NOTIFIER®
by Honeywell

Universal Zone Coder
UZC-256
Programming Manual

Document 15976
04/25/2008 Rev: D
P/N 15976:D ECN 07-946

Fire Alarm System Limitations

While a fire alarm system may lower insurance rates, it is not a substitute for fire insurance!

An automatic fire alarm system—typically made up of smoke detectors, heat detectors, manual pull stations, audible warning devices, and a fire alarm control panel with remote notification capability—can provide early warning of a developing fire. Such a system, however, does not assure protection against property damage or loss of life resulting from a fire.

The Manufacturer recommends that smoke and/or heat detectors be located throughout a protected premise following the recommendations of the current edition of the National Fire Protection Association Standard 72 (NFPA 72), manufacturer's recommendations, State and local codes, and the recommendations contained in the Guides for Proper Use of System Smoke Detectors, which are made available at no charge to all installing dealers. These documents can be found at http://www.systemsensor.com/html/applicat.html. A study by the Federal Emergency Management Agency (an agency of the United States government) indicated that smoke detectors may not go off in as many as 35% of all fires. While fire alarm systems are designed to provide early warning against fire, they do not guarantee warning or protection against fire. A fire alarm system may not provide timely or adequate warning, or simply may not function, for a variety of reasons:

Smoke detectors may not sense fire where smoke cannot reach the detectors such as in chimneys, in or behind walls, on roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level or floor of a building. A second-floor detector, for example, may not sense a first-floor or basement fire.

Particles of combustion or "smoke" from a developing fire may not reach the sensing chambers of smoke detectors because:

- Barriers such as closed or partially closed doors, walls, or chimneys may inhibit particle or smoke flow.
- Smoke particles may become "cold," stratify, and not reach the ceiling or upper walls where detectors are located.
- Smoke particles may be blown away from detectors by air outlets.
- Smoke particles may be drawn into air returns before reaching the detector.

The amount of "smoke" present may be insufficient to alarm smoke detectors. Smoke detectors are designed to alarm at various levels of smoke density. If such density levels are not created by a developing fire at the location of detectors, the detectors will not go into alarm.

Smoke detectors, even when working properly, have sensing limitations. Detectors that have photoelectronic sensing chambers tend to detect smoldering fires better than flaming fires, which have little visible smoke. Detectors that have ionizing-type sensing chambers tend to detect fast-flaming fires better than smoldering fires. Because fires develop in different ways and are often unpredictable in their growth, neither type of detector is necessarily best and a given type of detector may not provide adequate warning of a fire.

Smoke detectors cannot be expected to provide adequate warning of fires caused by arson, children playing with matches (especially in bedrooms), smoking in bed, and violent explosions (caused by escaping gas, improper storage of flammable materials, etc.).

Heat detectors do not sense particles of combustion and alarm only when heat on their sensors increases at a predetermined rate or reaches a predetermined level. Rate-of-rise heat detectors may be subject to reduced sensitivity over time. For this reason, the rate-of-rise feature of each detector should be tested at least once per year by a qualified fire protection specialist. Heat detectors are designed to protect property, not life.

IMPORTANT! Smoke detectors must be installed in the same room as the control panel and in rooms used by the system for the connection of alarm transmission wiring, communications, signaling, and/or power. If detectors are not so located, a developing fire may damage the alarm system, crippling its ability to report a fire.

Audible warning devices such as bells may not alert people if these devices are located on the other side of closed or partly open doors or are located on another floor of a building. Any warning device may fail to alert people with a disability or those who have recently consumed drugs, alcohol or medication. Please note that:

- Strobes can, under certain circumstances, cause seizures in people with conditions such as epilepsy.
- Studies have shown that certain people, even when they hear a fire alarm signal, do not respond or comprehend the meaning of the signal. It is the property owner's responsibility to conduct fire drills and other training exercise to make people aware of fire alarm signals and instruct them on the proper reaction to alarm signals.
- In rare instances, the sounding of a warning device can cause temporary or permanent hearing loss.

A fire alarm system will not operate without any electrical power. If AC power fails, the system will operate from standby batteries only for a specified time and only if the batteries have been properly maintained and replaced regularly.

Equipment used in the system may not be technically compatible with the control panel. It is essential to use only equipment listed for service with your control panel.

Telephone lines needed to transmit alarm signals from a premise to a central monitoring station may be out of service or temporarily disabled. For added protection against telephone line failure, backup radio transmission systems are recommended.

The most common cause of fire alarm malfunction is inadequate maintenance. To keep the entire fire alarm system in excellent working order, ongoing maintenance is required per the manufacturer's recommendations, and UL and NFPA standards. At a minimum, the requirements of NFPA 72 shall be followed. Environments with large amounts of dust, dirt or high air velocity require more frequent maintenance. A maintenance agreement should be arranged through the local manufacturer's representative. Maintenance should be scheduled monthly or as required by National and/or local fire codes and should be performed by authorized professional fire alarm installers only. Adequate written records of all inspections should be kept.

Limit-C1-2-2007

Installation Precautions

Adherence to the following will aid in problem-free installation with long-term reliability:

WARNING - Several different sources of power can be connected to the fire alarm control panel. Disconnect all sources of power before servicing. Control unit and associated equipment may be damaged by removing and/or inserting cards, modules, or interconnecting cables while the unit is energized. Do not attempt to install, service, or operate this unit until manuals are read and understood.

CAUTION - System Re-acceptance Test after Software Changes: To ensure proper system operation, this product must be tested in accordance with NFPA 72 after any programming operation or change in site-specific software. Re-acceptance testing is required after any change, addition or deletion of system components, or after any modification, repair or adjustment to system hardware or wiring. All components, circuits, system operations, or software functions known to be affected by a change must be 100% tested. In addition, to ensure that other operations are not inadvertently affected, at least 10% of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, must also be tested and proper system operation verified.

This system meets NFPA requirements for operation at 0-49º C/32-120º F and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C (90°F ± 3°F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15-27º C/60-80º F.

Verify that wire sizes are adequate for all initiating and indicating device loops. Most devices cannot tolerate more than a 10% I.R. drop from the specified device voltage.

Like all solid state electronic devices, this system may operate erratically or can be damaged when subjected to lightning induced transients. Although no system is completely immune from lightning transients and interference, proper grounding will reduce susceptibility. Overhead or outside aerial wiring is not recommended, due to an increased susceptibility to nearby lightning strikes. Consult with the Technical Services Department if any problems are anticipated or encountered.

Disconnect AC power and batteries prior to removing or inserting circuit boards. Failure to do so can damage circuits.

Remove all electronic assemblies prior to any drilling, filing, reaming, or punching of the enclosure. When possible, make all cable entries from the sides or rear. Before making modifications, verify that they will not interfere with battery, transformer, or printed circuit board location.

Do not tighten screw terminals more than 9 in-lbs. Over-tightening may damage threads, resulting in reduced terminal contact pressure and difficulty with screw terminal removal.

This system contains static-sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. Use static suppressive packaging to protect electronic assemblies removed from the unit.

Follow the instructions in the installation, operating, and programming manuals. These instructions must be followed to avoid damage to the control panel and associated equipment. FACP operation and reliability depend upon proper installation.

Precau-D1-9-2005

FCC Warning

WARNING: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause interference to radio communications. It has been tested and found to comply with the limits for class A computing devices pursuant to Subpart B of Part 15 of FCC Rules, which is designed to provide reasonable protection against such interference when devices are operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his or her own expense.

Canadian Requirements

This digital apparatus does not exceed the Class A limits for radiation noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la classe A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

HARSH™, **NIS™**, **Notifier Integrated Systems™**, and **NOTI•FIRE•NET™** are all trademarks; and **Acclimate® Plus**, **FlashScan®**, **NION®**, **NOTIFIER®**, **ONYX®**, **ONYXWorks®**, **UniNet®**, **VeriFire®**, and **VIEW®** are all registered trademarks of Honeywell International Inc. **Echelon®** is a registered trademark and **LonWorks™** is a trademark of Echelon Corporation. **ARCNET®** is a registered trademark of Datapoint Corporation. **Microsoft®** and **Windows®** are registered trademarks of the Microsoft Corporation. **LEXAN®** is a registered trademark of GE Plastics, a subsidiary of General Electric Company.

©2008 by Honeywell International Inc. All rights reserved. Unauthorized use of this document is strictly prohibited.

Software Downloads

In order to supply the latest features and functionality in fire alarm and life safety technology to our customers, we make frequent upgrades to the embedded software in our products. To ensure that you are installing and programming the latest features, we strongly recommend that you download the most current version of software for each product prior to commissioning any system. Contact Technical Support with any questions about software and the appropriate version for a specific application.

Documentation Feedback

Your feedback helps us keep our documentation up-to-date and accurate. If you have any comments or suggestions about our online Help or printed manuals, you can email us.

Please include the following information:

- Product name and version number (if applicable)
- Printed manual or online Help
- Topic Title (for online Help)
- Page number (for printed manual)
- Brief description of content you think should be improved or corrected
- Your suggestion for how to correct/improve documentation

Send email messages to:

FireSystems.TechPubs@honeywell.com

Please note this email address is for documentation feedback only. If you have any technical issues, please contact Technical Services.

Table of Contents

Section 1: Introduction 8
1.1: Product Overview 8
1.2: UL 864 Compliance 8
1.2.1: Products Subject to AHJ Approval 8
1.3: Related Documentation 9

Section 2: Getting Started 10
2.1: Overview 10
2.1.1: About This Manual 10
2.1.2: Before you Begin 10
2.1.3: Key Terms 11
2.2: The UZC-256 Programming Kit 11
2.3: Installing the Application 11
2.4: Main Screen and User Interface 12
2.5: Steps for Creating a Program 12
2.6: Starting the Application and Setting Communication Port 13
2.7: Display New File 14
2.8: Connecting a UZC-256 to a PC 15
2.9: Download Program Files (PC to UZC) 16
2.9.1: Uploading Program Files (UZC-256 to PC) 16
2.10: Disconnecting UZC-256 from PC 17

Section 3: Programming 18
3.1: Overview 18
3.2: Program Modes 18
3.3: Starting a Program File 18
3.4: Programming in Counting Mode 19
3.4.1: Counting Screen 19
3.5: How to Complete the Counting Screen 20
3.6: Programming in Coding Mode 21
3.6.1: All Call and Receive Only 22
3.6.2: Entering Variable Codes 22
3.6.3: Variable Codes Timing Diagram 23
3.6.4: Entering Output Codes 24
3.7: Programming a General Alarm 25
3.7.1: Displaying a General Alarm Code Screen 25
3.7.2: Completing the Screen 26
3.7.3: General Alarm Cycle 27
3.7.4: Examples 28

Section 4: Working with Program Files 30
4.1: Overview 30

4.2: Saving the Program File 30
4.3: Transferring Program Files 31
4.3.1: Downloading: Copying Program Files (PC to UZC) 31
4.3.2: Uploading: Copying Program Files (UZC-256 to PC) 32
4.4: Modifying a Program File 32

Section 5: Troubleshooting 34
5.1: Overview 34
5.2: Troubleshooting the UZC-256 34

Appendix A: System 5000 & System 500 (UL 8th) 38
A.1: Overview 38
A.2: Programming Guidelines for the UZC-256 38
A.3: Programming Guidelines for the System 5000/System 500 39

Appendix B: System 5000 with AIM-200 (UL 8th) 40
B.1: Overview 40
B.2: Programming Guidelines for the UZC-256 40
B.3: Programming Guidelines for System 5000 w/AIM-200 41

Appendix C: NFS-3030/NFS2-3030, NCA/NCA-2, and AM2020/AFP1010 42
C.1: Overview 42
C.2: Programming Guidelines for the UZC-256 42
C.3: Programming Guidelines for the NFS-3030/NFS2-3030, NCA/NCA-2, or AM2020/AFP1010 43
C.3.1: NFS-3030 and NFS2-3030 Annunciator Programming 43
C.3.2: NCA and NCA-2 Annunciator Programming 44
C.3.3: AM2020 and AFP1010 Annunciator Programming 45

Appendix D: NFS-320 (UL 9th), NFS2-640 (UL 9th), NFS-640 (UL 8th), and AFP-300/AFP-400 (UL 8th) 46
D.1: Overview 46
D.2: Programming Guidelines for the UZC-256 46
D.3: Programming Guidelines for the AFP-300, AFP-400, NFS-640, NFS2-640 and NFS-320 47
D.3.1: AFP-300 and AFP-400 Annunciator Programming 47
D.3.2: NFS-640 and NFS2-640 Annunciator Programming 48
D.3.3: NFS-320 Annunciator Programming 49

Table of Contents

Section 1: Introduction

1.1 Product Overview

The UZC-256 Universal Zone Coder is a one-board module that stores and communicates customer-specified codes for up to 256 initiating zones in a fire alarm system. You can create a program file, containing coded information on a PC and store the file on the UZC-256. Fire alarm systems that operate with the UZC-256 include the following:

- NFS2-3030
- NCA-2
- NFS2-640
- NFS-3030
- NFS-640
- NFS-320
- NCA
- System 500
- System 5000
- System 5000 with AIM-200
- AM2020/AFP1010
- AFP-300/AFP-400

This manual provides instructions for programming the UZC-256 from a PC. For instructions on connecting the UZC-256 to your fire alarm system, refer to the UZC-256 Installation Manual and the installation manual for your fire alarm control panel (FACP). See Table 1.1, "Related Documentation" for specific part numbers of documents referenced in this manual.

1.2 UL 864 Compliance

1.2.1 Products Subject to AHJ Approval

This product has been certified to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864 9th Edition.

The following products have not received UL 864 9th Edition certification and may only be used in retrofit applications. Operation of the UZC-256 with products not tested for UL 864 9th Edition has not been evaluated and may not comply with NFPA 72 and/or the latest edition of UL 864. These applications will require the approval of the local Authority Having Jurisdiction (AHJ).

- System 500
- System 5000
- AIM-200
- AM2020/AFP1010
- AFP-300/AFP-400
- TCM-2/TCM-4

- NCA
- CPU-640
- CPU-3030

1.3 Related Documentation

References to other manuals are mentioned where further documentation could provide assistance. Refer to the documents as listed.

Table 1.1 provides a list of document containing additional information regarding the fire alarm control panels and components that ACS annunciators can be connected to. The NOTIFIER document (DOC-NOT) chart provides the current document revision.

Document Name	P/N
UZC-256 Installation Manual	15216
Device Compatibility Document	15378
NFS-320 Installation and Programming Manuals	52745, 52746
NFS2-640 Installation and Programming Manuals	52741, 52742
NFS-640 Installation and Programming Manuals	51332, 51333
NFS-3030 Installation and Programming Manuals	51330, 51345
NFS2-3030 Installation and Programming Manuals	52544, 52545
System 500 Installation Manual	15019
System 5000 Installation Manual AIM-200 Manual	15583 15949
AFP-300/AFP-400 Installation Manual	50253
AM2020/AFP1010 Installation Manual	15088
VeriFire™ Tools CD help file	VERIFIRE-TCD
NCA Network Control Annunciator Manual	51482
NCA-2 Network Control Annunciator Manual	52482
TCM-2 Instruction Manual TCM-4 Instruction Manual	15805 15924

Table 1.1 Related Documentation

Section 2: Getting Started

2.1 Overview

Use the UZC-256 Programming Utility (PK-UZC-256), to program the UZC-256 directly from any PC running the Windows® operating system and equipped with a serial port. UZC-256 program files can be created and stored on the PC's hard drive, then downloaded to the panel. The programming utility is available for download from the MagniFire website. It is also avaialble with the VeriFire Tools Medium Systems CD (P/N VeriFire-CD)

This version of PK-UZC-256 is also equipped with a conversion utility to automatically convert older PK-UZC-256 program files into the current format.



NOTE: Do not attempt to use older versions of PK-UZC-256 when installing a UZC-256 on a new system. Replace MS-DOS versions with a Windows® compatible version.

Before attempting to program the UZC-256 with this programming utility, the user should have a knowledge of basic computer use. After creating or modifying the UZC-256 program, the system must be thoroughly tested with the software installed and operational.

The PK-UZC-256 programming utility can be used in two ways:

- **Online**: Connect a PC to the UZC-256 and transfer program files between the two devices.
- **Offline**: Even when a PC is not connected to the UZC-256, the PC still can be used to create or modify program files. The files can be stored on a floppy disk or on a hard drive for later transfer to UZC-256.

The UZC-256 does not function with the following:

- Indicating devices that do not produce a steady periodic or non-periodic sound.
- Appliances that produce their own code (such as appliances with electronic sounds).

2.1.1 About This Manual

This manual contains information on the following:

- How to install and configure the UZC-256 for programming.
- How screens and menus work.
- How to use the UZC-256 application and transfer files.

2.1.2 Before you Begin

Instructions in this manual assume you are familiar with using a personal computer (PC) running a Windows operating system.

2.1.3 Key Terms

Key Terms in this manual include the following:

- **Count** - the number of devices set to activate a UZC-256 control relay.
- **Coded Output** - Coded information from the UZC-256 Application that controls the three relay outputs on the UZC-256 module.
- **Control Relay** - One of three relays on the UZC-256 module, controlled by the UZC-256 Application, that supplies coded information to designated circuits.
- **FACP** - an acronym for “Fire Alarm Control Panel.”
- **Output Code** - Four-digit code in the UZC-256 Application to specify an addressable or intelligent module, device, or annunciator.
- **Program file** - A PC file containing coded information for the UZC-256.
- **UZC-256 Application** - The menu-driven program used to create a program file.
- **Window** - a range of annunciator addresses defined by start and stop address.

2.2 The UZC-256 Programming Kit

Two kits are available, a software kit and a hardware kit. Table 2.1 lists the contents and part numbers for each kit.

P/N	Contents
VeriFire-CD	CD Package, includes UZC-256 software
UZC-HI	Null Modem Cable, 9-pin socket to 9-pin socket Adapter, 9-pin connector to 25-pin socket AC Power Adapter. Required to program the UZC-256

Table 2.1 Related Equipment

2.3 Installing the Application

Run "X:\UZC256\setup.exe" (where "X" is the drive letter of your CD drive) to install Programming Utility PK-UZC-256 on a stand-alone PC. The PC only needs to be connected to the UZC when transferring files to and from the module.

2.4 Main Screen and User Interface

All programming functions are available as buttons on the main screen as well as through the drop-down menu choices. The drop-down menu provides a configuration menu for your PC's COM port as discussed later in this section.

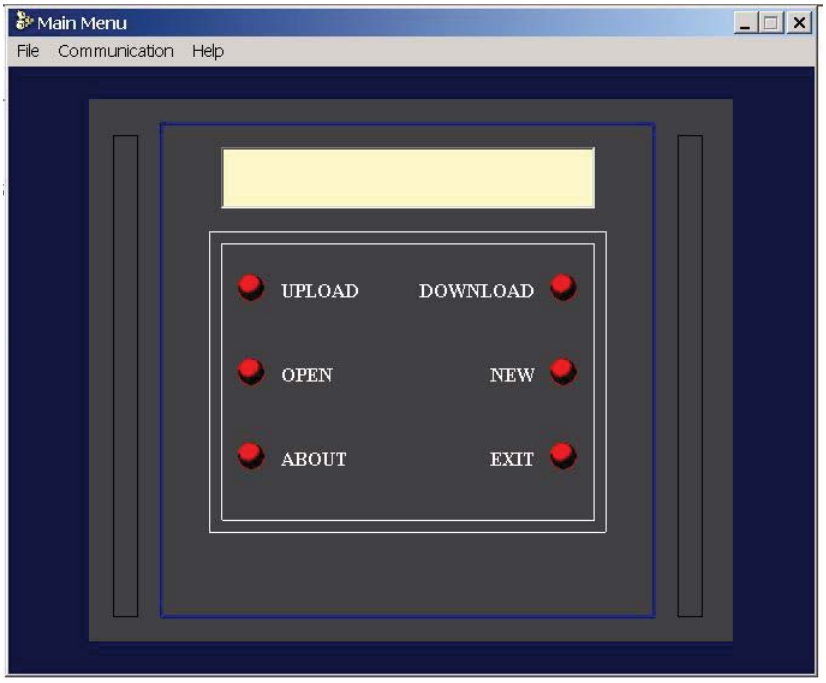


Figure 2.1 Main Menu

2.5 Steps for Creating a Program

Follow these steps in order to program the UZC-256. References to sections in this manual are also listed.

Step Action

1. Start the application. Refer to "Starting the Application and Setting Communication Port" on page 13.
2. Create a UZC-256 program file. Refer to "Starting a Program File" on page 18.
3. Enter program variables and coding. Refer to "Programming in Counting Mode" on page 19, "Programming in Coding Mode" on page 21 and appendixes for specific systems.
4. Enter the General Alarm coding. Refer to "Programming a General Alarm" on page 25.
5. Save the program file. Refer to "Saving the Program File" on page 30.

6. Connect the PC to the UZC. Refer to “Connecting a UZC-256 to a PC” on page 15.
7. Download the program file to the UZC. Refer to “Downloading: Copying Program Files (PC to UZC)” on page 31.
8. Disconnect PC and Install UZC-256 into FACP. Refer to “Disconnecting UZC-256 from PC” on page 17 and the FACP Installation Manual.
9. Run and test the UZC-256 program with the FACP. Refer to FACP Installation Manual.
10. Always exit the program using the red “Exit” button or by choosing “Exit” from the drop-down File menu. This will save your settings for the next time you run the program.

2.6 Starting the Application and Setting Communication Port

From the Windows start menu, select the Programs folder named “PK UZC 256 v2.0”, and the program named “PK UZC 256”.

From the main menu, select >Communication >Configuration and highlight the COM port to which you will be connecting your standalone PC.

See Figure 2.2 below. The default setting is Com2 which is used on most systems.

Note: To save the settings you selected, make sure you exit the program by selecting the red button “EXIT” or through the File menu. If you select in the upper right corner, these settings may not be saved.

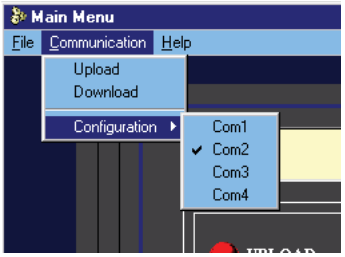


Figure 2.2 Main Menu: Configuring Communication Port

2.7 Display New File

When this button is pressed, a display screen will appear allowing the user to select the type of program they wish to edit:

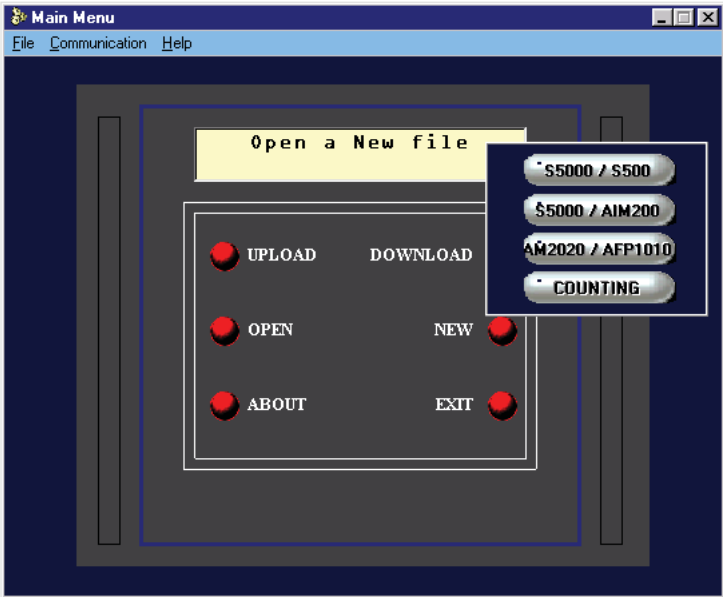


Figure 2.3 Main Menu: Open

After that, the user will see Circuit Zones, Segments, All Call and Receive Only locations, and all the Variable Codes in the format selected. The user can modify the program and download to the UZC-256. During download, the program will inform the user if download was completed successfully. If there was an error during download (e.g. the Checksum was not verified) it is recommended to try to perform the download again.

Note: Make sure to save your program for any changes you made. Check the UZC256 panel and verify the program mode jumper is set correctly.

2.8 Connecting a UZC-256 to a PC

CAUTION: Never connect a PC to a UZC-256 module that is installed in a fire alarm system with an earth ground fault condition. Doing so can damage the PC and cause loss of data.

NOTE: You can program the UZC-256 without connecting the PC, but the UZC-256 application requires an entry for the serial port to continue to the next screen.

The UZC-256 needs to be connected to a PC only to upload or download a program file. To connect the UZC-256 module to a PC follow the instructions below and refer to Figure 2.4.

1. Configure the PC for a serial port at COM1 or COM2.
2. Turn off the power to the UZC-256 (if installed).
3. Plug one end of the Null Modem Cable into the 9-pin connector on the UZC-256 module.
4. Plug the other end of the cable into the serial port on the PC. NOTE: If the PC does not have a 9-pin serial port, use the supplied 9-pin to 25-pin adapter.
5. Set DIP switch 1 on the UZC-256 to “Program” mode by placing the switch in the down position. See Figure 2.4.
6. Connect AC adapter to J1 connector and AC power (required when 24 VDC power is not applied).
7. Turn on power to the PC.

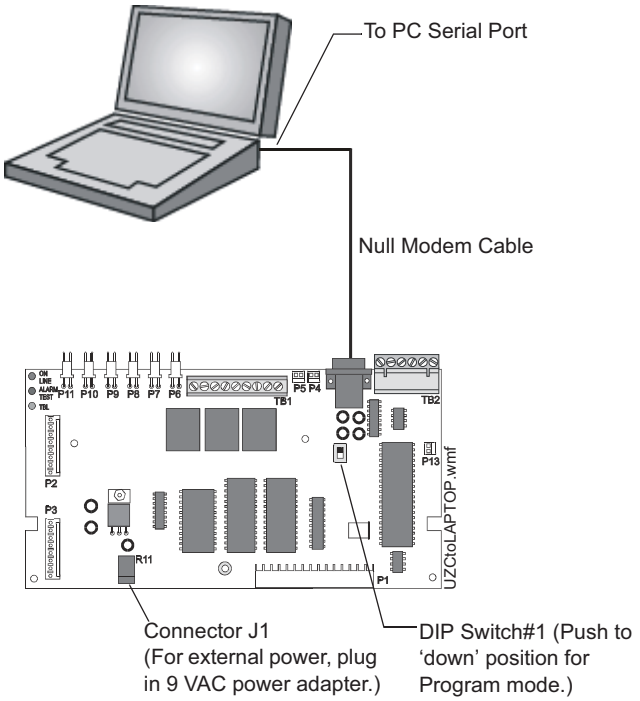


Figure 2.4 Connecting a PC to a UZC-256

2.9 Download Program Files (PC to UZC)

To copy a program file from a PC to the UZC, follow these steps:

1. Connect the PC to the UZC-256 module. Refer to Section 2.8, "Connecting a UZC-256 to a PC".
2. Make sure the COM port settings is correct. Refer to Section 2.6, "Starting the Application and Setting Communication Port".
3. Start the Application and go to the "Download" button.
4. Enter the drive, folder and filename of the file to be copied according to standards Windows operating system procedures.
5. When the PC finishes copying the file, a confirmation message displays.

2.9.1 Uploading Program Files (UZC-256 to PC)

To copy a program file from the UZC-256 to a PC, follow these steps:

1. Connect the PC to the UZC-256 module. Refer to Section 2.8, "Connecting a UZC-256 to a PC".
2. Make sure the COM port settings is correct. Refer to Section 2.6, "Starting the Application and Setting Communication Port".
3. Start the Application and go to the "Upload" button.

4. The upload process will start automatic. When the PC finishes copying the file, a confirmation message displays. Click OK. The program screen will open with the uploaded program settings.

Note: Save program before continuing.

2.10 Disconnecting UZC-256 from PC

Upon completion of downloading the program onto the UZC-256, disconnect the unit from the PC following the procedure below.

1. Set DIP switch 1 on the UZC-256 to “Normal” mode by placing the switch in the up position. See Figure 2.4.
2. Disconnect power from the PC and UZC-256.
3. Remove Null Modem Cable (and adapter).
4. Exit the program by pressing “Exit” or selecting “Exit” from the File menu.

Section 3: Programming

3.1 Overview

This chapter explains how to create and modify a program file for the UZC-256. The fire alarm control panel (FACP) will also need to be configured to annunciate correctly on the selected addresses; follow the directions in your FACP programming manual.
Note: VeriFire Tool's "Address Map ACS" button will assign up to four annunciator groups to the UZC-256.

3.2 Program Modes

The UZC-256 application provides two programming modes as listed below:

- **Coding.** Programs up to 256 addressable devices or zones, depending on the capacity of the fire alarm system. When the FACP senses an active coded device or circuit, the UZC-256 sends a pulse to the notification appliance via the UZC-256 control relays.
- **Counting.** Programs the UZC-256 output relays to activate after a specific number of alarms occur within pre-defined range of annunciators.

3.3 Starting a Program File

Display a sample program file, which may be modified, by following the instructions below.

1. Access the Main Menu and select "New", by pressing the red button on its right side. An option block displays giving the choice of four programming modes shown in Figure 3.1.
2. Select your option, by pressing one of the four buttons.

If you selected "Counting", the counting program screen displays. Continue with Section 3.4, "Programming in Counting Mode".

If you selected any of the Fire Alarm Systems, a program screen displays. Continue with Section 3.6, "Programming in Coding Mode".

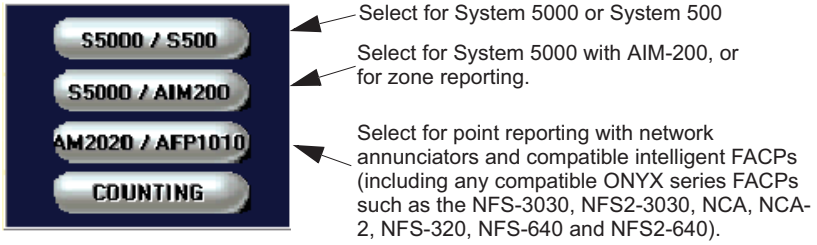


Figure 3.1 Programming Options

3.4 Programming in Counting Mode

Counting mode lets you program the UZC-256 control relays to activate after a specific number of devices alarm occur within a defined "window" of annunciator addresses. The UZC-256 monitors the control relays within the window. When the specified number of devices activate, the UZC-256 sends a pulse through a control relay to the notification appliance.

NOTE: Intelligent addressable FACPs such as NFS2-3030, NFS-3030, NFS2-640, NFS-640, NFS-320, NCA, NCA-2 and AM2020/AFP1010 can support up to 32 annunciator addresses, each consisting of 64 points. (These annunciator addresses are referred to as the Start and Stop addresses.) The System 500, System 5000, and the System 5000/AIM-200 systems support a lesser number of annunciators, depending on the number of installed modules. Use of a UDACT reduces the number of available annunciator addresses.

3.4.1 Counting Screen

Display of a counting program screen.

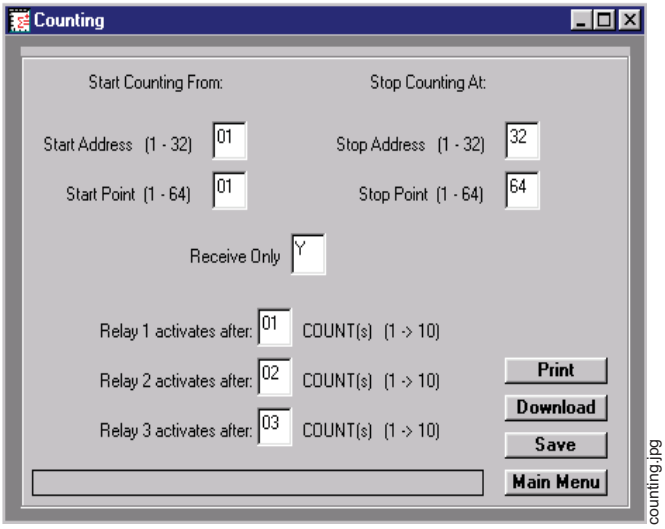


Figure 3.2 Counting Screen

3.5 How to Complete the Counting Screen

The table below contains instructions on how to complete the counting screen.

Entry Field	Description	Enter the following...
Start Counting From:	The address and the point of an annunciator that defines the beginning point of the counting window.	1-32 for address and 1-64 for point
Stop Counting At:	The address and the point of an annunciator that defines the end point of the counting window.	1-32 for address and 1-64 for point
Receive Only (Y/N)?	**Yes (Y)** sets annunciators in the counting window to only receive data from the FACP and allows other annunciators to use addressed points in the count window. **No (N)** sets annunciator in the counting window to receive data from the FACP and send date to the FACP.	Y or N
Relay 1 activates... Relay 2 activates... Relay 3 activates...	Program a UZC-256 control relay to pulse a notification appliance after a specified number of annunciators in the count window activate.	Number of counts (1-10) for each UZC-256 control relay

Table 3.1 Completing a Counting Program Screen

Upon completion of all entries, press “Save”. See “Saving the Program File” on page 30.

■ Example of Completed Counting Screen

Figure 3.3 shows a completed counting screen that will (1) Define all devices between 0201 and 0256; and (2) Program relays 1, 2 and 3 to activate after devices 3, 5 and 9 go off respectively.

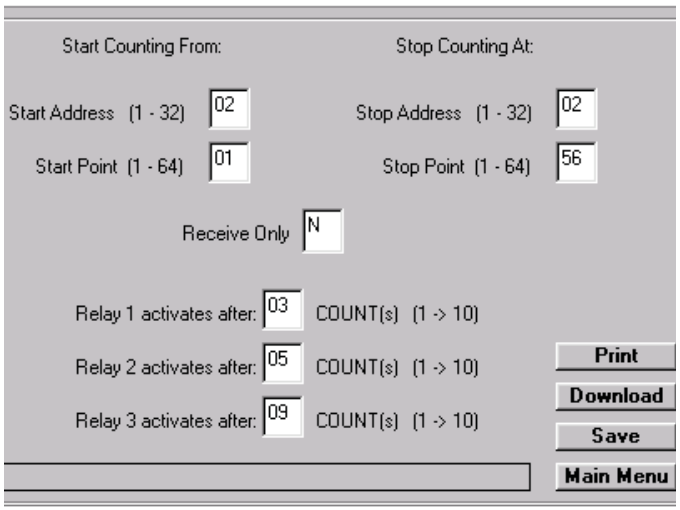


Figure 3.3 Sample Counting Screen

3.6 Programming in Coding Mode

Coding mode allows you to program up to 256 separate and distinct codes. A code consists of the device address and the assigned number of a point. The UZC-256 can use up to four annunciator addresses. Each annunciator point contains up to 64 points. The UZC-256 monitors each programmed point. When a device at one of the points activates, the UZC-256 sends a pulse through one of the control relays to a notification appliance.

Refer to the appendix that is specific to your FACP in order to program the UZC-256 for your system.

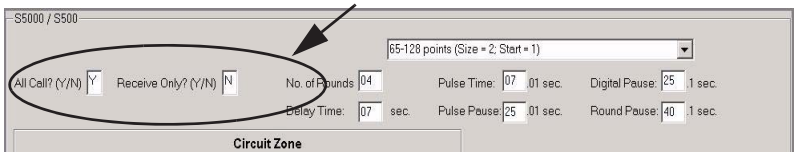
When programming in coding mode, a General Alarm coding screen appears as the last screen. Refer to “Programming a General Alarm” on page 25 for information on completing that screen.

This section covers the following topics:

- All Call (System 5000 only)
- Receive Only
- How to enter variable codes
- How to enter output codes

3.6.1 All Call and Receive Only

Coding screens contain the ALL CALL and RECEIVE ONLY options. Enter values for these fields as described below.



NOTE: Do not select *All Call* and *Receive Only* at the same time.

Figure 3.4 All Call & Receive Only Locations

■ All Call (System 5000)

All Call is a System 5000 feature. On all other panels set the All Call field to "N".

On compatible System 5000 panels (CPU P/N 73210 or greater), set the All Call field to "Y" to enable the UZC-256 to activate all indicating circuits (indicating, speaker, and releasing) at the start of the General Alarm code.

CAUTION:
The *All Call* option will activate Time Control Modules TCM-2 and TCM-4. To disable the *All Call* option, program circuits on the modules for Switch Inhibit. Refer to the TCM-2 or TCM-4 Manual.

■ Receive Only

Receive Only means that a device can only receive information from the FACP. You can select this option if other Receive/Transmit devices share an EIA-485 address.

3.6.2 Entering Variable Codes

Each coding screen contains a set of six variable fields that define the zone codes assigned to each circuit or annunciator point. Before programming zone codes, complete these fields as shown below.

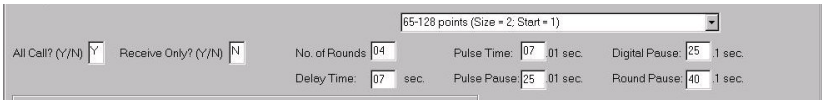


Figure 3.5 Variable Codes Location

Variable Code	You can specify...	By entering a value between...
No. rounds	Number of times a code sounds.	1 - 99 (typical value: 4)
Pulse Time	Duration of one pulse.	0.0 - 1 second (0.01 sec. increments)
Digit Pause	Pause between digits of a specified code.	0.0 - 9.9 seconds (0.01 sec. increments)
Delay Time	Time period from alarm to start of specified code.	1 - 99 seconds (recommended: 5 sec. for S5000 and AM2020)
Pulse Pause	Time period between pulses within a digit of a specified code.	0.0 - 1 second (0.01 sec. increments)
Round Pause	Pause between sounding of each round of code.	0.0 - 9.9 seconds

Table 3.2 Variable Codes

3.6.3 Variable Codes Timing Diagram

Figure 3.6 shows a sample timing diagram that results from the variables and output code (0121) with the variables set at the following.

- No. Rounds: 04
- Delay Time: 07 (sec.)
- Pulse Time: 07 (.01 sec.)
- Pulse Pause: 25 (.01 sec.)
- Digit Pause: 25 (.1 sec.)
- Round Pause: 40 (.1 sec.)

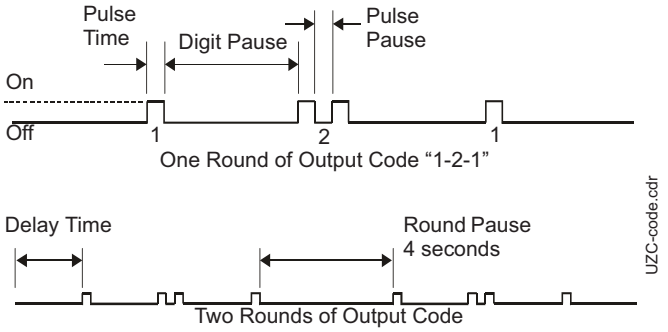


Figure 3.6 Sample Timing Diagram

3.6.4 Entering Output Codes

Programming involves filling in data fields on program screens. Data fields vary according to the program mode and the system. The Programming sections contain details for filling in programming-specific data fields and the Appendices contain details for filling in system-specific data fields.

Filling in output codes, however, is common to all programming modes and systems. You enter a unique four-digit output code to program the following:

- Installed circuits for the S500/S5000 and S5000/AIM-200.
- Annunciator points representing software zones or initiating devices in the NFS2-3030, NFS-3030, NFS2-640, NFS-640, NFS-320, NCA-2, NCA, AM2020/AFP1010, and AFP-300/AFP-400.

Formatting Output Codes

Output codes consist of four digits, using a combination of decimal and hexadecimal numbers.

Table 3.3 contains a conversion of decimal to hexadecimal numbers.

Number	Hex
10	A
11	B
12	C
13	D
14	E
15	F

Table 3.3 Hexadecimal Conversion

Sample Output Codes

The table below contains sample entries for output codes:

- Column 1 contains sample output codes.
- Column 2 contains the numbers as typed from the keyboard.

To get output code...	Type...
4 - 5	45
2 - 3 - 4	234
0 - 2 - 13 - 5	02D5
0 - 10 - 4 - 0	0A40
No Code	0000 or XXXX

Table 3.4 Sample Output Codes



NOTE:"0000" does not sound a zone code, but does count for General Alarm use. "XXXX" does not sound a zone code and does not count for General Alarm.

3.7 Programming a General Alarm

A General Alarm is an alarm set to respond to an indicating device mapped to a series of initiating devices in various software zones. This section contains information for programming the general alarm to function with the UZC, including the following topics:

- How to display a General Alarm Code screen.
- How to complete the screen.

3.7.1 Displaying a General Alarm Code Screen

On the right side of the Programming page of a Coding Mode program screen is the display of General Alarm Code.

Figure 3.7 contains a general alarm code screen.

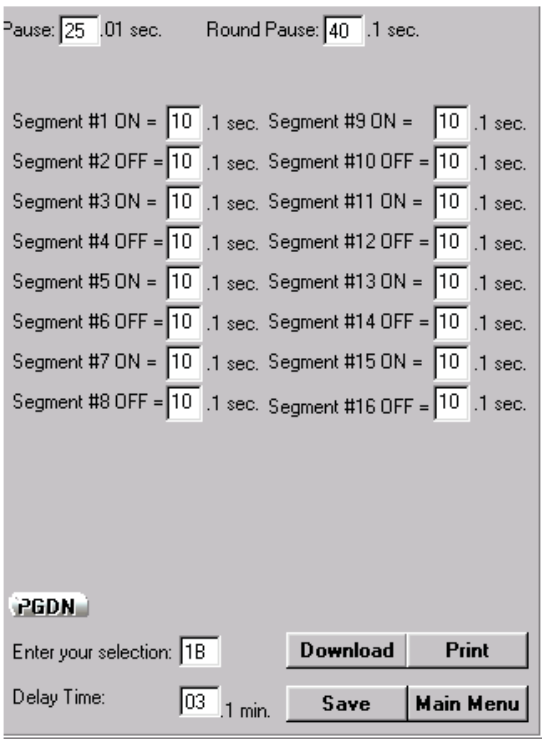


Figure 3.7 General Alarm Coding Screen

3.7.2 Completing the Screen

Follow the instructions below to complete the General Alarm Code screen and save the program file.

1. Double Click on the Segment box that you want to modify.
2. Enter values for alarm code (Seg. 1 - 16). See “Examples” below.
3. Enter General Alarm options and operations as noted in Table 3.5. Example: 1B = After delay from 1st alarm / Allow the sounding of subsequent zone codes.
4. Enter Delay Time.
   Example: 03 = 3 tenths of a minute; 10 = 1 minute
5. Upon completion of all entries; press “Save” button to save the program.

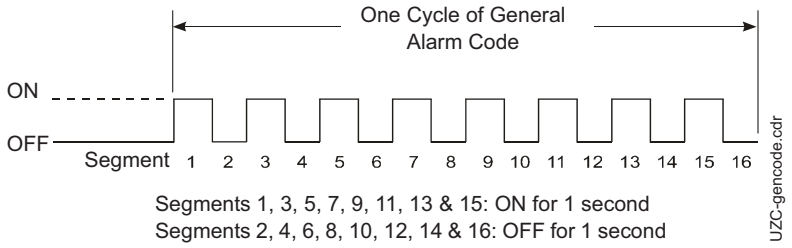
General Alarm option and operation choices

Selecting Options...	Lets you...
1) AFTER DELAY FROM 1ST ALARM	Set the general alarm to sound after a fixed interval (DELAY TIME) from the sound of the first zone code. Type a value between 1 - 9.9 min. (in 0.1 min. increments) in the DELAY TIME field.
2) AFTER SECOND ALARM (NO DELAY)	Set the general alarm to sound immediately after the sound of the second zone code.
3) COMBINE 1 & 2	Retain the fixed interval of option 1 and the immediate response of option 2. If a second zone code sounds before the fixed interval expires, the general alarm sounds immediately.
4) NONE	Disable the general alarm.
A) CONTINUOUSLY	Set the general alarm to sound continuously until system reset.
B) ALLOW THE SOUNDING OF SUBSEQUENT ZONE CODES	Interrupt the sound of the general alarm for additional zone codes. The output returns to general alarm after sounding additional zone codes.

Table 3.5 Specifying Options on the General Alarm Screen

3.7.3 General Alarm Cycle

Figure 3.8 shows what one cycle of general alarm code looks like if programmed according to the parameters in the general alarm code screen. General Alarm code repeats until the system resets.



Segments 1, 3, 5, 7, 9, 11, 13 & 15: ON for 1 second
Segments 2, 4, 6, 8, 10, 12, 14 & 16: OFF for 1 second

Figure 3.8 Sample General Alarm Code

3.7.4 Examples

Examples of general alarm codes in morse code, temporal, and steady output formats.

If using...	For code...	Enter the following...
Morse U code	.5 sec On .5 sec Off .5 sec On .5 sec Off 1 sec On 2.5 sec Off unused	05 05 05 05 10 25 00 for all unused segments
Temporal code	.5 sec On .5 sec Off .5 sec On .5 sec Off .5 sec On 1.5 sec Off unused	05 05 05 05 05 15 00 for all unused segments
Steady output	Segment 1 Segments 2 - 26	99 00

Table 3.6 Examples of General Alarm Codes

Section 4: Working with Program Files

4.1 Overview

When you finish programming zone codes and the general alarm code the next step is to name and save the program file and transfer it to the UZC-256. After the program file is saved it is then stored on a disk or hard drive. This chapter explains how to accomplish this along with other tasks associated with program files.

The following topics are covered in this chapter:

- Saving the program file
- Transferring program files to and from the UZC.
- Modify a program file

4.2 Saving the Program File

When finished completing the programming and general alarm screens the next step is to save the program file. Follow the instructions below:

Step	Action
1	At the SAVED to FILE: prompt of the General Alarm screen, select a Drive, Folder, and Filename of your choice, as shown: **C:\UZC\program1.uzc**
2	Press **SAVE**.
3	Press **EXIT** to return to the main menu.



NOTE: If the following message displays: “Invalid Counts. Press enter to edit or esc back to Main Menu”, One or more of the input fields contains out-of-range data. Review all fields, modify as needed, and press esc.

Figure 4.1: These buttons will display at the lower right corner of the programming screens (actual layout depends on type of programming being done). After clicking “save”, follow standard Windows Operating System procedures to select where the file will be saved. Files will save with a “.uzc” extension; create a sub-folder for these files.



Figure 4.1 Saving to File

4.3 Transferring Program Files

This section explains how to transfer Program files between a PC and the UZC-256 module, organized into the following topics:

- Download: How to copy a program file from a PC to the UZC.
- Upload: How to copy a program file from the UZC-256 to a PC.

CAUTION: Never connect a PC to a UZC-256 module that is installed in a fire alarm system with an earth ground fault condition. Doing so can damage the PC and cause loss of data.

NOTE: You get a message “Downloading Error!!!...Try Again...” if the program cannot copy a file. Make sure the PC COM port number (COM1 or COM2) matches the selection at “Serial Port:” on the Main Menu.
If you are running Windows XP, check in the "Device Manager" in the communication port settings under "Advanced", and make sure that the FIFO settings are unchecked.

4.3.1 Downloading: Copying Program Files (PC to UZC)

To copy a program file from a PC to the UZC, follow these steps:

Step	Action
1	Connect the PC to the UZC-256 module. Refer to “Connecting a UZC-256 to a PC” on page 15.
2	Start the Application and go to the Main Menu.

Step	Action
3	Click on “Download” button.
4	Follow standards Windows operating system commands to locate the file where you previously set up and saved the database. Click to open.
5	When the PC finishes copying the file, a confirmation message displays.

Alternately, from within the panel-programming screen, click the “Download” button. Always save before downloading.

4.3.2 Uploading: Copying Program Files (UZC-256 to PC)

To copy a program file from the UZC-256 to a PC, follow these steps:

Step	Action
1	Connect the PC to the UZC-256 module. Refer to “Connecting a UZC-256 to a PC” on page 15.
2	Start the Application and go to the Main Menu.
3	Click the “Upload” button.
4	When the PC finishes copying the file, a confirmation message displays.
5	Click “Save” from within a programming screen.

4.4 Modifying a Program File

To modify a program file, follow these steps:

Step	Action
1	Start the Application and go to the Main Menu.
2	Click “Open” and select the previously saved file to be modified.
3	Modify the program file as needed; click “PGDN” or “PGUP” to page up or page down between available screens.
4	Save the program file.
5	Click “Main Menu” to

Section 5: Troubleshooting

5.1 Overview

This section contains information for troubleshooting the UZC-256 if your program file does not work.

5.2 Troubleshooting the UZC-256

Review the troubleshooting information in the table below if you cannot get your program file to run. It contains a list of common problems and solutions to these problems.

Check the following...	Take the following actions...
DIP switch 1 on the UZC-256 module	Set DIP switch to “Program” mode (down Position). Refer to “Connecting a UZC-256 to a PC” on page 15.
External power adapter, if operating the UZC-256 module with external power through J1	Inspect the power adapter for: Output = 9 VDC Positive = plug Negative = center pin
Wiring on the null modem cable connected between the PC and the UZC.	See wiring diagrams below, which show pin-to-pin connections on the null modem cable and adapter.
If the “Invalid port number” error message appears, check the COM port that the null modem cable is connected to, and check that the cable is pinned-out correctly.	To check available COM ports on PC: start menu, control panel, system. Hardware tab; device manager button; “Ports (COM & LPT) click + sign to expand choices. Select COM 1, then the others.

Table 5.1 Troubleshooting the UZC-256

Null Modem Cable and Converter pin connection diagram:

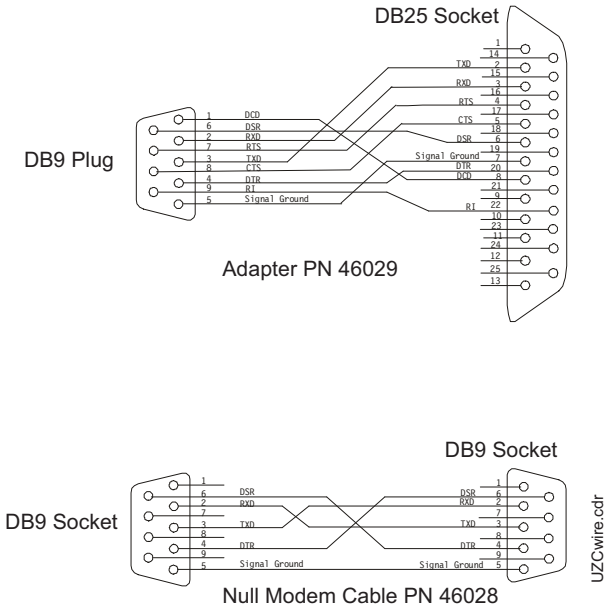


Figure 5.1 Pin Connections

Notes

Appendix A: System 5000 & System 500 (UL 8th)

WARNING: System 500 and System 5000 have not been certified to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864 9th Edition. Operation of the UZC-256 with products tested for UL 864 9th Edition has not been evaluated and may not comply with NFPA 72 and/or the latest edition of UL 864. These applications will require the approval of the local Authority Having Jurisdiction (AHJ).

A.1 Overview

This appendix contains information on completing the S5000/S500 coding program screens, which is used with the System 5000 and System 500. For further information on these FACPs, refer to the System 500 Instruction Manual and the System 5000 Operator's Manual.

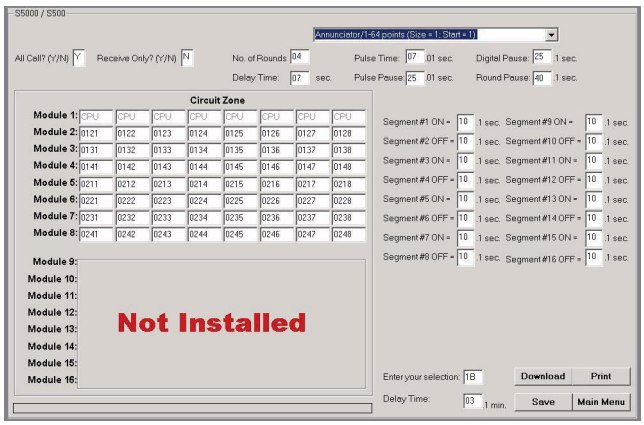
A.2 Programming Guidelines for the UZC-256

When used in conjunction with the System 5000 or System 500, program the UZC-256 annunciator points in the following manner:

- Start the UZC-256 programming utility.
- Select the S5000/S500 option from the opening screen.
- Choose and enter one of the annunciator options as detailed in "Programming Guidelines for the System 5000/System 500" on page 39.
- Enter the All Call and Receive Only information as described in "All Call and Receive Only" on page 22.
- Enter the values for Variable Codes as described in "Entering Variable Codes" on page 22.
- Enter Output Codes for annunciators 1 and 2 as described in "Entering Output Codes" on page 24.
- Enter the values for General Alarm codes as described in "Programming a General Alarm" on page 25.

Save changes before changing pages and before exiting; see "Saving the Program File" on page 30.

The programming screen shown below shows the default screen for a system with one annunciator address assigned.



NOTE: Use the **PGDN** (Page Down) key to get the second screen when the third and fourth annunciators are programmed on the UZC-256.

A.3 Programming Guidelines for the System 5000/System 500

The table below contains a list of the System 5000/System 500 annunciator options, along with address and point information.

Annunciator Option	Size	Address assigned to UZC-256	Max Number of Points	Refer to...
1) 1-64 points	1	1	64	
2) 65-128 points	2	1 and 2	128	
3) Dual 1-64	1	2	64	Notes 1, 2
4) Quad 1-64	1	4	64	Notes 1, 3
5) Dual -128	2	3 and 4	128	Notes 1, 4

Table A.1 Annunciator Modes

System 5000 only.
Assume one 64-point Receive/Transmit annunciator at address 1.
Assume three 64-point Receive/Transmit annunciators at addresses 1, 2, and 3.

Assume one 64-point Receive/Transmit annunciator at addresses 1 and 2.

Appendix B: System 5000 with AIM-200 (UL 8th)

WARNING: System 5000 and AIM-200 have not been certified to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864 9th Edition. Operation of these products with products tested for UL 864 9th Edition has not been evaluated and may not comply with NFPA 72 and/or the latest edition of UL 864. These applications will require the approval of the local Authority Having Jurisdiction (AHJ).

B.1 Overview

This appendix contains information on completing the S5000/AIM-200 coding program screens, used with a System 5000 with an AIM-200. For further information on this FACP, refer to the System 5000 Operator's Manual and the AIM-200 Instruction Manual.

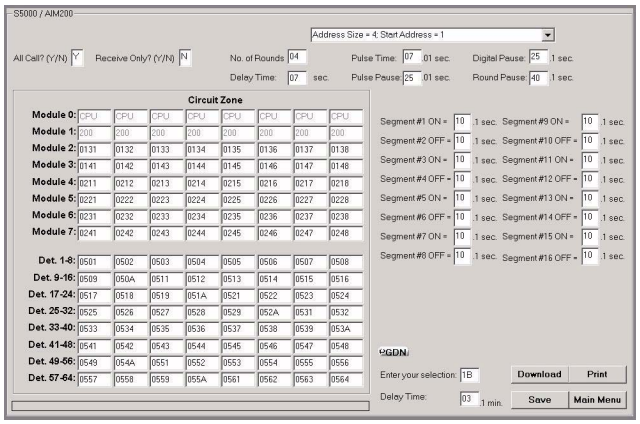
B.2 Programming Guidelines for the UZC-256

When used in conjunction with a System 5000 with AIM-200, program the UZC-256 annunciator points in the following manner:

- Start the UZC-256 programming utility.
- Select the S5000/AIM200 option from the opening screen.
- Choose and enter one of the annunciator options (1 or 2) as detailed in "Programming Guidelines for System 5000 w/AIM-200" on page 41.
- Enter the All Call and Receive Only information as described in "All Call and Receive Only" on page 22.
- Enter the values for Variable Codes as described in "Entering Variable Codes" on page 22.
- Enter Output Codes for annunciators 1 and 2 as described in "Starting a Program File" on page 18.
- Enter the values for General Alarm codes as described in "Programming a General Alarm" on page 25.

Save changes before changing pages and before exiting. See "Saving the Program File" on page 30.

The programming screen shown below shows the default screen for a system with two annunciator addresses assigned.



NOTE: Use the **PGDN** (Page Down) key to get the second screen when the third and fourth annunciators are programmed on the UZC-256.

B.3 Programming Guidelines for System 5000 w/AIM-200

The table below contains a list of the S5000/AIM-200 annunciator options, along with address and point information.

Annunciator Mode	Address Size	Assigned Address	Number of Points
1	4	01 02 03 04	Panel Modules 3-8 (point 17-64) AIM detectors 1-64 AIM detectors 1-64 AIM detectors 1-64 and modules 65-96
2	3	02 03 04	AIM detectors 1-64 AIM detectors 1-64 AIM detectors 1-64 and modules 65-96

Table B.1 Annunciator Options

Appendix C: NFS-3030/NFS2-3030, NCA/NCA-2, and AM2020/AFP1010

WARNING: NCA, NFS-3030, AM2020 and AFP1010 have not been certified to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864 9th Edition. Operation of these products with products tested for UL 864 9th Edition has not been evaluated and may not comply with NFPA 72 and/or the latest edition of UL 864. These applications will require the approval of the local Authority Having Jurisdiction (AHJ).

C.1 Overview

This appendix contains information on completing the AM2020/AFP1010 coding program screens used with an NFS-3030/NFS2-3030, NCA/NCA-2, or AM2020/AFP1010.

For further information, refer to the each FACP's operations and programming manual.

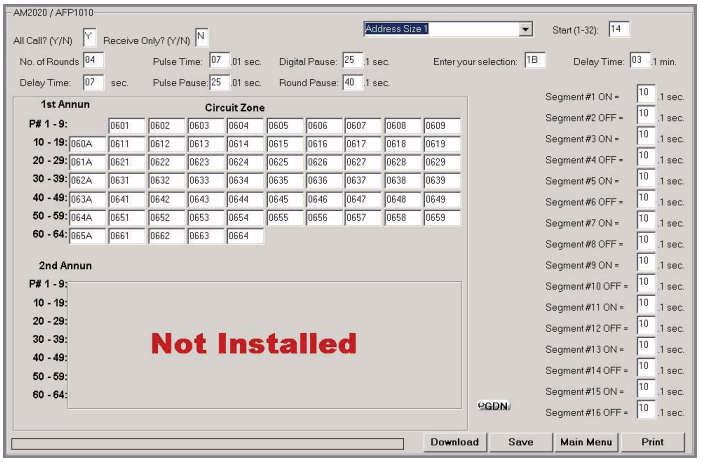
C.2 Programming Guidelines for the UZC-256

When used in conjunction with an NFS-3030/NFS2-3030, NCA/NCA-2, or AM2020/AFP1010, program the UZC-256 annunciator points in the following manner:

- Start the UZC-256 programming utility.
- Select the AM2020/AFP1010 option from the opening screen.
- Select Address Size (UZC-256 can operate as up to 4 sequential annunciator addresses).
- Enter starting annunciator point (1-32, dependent on the FACP).
- Enter the All Call and Receive Only information as described in "All Call and Receive Only" on page 22.
- Enter the values for Variable Codes as described in "Entering Variable Codes" on page 22.
- Enter Output Codes for annunciators 1 and 2 as described in "Starting a Program File" on page 18.
- Enter the values for General Alarm codes as described in "Programming a General Alarm" on page 25.

Save changes before changing pages and before exiting; see "Saving the Program File" on page 30.

The programming screen shown below shows the default screen for a system with one annunciator address assigned.



AM2020,AFP1010a.jpg

NOTE: Use the **PGDN** (Page Down) key to get the second screen when the third and fourth annunciators are programmed on the UZC-256.

C.3 Programming Guidelines for the NFS-3030/NFS2-3030, NCA/NCA-2, or AM2020/AFP1010

C.3.1 NFS-3030 and NFS2-3030 Annunciator Programming

The NFS-3030/NFS2-3030 supports up to 32 fully programmable annunciator addresses. When selecting the start address and address size for the UZC-256, be sure to take annunciator address availability into consideration. The table below contains a list of the NFS-3030 and NFS2-3030 annunciator options available when used in conjunction with the UZC-256.

Annunciator Mode	Number of Points
UZC	64 points
64PT	64 points

Table C.1 NFS-3030/NFS2-3030 Annunciator Options

When programming the NFS-3030 or NFS2-3030, use the annunciator type of "UZC" for the starting address programmed on the UZC-256. If the UZC-256's address size is more than 1, then those addresses should be programmed as 64PT. For example, if the starting address on the UZC-256 is 11 and the address size is 4, than the NFS-3030 or NFS2-3030 should be programmed as follows:

.

Annunciator Address	Annunciator Mode
11	UZC
12	64PT
13	64PT
14	64PT

Table C.2 NFS-3030/NFS2-3030 Annunciator Programming Example

Each UZC-256 annunciator point can be programmed to monitor a specific NFS-3030/NFS2-3030 point. When the point being monitored becomes active, the Output Code associated with that UZC-256 point will sound. For further information, refer to the NFS-3030 or NFS2-3030 Programming Manuals.

C.3.2 NCA and NCA-2 Annunciator Programming

The NCA/NCA-2 supports up to 32 fully programmable annunciator addresses. When selecting the start address and address size for the UZC-256, be sure to take annunciator address availability into consideration. The table below contains a list of the NCA and NCA-2 annunciator options when used in conjunction with the UZC-256.

Annunciator Mode	Number of Points
UZC	64 points
64PT	64 points

Table C.3 NCA/NCA-2 Annunciator Options

Programming the NCA and NCA-2 for operation with the UZC-256 is very similar to the NFS-3030 and NFS2-3030. However, since the NCA and NCA-2 monitor and control networked FACPs, the monitored points available vary depending on network setup. Refer to the NCA or NCA-2 programming manual for additional information.

C.3.3 AM2020 and AFP1010 Annunciator Programming

The AM2020/AFP1010 can support up to 32 fully programmable annunciator addresses. When selecting the start address and address size for the UZC-256, be sure to take annunciator address availability into consideration. The table below contains a list of the AM2020/AFP1010 annunciator options, along with address and point information.

Annunciator Mode	Number of Points
64PT	64 points each

Table C.4 AM2020/AFP1010 Annunciator Options

The AM2020/AFP1010 does not specifically designate an annunciator type for the UZC-256. When programming the AM2020/AFP1010 annunciators, program the UZC-256's starting address and any subsequent addresses. For example, if the starting address on the UZC-256 is 14 and the address size is 4, then annunciator addresses 14, 15, 16, and 17 should be programmed on the AM2020/AFP1010. Once the annunciator addresses are programmed, each individual annunciator point to be used must be programmed as well. Specific points on the AM2020/AFP1010 can then be mapped to each UZC-256 annunciator point. For further information, refer to the AM2020/AFP1010 Programming manual.

Appendix D: NFS-320 (UL 9th), NFS2-640 (UL 9th), NFS-640 (UL 8th), and AFP-300/AFP-400 (UL 8th)

WARNING: AFP-300/AFP-400 and NFS-640 have not been certified to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864 9th Edition. Operation of these product with products tested for UL 864 9th Edition has not been evaluated and may not comply with NFPA 72 and/or the latest edition of UL 864. These applications will require the approval of the local Authority Having Jurisdiction (AHJ).

NFS-320 and NFS2-640 have been certified to comply with the requirements in the Standard for Control Units and Accessories for Fire Alarm Systems, UL 864 9th Edition. Operation of these products with products not tested for UL 864 9th Edition may not comply with NFPA 72 and/or the latest edition of UL 864. These applications will require the approval of the local Authority Having Jurisdiction (AHJ).

D.1 Overview

This appendix contains information on completing the AM2020/AFP1010 coding program screens, which are used for the AFP-300/AFP-400, NFS-320, NFS2-640 and NFS-640.
For further information, refer to each FACP's programming and operations manual.

NOTE: The difference between the AFP-300 and AFP-400 is the AFP-300 has one (1) SLC and the AFP-400 has two (2) SLCs.

D.2 Programming Guidelines for the UZC-256

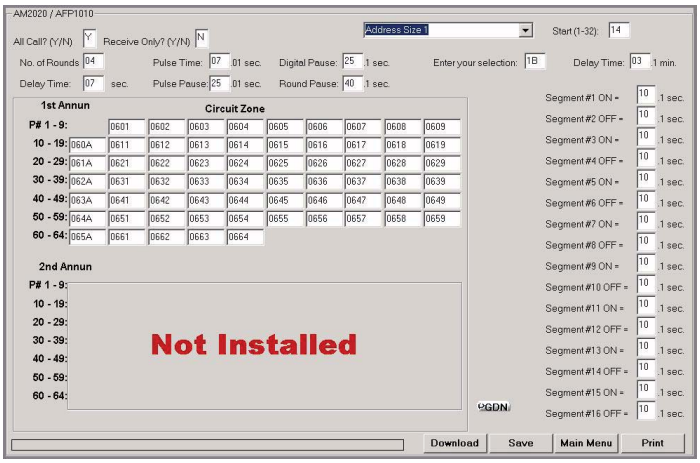
When used in conjunction with a AFP300/AFP400, NFS-640, NFS2-640 or NFS-320, program the UZC-256 annunciator points in the following manner:

- Start the UZC-256 programming utility.
- Select the AM2020/AFP1010 option from the opening screen.
- Select Address Size (UZC-256 can operate as up to 4 sequential annunciator addresses).
- Enter starting annunciator point (1-32, dependent on the FACP).
- Enter the All Call and Receive Only information as described in "All Call and Receive Only" on page 22.
- Enter the values for Variable Codes as described in "Entering Variable Codes" on page 22.
- Enter Output Codes for annunciators as described in "Entering Output Codes" on page 24.

- Enter the values for General Alarm codes as described in "Programming a General Alarm" on page 25.

Save changes before changing pages and before exiting; see "Saving the Program File" on page 30.

The programming screen shown below shows the default screen for a system with one annunciator address assigned.



AM2020,AFP1010a.jpg

NOTE: Use the **PGDN** (Page Down) key to get the second screen when the third and fourth annunciator is programmed on the UZC-256.

D.3 Programming Guidelines for the AFP-300, AFP-400, NFS-640, NFS2-640 and NFS-320

D.3.1 AFP-300 and AFP-400 Annunciator Programming

The AFP-300/400 supports up to ten annunciator addresses. When selecting the start address and address size for the UZC-256, be sure to take annunciator address availability into consideration.

The AFP-300/AFP-400 uses pre-programmed Annunciator Selection Groups. Within these groups, point annunciation is specified and can not be modified. Program the AFP-300/AFP-400 to send data from ACS Annunciator Selection Groups, as listed in the following table:

Annunciator Selection	Number of Points
ACS Selection Group 1	CPU Status and Zones 1-56
ACS Selection Group 2	Zones 57-99, NAC Ckts 1-4 and 16 Special Zones
ACS Selection Group 3	Intelligent Modules 101 to 164
ACS Selection Group 4	Intelligent Modules 201-264 (AFP-400 only)
ACS Selection Group 5	Intelligent Modules 165-196 and 265-296 (AFP-400 only)
ACS Selection Group 6	Detectors 101 to 164 on SLC loop 1
ACS Selection Group 7	Detectors 201-264 on SLC loop 2 (AFP-400 only)
ACS Selection Group 8	Detectors 165-196 and 265-296 (AFP-400 only)
ACS Selection Group 9	NAC/Panel Output Circuit Modules (64 points)

Table D.1 Annunciator Selection Group for AFP-300/AFP-400

NOTE: The AFP-300/AFP-400 has two additional user programmable Annunciator Selection Groups available. These groups can only be modified using the VeriFire-400 programming utility. For more information, refer to the AFP-300/AFP-400 Programming Manual.

D.3.2 NFS-640 and NFS2-640 Annunciator Programming

The NFS-640/NFS2-640 has 32 Annunciator addresses available. When selecting the start address and address size for the UZC-256, be sure to take annunciator address availability into consideration.

NOTE: If a UDACT is installed on the NFS-640 or NFS2-640, Annunciator address availability will be limited. For more information, refer to the NFS-640 and NFS2-640 Programming Manuals.

The NFS-640/NFS2-640 uses pre-programmed Annunciator Selection Groups. Within these groups, point annunciation is specified and can not be modified. Program the NFS-640/NFS2-640 to send data from ACS Annunciator Selection Groups, as listed in the following table:

Annunciator Selection	Number of Points
ACS Selection Group A	8 System Points and Zones 1 - 56
ACS Selection Group B	Zones 57 - 99, 9 F Zones, 8 R Zones, 4 NACS
ACS Selection Group C	Loop 1, Modules 1 - 64
ACS Selection Group D	Loop 2, Modules 1 - 64
ACS Selection Group E	Loop 1, Modules 65 - 128
ACS Selection Group F	Loop 2, Modules 65 - 128
ACS Selection Group G	Loop 1, Modules 129 - 159 (1 unused point) Loop 2, Modules 129 - 159 (1 unused point)
ACS Selection Group H	Loop 1, Detectors 1 - 64
ACS Selection Group I	Loop 2, Detectors 1 - 64
ACS Selection Group J	Loop 1, Detectors 65 - 128
ACS Selection Group K	Loop 2, detectors 65 - 128
ACS Selection Group L	Loop 1, Detectors 129 - 159 (1 unused point) Loop 2, Detectors 129 - 159 (1 unused point)
ACS Selection Group M	Panel Circuits 1.1 to 8.8 (NFS-640 only)

Table D.2 Annunciator Selection Group for NFS-640/NFS2-640

NOTE: The NFS-640/NFS2-640 has up to ten additional user-modifiable Annunciator Selection Groups available. These groups can only be modified using the VeriFire-Tools programming utility. For more information, refer to the NFS-640 and NFS2-640 Programming Manuals.

D.3.3 NFS-320 Annunciator Programming

The NFS-320 has 32 Annunciator addresses available. When selecting the start address and address size for the UZC-256, be sure to take annunciator address availability into consideration.

NOTE: If a UDACT is installed on the NFS-320, Annunciator address availability will be limited. For more information, refer to the NFS-320 Programming Manual.

The NFS-320 uses pre-programmed Annunciator Selection Groups. Within these groups, point annunciation is specified and can not be modified. Program the NFS-320 to send data from ACS Annunciator Selection Groups, as listed in the following table:

Annunciator Selection	Number of Points
ACS Selection Group A	8 System Points and Zones 1 - 56
ACS Selection Group B	Zones 57 - 99, 9 F Zones, 8 R Zones, 4 NACS
ACS Selection Group C	Loop 1, Modules 1 - 64
ACS Selection Group E	Loop 1, Modules 65 - 128
ACS Selection Group G	Loop 1, Modules 129 - 159 (points 32 - 64 not used)
ACS Selection Group H	Loop 1, Detectors 1 - 64
ACS Selection Group J	Loop 1, Detectors 65 - 128
ACS Selection Group L	Loop 1, Detectors 129 - 159 (points 32 - 64 not used)

Table D.3 Annunciator Selection Group for NFS-320

NOTE: The NFS-320 has up to ten additional user-modifiable Annunciator Selection Groups available. These groups can only be modified using the VeriFire-Tools programming utility. For more information, refer to the NFS-640 and NFS2-640 Programming Manuals.

Limited Warranty

Honeywell International Inc. warrants products manufactured by it to be free from defects in materials and workmanship for eighteen (18) months from the date of manufacture, under normal use and service. Products are date stamped at time of manufacture. The sole and exclusive obligation of **Honeywell International Inc.** is to repair or replace, at its option, free of charge for parts and labor, any part that is defective in materials or workmanship under normal use and service. All returns for credit are subject to inspection and testing at the factory before actual determination is made to allow credit. **Honeywell International Inc.** does not warrant products not manufactured by it, but assigns to the purchaser any warranty extended by the manufacturer of such products. This warranty is void if the product is altered or repaired by anyone other than **Honeywell International Inc.** or as expressly authorized by **Honeywell International Inc.** in writing, or is serviced by anyone other than **Honeywell International Inc.** or its authorized distributors. This warranty is also void if there is a failure to maintain the products and systems in which they operate in a proper and workable manner. In case of defect, secure a Return Material Authorization form from our Return Authorization Department.

This writing constitutes the only warranty made by **Honeywell International Inc.**, with respect to its products. **Honeywell International Inc.**, does not represent that its products will prevent any loss by fire or otherwise, or that its products will in all cases provide the protection for which they are installed or intended. Buyer acknowledges that **Honeywell International Inc.**, is not an insurer and assumes no risk for loss or damages or the cost of any inconvenience, transportation damage, misuse, abuse, accident or similar incident.

HONEYWELL INTERNATIONAL INC. GIVES NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR OTHERWISE WHICH EXTENDS BEYOND THE DESCRIPTION ON THE FACE HEREOF. UNDER NO CIRCUMSTANCES SHALL **HONEYWELL INTERNATIONAL INC.** BE LIABLE FOR ANY LOSS OF OR DAMAGE TO PROPERTY, DIRECT, INCIDENTAL OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE **HONEYWELL INTERNATIONAL INC.**'S PRODUCTS. FURTHERMORE, **HONEYWELL INTERNATIONAL INC.** SHALL NOT BE LIABLE FOR ANY PERSONAL INJURY OR DEATH WHICH MAY ARISE IN THE COURSE OF, OR AS A RESULT OF, PERSONAL, COMMERCIAL OR INDUSTRIAL USE OF ITS PRODUCTS.

This warranty replaces all previous warranties and is the only warranty made by **Honeywell International Inc**. No increase or alteration, written or verbal, of the obligation of this warranty is authorized.

Warn-HL-05-2007.fm

NOTIFIER®
by Honeywell

World Headquarters
12 Clintonville Road
Northford, CT 06472-1610 USA
203-484-7161
fax 203-484-7118

www.notifier.com

ISO 9001
CERTIFIED
ENGINEERING & MANUFACTURING
QUALITY SYSTEMS