

# comPPage

## Paging Interface Adapter

**Model PIA3264**



Revision 2.3.4

Information in this document is subject to change without notice. Companies, names, and data used in examples herein are fictitious unless otherwise noted. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of comPPage®, Inc. All rights reserved. Printed in the United States. Microsoft, MS, Microsoft Windows XP are all trademarks of Microsoft Corporation.

### NOTIFICATION OF COPYRIGHT

This software package associated with the Paging Interface Adapter (“software”) is a proprietary product of comPPage®, Inc. and is protected by copyright laws and international treaty. You must treat the software like any other copyrighted material, except that you may place the software on a single hard disk, provided that you keep the original software solely for backup or archival purposes. Copyright laws prohibit making additional copies of the software for any other reason.

### SOFTWARE LICENSE AGREEMENT

Read this license Agreement before using the software. This agreement is a legal contract between you, the end user, and comPPage®, Inc. governing your use of the Software. This agreement shall also be binding on any subsequent, authorized licensee. If you do not wish to agree to the terms of this Agreement, promptly return the complete package to the distributor from whom you obtained this product. You will receive a full refund provided you return the equipment in its original packaging. If you have any questions concerning this Agreement, contact:

**comPPage®, Inc.**  
**Attn: Customer Service (561) 969-7124)**  
**3900 Woodlake Blvd.**  
**Suite 208**  
**Greenacres, Florida 33463**

### LICENSE

1. comPPage®, Inc. grants you the right to use the **Paging Interface Adapter** and **software**.
2. You may not sub license, rent, or lease the software, but you may permanently transfer your license to use the software and accompanying materials by delivering to another party the original materials comprising the software package, including the title page of the reference manual. You must also simultaneously destroy all copies of the accompanying materials in your possession. Such transfer terminates your license to use the software. The new recipient of the software and accompanying materials accepts this agreement and is licensed under the terms of this agreement upon initially using the Software.
3. You may not de-compile, disassemble, reverse engineer, copy, transfer, or otherwise use the software except as stated in this Agreement.

## Table of contents

License .....	2
Description .....	4
Main board and contact logic card.....	5
Change pc IP address.....	6
Default User ID and Password.....	7
Change User ID and Password.....	8
Local Area Network Install.....	9 10
RS485 Install.....	11
Program Overview.....	12 – 15
Programming Contacts for Elapse Time Report.....	16
Escalation and Repeat Settings .....	17
Development of Default Voltage Input File .....	16 - 18
Development of Default Non-Voltage Input File .....	18 - 20
Maintenance .....	20
Reports .....	21 - 24
Edit zone/room .....	25
Mixed inputs .....	25
Master-Slave Programming & Search .....	26
Micro SD Card .....	26 - 27
Installation .....	28 - 30
Master / Slave connectively / Troubleshooting.....	30
Specifications/Terms/Cable Pin Out .....	31
Connection Diagram .....	32
PIA Controller Information.....	34

## PAGING INTERFACE ADAPTER PIA3264

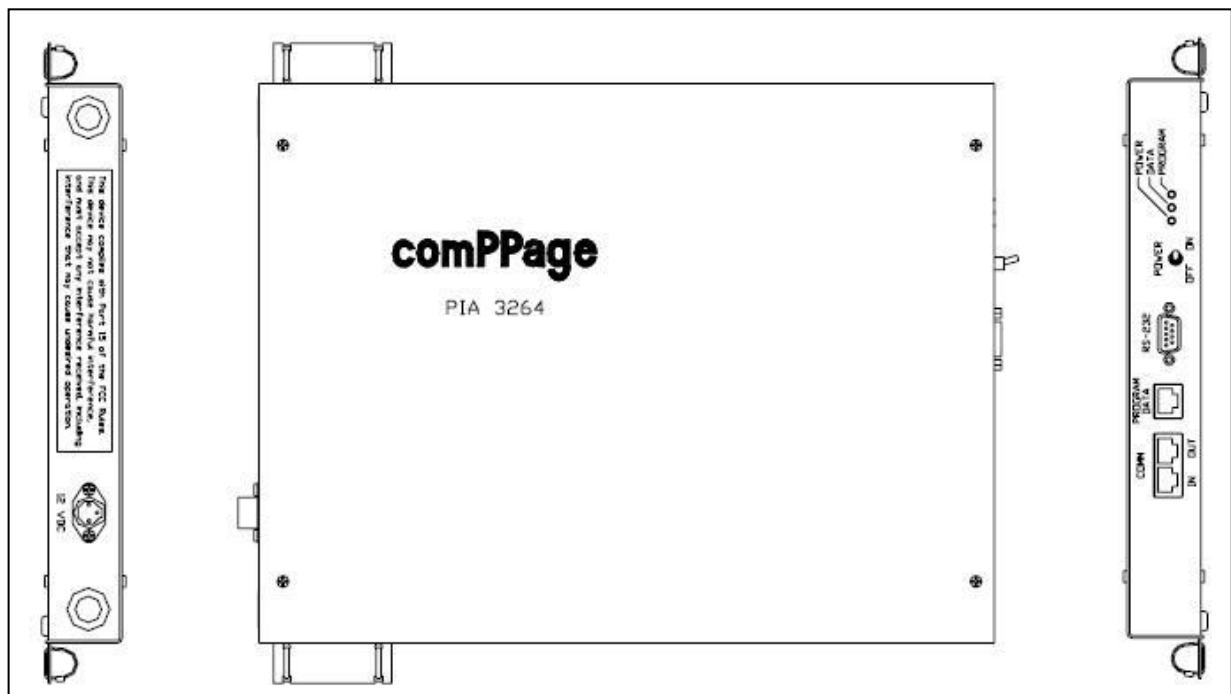
### PAGING INTERFACE ADAPTER

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 any where 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.

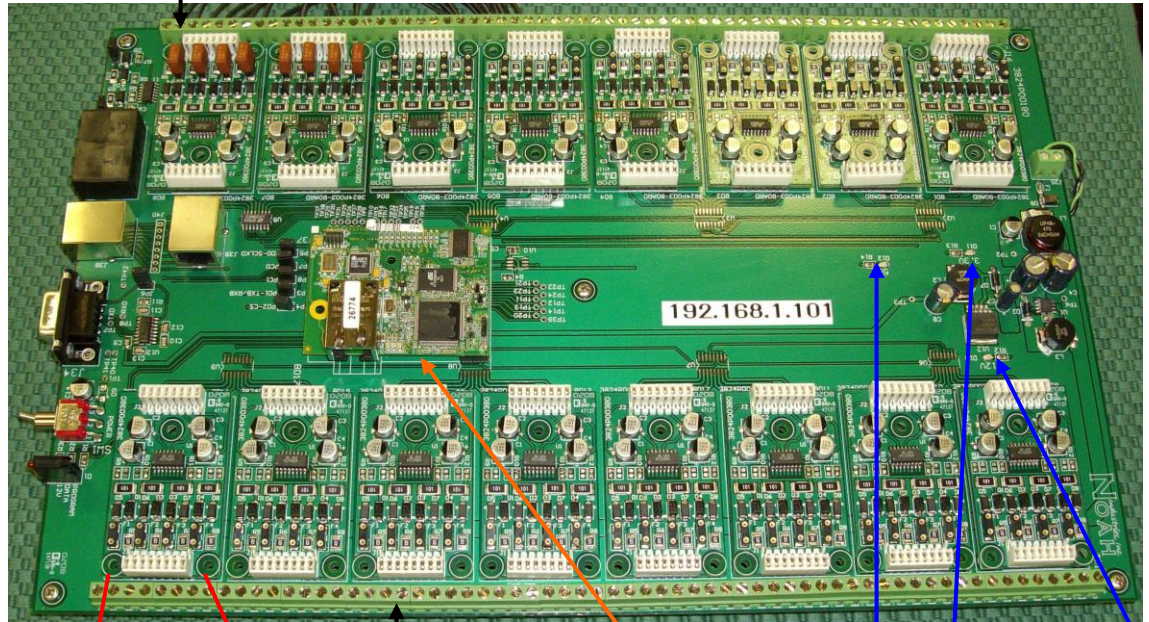


comPPage's Paging Interface Adapter (PIA3264) is a unit that was Designed, Developed and Manufactured in the USA. Each unit has a **Limited Lifetime Warranty**.

## Paging Interface Adapter

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 -)

Fuse Holder  
In Front

Contact Logic Board

Indicates Ethernet Connection  
2-Green, 1-Yellow

Indicates  
SD Card  
Present

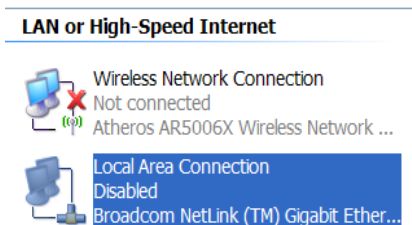
**ENSURE ALL POWER IS REMOVED BEFORE INSTALLING OR REMOVING THE CONTACT LOGIC BOARD AND/OR MICRO SD STORAGE CARD**

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.

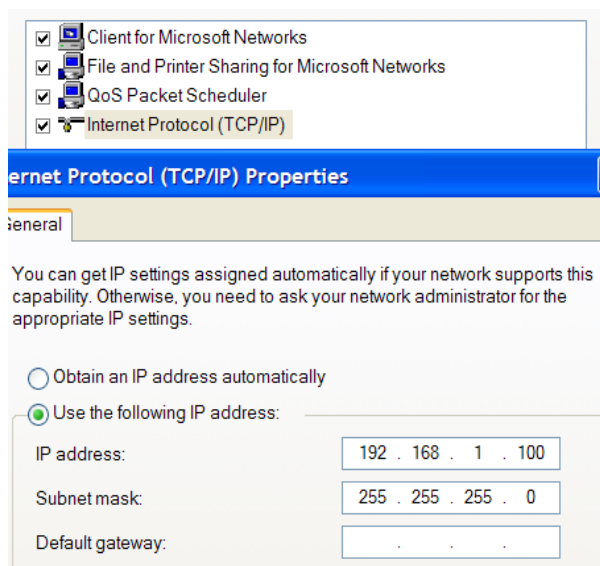
**Note:** **Be sure to check with your network administrator before proceeding.**

### 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**

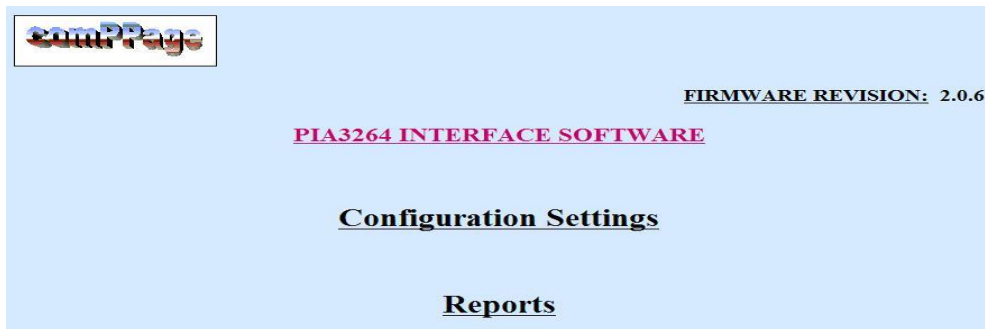
The unit is shipped with a default log on **User ID** and **Password**. You should change the log on and password before proceeding.

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.

**Change: Maintenance UserID / Password**

Current UserID:

New UserID:

Current Password:

New Password:

**UserID and Passwords can be Alpha or alphanumeric with a Maximum Length of 11 characters and no spaces.**

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.
6. **For the new password/user id to take effect CYCLE THE POWER on the PIA.**

**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.

The screenshot displays the 'PIA3264 INTERFACE SOFTWARE' web interface. At the top left is the 'comPage' logo. The main content area is titled 'GLOBAL SETTINGS' and contains several configuration fields:
 

- Date: 09/29/2009, Time: 13:26:58, Master's IP Address: 192.168.1.239, Host System: Cornell (dropdown)
- Unit ID: Master (dropdown), IP Address: 192.168.1.239, Netmask: 255.255.255.0, Default Gateway: 192.168.1.1
- Protocol: Scope (dropdown), Data Type: Alphanumeric (dropdown), Baud Rate: 1200 (dropdown)
- Device To Transmitter Port Setup: 9600-N-8-1 (dropdown)
- Total Number of Contacts: 16

 Below this is the 'Monitoring Pager' section with two entries:
 

- Pager ID 1: 0000000, Alert Type: None (dropdown)
- Pager ID 2: 0000000, Alert Type: None (dropdown)

 The 'System OK Check' section includes:
 

- Pager ID: 0100800, Alert Type: A (dropdown), Interval: 5 m (dropdown)
- Shift Schedule:
- Shift 1 - 00:00 to 00:00, Shift 2 - 00:00 to 00:00, Shift 3 - 00:00 to 00:00

 At the bottom, there are four buttons: 'Save Database', 'Contact Settings', 'Programming Authentication Settings', and 'Report Authentication Settings'.

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.

## Paging Interface Adapter

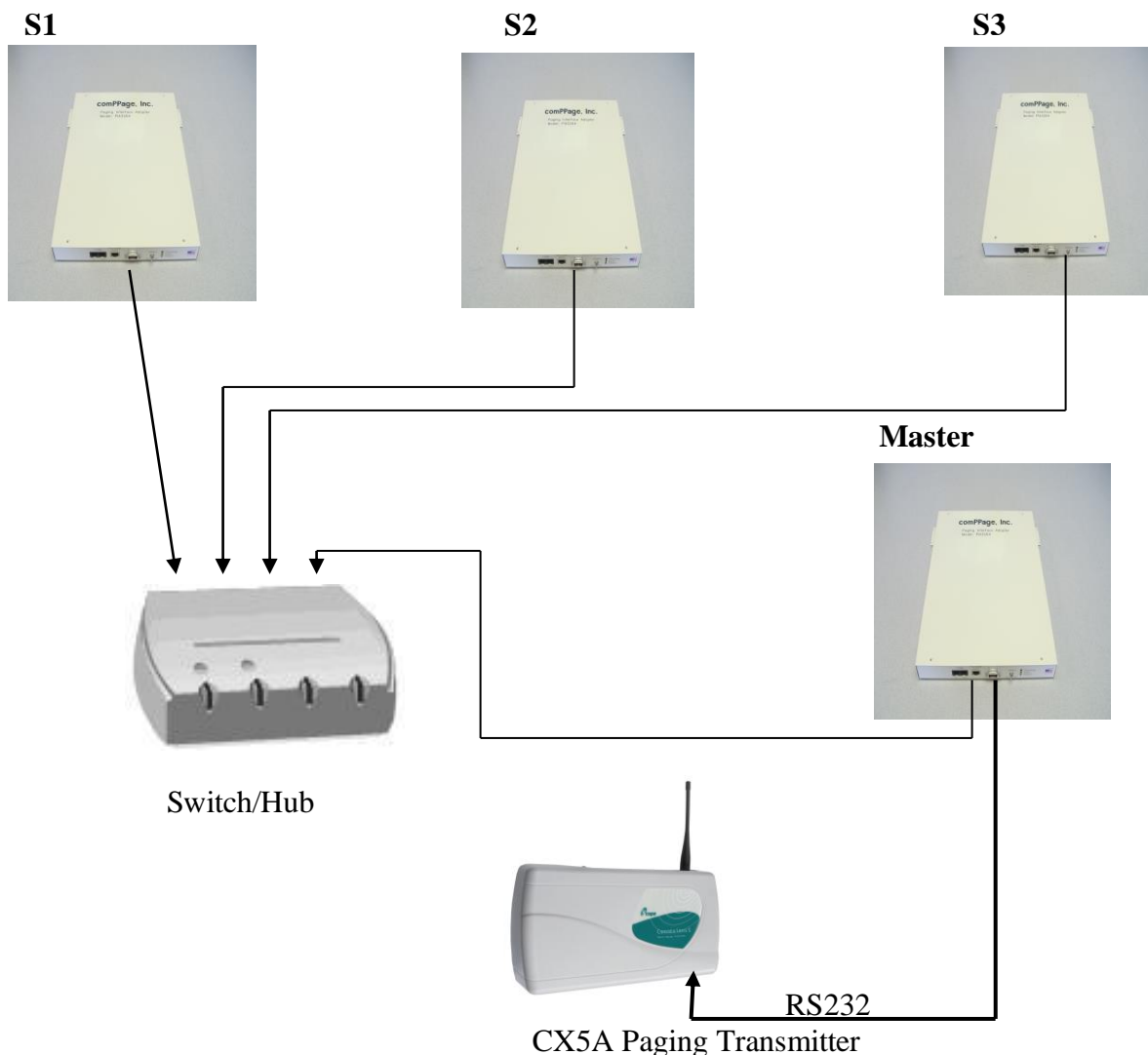
7. After entering the new IP address, go to the bottom of the page and click on **Save Database**. This will write the new address to memory.
8. You **MUST** cycle the power on the PIA3264 before the new IP address will be effective.

### 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. Ie 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.

7. 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.
8. 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 disregarded.**

### **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.

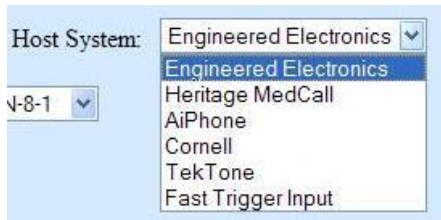
1. Date – type the complete date including slash marks. (05/01/2008).
2. Time – the unit use a 24 hour clock. You must enter all digits include colons.(02:15:00)

### **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 until 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 effect 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**

**comPage**

PIA3264 INTERFACE SOFTWARE

**Contact Programming Mode**

Input Data For Zone # 5 Room # 106

Input Configuration : Input Alert Type : Voltage Alert-High  5

Active Message : Bed Call Room 106 Reset Message : Room 106 Reset

Slow Pulsing  Fast Pulsing

Pulse 1 Message : Bath Call Room 106 Pulse 2 Message : Emergency Call Room 106

Shift 1 Pager: 0300800 A 0301600 B 0302400 C

Shift 2 Pager: 0000000 None 0000000 None 0000000 None

Shift 3 Pager: 0000000 None 0000000 None 0000000 None

Escalation :  0301600 B 5  0302400 C 10  0303200 D 15

Repeat : 5 Interval : 2  1 To 2

### 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

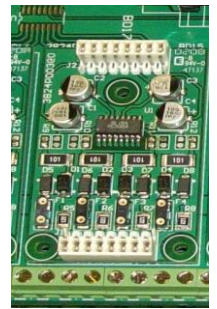
### Create Default File

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.  
Ie.. 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



Voltage Input Logic Card w/o Fuses



## Paging Interface Adapter

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.

The screenshot shows a configuration interface with the following elements:

- Active Msg Pager IDs Shift 1:** 0300800, A
- Pulse One Pager IDs Shift 1:** 0301600, B
- Pulse Two Pager IDs For shift 1:** 0302400, C
- Shift 2 Pager:** 0000000, None
- Shift 3 Pager:** 0000000, None
- Escalation:** Three rows with checkboxes, pager IDs (0301600, 0302400, 0303200), alert types (B, C, D), and time values (5, 10, 15).
- Repeat/Intervals:** Repeat: 5, Interval: 2, Save To Zone: 1 To 2.

Repeats & Escalation Chart – Sample

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

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

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.  
Ie.. 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.

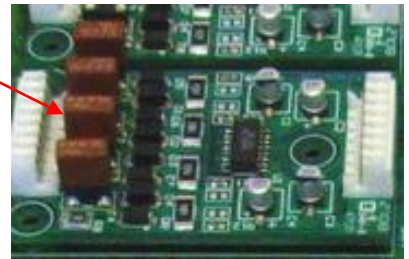
**Non-Voltage Input (default)**

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 1<sup>st</sup> row .
  - b. Pagers for Shift 2 are shown on the 2<sup>nd</sup> row.
  - c. Pagers for shift 3 are shown on the 3<sup>rd</sup> row.
7. Column 2 & 3 are for Pulse 1 and Pulse 2. Pulsing is not available for Non-Voltage input.

Active message  
Pager IDs

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.

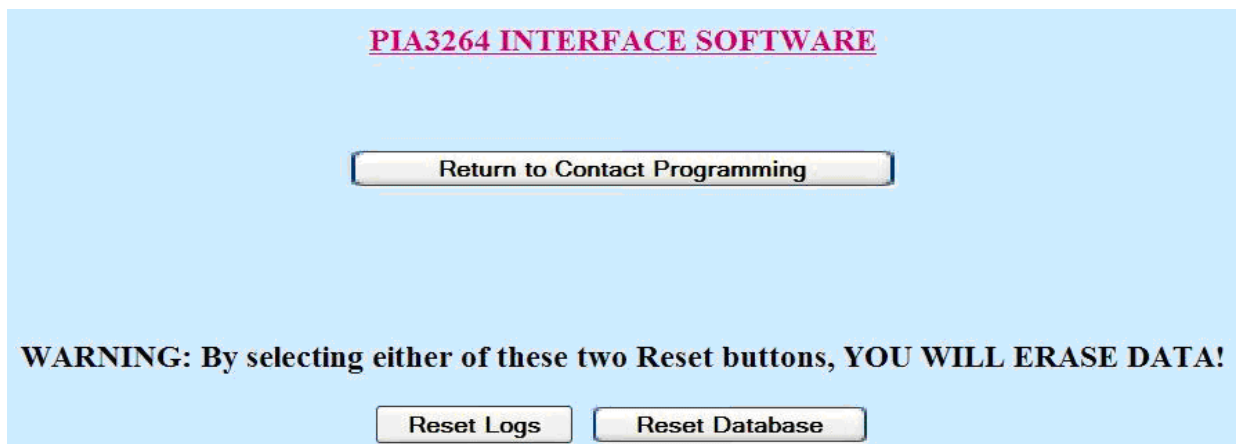
  - a. Enter the zone you are copying in the first blank.
  - b. Enter the ending zone you want to program.  
 Ie.. Save to: 2 to 32. This will copy all data from zone 2 to 32.
  - c. The screen will refresh and display Zone 32 (the last zone number you entered).
  - d. Select Save to Zone

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:   | <b>Do not use this Option unless you are the Data Administrator.<br/>When this option is selected the below screen will appear.</b> |



## 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.

#### Database Report

---

Date: 12/31/2008

Time:00:00:00

---

Zone: 1      Active: Bed Call Assistance Needed Room 222  
Reset: Bed Call Assistance Needed Room 222 Reset  
Shift: 3  
Pulse1: Y    Slow    Bath Call Room 222  
Pulse2: N  
Esc: Y  
Repeat: 2/5

---

Zone: 2      Active: Bed Call Assistance Needed Room 444  
Reset: Bed Call Assistance Needed Room 444 Reset  
Shift: 3  
Pulse1: Y    Slow    Bath Call Room 444  
Pulse2: N  
Esc: Y  
Repeat: 2/5

---

## 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.

Report Date: 12/24/2008 Report Time: 14:27:56 Options: Date Room#		
Log Date: 12/23/2008 [the date the report was taken from]		
<b>Room No. 222</b>		
Log Time	Pager ID	Message
07:20:00	0300800	Bed Call Room 222
08:13:22	0300800	Bath Call Room 222
08:14:00	0300800	Bed Call Room 222 Reset
08:22:23	0300800	Bath Call Room 222 Reset
10:13:35	0300800	Bed Call Room 222
13:00:45	0300800	Bath Call Room 222

**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]		
<b>Room No. 33</b>		
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

**EIapse 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.

<b>PIA3264 REPORT</b>			
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]			
<b>Room No. 66</b>			
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.
3. On the master contact input screen program as follows.
  - Example
  - 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.**

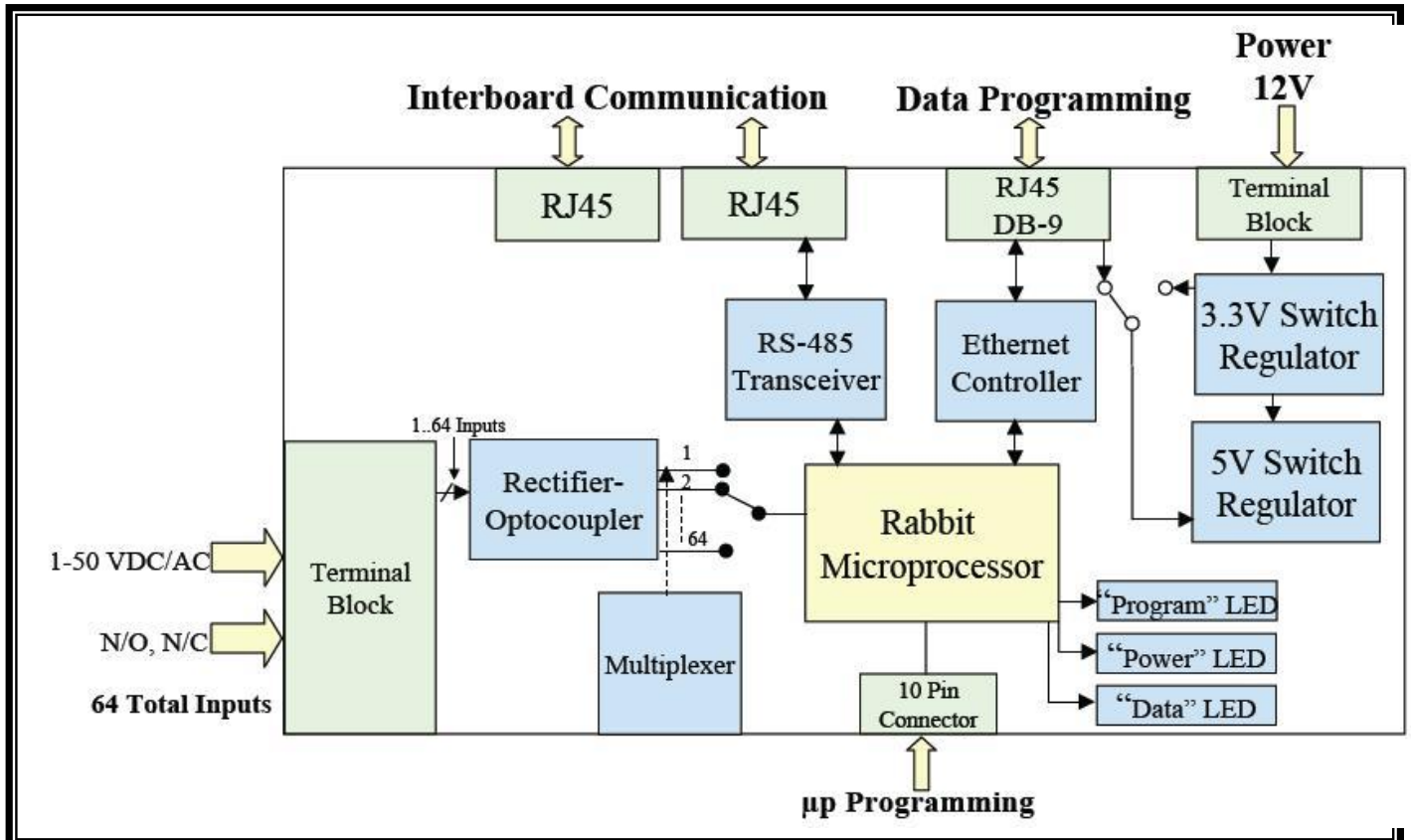
1. If you do not have the correct size card reader on your PC, remove the SD Micro card from it's adapter and place it in a larger adapter.
2. Place the adapter in the card reader on your PC. Window XP and Vista will recognize the card as a removal drive and assign it a letter.
3. Create a directory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

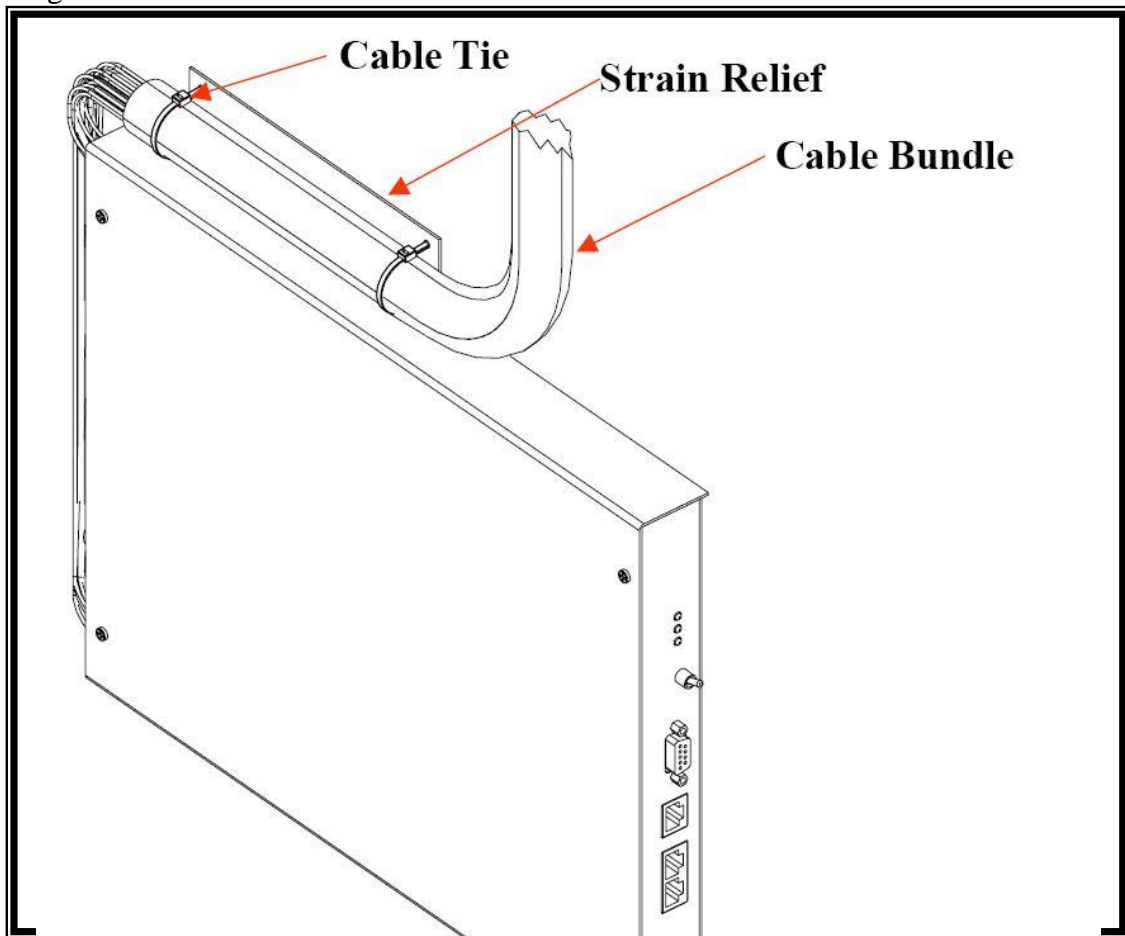
**No Fuses = Voltage Input**

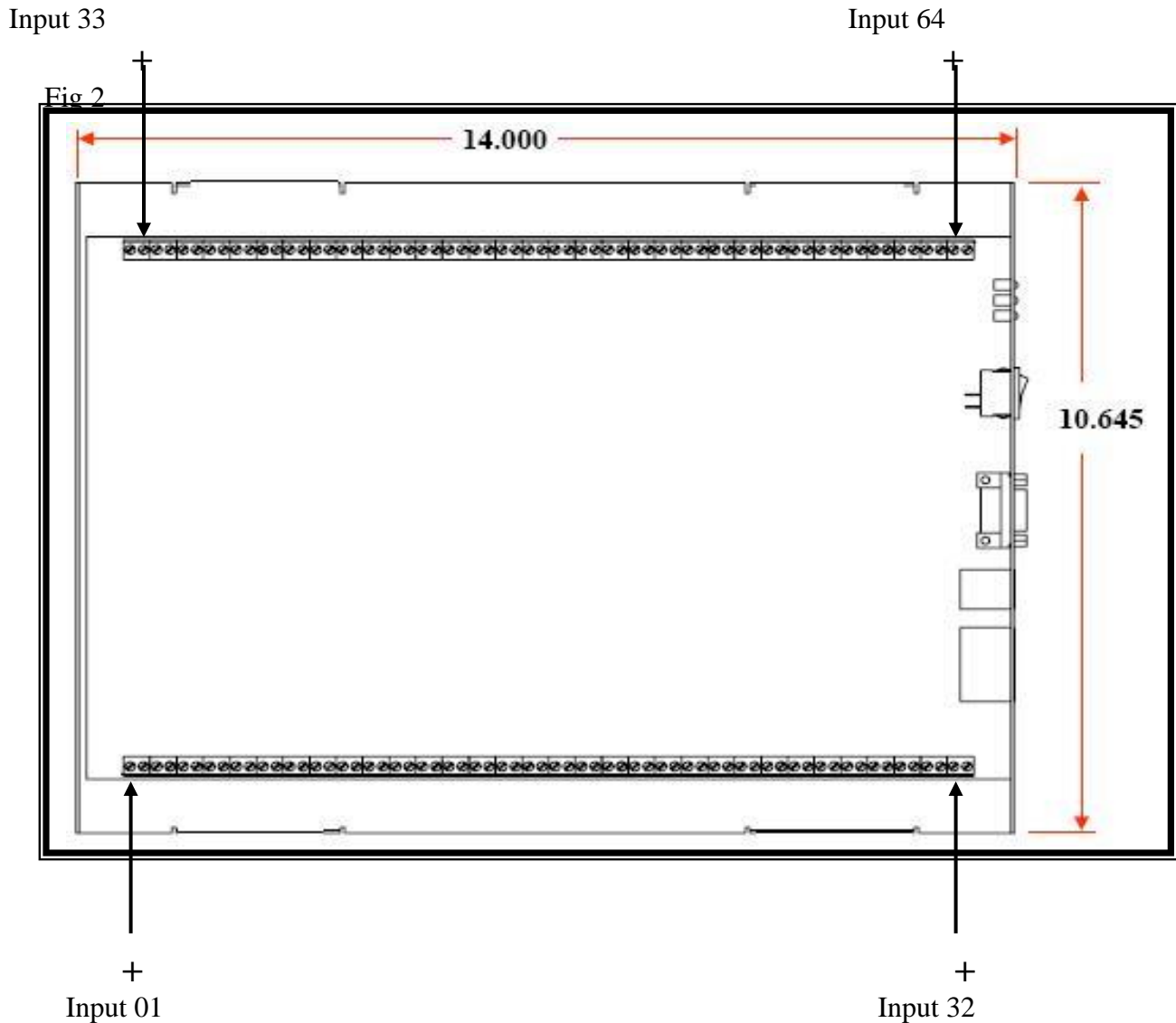
**Fuses = Non-Voltage(Dry) Input – If unit was ordered for Non-Voltage input, refer to the installation sheet provided.**

### 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 PIA3264.
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 attached by 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.

Fig 1





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 Connectivity**

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**  
 Program LED **ON**

**Slave(s) not connected to Master.  
 Check Interconnect RJ45 Cable.**

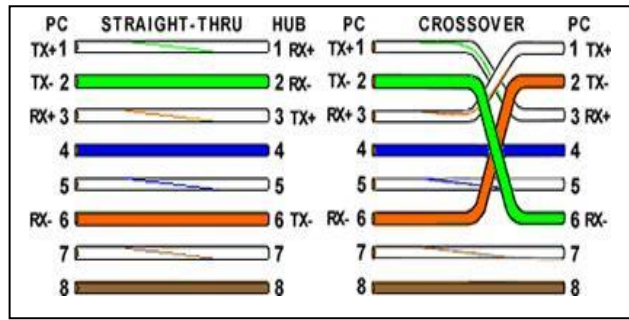
**MASTER or SLAVE**

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

**RS232 Connection**

PIN	FUNCTION
1	TP42
2	Receive Data (IN)
3	Transmit Data (OUT)
4	TP40
5	Ground
6	JP4
7	Jumper to 8
8	Jumper to 7
9	TP41

**RJ45 Ethernet Connection**



**Specifications**

Input Voltage	12 Volts DC
Current	2A Surge, Normal – 1A
Input Contacts	64 per PIA
Input	No Voltage (dry) - Fused Voltage – AC or DC 2-40 Volts Inputs can be Mixed Pulsing - 2 Levels
Connection	RJ45 Cable using RS485 Total 8 Units
Multiple Call levels Systems Supported	AiPhone, Cornell, Dukane, Engineered Electronics, Heritage MedCall TekTone
Paging Protocol Output RS232	Scope, Comp2, Tap, WaveWare
Programming	Web Browser Connection RJ45
IP Address	Default 192.168.1.239
MAC	00 90 C2 [Additional six characters on processor board]
Approval	FCC Title 47, Part 15, RoHS Compliant, UL 1069 Ed: 7 and CSA C22.2#205
Size	14 in x 10.5 in x 2 in
Warranty	Limited Life Time
Patent	US Patent Pending 61/291,719

**Terms**

Trigger Input	Fast	Used with Dry Contact Input or Non-Pulsing Voltage Input. Closer Detection <75mS
Monitoring Pager		All Alerts will be sent to this pager if pager ID is entered
System OK Check		If Selected, system will automatically send a page at selected time. SYSTEM OK
Slow Pulsing		Pulsing input at 1 Hz or Less
Fast Pulsing		Pulsing Input at 2 Hz
Voltage Alert High		Active Msg sent when input voltage is High
Voltage Alert Low		Active Msg sent when input voltage is low

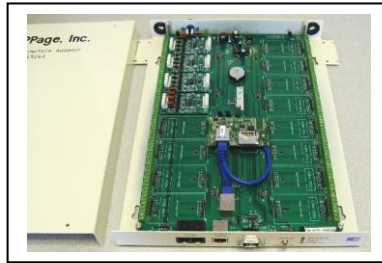
## PIA3264 RS-485 HOOK-UP



CTBD4 Logic Card  
Voltage Input



RS232 Scope Protocol



Slave1



Master



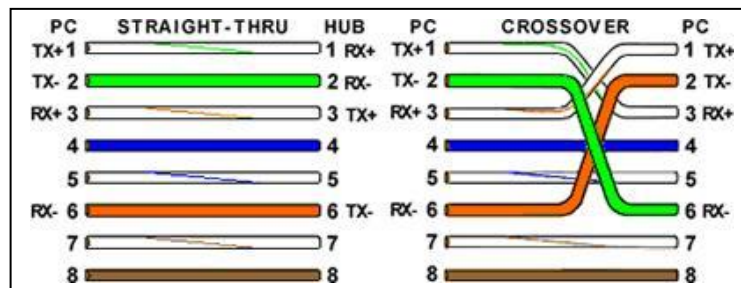
Slave 2

Cross Cable RJ45 (supplied)

Patch Cable RJ45 (supplied)

### 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...





**Paging Interface Adapter**  
**TECHNICAL INFORMATION**

**Nurse Call Hook-Up**

**Cornell**

Connection Type – Voltage Alert High

Activation - +24VDC

Reset - 0VDC

**Wiring Connection PRIOR TO CONNECTING POINT WIRES, REMOVE JUMPER JP3&JP4**

Cornell +24VDC to PIA – (neg)

Point Wire Neg to PIA + (pos)

Card Type: CTBD4

**Engineered Electronics**

Connection Type – Voltage Alert High

Activation - +24VDC

Reset - 0 VDC

**Wiring Connection PRIOR TO CONNECTING POINT WIRES, REMOVE JUMPER JP3&JP4**

Point Wire to PIA + (pos)

+24Volts from Zone Board on 900-20X unit to PIA - (neg)

Card type: CTBD4

**Heritage MedCall**

Connection Type – Voltage Alert High

Activation - +24VDC

Reset - 0VDC

**Wiring Connection PRIOR TO CONNECTING POINT WIRES, REMOVE JUMPER JP3&JP4**

Point wire +24VDC to PIA – (neg)

Gnd Neg to PIA + (pos)

Card Type: CTBD4

**Tektone+Signal and Sound**

Connection Type – Voltage Alert Low

Activation - 0VDC

Reset - +24VDC

**Wiring Connection**

Point Wire to PIA +(Pos)

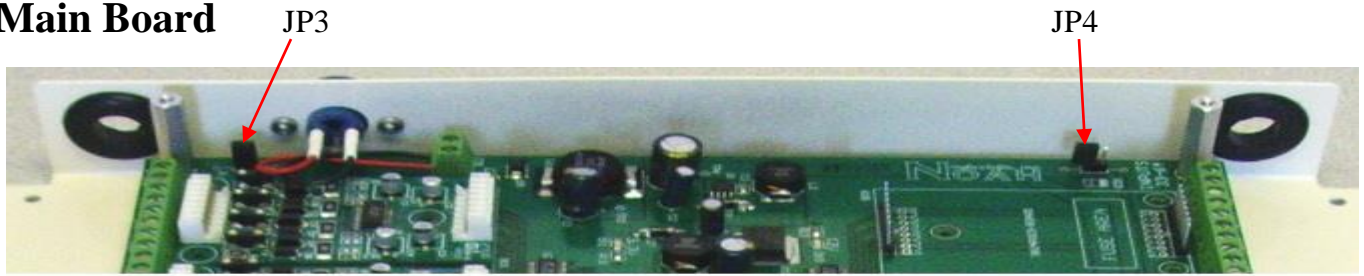
Field Gnd – To PIA –(Neg)

Card Type: TLEDDK

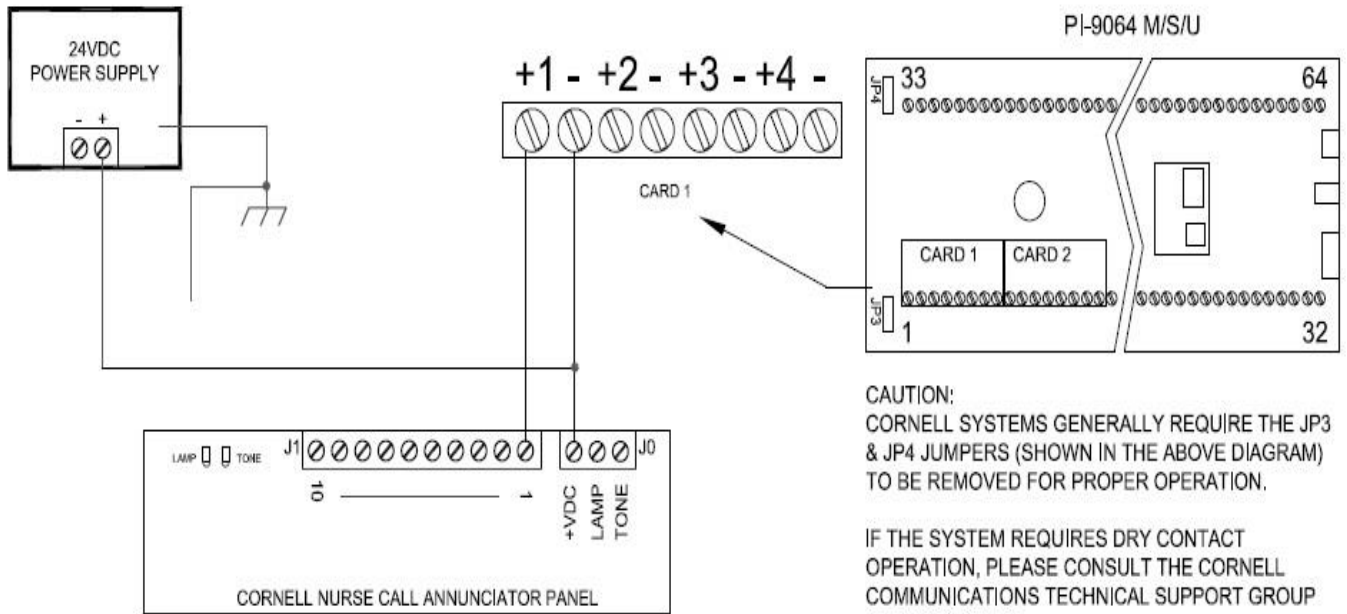
## Paging Interface Adapter

**Note:** JP 3 & JP 4 is located on rear of the main board on the right and left of the board. JP3 is for Ground on contacts 1-32 and JP4 is for 33-64.

### Main Board



### Cornell Diagram



#### 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 .



CORNELL Communications, Inc.  
sales@cornell.com 414-351-4660  
Web: www.cornell.com 414-351-4657(fax)

DATE: FEBRUARY 3, 2016

TITLE: PI-9064 M/S/U INTERFACE WIRING

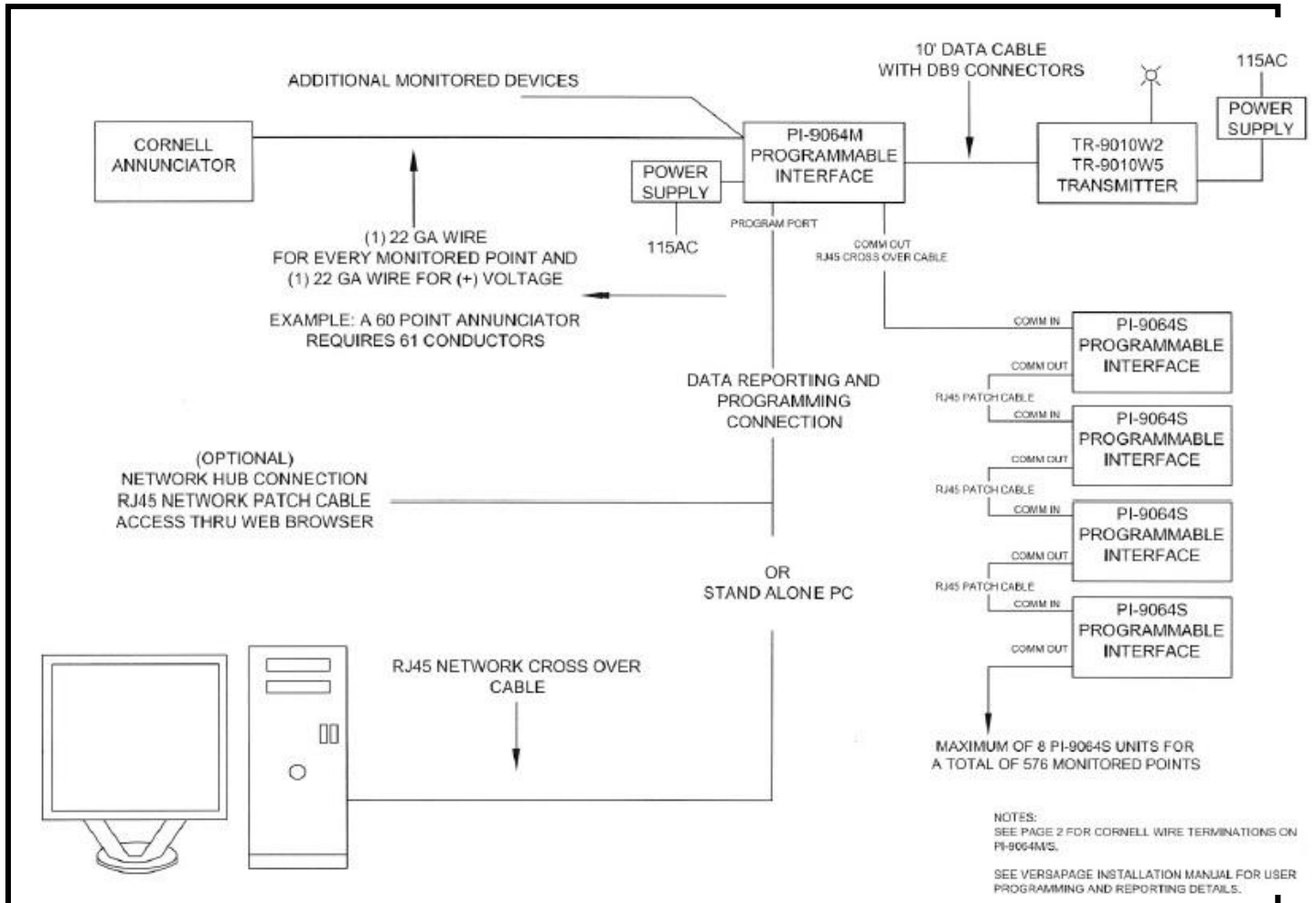
SYSTEM: VERSAPAGE

DRAWING #

PAGE 2 OF 2

# Paging Interface Adapter

## Cornell – Continue



Engineered Electronics

**ENGINEERED ELECTRONICS, INC.  
COLOR CODE CONNECTIONS FOR PIA3264**

A CABLE	POINT CONNECTION	B CABLE	POINT CONNECTION	B CABLE	POINT CONNECTION
900-202 OR 900-203	PIA3264	900-202 OR 900-203	PIA3264	900-202 OR 900-203	PIA3264
BL/WH	+1	BL/WH	+31	WH/BL	+56
OR/WH	+2	OR/WH	+32	WH/OR	+57
GR/WH	+3	GR/WH	+33	WH/GR	+58
BR/WH	+4	BR/WH	+34	WH/BR	+59
SL/WH	+5	SL/WH	+35	WH/SL	+60
BL/RD	+6	BL/RD	+36	RD/BL	+61
OR/RD	+7	OR/RD	+37	RD/OR	+62
GR/RD	+8	GR/RD	+38	RD/GR	+63
BR/RD	+9	BR/RD	+39	RD/BR	+64
SL/RD	+10	SL/RD	+40	RD/SL	+65
BL/BK	+11	BL/BK	+41	BK/BL	+66
OR/BK	+12	OR/BK	+42	BK/OR	+67
GR/BK	+13	GR/BK	+43	BK/GR	+68
BR/BK	+14	BR/BK	+44	BK/BR	+69
SL/BK	+15	SL/BK	+45	BK/SL	+70
BL/YL	+16	BL/YL	+46	YL/BL	+71
OR/YL	+17	OR/YL	+47	YL/OR	+72
GR/YL	+18	GR/YL	+48	YL/GR	+73
BR/YL	+19	BR/YL	+49	YL/BR	+74
SL/YL	+20	SL/YL	+50	YL/SL	+75
BL/VI	+21	BL/VI	+51	VI/BL	+76
OR/VI	+22	OR/VI	+52	VI/OR	+77
GR/VI	+23	GR/VI	+53	VI/GR	+78
BR/VI	+24	BR/VI	+54	VI/BR	+79
SL/VI	+25	SL/VI	+55	VI/SL	+80
WH/BL	+26				
WH/OR	+27				
WH/GR	+28				
WH/BR	+29				
WH/SL	+30				

Heritage MedCall

