active Message information.

4. Enter Reset Message Information.

![Removal Fuse]

Dry Contact Input Logic Card with Fuses Installed.
6. If Shift was not checked on the Global Setting page, only shift 1 pager in the first column will be active. If Shift was selected on the Global Setting, all the pager ids will be active.
   a. Pagers for Shift 1 are shown on the 1st row.
   b. Pagers for Shift 2 are shown on the 2nd row.
   c. Pagers for shift 3 are shown on the 3rd row.

7. Column 2 & 3 are for Pulse 1 and Pulse 2. Pulsing is not available for Non-Voltage input.

7. Pager ID
   a. If no pager number is required, the blank must have 7 zeros entered.
   b. Protocol selections determine what type of pager IDs are used.
      Scope – 0100800 (7 digits) TAP – 100 (3 digits), WaveWare – 100 (3 digits)
      Comp2 – 100 (3 digits)
   c. Select the Alerts type for each pager ID. Alerts A-D.

8. Select the Repeat and Interval for each contact.
   a. Repeat 0-5 or RUR (repeat until reset)
   b. When RUR(repeat until reset) is selected, ESCALATION function is not available.
   c. Interval 2, 5, 10, 15, 20, 30 Minutes, 1 or 2 hours.

9. Select Save to Zone -
   In order to reduce redundant key strokes, you can duplicate your original entry and then edit the area that requires changing.
   a. Enter the zone you are copying in the first blank.
   b. Enter the ending zone you want to program.
      I.e., Save to: 2 to 32. This will copy all data from zone 2 to 32.
   c. The screen will refresh and display Zone 32 (the last zone number you entered.
   d. Select Save to Zone
10. Editing Default file using **FIND ZONE**
   a. In the box next to **Fine Zone**, enter the number of the contact you want to edit.

11. Select **Fine Zone**.

12. The zone information for the zone you entered will appear. You can now make changes.

13. Editing Default file using **Prev or Next**
   a. In the box next to **Fine Zone**, enter the number of the contact you want to edit.
   b. Select **Fine Zone**.

14. The zone information for the zone you entered will appear. You can now make changes.

15. Select Next to display the next input to be programmed
   a. Continue until all inputs have been programmed.

**When all programming is complete, select [PRINT DATABASE].**
Retain this copy and place a copy with the unit for any future questions or changes.

**Function Buttons Page Two**

1. PREV  Go back to the previous input zone.
2. NEXT  Move to the next input zone.
3. SAVE ZONE  Save all data to memory.
4. PRINT DATABASE  Print a record of all information in current file.
5. FIND ROOM  Search feature, displays data for the room number entered.
6. FIND ZONE  Search feature, displays data for the zone number entered.
7. SAVE TO ZONES  Save displayed data to all zones entered.
8. PRINT REPORTS  User can select from the reports database and create custom Reports.
9. MAINTENANCE: **Do not use this Option unless you are the Data Administrator.**
   **When this option is selected the below screen will appear.**

![PIA3264 INTERFACE SOFTWARE](image)

**WARNING:** By selecting either of these two Reset buttons, **YOU WILL ERASE DATA!**

- Reset Logs
- Reset Database
REPORTS
The system has the ability to store multiple days of data on the 1GB micro card located on the processor. The user can produce different types of reports by selecting different search parameters. The user should copy the logs from time to time to a PC. [see page 23 for the correct procedure] The oldest log will be written over and lost. These reports are selectable by choosing REPORTS from the bottom of input screen one.

Database Report
The database report is a complete record of all currently programmed zones on the Master and Slaves.

1. Select Print Database from screen two.
2. The system will display all the currently active zones.
3. On the browser, select File, Print. Select the printer you want the report to be printed.

<table>
<thead>
<tr>
<th>Zone: 1</th>
<th>Active: Bed Call Assistance Needed Room 222</th>
<th>Reset: Bed Call Assistance Needed Room 222 Reset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shift: 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulse1: Y Slow Bath Call Room 222</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulse2: N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Esc: Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Repeat: 2/5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zone: 2</th>
<th>Active: Bed Call Assistance Needed Room 444</th>
<th>Reset: Bed Call Assistance Needed Room 444 Reset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shift: 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulse1: Y Slow Bath Call Room 444</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulse2: N</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Esc: Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Repeat: 2/5</td>
<td></td>
</tr>
</tbody>
</table>
Report Options
The system will generate multiple reports according to the search criteria selected by the user.

The user can select reports with or without entering a date, room number or type of call. This type of report would be very general and cover a large amount of data. If this is desired the user must understand it will take considerable amount of time to produce. The processor will be doing other things as well as the search for the data requested. Below is a list of common search criteria.

1. **Room Number by Date.** This will show all call types for the given date and Room#.
   a. Select Date and Select the date for the search.
   b. Select From Room and enter the Room number in the first blank, and the Identifier if used, leave the second blank empty.
   c. Select View Report.

2. **Room Number by Date and Type of Call.** This will show only the call type selected.
   a. Select Date and Select the date for the search.
   b. Select From Room and enter the Room number in the first blank, and the Identifier if used, leave the second blank empty.
   c. Select Type and highlight the level of call you want to see.
   d. Select View Report.
3. **Room Number by Date, Call Type and Elapsed Time.**
   a. Select Date and Select the date for the search.
   b. Select From Room and enter the Room number in the first blank, and the Identifier if used, leave the second blank empty.
   c. Select Elapsed Time.
   d. Select Type and highlight the type of call.
   **Note:** If all call type are desired, do not select Type, all call types will be listed.
   e. Select View Report.

4. **Group of Rooms for a Specific date.**
   a. Select Date and Select the date for the search.
   b. Select From Room and enter the Starting room number in the first blank, and the Identifier if used, enter the ending Room number and Identifier in the last blank.
   c. If no specific call type is desired, select View Report.

5. **Room Number, Date, and Specific Shift, All Call Types.**
   a. Select Date and Select the date for the search.
   b. Select From Room and enter the Room Number in the first blank.
   c. Select Shift and then Select which shift.
   d. Select View Report.

**Report by Room number**
The room number report is a list of all calls placed from a specific room, on a specific date. The term after Options: on the report designates the type of report.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Options: Date Room#</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Log Date: 12/23/2008 [the date the report was taken from]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Room No. 222</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Log Time</th>
<th>Pager ID</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>07:20:00</td>
<td>0300800</td>
<td>Bed Call Room 222</td>
</tr>
<tr>
<td>08:13:22</td>
<td>0300800</td>
<td>Bath Call Room 222</td>
</tr>
<tr>
<td>08:14:00</td>
<td>0300800</td>
<td>Bed Call Room 222 Reset</td>
</tr>
<tr>
<td>08:22:23</td>
<td>0300800</td>
<td>Bath Call Room 222 Reset</td>
</tr>
<tr>
<td>10:13:35</td>
<td>0300800</td>
<td>Bed Call Room 222</td>
</tr>
<tr>
<td>13:00:45</td>
<td>0300800</td>
<td>Bath Call Room 222</td>
</tr>
</tbody>
</table>
Report by Call Type and Room

This report the user can select a specific call type and room.

Report Date: 12/22/2008
Report Time: 13:27:00
Options: Date Room# Type

Log Date: 10/20/2008  [the date the report was taken from]

Room No. 33

Log Time  Pager ID    Message
06:19:00  0301600  Bed Call Room 33
07:12:00  0301600  Bed Call Room 33 Reset
08:45:00  0301600  Bed Call Room 33

Elapse Time

This report allows the user to create a report for a specific room, day and calculate the elapse time for all calls for that room.

PIA3264 REPORT

Report Date: 12/24/2008
Report Time: 14:20:09
Options: Date Room# Elapsed Time Type

Log Date: 12/23/2008  [the date the report was taken from]

Room No. 66

Log Time  E – Time  Pager ID    Message
12:44:32               0300800  Bed Call Room 66
12:45:16  00:00:44  0300800  Room 66  RESET
13:15:00  0300800  Bed Call Room 66
13:25:00  00:10:00  0300800  Room 66 Reset
EDIT

To change or remove information from a specific zone or room, follow the steps below.

1. Zone
   a. Log on to unit.
   b. Go to contact input screen.
   c. In the blank next to the FIND ZONE enter the zone number you want to edit.
   d. Select FIND ZONE.
   e. The system will display the current data for that zone.
   f. Edit the data and select SAVE ZONE.

2. Room Number
   a. Log on to unit.
   b. Go to contact input screen
   c. In the blank next to ROOM NO enter the room number you want to edit.
   d. Select Find Room.
   e. The system will display the current data for that room.
   f. Edit the data and select SAVE ZONE.

Note: After edit changes are saved, select Print Database. This will give you a complete list of all data on all zones.

MIXED INPUTS
The PIA3264 has the ability to process different types of data on the same unit. This option allows the user to select Non-Voltage(dry – N/O, N/C) and Voltage (High or Low). The user can select VOLTAGE, or Dry for each set of contact. When mixing inputs the system requires each contact logic card to have the same input type.

Each CTBD4 logic card controls 4 inputs.

Example: Master with 16 inputs
Voltage: Contacts 1-4, 9-12
Dry: Contacts: 5-8, 13-16
MASTER – SLAVE PROGRAMMING

As stated earlier in this manual, all contact input programming is accomplished on the Master unit. Here is an example of a typical multiple host input location. The user has 3 host systems on different floors, each unit has different outputs. Floor 1 – Master unit, 64 inputs, Floor 2 – S1, 16 inputs and Floor 3 – S2, 20 inputs.

System Configuration

1. Program Master as MASTER and select the amount of Slave units attached.
2. Program S1 as S1 and S2 as S2. If attached to a host system that has pulsing, be sure to select the host type on the slave unit as well as the master. Select 64 contacts on the Slave. (Do Not Program any contacts on the slave).
3. This Completes the Slave programming.
4. On the master contact input screen program as follows.
   a. Contacts 1-64 – Information about inputs connected to the Master Unit.
   b. Contacts 65-80 – Information about inputs connected to Slave1.
   c. Contacts 129-148 – Information about inputs connected to Slave2.

Each PIA3264 has the capacity of 64 input, with a maximum of 576 when all 8 slaves are connected. The contact number runs in sequence. Master 1-64, Slave1 65-128, Slave2 129 – 192, Slave3 193-256 and so on till you reach the maximum. If the Slave only or master has less than the 64 inputs connected you only program the ones that are connected. The contacts can be connected in any order. Ie. 1-16 or 32-48. Just remember, only program those contacts that are connected.

4. Connect the Master and first slave using an RJ45 crossover cable.
5. Connect all Slaves together using an RJ45 patch cable.

SEARCH and DISPLAY DATA

Find Room
1. Enter the room number you want to find in the field next to Room No.
2. Select Find Room.
3. All programming for that specific room will be displayed.

Find Zone
1. Enter the zone number you want to find in the field next to Find Zone
2. Select Find Zone.
3. All programming for that specific zone will be displayed

Removal of SD Card
1. Remove power from the PIA3264.
2. Remove the four screws holding the top cover on and set the cover and screws aside.
3. Locate the Main Processor board in the middle of the mother board.
4. Push the card in GENTLY and the card will snap back. Now you can remove it.
Copying Files from SD Card

*Note: Copying files from the SD card to your PC is for storage only. You not use your PC to Read or Modify the files.*

1. If you do not have the correct size card reader on your PC, remove the SD Micro card from it’s adapter and place it in a larger adapter.
2. Place the adapter in the card reader on your PC. Window XP and Vista will recognize the card as a removal drive and assign it a letter.
3. Create a directory and drag and drop the directories on the SD card into the directory you created.

Reinstalling SD Card into PIA3264

1. Remove SD Card from PC after all directories have been copied.
2. Install SD Micro Card back into SD Adapter if removed previously.
3. Insert SD Card adapter with Micro Card into holder on Main Processor Board.
4. Ensure contact surface is up and push in GENTLY. You will feel the card detent.
5. Replace the cover previously removed and apply power to the unit.

**BLOCK DIAGRAM**
INSTALLATION

Ensure power is NOT APPLIED to the unit before proceeding.
No Fuses = Voltage Input
Fuses = Non-Voltage(Dry) Input – If unit was ordered for Non-Voltage input, refer to the installation sheet provided.

VOLTAGE INPUT
1. Remove the four Phillips head screws located on top of the unit.
2. Remove the top cover and sit aside.
3. Using the hardware supplied, mount the PI A3264.
4. If the cable you are using has bundled wires, strip the outside covering back 24 inches.
5. Loop the cable in a U shape and attach to the PIA3264 using the tie-wraps provided. Fig 1
6. Route the wire pairs through the access holes on the back of the unit.
7. With the front of the unit facing you, zones 1 - 32 are on the left and 33 – 64 are on the right. Fig 2
   You should route your cables accordingly in order not to have to cross over the board inside.
8. If all the inputs have a common ground, it is not necessary to attach individual grounds to each input on the terminal block. Simply attach the common ground to terminal number 2(-). All the commons are electrically connected on the main board. Attach the Point wire or Positive wire to terminal 1 (+). Continue until all inputs are connected.

9. Replace top cover and Phillips screws removed earlier.
10. Connect the power lead to rear of the unit.
11. Turn the power switch located on the front panel ON.
12. The power light will illuminate.
13. Connect the 9 pin to 9 pin serial Cable from the PIA3264 to the input of the Paging Encoder.
14. Apply power to the Paging Encoder. The Red power light will illuminate (Scope/WaveWare).
15. The PIA3264 is now in operation.
Master – Slave Connectively
When an installation requires more than a single unit with 64 inputs, additional units called Slaves can be added up to 8.

Master and Slave units are the same. Only the programming will designate Slave or Master. After programming the Master and Slave(s), follow the steps below for mounting and check out for proper operation.

1. Connect the first slave to the master using a RJ45 Crossover Cable.
2. Connect the cable to the master RJ45 Out connector. Connect to the Slave’s RJ45 IN connector.
3. Each Slave is attached to another slave using a RJ45 Patch Cable.
4. After all units are connected to the master, turn the power switch located on the front panel ON in the following sequence.
   a. Turn power on the Master.
   b. Turn the power on the slave units in order. ..ie..1, 2, 3.
5. The master Power LED will be ON.
6. Each Slave’s power LED will be ON and the yellow Data LED will flash on each slave as it reads the configuration from the master. Once complete the LED will come on solid.
7. In normal operation the slave’s Yellow Data LED , Green Power LED and will be ON solid.

Troubleshooting
If a Master Slave configuration is not sending data to the paging transmitter, the following should be checked. Power - GREEN, Data – YELLOW, Program - RED

Master Power LED is ON. Slave Power LED and Data LED is ON Solid. 1. Check RS232 Cable to Paging Encoder
2. Check for correct Paging Protocol in Master Unit.

SLAVE UNIT

Power LED ON Data LED ON Slave(s) not connected to Master. Program LED ON Check Interconnect RJ45 Cable.

MASTER or SLAVE

Power LED OFF No 12 VDC input. Check AC Adapter in rear of Slave or Master
Paging Interface Adapter

### RS232 Connection

<table>
<thead>
<tr>
<th>PIN</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TP42</td>
</tr>
<tr>
<td>2</td>
<td>Receive Data (IN)</td>
</tr>
<tr>
<td>3</td>
<td>Transmit Data (OUT)</td>
</tr>
<tr>
<td>4</td>
<td>TP40</td>
</tr>
<tr>
<td>5</td>
<td>Ground</td>
</tr>
<tr>
<td>6</td>
<td>JP4</td>
</tr>
<tr>
<td>7</td>
<td>Jumper to 8</td>
</tr>
<tr>
<td>8</td>
<td>Jumper to 7</td>
</tr>
<tr>
<td>9</td>
<td>TP41</td>
</tr>
</tbody>
</table>

### RJ45 Ethernet Connection

### Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>12 Volts DC</td>
</tr>
<tr>
<td>Current</td>
<td>2A Surge, Normal – 1A</td>
</tr>
<tr>
<td>Input Contacts</td>
<td>64 per PIA</td>
</tr>
<tr>
<td>Input</td>
<td>No Voltage (dry) - Fused Voltage – AC or DC 2-40 Volts Inputs can be Mixed Pulsing - 2 Levels</td>
</tr>
<tr>
<td>Connection</td>
<td>RJ45 Cable using RS485 Total 8 Units</td>
</tr>
<tr>
<td>Multiple Call levels Systems Supported</td>
<td>AiPhone, Cornell, Dukane, Engineered Electronics, Heritage MedCall TekTone</td>
</tr>
<tr>
<td>Paging Protocol Output RS232</td>
<td>Scope, Comp2, Tap, WaveWare</td>
</tr>
<tr>
<td>Programming</td>
<td>Web Browser Connection RJ45</td>
</tr>
<tr>
<td>IP Address</td>
<td>Default 192.168.1.239</td>
</tr>
<tr>
<td>MAC</td>
<td>00 90 C2 [Additional six characters on processor board]</td>
</tr>
<tr>
<td>Approval</td>
<td>FCC Title 47, Part 15, RoHS Compliant, UL 1069 Ed: 7 and CSA C22.2#205</td>
</tr>
<tr>
<td>Size</td>
<td>14 in x 10.5 in x 2 in</td>
</tr>
<tr>
<td>Warranty</td>
<td>Limited Life Time</td>
</tr>
</tbody>
</table>

### Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast Trigger Input</td>
<td>Used with Dry Contact Input or Non-Pulsing Voltage Input. Closer Detection &lt;75mS</td>
</tr>
<tr>
<td>Monitoring Pager</td>
<td>All Alerts will be sent to this pager if pager ID is entered</td>
</tr>
<tr>
<td>System OK Check</td>
<td>If Selected, system will automatically send a page at selected time. SYSTEM OK</td>
</tr>
<tr>
<td>Slow Pulsing</td>
<td>Pulsing input at 1 Hz or Less</td>
</tr>
<tr>
<td>Fast Pulsing</td>
<td>Pulsing Input at 2 Hz</td>
</tr>
<tr>
<td>Voltage Alert High</td>
<td>Active Msg sent when input voltage is High</td>
</tr>
<tr>
<td>Voltage Alert Low</td>
<td>Active Msg sent when input voltage is low</td>
</tr>
</tbody>
</table>
PIA3264
RS-485 HOOK-UP

CTBD4 Logic Card
Voltage Input

RS-485 HOOK-UP

Slave 1
Cross Cable RJ45 (supplied)

Slave 2
Patch Cable RJ45 (supplied)

Master

Setup:
1. All Programming is accomplished on the master.
2. Master is connected to first Slave with the GREEN RJ45 Cross Over Cable.
3. Each Slave is programmed to identify its slave number (slave1 or 2 etc…)

RS232 Scope Protocol
Paging Interface Adapter

TECHNICAL INFORMATION

Nurse Call Hook-Up

**Cornell**
Connection Type – Voltage Alert High
Activation - +24VDC
Reset - 0VDC
Wiring Connection
Cornell +24VDC to PIA – (neg)
Point Wire Neg to PIA + (pos)
Card Type: Standard – With fuse Holder

**Engineered Electronics**
Connection Type – Voltage Alert Low
Activation - 0VDC
Reset - +24VDC
Wiring Connection
EEI Point Wire to PIA + (pos)
Field Gnd To PIA - (neg)
Card type: EEI w/o Fuse Holder

**Heritage MedCall**
Connection Type – Voltage Alert High
Activation - +24VDC
Reset - 0VDC
Wiring Connection
Point wire +24VDC to PIA – (neg)
Gnd Neg to PIA + (pos)
Card Type: Standard – With fuse Holder

**Tektone+Signal and Sound**
Connection Type – Voltage Alert Low
Activation - 0VDC
Reset - +24VDC
Wiring Connection
NOTES:
THE VERSAPAGE INTERFACE, REQUIRES A 22GA WIRE FROM EACH MONITORED TERMINAL OF THE A-4000 SERIES ANNUNCIATOR, AS SHOWN ABOVE. THE (+VDC) TERMINAL, ON THE CORNELL ANNUNCIATOR, PROVIDES COMMON SYSTEM VOLTAGE TO THE (-) TERMINALS ON THE VERSAPAGE INTERFACE. THE MONITORED POINTS ON THE CORNELL ANNUNCIATOR, IN THE CONFIGURATION SHOWN, PROVIDE THE NEG (-) CONNECTION TO THE (+) TERMINALS ON THE VERSAPAGE INTERFACE.

FOR ADDITIONAL SYSTEM MONITORING AND CONNECTION OPTIONS, PLEASE CONSULT THE INSTALLATION MANUAL ON OUR WEBSITE.
Paging Interface Adapter

Cornell – Continue

Additional Monitored Devices

Cornell Annunciator

Power Supply

PI-9064M
Programmable Interface

TR-901W2
TR-901W5
Transmitter

10’ Data Cable
With DBS Connectors

115AC

Data Reporting and
Programming Connection

(Optional)
Network Hub Connection
RJ45 Network Patch Cable
Access Thru Web Browser

OR
Stand Alone PC

RJ45 Network Cross Over
Cable

Maximum of 8 PI-9064S Units For
A Total of 576 Monitored Points

Notes:
See page 2 for Cornell Wire Terminations on
Programs.
See Versapage Installation Manual for User
Programming and Reporting Details.
<table>
<thead>
<tr>
<th>A CABLE</th>
<th>POINT CONNECTION</th>
<th>B CABLE</th>
<th>POINT CONNECTION</th>
<th>B CABLE</th>
<th>POINT CONNECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL/WH</td>
<td>+1</td>
<td>BL/WH</td>
<td>+31</td>
<td>WH/BL</td>
<td>+58</td>
</tr>
<tr>
<td>OR/WH</td>
<td>+2</td>
<td>OR/WH</td>
<td>+32</td>
<td>WH/OR</td>
<td>+57</td>
</tr>
<tr>
<td>GR/WH</td>
<td>+3</td>
<td>GR/WH</td>
<td>+33</td>
<td>WH/GR</td>
<td>+58</td>
</tr>
<tr>
<td>BR/WH</td>
<td>+4</td>
<td>BR/WH</td>
<td>+34</td>
<td>WH/BK</td>
<td>+59</td>
</tr>
<tr>
<td>SL/WH</td>
<td>+5</td>
<td>SL/WH</td>
<td>+35</td>
<td>WH/SL</td>
<td>+60</td>
</tr>
<tr>
<td>BL/BD</td>
<td>+6</td>
<td>BL/BD</td>
<td>+36</td>
<td>RD/BL</td>
<td>+61</td>
</tr>
<tr>
<td>OR/BD</td>
<td>+7</td>
<td>OR/BD</td>
<td>+37</td>
<td>RD/OR</td>
<td>+62</td>
</tr>
<tr>
<td>GR/BD</td>
<td>+8</td>
<td>GR/BD</td>
<td>+38</td>
<td>RD/GR</td>
<td>+63</td>
</tr>
<tr>
<td>BR/BD</td>
<td>+9</td>
<td>BR/BD</td>
<td>+39</td>
<td>RD/BR</td>
<td>+64</td>
</tr>
<tr>
<td>SL/BD</td>
<td>+10</td>
<td>SL/BD</td>
<td>+40</td>
<td>RD/SL</td>
<td>+65</td>
</tr>
<tr>
<td>BL/BL</td>
<td>+11</td>
<td>BL/BL</td>
<td>+41</td>
<td>BK/BL</td>
<td>+66</td>
</tr>
<tr>
<td>OR/BL</td>
<td>+12</td>
<td>OR/BL</td>
<td>+42</td>
<td>BK/OR</td>
<td>+67</td>
</tr>
<tr>
<td>GR/BL</td>
<td>+13</td>
<td>GR/BL</td>
<td>+43</td>
<td>BK/GR</td>
<td>+68</td>
</tr>
<tr>
<td>BR/BL</td>
<td>+14</td>
<td>BR/BL</td>
<td>+44</td>
<td>BK/BR</td>
<td>+69</td>
</tr>
<tr>
<td>SL/BL</td>
<td>+15</td>
<td>SL/BL</td>
<td>+45</td>
<td>BK/SL</td>
<td>+70</td>
</tr>
<tr>
<td>BL/YL</td>
<td>+16</td>
<td>BL/YL</td>
<td>+46</td>
<td>YL/BL</td>
<td>+71</td>
</tr>
<tr>
<td>OR/YL</td>
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