Honeywell

ACUIX™

High Speed Dome

User Manual

Document 800-01023 – Rev A – 02/08

Revisions

Issue	Date	Revisions
1.00	05/07	New document
1.01	05/07	Revised document (HJZTP privacy zone revision)
A	02/08	Document p/n changed from 900.0849 rev 1.01. Removed 23X WDR & TDN (Hitachi VK-S454R) camera, added 18X Color (Sony FCB-48C), 18X TDN (Sony FCB-490D) and 26X WDR & TDN (Sony FCB-990D) cameras. Added Class A warning to p. 3.

FCC Compliance Statement

Information to the User: This equipment has been tested and found to comply with the limits for a Class B digital device. Pursuant to Part 15 of the FCC Rules, these limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference. For example, try orienting or relocating the receiving antenna, increasing the separation between the equipment and receiver, or connecting the equipment to an outlet on a different circuit.

Caution Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Users of the product are responsible for checking and complying with all federal, state and local laws and statutes concerning the monitoring and recording of video and audio signals. Honeywell Video Systems shall not be held responsible for the use of this product in violation of current laws and statutes.

Canadian Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Manufacturer’s Declaration of Conformance

The manufacturer declares that the equipment supplied with this guide is compliant with the essential protection requirements of the EMC directive 89/336/EEC and the Low Voltage Directive LVD 73/23 EEC, conforming to the requirements of standards EN 55022 for emissions, EN 50130-4 for immunity, and EN 60065 for Electrical Equipment safety.

Explanation Of Graphical Objects

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the enclosure of the product that may be of sufficient magnitude to constitute a risk of electric shock to the person.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance servicing instructions in the literature accompany the product.

Important Safety Instructions

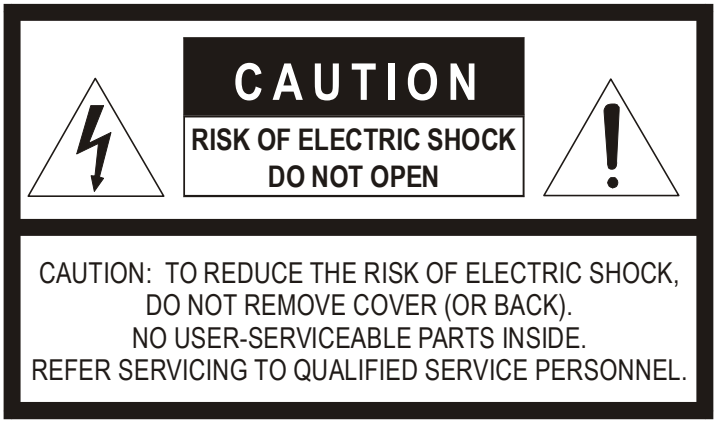
READ INSTRUCTIONS - All safety and operating instructions should be read before the unit is operated.

1. RETAIN INSTRUCTIONS - The safety and operating instructions should be retained for future reference.
2. HEED WARNINGS - All warnings on the unit and in the operating instructions should be adhered to.
3. FOLLOW INSTRUCTIONS - All operating and use instructions should be followed.
4. CLEANING - Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
5. ATTACHMENTS - Do not use attachments not recommended by the product manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
6. ACCESSORIES - Only use accessories specified by the manufacturer. Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the equipment. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer.
7. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
8. POWER SOURCES - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your facility, consult your product dealer or local power company.
9. OVERLOADING - Do not overload outlets and extension cords as this can result in a risk of fire or electric shock.
10. POWER-CORD PROTECTION - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords, plugs, and convenience receptacles.
11. SERVICING - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

12. DAMAGE REQUIRING SERVICE - Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:
    a. When the power-supply cord or plug is damaged.
    b. If liquid has been spilled, or objects have fallen into the unit.
    c. If the unit has been exposed to rain or moisture.
    d. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
    e. If the unit has been dropped or the enclosure has been damaged.
    f. When the unit exhibits a distinct change in performance - this indicates a need for service.
13. REPLACEMENT PARTS - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
14. SAFETY CHECK - Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
15. LIGHTNING AND POWER LINE SURGES - For added protection of this unit when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power-line surges.
16. HEAT - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.
17. INSTALLATION - Install in accordance with the manufacturer's instructions. Do not install the unit in an extremely hot or humid location, or in a place subject to dust or mechanical vibration. The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

Prior to installation and use of this product, please observe the following cautions and warnings.

Caution



Warning

Warning! **Installation and servicing must be performed by qualified personnel in accordance with current IEE wiring regulations.**

Warning! **The PSU must be wired to a double pole fuse spur with 3mm separation. The 3A fuse spur must be located close to the PSU.**

Warning! **Using replacement parts or accessories other than the original manufacturers may invalidate the warranty.**

Warning! **To prevent injury, this apparatus must be securely attached to the wall/ceiling in accordance with the installation instructions.**

Contents

Figures

Tables

About This Document

This document introduces the ACUIX™, a high-performance PTZ (pan/tilt/zoom) camera system, and describes how to install, configure, and operate the PTZ dome.

This document demonstrates how to install the camera assembly and lower dome into the housing and then program and operate the camera using one of the available protocols. Troubleshooting and Specifications reference sections are also included.

Overview of Contents

This document contains the following chapters and appendixes:

- *Chapter 1, Installing the Pan and Tilt Camera Assembly and Lower Dome*, introduces the ACUIX dome and describes the camera assembly and lower dome installation.
- *Chapter 2, Switch Settings*, explains the different DIP and rotary switches available and their uses.
- *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*, provides instruction for programming and operation of an ACUIX set to Honeywell Diamond protocol and controlled by an HEGS5000/HEGS5001 controller.
- *Chapter 4, Operation and Programming with Honeywell VCL Protocol*, demonstrates the programming and operation of an ACUIX set to Honeywell VCL protocol and controlled by an HJZTP controller.
- *Chapter 5, Operation and Programming with IntelliBus™ Protocol*, describes additional features that are provided by the IntelliBus™ protocol.
- *Chapter 6, ACUIX Password Feature*, provides an overview of the ACUIX password protection feature and its options.
- *Chapter 7, On-Screen Setup Menus*, covers the on-screen setup menus, and setting up the control, camera and special features.
- *Appendix A, Troubleshooting*, provides answers for common technical issues.
- *Appendix B, Replacement Parts*, lists the materials that may assist when installing and servicing the ACUIX product line.
- *Appendix B, Specifications*, shows the ACUIX specifications.
- *Appendix C, Pelco Emulation*, describes the operation of ACUIX Mimic Tours when set for Pelco protocol and controlled by a Pelco keyboard.
- *Appendix D, Digital Video Recorder Integration*, describes the required protocols for using an ACUIX PTZ camera with a Honeywell DVR.

Related Documents

For more information about topics that are relevant to ACUIX, see the documents listed below.

Document title	Part number
ACUIX Housing Installation Guide	*800-01760*
ACUIX Quick Set-Up Poster	*800-00248*
HDPRM2 Parapet Mount Install Guide	*900.0877*
HDXWM1 Decorative Wall Mount Install Guide	*900.0868*
HDCM1 Indoor Pendant Mount Install Guide	*900.0869*

1

Installing the Pan and Tilt Camera Assembly and Lower Dome

Introduction

This chapter describes installing the ACUIX pan and tilt camera assembly in the housing and installing the lower dome on the housing. Installation of the camera assembly is the same regardless of the housing type. The following instructions assume the housing mount has been installed and the housing has been installed on the mount. See *Related Documents* on page *16* for the names and part numbers of the mount and housing installation guides.

Models

Refer to the following table for the ACUIX pan and tilt camera assembly model numbers.

Table 1-1 ACUIX Pan and Tilt Camera Assembly Model Numbers

Model Number	Description
HDCAN0000	ACUIX Pan and Tilt with 18X Color, NTSC Camera
HDCAP0000	ACUIX Pan and Tilt with 18X Color, PAL Camera
HDCJN0000	ACUIX Pan and Tilt with 18X WDR & TDN, NTSC Camera
HDCJP0000	ACUIX Pan and Tilt with 18X WDR & TDN, PAL Camera
HDCFN0000	ACUIX Pan and Tilt with 26X WDR & TDN, NTSC Camera

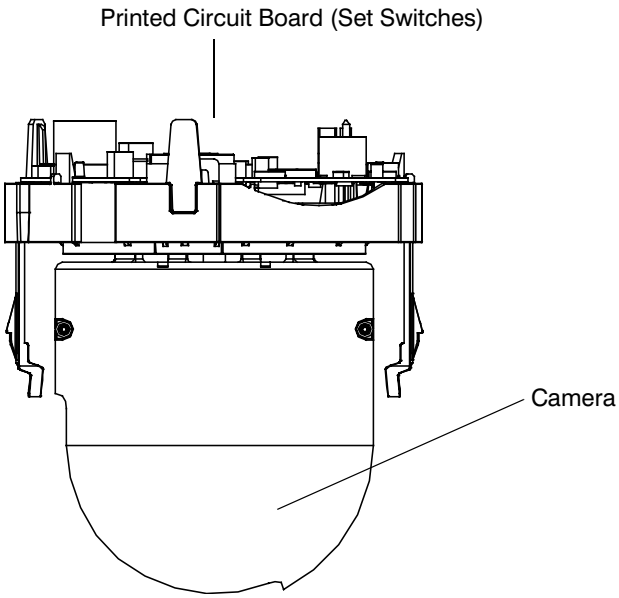
Table 1-1 ACUIX Pan and Tilt Camera Assembly Model Numbers

Model Number	Description
HDCFP0000	ACUIX Pan and Tilt with 26X WDR & TDN, PAL Camera
HDCGN0000	ACUIX Pan and Tilt with 35X WDR & TDN w/ EIS, NTSC Camera
HDCGP0000	ACUIX Pan and Tilt with 35X WDR & TDN w/ EIS, PAL Camera

Installing the Pan and Tilt Camera Assembly

1. Set the switches on the printed circuit board as required for your system configuration. See *Chapter 2, Switch Settings*.

Figure 1-1 ACUIX Pan and Tilt Camera Assembly



2. Line up the alignment label (yellow label with black dot) below the locking guide in the housing with the alignment label (yellow label with black dot) on the locking rail on the pan and tilt camera assembly.

Figure 1-2 ACUIX Housing

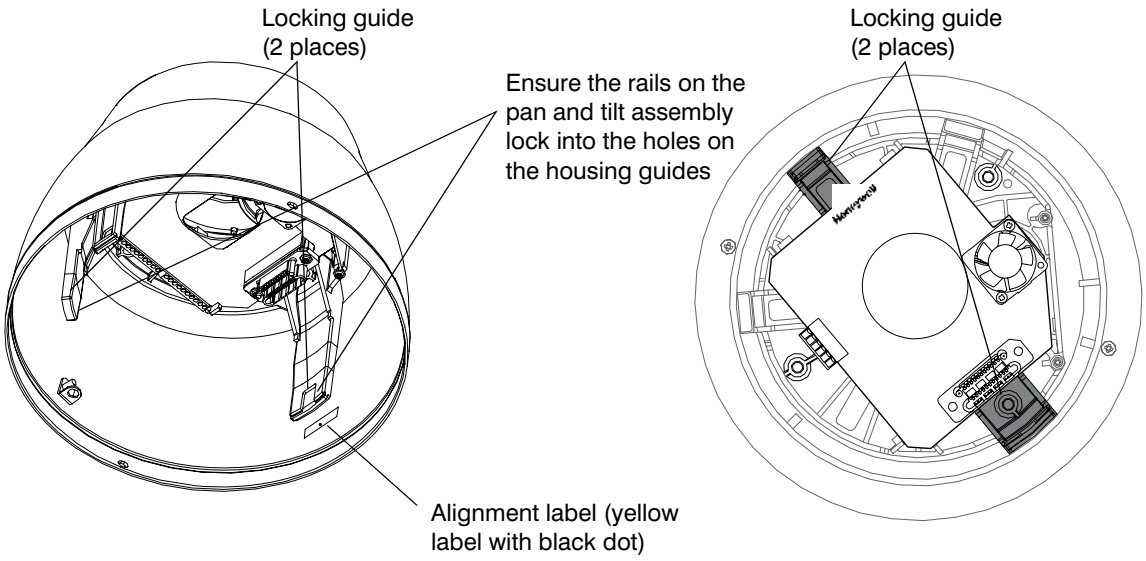
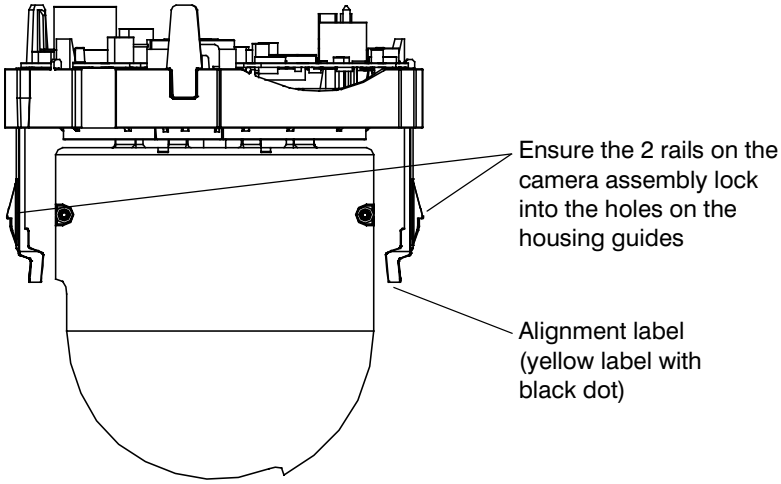


Figure 1-3 ACUIX Pan and Tilt Camera Assembly Locking Rails



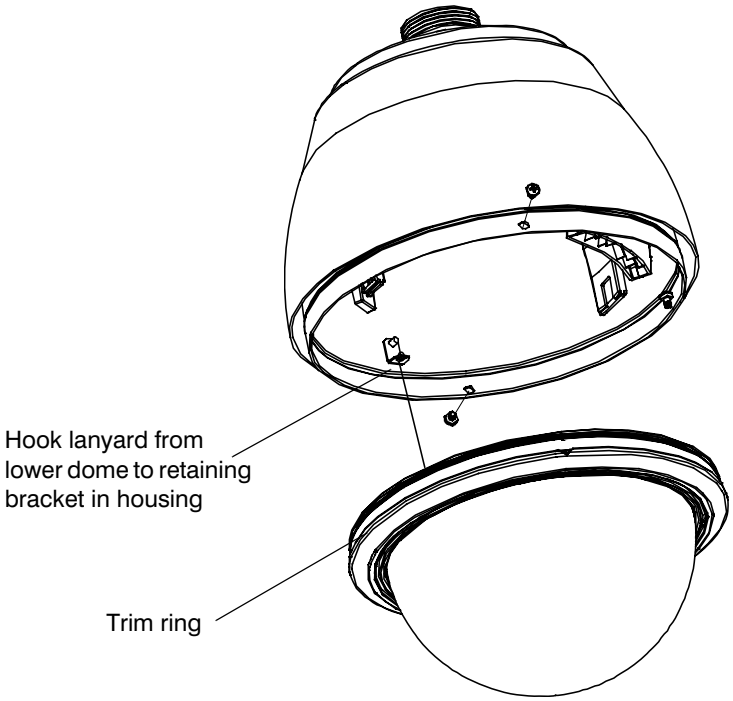
3. Push the camera assembly into the housing until it snaps into place.

Installing the Lower Dome

Indoor or Outdoor Pendant

1. Hook the lanyard attached to the lower dome on the retaining bracket in the housing.

Figure 1-4 Pendant Lower Dome Installation



2. Ensure the trim ring is in place around the lower dome.
3. Press the lower dome into the housing.
4. Secure the lower dome to the housing by installing the two screws provided with the lower dome.

2

Switch Settings

The ACUIX has two DIP switches (SW5 and SW6) on the pan and tilt printed circuit board (PCB) for setting the protocol, baud rate, and parity. These settings must match the control equipment settings.

There are four rotary switches (SW1, SW2, SW3, and SW4) for setting the ACUIX logical address for control purposes.

A DIP switch can also be used to restore the default settings and another DIP switch to override the switch settings for the logical address.

Figure 2-1 ACUIX Pan and Tilt Camera Assembly

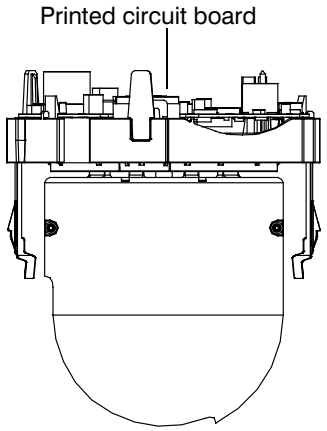
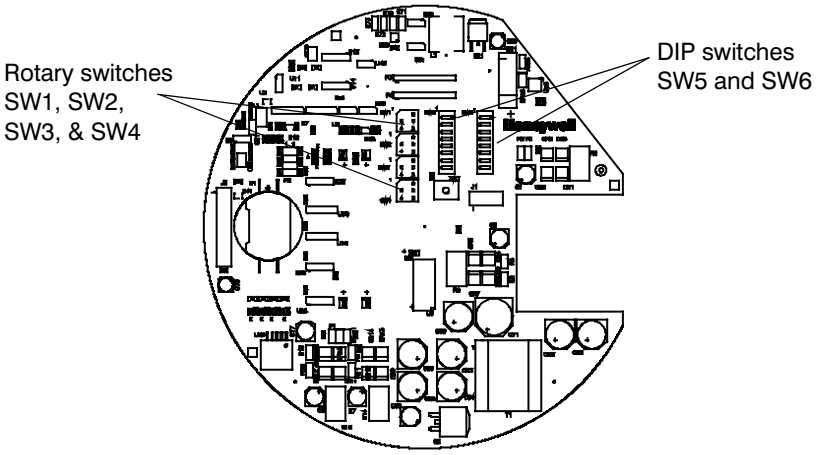


Figure 2-2 Location of DIP and Rotary Switches on Main Board



Protocol Settings

DIP switch SW5 is used to select the protocol setting for your ACUIX. See *Table 2-1* for more information. The default protocol setting for the ACUIX is the Honeywell Diamond protocol.

Note If there are invalid settings on SW5 or SW6 regarding protocol or baud rate, the system defaults to Diamond protocol at 9600 baud rate.

Table 2-1 DIP Switch SW5 ACUIX Protocol Settings

Protocol Name	Switch Position							
	1	2	3	4	5	6	7	8
IntelliBus™	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Diamond	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF
MAXPRO Mode	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	OFF
VCL - RS485	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF	OFF
VCL Video Telemetry (Control over Coax)	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	OFF
Pelco P	**ON**	OFF	**ON**	OFF	OFF	OFF	OFF	OFF
Pelco D	OFF	**ON**	**ON**	OFF	OFF	OFF	OFF	OFF

Baud Rate

DIP SW6, position 1 through 4 are used to set the baud rate. The baud rate of the ACUIX and the control equipment must be the same.

Note If there are invalid settings on SW5 or SW6 regarding protocol or baud rate, the system defaults to Diamond protocol at 9600 baud rate.

Table 2-2 DIP Switch SW6 ACUIX Baud Rate Settings

Baud Rate	Switch Position			
	1	2	3	4
600	OFF	OFF	OFF	OFF
1200	**ON**	OFF	OFF	OFF
2400	OFF	**ON**	OFF	OFF
4800	**ON**	**ON**	OFF	OFF
9600	OFF	OFF	**ON**	OFF
19200	**ON**	OFF	**ON**	OFF
38400	OFF	**ON**	**ON**	OFF
57600	**ON**	**ON**	**ON**	OFF
115200	OFF	OFF	OFF	**ON**

Parity

DIP Switch SW6, positions 5 and 6 are used to set the parity.

Table 2-3 DIP Switch SW6 ACUIX Parity Settings

Parity	Switch Position	
	5	6
None	OFF	OFF
Even	**ON**	OFF
Odd	OFF	**ON**

Note SW6, position 7 should be kept OFF. This switch is only used during development for debugging purposes.

Sample Switch Settings

Legend for the following samples:

1 = On/ 0 = Off

Honeywell Diamond

For Honeywell Diamond protocol, the commonly used setting is 9600 baud, even parity.

SW5 - 10000001 (positions 1–8).

In above SW5–8 is ON to force reading from DIP switches. See *DIP Switch Address Override*, page *26*, for more information on setting SW5–8.

SW6 - 00101000 (positions 1–8) sets the ACUIX to 9600 baud with even parity.

VCL - RS485

For VCL - RS485 protocol, the commonly used setting is 9600 baud, no parity.

SW5 - 11000001 (positions 1–8).

In above SW5–8 is ON to force reading from DIP switches. See *DIP Switch Address Override*, page *26*, for more information on setting SW5–8.

SW6 - 00100000 (positions 1–8) sets the ACUIX to 9600 baud with no parity.

IntelliBus™

SW5 - 00000001 (positions 1–8).

In above SW5–8 is ON to force reading from DIP switches. See *DIP Switch Address Override*, page *26*, for more information on setting SW5–8.

SW6 - 01100000 (positions 1–8) sets the ACUIX to 38400 baud with no parity.

Camera Address Settings

Address selection is via rotary switches SW1, SW2, SW3, and SW4.

Table 2-4 ACUIX Camera Addresses

Address	Value
SW1	Units digit
SW2	Tens digit
SW3	Hundreds digit
SW4	Thousands digit

Caution The ACUIX can be addressed from 0000 to 9999. The addressing scheme may be restricted due to the limitations of the controller being used to control the ACUIX. For example, the HEGS5000/HEGS5001 controllers can control camera addresses 1 to 256. The HJZTP can control camera addresses 1 to 128.

Address Examples

1. To set the camera address to 1, set SW1 = 1, SW2 = 0, SW3 = 0, SW4 = 0 (CAM - 0001).
2. To set the camera address to 125, set SW1 = 5, SW2 = 2, SW3 = 1, SW4 = 0 (CAM - 0125).

Note If the ACUIX is set to address 0000, it will respond to control commands for any address. That is, if the ACUIX is set to address 0000 and the operator sends control commands for address 2, the ACUIX addressed 0000 will perform the commands for address 2. No validation is performed on the addresses by the ACUIX.

DIP Switch Address Override

DIP Switch SW5−8 can be set so the ACUIX sets the camera address based on the rotary switch settings or from memory. SW5−8 should be kept **ON** during normal operation so that the logical address can be changed from the on-screen setup menus.

SW5−8

OFF Logical address stored in memory overrides the DIP Switch settings.

ON The ACUIX is forced to read from the rotary switches and overrides the logical address stored in memory.

Factory Defaults

The factory default settings are as follows:

Protocol	Honeywell Diamond
Baud rate	9600
Parity	No parity
Address	Even
Termination	None

Restore Factory Defaults

SW5−7 is looked at only when the ACUIX is powered up. If this switch is ON at the time of power up, the factory defaults will be restored. For an already powered dome, you must place switch SW5−7 in the ON position, and then cycle the power to the ACUIX for the factory default settings to be restored.

SW5−7

OFF Normal Operation.

ON Restore Factory Default settings.

Note It is not advisable to keep this DIP switch (SW5−7) in the **ON** position. Once the factory default is achieved after a single power cycling, place SW5−7 back to the OFF position.

RJ45 Ethernet Connection

The RJ45 connector located on the ACUIX interface board is used for production use and testing only and has no functionality during normal dome use. This will not damage your ACUIX dome, but may affect your network. Honeywell recommends you DO NOT connect your network to the RJ45 connector.

3

Operation and Programming with Honeywell Diamond Protocol

Introduction

The availability of the ACUIX features and the way the ACUIX features are controlled is governed by the controller being used and the ACUIX protocol setting. This chapter describes the operation of the ACUIX set to Honeywell Diamond protocol and controlled by a model HEGS5000, HEGS5001 or HJZTP joystick controller.

HEGS5000/5001 Controller

Power Up

Upon power up of the ACUIX, a start up screen displays the protocol, baud rate, parity, data bits, camera model, and software (VXWorks and FPGA) release dates and versions. If the Honeywell startup screen has been turned off in the setup menus, an X displays in its place.

```
    ---- ACUIX Dome ----
Protocol ..... Diamond
9600 baud no parity -8bits
Camera ..... Model
Honeywell Video Systems

DOMEApp date version B0
FPGABit date version B1
Please wait......_8

        CAM-0006 M
```

If the ACUIX is set to find home on startup, the message `Finding Home...` displays on the monitor. Once the ACUIX has found home, the message `Home Found...` is briefly displayed.

If the ACUIX is not set to find home on startup, the ACUIX finds home when it receives the first control command. After the ACUIX finds home, the operator can control the ACUIX.

Reset ACUIX

To reset an ACUIX using an HEGS5000/5001 controller you must be logged in as a Master user on the controller. This reset is the same as if power was removed from the ACUIX and then restored.

1. Press **Dome Menu**. `Dome Setup Menu` displays in the controller's LCD window. If Dome Setup Menu is not displayed, press **+** or **-** until it displays.
2. Press **Enter** to access the Dome Setup Menu.
3. Press **4** for Diagnostic Options.
4. Press **7** for Scan and Camera Reset.

You can also press **Clear**/**Manual** on the HEGS5000/5001 controller four times to reset the ACUIX.

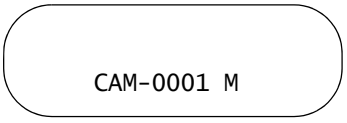
Note To restore the ACUIX to factory default settings, you can access the on-screen setup menus or make use of the DIP switches as described in *Restore Factory Defaults* on *page 27*.

Manual Control

Manual control of an ACUIX dome includes pan, tilt, zoom, focus, and iris. To manually control an ACUIX, the address of the ACUIX must be selected as the control camera. When an operator performs a command at the controller, the controller sends out the control command with the control camera address.

Example: The operator has camera 2 selected as the control camera on the controller. The operator performs the tilt function on the controller. The controller sends out the tilt command to camera address 2. All the ACUIX domes on the control loop receive the command, but only the ACUIX with address 2 performs the tilt command. If the ACUIX is set to address 0, CAM-0000, the ACUIX responds to commands for all addresses.

When the ACUIX is being manually controlled the letter M (manual) is added to the camera ID. The camera message must be turned on in the Display Options menu for it to be added to the video signal and viewed on a monitor.



Pan and Tilt

The joystick on the HEGS5000/5001 controller is used to control the pan and tilt functions of the ACUIX. The maximum pan speed is selectable between 120°, 240°, or 480° per second. The maximum tilt speed is one-half the maximum pan speed. If the maximum pan speed is set to 240° per second, the maximum tilt speed is set to 120° per second. The pan and tilt speeds are set in the on-screen setup menus under Control Options.

Table 3-1 HEGS5000 Joystick Operation

Action	Function
Joystick up	Tilt up
Joystick down	Tilt down
Joystick left	Pan left
Joystick right	Pan right

Note If the pan and/or tilt functions of the ACUIX are reversed through the on-screen setup menus, joystick up performs tilt down, joystick down performs tilt up, joystick left performs pan right and joystick right performs pan left.

Note The HEGS5000/HEGS5001 controller will not function properly if the polarity of the 2-wire RS485 lines is reversed.

Lens Control

The camera/lens package in the ACUIX provides automatic exposure control. The lens iris, camera video gain, and camera shutter speed adjust automatically to the brightness of the scene (unless manual exposure, or iris, is selected at the controller).

Under normal conditions the camera shutter is set to 1/60s for NTSC and the video gain is set to 1 (0dB). As the light level varies in this normal area the lens iris is opened and closed to compensate for the variations in the light level.

If the light level increases beyond the level that can be compensated for by closing the lens iris the camera will begin to decrease the time that the electronic shutter is opened down to a minimum of 1/10000s.

If the light level decreases when the camera is operating at a shutter speed of less than normal (see above) the shutter time will increase until it reaches the normal time and if the light level decreases beyond the level that can be compensated for by opening the lens iris the camera will begin increasing its video gain.

If the camera is operating with the video gain higher than the minimum and the light level increases the video gain will be decreased until it reaches the minimum value.

If the camera has auto slow shutter mode and it is set to auto and the light level continues to decrease beyond the point where the camera's maximum video gain is reached, then the time that the electronic shutter is open will increase beyond 1/60s for NTSC until it reaches the maximum shutter time (1/2 to 2s depending on the camera). This will cause blurred motion and slow updating of the picture.

If the camera is in the slow shutter mode and the light level increases the shutter time will decrease until it reaches the normal setting (see above).

If the camera has True Day Night (TDN) functionality the IR block filter will be removed and the picture switched to black and white at a preselected increased gain and shutter time point. This point is either detected by the camera or by the ACUIX depending on the camera type and can be modified in either case. The details of the operation of the TDN feature depends on the specific camera being used.

If the camera has TDN and the IR block filter has been removed and the light level increases beyond the TDN transition point set by the camera or the ACUIX the IR block filter will be inserted and the picture is returned to color.

For all cameras with manual exposure control (also referred to as manual iris control) the same sequence is followed when increasing and decreasing manual exposure control. When in manual exposure control the TDN function is also controlled manually, however, it remains independent of the manual exposure control.

If the unit is powered down then back up, the ACUIX comes back up in the iris mode it was in when it was powered down.

The lens auto focus feature can be set to adjust automatically when the zoom setting changes or when the pan, tilt, or zoom settings change. The lens auto focus can also be disabled so the operator has to manually focus the lens. If the ACUIX is programmed for either of the two auto focus settings, the operator can manually control the lens focus. The minimum focus distance is set at 1.0 meter (3.3 ft) from the camera lens in both manual and automatic focus modes.

Refer to *Table 3-2* for information on manually controlling the camera lens features using the HEGS5000/5001.

Table 3-2 HEGS5000/5001 Camera Lens Control

Control	Function
Joystick Knob	Rotate the joystick knob clockwise and counterclockwise for zoom in and out functions, respectively. The manual speed of the zoom function is set through the on-screen setup menus under Camera Options.
Auto Iris	Places the lens in auto exposure mode.
Iris Open	Manually increases exposure to lighten the scene.
Iris Close	Manually decreases exposure to darken the scene.
Focus Near/Focus Far	Manually focuses the lens.

18X Color Camera (FCB-EX48C)

The 18X color camera has an 18X optical zoom lens with a digital zoom function up to 216X.

The White Balance can be set to manual mode. If the unit is in manual mode, the red and blue gain settings can be set between 0 (low) and 255 (high).

The 18X color camera features motion detection. There are four default motion detection zones. If motion detection is set to ON, and the camera detects motion in any one of the four zones, the message `Motion Detected` displays on the video. The message remains on the video until the ACUIX either is controlled by the operator, responds to an alarm, or performs the default function. Once motion is detected, the ACUIX automatically disables motion detection. The user must re-enable motion detection through the setup menus.

18X True Day/Night Camera with Wide Dynamic Range (FCB-EX490D)

The 18X True Day/Night (TDN) camera has a feature called Wide Dynamic Range (WDR) that can be enabled or disabled. The wide dynamic range is only functional if the camera is in auto iris mode. When the wide dynamic range is enabled, the camera scans the scene and sets the exposure level so both the dark areas and bright areas in a scene can be viewed.

When the controller is in manual iris mode the wide dynamic range is disabled and the auto digital shutter does not go below 1/60s for NTSC or 1/50s for PAL. The exposure setting (iris, gain or shutter) that is controlled when the camera is in manual exposure mode is selectable, while the other two will be in auto mode.

The White Balance can be set to manual mode. If the unit is in manual mode, the red and blue gain settings can be set between 0 (low) and 255 (high).

The 18X color camera features motion detection. There are four default motion detection zones. If motion detection is set to ON, and the camera detects motion in any one of the four zones, the message `Motion Detected` displays on the video. The message remains on the video until the ACUIX either is controlled by the operator, responds to an alarm, or performs the default function. Once motion is detected, the ACUIX automatically disables motion detection. The user must re-enable motion detection through the setup menus.

26X True Day/Night Camera with Wide Dynamic Range (FCB-EX990D)

The 26X True Day/Night (TDN) camera has a feature called Wide Dynamic Range (WDR) that can be enabled or disabled. The wide dynamic range is only functional if the camera is in auto iris mode. When the wide dynamic range is enabled, the camera scans the scene and sets the exposure level so both the dark areas and bright areas in a scene can be viewed.

When the controller is in manual iris mode the wide dynamic range is disabled and the auto digital shutter does not go below 1/60s for NTSC or 1/50s for PAL. The exposure setting (iris, gain or shutter) that is controlled when the camera is in manual exposure mode is selectable, while the other two will be in auto mode.

The White Balance can be set to manual mode. If the unit is in manual mode, the red and blue gain settings can be set between 0 (low) and 255 (high).

The 26X color camera features motion detection. There are four default motion detection zones. If motion detection is set to ON, and the camera detects motion in any one of the four zones, the message `Motion Detected` displays on the video. The message remains on the video until the ACUIX either is controlled by the operator, responds to an alarm, or performs the default function. Once motion is detected, the ACUIX automatically disables motion detection. The user must re-enable motion detection through the setup menus.

35X True Day/Night Camera with Wide Dynamic Range, Progressive Scanning and Image Stabilization (VK-S654)

The 35X camera has a feature called Wide Dynamic Range (WDR) that can be enabled or disabled. The wide dynamic range is only functional if the camera is in auto iris mode. When the wide dynamic range is enabled, the camera scans the scene and sets the exposure level so both the dark areas and bright areas in a scene can be viewed.

When the controller is in manual mode the wide dynamic range is disabled and the auto digital shutter does not go below 1/60s for NTSC. The exposure setting (iris, gain or shutter) that is controlled when the camera is in manual exposure mode is selectable, while the other two will be in auto mode.

The White Balance can be set to manual mode. If the unit is in manual mode, the red and blue gain settings can be set between 0 (low) and 511 (high).

The 35X camera also features progressive scanning, image stabilization, and motion detection. When the default interlace scanning is set to the default ON, the camera scans all the odd lines and then all the even lines of video. If the interlace scanning is set to OFF, the camera is in progressive scan mode and scans all the lines of video. When the interlace scanning is set to ON, the wide dynamic range and motion detection features are disabled.

The 35X camera features electronic Image Stabilization (EIS) to eliminate blurry and jumpy video when the camera is bumped or jostled due to wind or traffic vibration. If the Image Stabilization is set to ON, the motion detection feature is disabled. When EIS is enabled, the camera reduces the area of the CCD that is scanned. This causes the video displayed on the monitor to appear to have zoomed in. When the dome undergoes a pan or tilt operation, electronic Image Stabilization is disabled while the camera moves, and then re-enables after the camera has stopped moving for a five second period.

The 35X camera features motion detection. There are eight default motion detection zones. If motion detection is set to ON, and the camera detects motion in any one of the eight zones, the message `Motion Detected` displays on the video. The message remains on

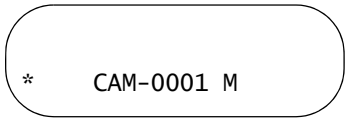
the video until the ACUIX either is controlled by the operator, responds to an alarm, or performs the default function. Once motion is detected, the ACUIX automatically disables motion detection. The user must re-enable motion detection through the setup menus.

Table 3-3 35X Camera Feature Dependencies

If:	Then:
Motion detection is enabled	Interlace scanning and image stabilization are disabled.
Image stabilization is enabled	Motion detection is disabled.
Interlace scanning is enabled	Wide Dynamic Range (WDR) and motion detection are disabled.
Wide Dynamic Range (WDR) is enabled	Interlace scanning must be disabled and the ACUIX must be in auto iris mode.

Freeze and Unfreeze Video

Press **Freeze Video** on the controller to toggle between freezing and unfreezing the current video scene. When the video is frozen, an asterisk displays on the same line as the camera ID, and the video remains frozen on the current scene until the operator unfreezes the video.



If the camera ID display is turned off, the asterisk displays by itself.

An operator can manually control the camera or send the camera to a Preset, but the video display does not change. When the video is unfrozen, the scene the camera is viewing is outputted on the video signal.

Flashback Operation

The patented flashback function enables the user to quickly return to a scene of interest. Initially pressing **Flashback** when viewing a scene saves that scene as a flashback scene. Moving to a subsequent scene and pressing **Flashback** both saves that scene and returns the camera to the previously saved flashback scene.

For instance, after the ACUIX has found home (initialized), the operator finds a scene of interest. The operator presses **Flashback** and ACUIX stores that scene (Scene A). If the operator then moves to another scene (Scene B) and presses **Flashback**, ACUIX saves Scene B and returns to Scene A. Pressing **Flashback** again returns the camera to Scene B. If the operator then manually moves to another scene (Scene C) and presses **Flashback** the ACUIX returns to Scene A. This occurs because the last time **Flashback** was pressed the camera was at Scene A, therefore, saving that scene in the Flashback memory.

The only exception is during a Preset Tour operation. For example, **Flashback** is pressed and the ACUIX returns to Scene A. After that, a Preset Tour is started. During the Preset Tour, the ACUIX moves from Preset 2 to Preset 3. If **Flashback** is pressed while the ACUIX is at Preset 3, the Preset Tour will be terminated and the ACUIX will go back to Preset 2.

Each time **Flashback** is pressed thereafter, the ACUIX toggles between Presets 2 and 3 until the ACUIX is manually controlled. After manual control, the flashback feature returns to normal operation. The next time **Flashback** is pressed, the current scene (Scene D) is stored and the ACUIX returns to the last Flashback scene (in this case, Scene A) prior to the start of the Preset Tour. Once at Scene A, if **Flashback** is pressed, the ACUIX goes back to Scene D.

NightShot Mode

The NightShot feature is only available on ACUIX units with cameras that have a removable IR block filter. These cameras are often referred to as true day/night (TDN) cameras. When the IR block filter is removed (NightShot on), the camera sensitivity for viewing dark scenes is increased and the video is converted to black and white.

Note NightShot mode must be set to manual in the setup menus to control it from the controller.

To toggle between standard operation and NightShot mode:

1. Press **Run Menu** continuously until `NightShot` displays on the controller's LCD.
2. Press **Enter**.

A message (`NightShot On` or `NightShot Off`) displays on the monitor where the ACUIX video is viewed.

The NightShot mode can also be toggled on and off using **Preset 99**. Refer to *Recall Presets* on page *41* for more information on sending the ACUIX to a Preset.

Alarm Operation

The ACUIX has 4 alarm inputs that can be configured as normally open or closed. If the contact deviates from normal, an alarm occurs. The ACUIX can be programmed (through the on-screen setup menus) to activate a Preset, a Preset Tour, or Mimic Tour in response to an alarm. Refer to *Program Alarms*, page *93*, in *Chapter 7, On-Screen Setup Menus* for more information on programming alarms.

The alarms are sampled 16 times per second. After the alarm has been activated, the ACUIX determines if a function has been programmed for that alarm, and if that alarm is enabled. If either of those conditions are not met, the alarm will be discarded. If both conditions are met, the alarm is considered triggered. If no other alarm is in service, the alarm is serviced. The function assigned to the alarm is performed. The ACUIX stays in this alarm state until the alarm is acknowledged. Any additional alarms that are triggered are not serviced until the first alarm is acknowledged. If there is more than one alarm waiting to be serviced, they are serviced in order of alarm number, starting with the lowest.

An alarm cannot be reactivated until it has been both acknowledged, and the contact returned to normal. After acknowledgment and the contact change of state, the cycle can begin again.

There are three ways to acknowledge an alarm:

- The first way is to press the key on the controller that represents the ESC key (**Clear**/**Manual** on the HEGS5000/HEGS5001 controller). This sends a Return to Manual command to the ACUIX. When the ACUIX receives this command, it acknowledges any alarm that is currently active.
- The second way to acknowledge an alarm is to take manual control. This will acknowledge ALL the alarms that are present—even those waiting to be serviced. To acknowledge alarms sequentially: press a PTZ button to acknowledge the first alarm, then press another PTZ button to acknowledge the second alarm, and so on.
- The final way is to use the default function. The default function runs a Preset, Preset Tour, or Mimic Tour after a user-programmable amount of inactive time. It also auto-acknowledges an alarm after the programmable delay. It acknowledges each active alarm until all alarms are inactive. At that point, the default function runs. If any new alarms come in after this, the cycle starts again.

The alarm status displays on-screen on the same text line set aside for the Camera ID number. The Camera ID does not have to be displayed in order to view the alarm status. If any alarms are active, the ACUIX displays `AL-`. After the `AL-`, the ACUIX lists all active alarms in order. Thus, if alarms 1, 3, and 4 are active, the ACUIX displays `AL-1 3 4`. There is no on-screen indication as to which alarm is currently being serviced. That can be determined by what function is active.

Find Home

The ACUIX has a mechanical “Home” position. The home position is a pan and tilt position used as a reference point for controlling and programming the ACUIX. Upon power-up of the unit, the ACUIX must find its home position before it responds to any control commands.

The ACUIX can be sent to its home position from the HEGS5000 controller as follows:

1. Press **Run Menu** until `Find Home` displays on the controller’s LCD screen.
2. Press **Enter**. The controller sends out the data to send the control camera to its mechanical home position.

The message, `Home Found...` displays. If the message, `Homing Failed`, displays, the ACUIX can be manually controlled, but cannot be programmed and automatic functions (Presets, Mimic Tours, Preset Tours, and Privacy Zones) are not operational.

Presets

A Preset is a programmed scene (pan, tilt, zoom, focus, and iris setting) that can be recalled by an operator, in response to an alarm, or set as the default function when the ACUIX is idle for a specified time. There are 161 (0–160) Presets in each ACUIX dome. Presets 71–79 and 98–99 are pre-programmed for special functions and cannot be re-programmed.

Table 3-4 Pre-programmed Presets

Preset	Function
72	Recover encrypted PIN
75	Administrator Login screen
98	Camera reset
99	NightShot On/Off

Preset 99 is reserved for manually controlling the NightShot mode on cameras with IR block filters. Preset 99 toggles between standard operation and the NightShot mode. The NightShot mode must be manual for this Preset to function. The NightShot mode causes the camera to pull the IR block filter and go to black and white to increase the sensitivity of the video.

Program Preset

There are two methods for programming and saving Presets when using the HEGS5000/HEGS5001 controller. The first method quickly saves the current camera scene and assigns a predefined title. For example, Preset 1 is titled PS1, Preset 2 is titled PS2, and so forth. The second method allows the user to program a 24-character title.

Note The HEGS5000/5001 controller allows operators to program Presets 1–10. To program Preset 0 and 9, you must log in as a Master user.

Program Preset Method 1 (PSn Title)

1. Position the camera (pan, tilt) and the lens (zoom, focus, iris) to the desired scene.
2. Press **Run Menu** until `Quick Prg Preset` displays on the LCD screen and then press **Enter**.
3. Using the numeric keys, enter the desired Preset number (refer to *Table 3-4* for reserved Presets) and press **Enter**. The current PTZ position and lens settings are saved for the Preset number entered.

Example: To save Preset 5 with the default title PS5.

1. Position the camera and lens as desired.
2. Press **Run Menu** until `Quick Prg Preset` displays.
3. Press **Enter**.

4. Press **5**.
5. Press **Enter**.

   The current scene is saved as Preset 5 with the title PS5.

Program Preset Method 2 (User-defined Title)

1. Press **Dome Menu**.
2. Press **+** or **-** until `PreShot Menu` displays.
3. Press **Enter**.
4. Press **+** or **-** until `Program` displays.
5. Press **Enter**. The following displays in the controller's LCD window.

```
<     Select Function     >

                A
```

6. Follow the on-screen prompts that appear on the monitor where the ACUIX video is viewed.

   a. Enter the Preset number (see *Table 3-4* for reserved Presets) using the numeric keypad and press **Enter**. If the selected Preset number has already been programmed, the Preset title displays. To accept the existing title, press **Enter**. To change the current title proceed to step b.

Note The HEGS5000 is limited to Preset numbers 0–99.

Note Preset 99 is reserved for controlling the NightShot mode if this feature is available on the camera and cannot be programmed. For domes without the NightShot feature, Preset 99 can be programmed.

   b. Press **+** or **-** until the desired character displays on the controller's LCD screen, and press **Character Select**. The controller sends the character to the ACUIX. Continue selecting characters and pressing **Character Select** until the desired title displays on the monitor.

   c. Press **Enter**. The following commands are displayed on the monitor:

Table 3-5 Program Preset Menu Commands

Action	Required Steps
C to Change name location	Press **+** or **-** until C displays on the LCD and press **Character Select**. Use the up or down arrow keys to reposition the Preset title on the monitor screen.
E to Edit Preset	Press **+** or **-** until E displays on the LCD and press **Character Select**. Reposition the PTZ and/or change the lens settings, then repeat step 6.
D to Delete Preset	Press **+** or **-** until D displays on the LCD and press **Character Select**. The Preset number entered in step 6 is deleted.

Table 3-5 Program Preset Menu Commands

Action	Required Steps
S to Save Preset	Press + or - until S displays on the LCD and press **Character Select**. The current PTZ and lens (focus and iris) settings are saved for the Preset number entered in step 6.
N to Save name only	Press + or - until N displays on the LCD and press **Character Select**. This option is used for retitling Presets. Only the title entered in step 6b is saved for the Preset number entered. The current PTZ and iris settings of the dome are not saved.

7. Program another Preset by repeating step 6 or press **Clear**/**Manual** to exit the Preset programming menu.
8. Press **Dome Menu** or press **Menu ESC** three times to exit the menu on the controller LCD.

Example: Program Preset 1, titled Front Door in Camera 1.

1. Select Camera 1.
   a. Press **1**.
   b. Press **Camera**.
2. Position camera 1 to the desired Preset position (pan, tilt, zoom, focus, iris).
3. Press **Dome Menu**.
4. Press + or - until `PreShot Menu` displays on the LCD and press **Enter**.
5. Press + or - until `Program` displays on the LCD and press **Enter**.
6. Press **1** and press **Enter**.
7. Program the title.
   a. Press + or - until an upper case F displays on the controller LCD and then press **Character Select**.
   b. Press + or - until a lower case `r` displays and then press **Character Select**.
   c. Press + or - until a lower case o displays and then press **Character Select**.
   d. Press + or - until a lower case `n` displays and then press **Character Select**.
   e. Press + or - until a lower case `t` displays and then press **Character Select**.
   f. Press + or - until `Space` displays and then press **Character Select**.
   g. Press + or - until an upper case D displays and then press **Character Select**.
   h. Press + or - until a lower case o displays and then press **Character Select**.
   i. Press + or - until a lower case o displays and then press **Character Select**.
   j. Press + or - until a lower case `r` displays and then press **Character Select**.
   k. Press **Character Select**.
8. Press + or - until an upper or lower case S displays on the controller LCD and then press **Character Select**.
9. Program another Preset or press **Clear**/**Manual** to exit.
10. Press **Dome Menu** or press **Menu ESC** three times to exit the menus on the controller LCD display.

Recall Presets

To recall a Preset:

1. Using the numeric keypad, enter the Preset number to recall (see *Table 3-4* for reserved Presets).

Note The HEGS5000 is limited to recalling Presets 0–99.

2. Press **PreShot**.

Example: Recall Preset 11.

1. Press **1**.
2. Press **1** again.
3. Press **PreShot**.

Note If the ACUIX has not already found its home position, it will first find its home position and then go to the preset.

The ACUIX goes to the pan, tilt, zoom, iris, and focus positions programmed in the Preset. While the ACUIX is going to a Preset position, the title of the Preset is added to the video signal and the letter A (automatic) is added to the camera ID. The Preset title and the letter A remain on the video until the ACUIX gets another command.

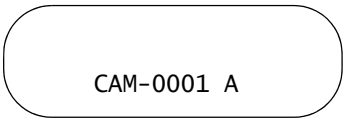


Table 3-6 Preset Title Operation

If:	Then:
Preset title is on	The Preset title displays on the monitor.
Camera message is on	The Camera ID and the letter A are displayed on the monitor.
An operator sends the ACUIX to a Preset that has not been programmed	The message `DOES NOT EXIST` displays on the monitor.

The ACUIX has a Still Preset feature that can be enabled or disabled through the Camera Options menu.

Table 3-7 Still Preset Operation

If:	Then:
Still Preset is on (video is frozen)	Video is frozen between Presets. Video from the old position remains until the scan arrives at the new Preset, then switches to the video from the new Preset. While video is frozen, an asterisk (*) appears on the same line as the Camera ID.
Still Preset is off (video is unfrozen)	Video returns to normal operation.

Still Preset

If the camera installed in the ACUIX has the Still Preset feature, and it is set to ON in the Camera Options menu, the ACUIX freezes the video between Presets. When the ACUIX is viewing a Preset and receives a command to go to another Preset, the video remains at the current Preset until the ACUIX arrives at the next Preset and then switches the video to the new Preset. While traveling between Presets, an asterisk displays to the left of the camera ID. If Still Preset is set to OFF, the ACUIX displays the actual video as it travels from one Preset to the next. If turned on and video is recording, this feature saves storage space

List Programmed Presets

A list of the programmed Presets can be viewed for each ACUIX. To view a listing of the programmed Presets, perform the following steps. This display cannot be edited; it is for viewing purposes only.

1. Press **Dome Menu**.
2. Press **+** or **-** until `PreShot Menu` displays on the controller LCD.
3. Press **Enter**.
4. Press **+** or **-** until `List` displays on the controller LCD.
5. Press **Enter**. A list of the programmed Presets displays on the monitor (where the ACUIX video can be viewed).
6. The controller LCD display shows the command `Page Down`. Press **Enter** to view more pages of the listing. When you have reached the end of the listing, `End of Directory` displays on the monitor. To go back to the first page of the listing, press **Enter**.
7. When you are finished viewing the Preset listing, press **Clear**/**Manual**.
8. To exit the menu on the LCD controller, press **Dome Menu** or press **Menu ESC**.

Preset Tours

Sixteen Preset Tours (1–16) can be programmed for each ACUIX. Up to 64 Presets, with velocity settings and dwell times for each Preset, can be programmed into every Preset Tour. Preset Tours can be started by an operator, started in response to an alarm, or programmed as a default function when the ACUIX is idle for a specified amount of time.

When an ACUIX receives a command to run a Preset Tour, the ACUIX goes to the first Preset programmed in the Preset Tour at maximum velocity (480°/second) and remains at the Preset for the programmed dwell time, then goes to the next Preset in the Preset Tour at the programmed velocity and remains at that Preset for the specified dwell time, and so forth for all other programmed Presets.

When an operator runs a Preset Tour continuously, the ACUIX goes from the last Preset to the first Preset at the programmed velocity. The amount of time the ACUIX takes to go to each Preset depends on the programmed velocity and the distance to the next Preset's pan and tilt coordinates. The velocity is programmable from 1° to 480° per second. The title of each Preset, as it is viewed, is added to the video signal. For the title to be displayed on the monitor, Preset Titles must be set to ON. The Preset Tour repeats continuously until an operator manually controls the ACUIX (pan, tilt, zoom, focus, or iris) or the ACUIX receives a Preset, Preset Tour, Mimic Tour, or find home command.

When an operator runs a Preset Tour once, the ACUIX goes to each Preset programmed as defined above for continuous operation. When the ACUIX executes the last Preset, it automatically stops the Preset Tour.

Program Preset Tours

Note Preset Tour programming is only available to a user logged in as the Master user on the HEGS5000/HEGS5001 controller.

1. Press **Dome Menu**.
2. Press **+** or **-** until `VectorScan Menu` displays.
3. Press **Enter**.
4. Press **+** or **-** until `Program` displays.
5. Press **Enter**. Follow the on-screen prompts that appear on the monitor where the ACUIX video is viewed.
6. Enter the Preset Tour number (**1**–**16**) using the numeric keypad and press **Enter**. If the selected Preset Tour number has already been programmed, the title displays and the programmed Presets are displayed. To accept the existing title, press **Enter**. To change the current title, proceed to step 7.

Note Preset Tours 1– 16 can be programmed from the HEGS5000 controller.

7. Enter the desired title by performing the following steps:

a. Press + or - until the desired character displays on the LCD screen, and then press **Character Select**. The controller sends the character to the ACUIX.

b. Continue selecting characters and pressing **Character Select** until the desired title displays on the monitor.

c. Press **Enter**. The cursor moves to the first Preset field.

8. Enter the first Preset number (0–70, 80–97, or 100–160) using the numeric keys.

Note If the cursor doesn't automatically move to the Velocity field, press the right arrow key below the controller's LCD.

9. Enter the velocity from **1** to **480** (degrees per second) in the VELOCITY column of the 0 row. If the cursor doesn't automatically move to the Velocity field, press the right arrow key below the controller's LCD.
10. Enter the Dwell Time from **0**–**99** seconds.
11. Continue entering Presets (up to a total of 64) by repeating steps 8, 9, and 10.
12. Press **Enter** when finished adding Presets. The following commands are displayed on the bottom of the monitor.

Table 3-8 Preset Tour Commands

Command	Function
E = Edit	Press + or - key until E displays on the LCD and press **Character Select**, then repeat steps 8–11.
D = Delete	Press + or - key until D displays on the LCD and press **Character Select**. The Preset Tour number entered in step 6 is deleted.
S = Save	Press + or - key until S displays on the LCD and press **Character Select**. The programming entered for the Preset Tour number entered in step 6 is saved.

13. Program another Preset Tour or press **Clear**/**Manual** to exit the VectorScan Programming menu.
14. Press **Dome Menu** or press **ESC** three times to exit the menus on the controller LCD.

List Programmed Preset Tours

A list of the programmed Preset Tours can be viewed for each ACUIX. The list displays the Preset Tour numbers and titles. The Preset Tours cannot be edited from this display.

1. Press **Dome Menu**.
2. Press **+** or **-** until `VectorScan Menu` displays on the LCD and press **Enter**.
3. Press **+** or **-** until `List` displays on the LCD and press **Enter**.

   The Preset Tour (VectorScan) list, including Preset Tour numbers and titles, displays on the monitor (where the video from the ACUIX can be viewed).

   The controller LCD display shows the command `Page Down`. Press **Enter** to view more pages of the listing (if applicable). When you have reached the end of the listing, `End of Directory` displays on the monitor. To go back to the first page of the listing, press **Enter**.
4. When you are finished viewing the Preset Tour listing, press **Clear**/**Manual**.
5. To exit the menu on the LCD controller, press **Dome Menu** or press **Menu ESC**.

List Contents of a Preset Tour

The contents of each Preset Tour stored in the ACUIX can be viewed. The Preset Tour contents cannot be edited from this display. The list displays the Presets with the programmed velocity settings and dwell times in the order they were programmed.

1. Press **Dome Menu**.
2. Press **+** or **-** until `VectorScan Menu` displays on the LCD and press **Enter**.
3. Press **+** or **-** until `Vscan Contents` displays on the LCD and press **Enter**.
4. Enter the Preset Tour (VectorScan) number (**1**–**16**) you want to view.

   The contents of the selected Preset Tour displays on the monitor where the ACUIX video is viewed.

   Use the up and down keys to scroll up and down through the contents.
5. When you are finished viewing the Preset Tour contents, press **Enter**.
6. To exit the menu on the LCD controller, press **Dome Menu** or press **Menu ESC** until the LCD display is cleared of all menus.

Run Preset Tour Once

Perform the following procedure to run a Preset Tour once:

1. Press **Dome Menu**.
2. Press **+** or **-** until `VectorScan Menu` displays on the LCD and press **Enter**.
3. Press **+** or **-** until `Run Once` displays on the LCD and press **Enter**.
4. Enter the Preset Tour (VectorScan) number (**1**–**16**) using the numeric keys.

Note The ACUIX supports Preset Tours 1–16 while the HEGS5000 is limited to running Preset Tours 0–9. Therefore, only Preset Tours 1–9 can be run on an ACUIX from a HEGS5000 controller.

5. Press **Enter**.

   The dome goes to each programmed Preset at the velocity programmed and for the dwell time specified and then stops. The ACUIX returns to manual mode and the letter `M` displays next to the camera ID.

Run Preset Tour Continuously

To run a Tour continuously means the ACUIX runs the Preset Tour from beginning to end; then repeats the list until halted by an operator.

Caution Continuous Preset Tour operation for extended periods of time (more than 8 hours) is not recommended. Continuous operation results in increased zoom lens failure and maintenance expense. Similarly, avoid setting auto focus to continuous.

To run a programmed Preset Tour continuously:

1. Enter the Preset Tour (VectorScan) number (**1**–**9**) using the numeric keys.
2. Press **VectorScan**.

   The VectorScan runs continuously until the ACUIX receives another command.

Stop Preset Tour

To stop a Preset Tour, you can:

- Manually control the ACUIX by moving the joystick in any direction.
- Send the ACUIX to a Preset.
- Start another Preset Tour or Mimic Tour.
- Press **Flashback**.

Mimic Tours

Sixteen (16) Mimic Tours up to 120 seconds each can be programmed in each ACUIX. A Mimic Tour stores the manual commands (pan, tilt, and zoom) performed by an operator. A tour can be recalled by an operator, activated in response to an alarm, or programmed as the default function when the ACUIX is idle for a specified time.

Program Mimic Tours

Note Mimic Tour programming is only available to a user logged in on the HEGS5000/5001 controller as the Master user.

Method 1: HEGS5000 LCD (Tours 1–3)

1. Press **Dome Menu**.
2. Press **+** or **-** until `Tour Menu` displays on the controller LCD.
3. Press **Enter**.
4. Press **+** or **-** until `Program` displays on the controller LCD, and press **Enter**.
5. Enter the Mimic Tour number (**1**–**3**) you desire to program using the numeric keypad on the controller and press **Enter**. The controller LCD displays `Tour Prgrm Stop`.
6. The ACUIX begins to count down from 120 to 0 seconds. Perform the desired pan, tilt, and zoom commands until the ACUIX times out. The ACUIX saves all commands as the operator performs them. To end the programming before the ACUIX times out, press **Enter** (`Tour Prgm Stop`) or press **Clear**/**Manual**.

   A message `PROGRAM MIMIC TOUR COMPLETE` displays on the monitor.

Method 2: On-Screen Setup Menu

See *Mimic Tour (Honeywell Diamond Protocol Only)*, page *116*, in *Chapter 7, On-Screen Setup Menus* for more information on setting up Mimic Tours.

Run Mimic Tour

Caution Continuous Mimic Tour operation (no times with zero motion and autofocus set on pan, tilt, and zoom) is not recommended. Continuous operation results in increased zoom lens failure and maintenance expense. Similarly, avoid setting auto focus to continuous.

Method 1 (Tours 1–3)

1. Press **Dome Menu**.
2. Press **+** or **-** until `Tour Menu` displays on the LCD and press **Enter**.
3. Press **+** or **-** until `Run` displays on the LCD and press **Enter**.
4. Enter the desired Tour number (**1**–**3**) using the numeric keys and press **Enter**. The programmed Tour begins and runs continuously until the ACUIX receives another command.

Method 2 (Tours 1–3)

1. Press **Run Menu** until `Run Tour` displays on the LCD and then press **Enter**.
2. Enter the desired Tour number (**1**–**3**) using the numeric keys and press **Enter**. The programmed Tour begins and runs continuously until the ACUIX receives another command.

Method 3 (Tours 1–16)

See *Mimic Tour (Honeywell Diamond Protocol Only)*, page *116*, in *Chapter 7, On-Screen Setup Menus*, for more information on running Mimic Tours.

Delete a Mimic Tour

Perform one of the following methods to delete a Mimic Tour. Existing programming in a Mimic Tour can also be overwritten by simply re-programming the Mimic Tour.

Method 1 (Tours 1–3)

1. Press **Dome Menu**.
2. Press **+** or **-** until `Tour Menu` displays on the LCD.
3. Press **Enter**.
4. Press **+** or **-** until `Delete` displays on the LCD.
5. Press **Enter**.
6. Enter the desired Tour number (**1**–**3**) using the numeric keys.
7. Press **Enter**.

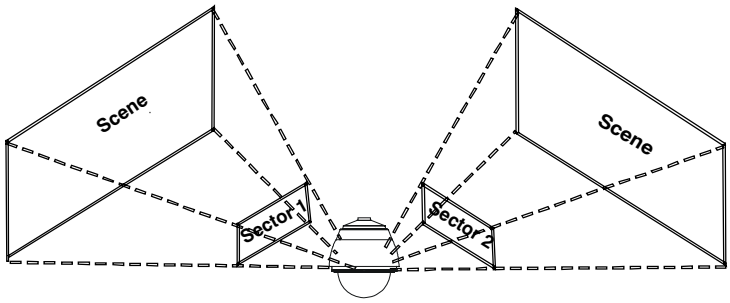
Method 2 (Tours 1–16)

See *Mimic Tour (Honeywell Diamond Protocol Only)*, page *116*, in *Chapter 7, On-Screen Setup Menus*, for more information on deleting a Mimic Tour.

Sector IDs

Sector IDs are used to quickly identify specific areas or scenes an ACUIX is viewing while an operator is manually controlling the ACUIX. Each ACUIX can be programmed to store up to 16 sectors. The sectors can overlap. The following diagram shows two Sector IDs.

Figure 3-1 Sectors IDs



Whenever an operator positions the ACUIX to view an area inside Sector 1, the title (for example, FRONT GATE) of Sector 1 is added to the video signal.

Note The Sector title display must be set to ON to view Sector titles on the monitor.

If the operator positions the ACUIX where one or more programmed sectors overlap, the ACUIX sequences between the sector titles for 1.5 seconds per sector. The operator looking at the monitor quickly knows the location the ACUIX is viewing. The location of the Sector ID title is programmable. See *Change Sector Name Location*, page *91*, in *Chapter 7, On-Screen Setup Menus* for more information.

Program Sector IDs

1. Press **Dome Menu**.
2. Press **+** or **-** until `Sector/Priv Menu` displays on the LCD.
3. Press **Enter**.
4. Press **+** or **-** until `Program` displays on the LCD.
5. Press **Enter**.
6. Enter the desired Sector number (**1**–**16**) to program.
7. Press **Enter**.
8. If desired, enter the Sector title (up to 24 characters):
   a. Press **+** or **-** until the desired character displays on the LCD screen, and then press **Character Select**. The controller sends the character to the ACUIX.
   b. Continue selecting characters and pressing **Character Select** until the desired title displays on the monitor.
   c. Press **Enter**.

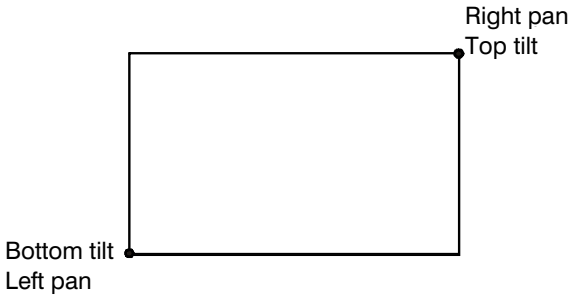
The following options are displayed on the monitor:

Table 3-9 Sector ID Commands

Command	Function
E to Edit Sector	Press + or - key until E displays on the LCD screen and press **Character Select**. Repeat *step 8*.
D to Delete Sector	Press + or - key until D displays on the LCD screen and press **Character Select**. The Sector number entered in *step 6* is deleted.
S to Save Sector Coordinates	Press + or - until S displays on the LCD screen and press **Character Select**. Follow the instructions in *step 9* for saving the Sector coordinates.
N to Save Name only	Press + or - until N displays on the LCD screen and press **Character Select**. This option is used for renaming Sector IDs. Only the title entered in *step 8* is saved for the Sector number entered. The current Sector coordinates are not changed.

9. Press + or - until the character for the desired action displays on the LCD screen and then press **Character Select**. To save Sector coordinates, press + or - until S displays on the LCD screen and press **Character Select**. Refer to *Figure 3-2* for programming coordinates.

Figure 3-2 Sector ID Coordinates



   a. Using the joystick, move the ACUIX so the lower left corner of the sector is centered on the monitor, and then press **Enter**.

   b. Using the joystick, move the ACUIX so the upper right corner of the sector is centered on the monitor, and then press **Enter**.

Note If the upper right tilt position is below the lower left tilt position, the message `Illegal Tilt Direction` displays. Re-adjust the tilt position until the message disappears or press **Clear**/**Manual** to cancel the operation and return to manual operation.

10. Repeat *step 6* to *step 9* to continue programming Sectors or press **Clear**/**Manual** to return to manual operation.

11. Press **Dome Menu** or **Menu ESC** to exit the Dome Menu on the LCD display.

List Programmed Sectors

A list of the programmed sectors can be viewed for each ACUIX. The list displays the Sector numbers and titles. Sector IDs cannot be revised from the display.

1. Press **Dome Menu**.
2. Press **+** or **-** until `Sector/Priv Menu` displays on the LCD.
3. Press **Enter**.
4. Press **+** or **-** until `List` displays on the LCD.
5. Press **Enter**.
6. The controller LCD display shows the command `Page Down`. Press **Enter** to view more pages of the listing. When you have reached the end of the listing, `End of Directory` displays on the monitor. To go back to the first page of the listing, press **Enter**.
7. When you are finished viewing the Sector listing, press **Clear**/**Manual**.

Privacy Zones

All Privacy Zone programming is password protected when using Diamond protocol. The password is user-programmable for up to 22 alphanumeric characters.

Privacy Zones are used so an operator cannot view the scene where the camera lens is positioned. Whenever an operator positions the camera so that any portion of a programmed Privacy Zone would be visible in the video, the video blanks. If a unit is sent to a Preset that has been programmed so that any portion of a Privacy Zone would be visible, the Preset title displays on the monitor, but the video is blanked. If a unit is sent to a Preset and any portion of a Privacy Zone would be visible while traveling to the Preset, the video is blanked when any portion of a Privacy Zone would be visible.

Note Upon powering up, the ACUIX dome automatically finds home so the dome can then run Presets and so on as they were programmed. If a Privacy Zone is enabled, no video is shown during homing, as your Privacy Zones are not recognized until ACUIX has reached home. Video displays once the dome has reached its home setting, unless a Privacy Zone overlaps with the home setting.

The ACUIX stores the Privacy Zone data in nonvolatile memory, which will save the data when the ACUIX is not powered. If Privacy Zones have been programmed and the unit loses power, the video is blanked upon power-up until the unit finds a home to prevent any Privacy Zones being visible. Any command to move the ACUIX causes the unit to find home. If any portion of a Privacy Zone would be visible when the unit is at its home position, the video remains blank until the operator manually moves the ACUIX so that no portion of a Privacy Zone would be visible.

Creating a Privacy Zone

1. Press **Dome Menu**
2. Press + or – until `Sector/Priv Menu` displays on the LCD and Press **Enter**.
3. Press + or – until `Program` displays on the LCD and Press **Enter**.
4. Press + or – until P displays on the controller LCD and Press **Character Select**.
5. Enter the password (the factory set password is blank, just press Enter to submit a blank password):
   a. Press the + or – key to display the required character on the LCD screen and press **Character Select**. The controller sends the character to the ACUIX.
   b. Repeat step a until the password is complete and press **Enter**.
6. Enter the desired privacy number (**1-32**) for the new privacy zone and press **Enter**.
7. Enter the Privacy Zone title (up to 22 characters):
   a. Press the + or – key to display the required character on the LCD screen and press **Character Select**. The controller sends the character to the ACUIX.
   b. Repeat step a until the password is complete and press **Enter**.
8. Privacy Zone options are displayed on the monitor. Press + or – until S displays on the LCD and press **Character Select**.
9. A box appears on the video screen representing the privacy zone:
   a. Position the camera to view the scene you want blanked.
   b. Use the up, down, left and right arrow keys to resize the box so the area that you want blanked is covered by the box.
10. Press **Enter** to Save the Privacy Zone.
11. Program another Privacy Zone or press **Clear**/**Manual** to exit programming and return the ACUIX to manual control.

Modifying Privacy Zones

After a privacy zone has been created a number of its properties can be changed, such as the name and number associated with a privacy zone.

1. Follow *step 1* to *step 5* in *Creating a Privacy Zone*.
2. Enter the number (**1-32**) for the privacy zone to be modified and press **Enter** to display the following privacy zone command options on the monitor.

Table 3-10 Privacy Zone Commands

Command	Procedure
E to Edit	Press + or **-** until E displays on the LCD screen and press **Character Select**. Enter the new privacy number for the privacy zone. Press **Enter** to save the new number.
D to Delete Zone Coordinates	Press + or **-** until D displays on the LCD screen and press **Character Select**. The coordinates for the selected privacy zone are deleted.
S to Program Zone Coordinates	Press + or **-** until S displays on the LCD screen and press **Character Select**. For details on setting zone coordinates refer to *Creating a Privacy Zone*.
N to Save Privacy Title only	Press + or **-** key until N displays on the LCD screen and press **Character Select**. Press + or – key, followed by **Character Select** for each character needed for the privacy title name and then press **Enter** to save the new title name.

3. After completing the required procedure press **Clear**/**Manual** to exit programming and return the ACUIX to manual control.

Changing the Privacy Zone Password

1. Press **Dome Menu**.
2. Press + or **-** until `Sector/Priv Menu` displays on the LCD screen.
3. Press **Enter**.
4. Press + or **-** until P displays on the LCD screen and press **Character Select**.
5. Enter the current password.
   a. Press the + or **-** key until the desired character displays on the LCD screen, and then press **Character Select**. The controller sends the character to the ACUIX.
   b. Continue selecting characters and pressing **Character Select** until all the characters in the password have been sent to the ACUIX. The characters will appear as asterisks (*) on the monitor display for security purposes.
   c. Press **Enter**.

6. Press + or - until P displays on the controller LCD and press **Character Select**.
7. Enter the new password, as done in *step 5*.
8. Re-enter the new password for verification. If you enter a different password the second time, an `Invalid` message displays and you must start again.
9. After programming the password, you can program a Privacy Zone or press **Clear**/**Manual** twice to exit programming.

Note If the password has been forgotten, the ACUIX can be reset to the default password through the on-screen setup menus. See *Resetting Privacy Zone Password (Diamond or IntelliBus Protocols)*, page *81*, in *Chapter 6, ACUIX Password Feature*.

HJTZP Controller

For detailed information on the HJZTP controller see the *HJZTP-US/HJZTP-EU User Manual* (900.0570).

Power Up

The operation of the ACUIX upon power up is the same as described on *page 29*.

Reset ACUIX

Press and hold **Fn**, then press **F6** (menu), to send the **return to manual** (ESC) command. This command cancels automatic dome actions such as preset tours and alarm actions.

Manual Control

Manual control of the ACUIX when using VCL protocol with the HJZTP controller is the same as described in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*.

Pan and Tilt

The joystick on the HJZTP controller is used to control the pan and tilt functions of the ACUIX.

Table 3-11 HJZTP Joystick Operation

Control	Function
Joystick up	Tilt up
Joystick down	Tilt down
Joystick left	Pan left
Joystick right	Pan right The speed of pan and tilt is relative to the amount of movement applied to the joystick.
Joystick Knob	Rotate the joystick knob clockwise and counterclockwise to perform the zoom in and out functions, respectively. The manual speed of the zoom function is set through the on-screen setup menus under Camera Options.

Lens Control

The lens iris is automatically controlled by the camera, but can be controlled manually from the controller.

Iris

Press the **+** (OPEN) or **-** (CLOSE) keys to manually alter the iris of the camera. Press the **auto** key above the iris control keys to put the camera in auto-iris mode.

Focus

Press the **+** (FAR) or **-** (NEAR) keys to manually focus the camera.

Note The **auto** key above the focus keys has no action when in Diamond protocol mode. Auto focus control can be set using the domes OSD menus (see *Auto Focus*, page *100*), to come on when the camera is zoomed, or when the camera undertakes a pan, tilt or zoom action.

Freeze/Unfreeze Video

Press and hold **Fn**, then press **F2** (▼) or 'freeze' to toggle the camera between freeze mode on and freeze mode off.

Flashback Operation

Press and hold **Fn**, then press **F3** (◀) or press **auto180** to operate the flashback function.

NightShot Mode

Press **Aux** or enter **preset 99** to toggle the camera between nightshot mode on and nightshot mode off. This option only works if the ACUIX configuration includes a day/night camera.

Alarm Operation

The ACUIX has four alarm inputs that can be configured as normally open or closed. If the contact deviates from normal, an alarm occurs. The ACUIX can be programmed (through the on-screen setup menus) to activate a Preset, a Preset Tour, or Mimic Tour in response to an alarm. Refer to *Program Alarms*, page *93*, in *Chapter 7, On-Screen Setup Menus* for more information on programming alarms.

The alarms are sampled 16 times per second. After the alarm has been accepted, the ACUIX determines if a function has been programmed for that alarm, and if that alarm is enabled. If either of those conditions are not met, the alarm will be discarded. If both conditions are met, the alarm is considered triggered. If no other alarm is in service, the alarm is serviced. The function assigned to the alarm is performed. The ACUIX stays in the state of this alarm until it is acknowledged. Any additional alarms that are triggered are not serviced until the first alarm is acknowledged. If there is more than one alarm waiting to be serviced, they are serviced in order of alarm number, starting with the lowest.

An alarm cannot be reactivated until it has been both acknowledged, and the contact returned to normal. After acknowledgment and the contact change of state, the cycle can begin again.

There are three ways to acknowledge an alarm:

- The first way is to press the key on the controller that represents the ESC key ('F6' ('menu') on the HJZTP controller). This sends a Return to Manual command to the ACUIX. When the ACUIX receives this command, it acknowledges any alarm that is currently active.
- The second way to acknowledge an alarm is to take manual control. This will acknowledge ALL the alarms that are present—even those waiting to be serviced.
- The final way is to use the default function. The default function runs a Preset, Preset Tour, or Mimic Tour after a user-programmable amount of inactive time. It also auto-acknowledges an alarm after the programmable delay. It acknowledges each active alarm until all alarms are inactive. At that point, the default function runs. If any new alarms come in after this, the cycle starts again.

The alarm status displays on-screen on the same text line set aside for the Camera ID number. The Camera ID does not have to be displayed in order to view the alarm status. If any alarms are active, the ACUIX displays AL–. After the AL–, the ACUIX lists all active alarms in order. Thus, if alarms 1, 3, and 4 are active, the ACUIX displays AL–1 34. There is no on-screen indication as to which alarm is currently being serviced. That can be determined by what function is active.

Find Home

Press and hold **Fn**, then press **F1** (▲), to send the dome to its home position.

Presets

There are 161 (0-160) Presets available in each ACUIX dome. Presets 71–79 and 98–99 are pre-programmed for special functions and cannot be pre-programmed.

Program Preset

For example, to program Preset 1 using the HJZTP controller:

1. Move the dome to view the desired preset position using the joystick, zoom, focus or iris keys.
2. Press and hold the **Preset** key.
3. Press key **1**.
4. Release the **Preset** key and the current position of the dome has been defined as Preset 1.

Note Presets can also be defined using the OSD menus. When presets are defined in this way the preset title can also be edited.

Recall Preset

For example, to seek Preset 1:

1. Press key **1**.
2. Press **Preset**. The camera moves at the maximum speed to the previously defined Preset 1.

Presets 1 to 4 can also be selected by a single key press using the keys labelled Preset 1 to 4.

If a recall of an undefined preset number is attempted, the dome will not move and the message ‘Does Not Exist’ displays on the screen.

Preset Tours

Preset tours function the same when using the HJZTP controller as described by *Preset Tours*, page *43*, however, the on-screen menus may be accessed differently when using the HJZTP controller.

Note See *Program a Preset Tour (Honeywell VCL and Supported 3rd Party Protocols)*, page *117*, in *Chapter 7, On-Screen Setup Menus* for more information on setting up Mimic Tours. For more information on using the HJZTP controller with the ACUIX on-screen menu, see *HJZTP Joystick Controller*, page *84* and the HJZTP/HJZTP User Manual (900.0570).

Mimic Tours

Mimic tours function the same when using the HJZTP controller as described by *Mimic Tours*, page *47*, however, the on-screen menus may be accessed differently when using the HJZTP controller.

Note See *Mimic Tour (Honeywell Diamond Protocol Only)*, page *116*, in *Chapter 7, On-Screen Setup Menus* for more information on setting up Mimic Tours. For more information on using the HJZTP controller with the ACUIX on-screen menu, see *HJZTP Joystick Controller*, page *84* and the HJZTP/HJZTP User Manual (900.0570).

Sector IDs

When using an HJZTP controller the Sector IDs must be programmed using the on-screen setup menu.

1. Press and hold **Lock**, then press **F6** (menu).
2. Use the joystick or the **Camera** and **Preset** keys to scroll to SECT then press **Aux** to enter the HJZTP sector menu.
3. Use the joystick or the Camera and Preset keys to select PROGRAM then press **Aux** to enter the ACUIX Program Sector Menu.
4. Enter Sector number and press **F5** (enter).
5. Enter the Sector title by pressing **Camera** and **Preset** to scroll through the characters and then pressing **Aux** to enter each character. Use the HJZTP numeric keypad to enter numbers. Press **F5**'(enter) when done.
6. Scroll to the S by pressing **Camera** and **Preset** then pressing **Aux** to enter the S.
7. Use the HJZTP joystick to center the picture on the lower right corner of the sector and press **F5** (enter).
8. Use the joystick to center the picture on the upper right corner of the sector and press **F5** (enter).
9. Return to *step 4* to program another sector or press **Lock** to exit the sector program menu.

Note For more information on using the HJZTP controller with the ACUIX on-screen menu, see *HJZTP Joystick Controller*, page *84* and the *HJZTP*/*HJZTP User Manual* (900.0570).

Privacy Zones

When using an HJZTP controller, Privacy Zones must be programmed using the on-screen setup menu.

Note Upon powering up, the ACUIX dome automatically finds home so the dome can then run Presets and so on as they were programmed. If a Privacy Zone is enabled, no video will be shown during homing, as your Privacy Zones are not recognized until ACUIX has reached home. Video displays once the dome has reached its home setting, unless a Privacy Zone overlaps with the home setting.

1. Press and hold **Lock**, then press **F6** (menu).
2. Use the joystick or the Camera and Preset keys to scroll to SECT then press **Aux** to enter the HJZTP Sector menu.

3. Use the joystick or the Camera and Preset keys to select PROGRAM then press **Aux** to enter the ACUIX Program Sector Menu.
4. Enter **P** and press **F5** (enter) to select Privacy Zones (use Camera' and Preset to scroll through the characters and press **Aux**).
5. Enter the password and press **Enter** (default is no password, use **Camera** and **Preset** to scroll through the characters and press **Aux**, use the HJZTP numeric keypad to enter numbers).
6. Enter Privacy Zone number and press **F5** (enter).
7. Enter the Privacy Zone title by pressing Camera and Preset to scroll through the characters and then pressing **Aux** to enter each character. Use the HJZTP numeric keypad to enter numbers. Press **F5** (enter) when done.
8. Scroll to the S by pressing **Camera** and **Preset** then pressing **Aux** to enter the S'
9. Use the joystick and the **F1** (▲) **F2** (▼) **F3** (◀) **F4** (▶) keys to adjust the position and size of the Privacy Zone.
10. Press **F5** (enter) to save the Privacy Zone.
11. Return to *step 6* to program another sector or press **Lock** to exit the sector program menu.

Note For more information on using the HJZTP controller with the ACUIX on-screen menu, see *HJZTP Joystick Controller*, page *84* and the *HJZTP/HJZTP User Manual* (900.0570).

4

Operation and Programming with Honeywell VCL Protocol

Introduction

This chapter provides specific operation and programming information when the ACUIX is set to Honeywell VCL protocol. Honeywell recommends using the HJZTP joystick controller when using this protocol. Operation is the same as described in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol* with the exceptions noted in the following paragraphs. Many of the features and programming options are accessed by using pre-programmed Preset commands.

Note Although the information in this chapter is specific to the Honeywell VCL protocol, when the ACUIX is set to MAXPRO, Pelco P or Pelco D protocol, the ACUIX operates in a similar manner.

Power Up

The operation of the ACUIX upon power up is the same as described in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*.

Reset ACUIX

The ACUIX can be reset through the setup menu or by a Preset command.

To reset the ACUIX through the setup menu:

1. Send the ACUIX to **Preset 90** to access the setup menus.
2. Push the joystick down until `4 Diagnostics Menu` is highlighted, then press **Iris Open**.
3. Push the joystick down until the `7 Scan and Camera Reset` option is highlighted and then press **Iris Open**.

Note If the Autofocus is OFF when the setup menus are accessed — by sending the ACUIX to Preset 90 — the Autofocus is automatically enabled.

Manual Control

Manual control of the ACUIX when using VCL protocol with the HJZTP controller is the same as described in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*.

Table 4-1 HJZTP Joystick Operation

Control	Function
Joystick up	Tilt up
Joystick down	Tilt down
Joystick left	Pan left
Joystick right	Pan right The speed of pan and tilt is relative to the amount of movement applied to the joystick.
Joystick Knob	Rotate the joystick knob clockwise and counterclockwise to perform the zoom in and out functions, respectively. The manual speed of the zoom function is set through the on-screen setup menus under Camera Options.

Lens Control

The lens iris is automatically controlled by the camera, but can be controlled manually from the controller.

Iris

Press + (OPEN) or - (CLOSE) on the HJZTP controller to manually alter the camera's iris. The camera auto-exposure must be off. Press **auto** above the iris control keys to put the camera in auto-iris mode.

The camera lens auto exposure mode can be enabled or disabled using the controller. **Preset 92** toggles the unit between auto and manual exposure. A message AUTO EXPOSURE ON or AUTO EXPOSURE OFF displays on the video when the ACUIX executes Preset 92.

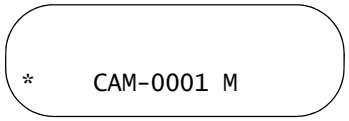
Focus

Press + (FAR) or - (NEAR) on the HJZTP controller to manually focus the camera.

Note Auto focus control can be set through the ACUIX setup menus (see *Auto Focus*, page *100*), to come on when the camera is panned, tilted, or zoomed.

Freeze/Unfreeze Video—Preset 95

The freeze/unfreeze video function described in *Freeze and Unfreeze Video* on page *35* can be accomplished using **Preset 95**. If the video is frozen, an asterisk (*) appears on the monitor on the same line as the camera message.



If the camera message is turned off, the asterisk displays by itself.

Flashback Operation—Preset 96

The flashback function described in *Flashback Operation* on page *35* can be accomplished using **Preset 96**.

NightShot Mode—Preset 94

If the ACUIX has a day/night camera with an IR block filter it can be controlled manually through the setup menus (Preset 90) or directly by sending the ACUIX to **Preset 94**. A message, `NightShot On` or `NightShot Off`, displays on the video when the ACUIX executes Preset 94.

Find Home

The operator can only send the ACUIX to its home position by resetting the scan and camera. See *Reset ACUIX* on page *62* for more information on finding home.

Presets

When using VCL protocol, there are several Presets reserved for controlling and programming the ACUIX. Refer to *Table 4-2* for a listing of the pre-programmed Presets and their functions. In VCL protocol mode, the ACUIX supports 128 Presets (0–127). Presets 71–99 are reserved for special functions.

The Presets reserved for ACUIX setup, programming, and control functions cannot be programmed and cannot be included in Preset Tours.

Table 4-2 Pre-programmed Presets ACUIX (VCL)

Preset	Function
Preset 72	Recover encrypted PINs
Preset 75	Administrator Login screen
Preset 76	Run Mimic Tour 1–16
Preset 77	Program Mimic Tour
Preset 78	Run Preset Tour 1–16
Preset 80	Run Mimic Tour 1
Preset 81	Run Mimic Tour 2
Preset 82	Run Mimic Tour 3
Preset 83	Program Mimic Tour 1
Preset 84	Program Mimic Tour 2
Preset 85	Program Mimic Tour 3
Preset 86	Terminate Mimic Tour programming
Preset 87	Start Preset Tour 1
Preset 88	Start Preset Tour 2
Preset 89	Start Preset Tour 3
Preset 90	Setup Menu (on-screen displays)
Preset 91	Toggles the error table display
Preset 92	Toggles auto exposure ON and OFF (factory default is ON).
Preset 93	Toggles backlight compensation ON and OFF. The unit must be in auto exposure mode for backlight compensation to function.
Preset 94	Toggles between standard operation and NightShot mode (camera models 843216-1011, 843216-1013, 843216-0984, and 843216-0985 only).
Preset 95	Toggles between freezing and unfreezing the video
Preset 96	Executes the Flashback function
Preset 97	Reserved
Preset 98	Camera Reset
Preset 99	Reserved

Program Preset

Up to 160 Presets can be defined. Presets are numbered 0–159. Presets 71–99 are reserved for special ACUIX functions and cannot be programmed. Refer to *Table 4-2* for a list of Presets 71–99 and their functions.

For example, to program Preset 1 using the HJZTP controller:

1. Move the selected dome to view the desired Preset position, using the joystick, zoom, focus and iris keys.
2. Press and hold **Preset**.
3. Press **1**.
4. Release **Preset**. The current position of the dome has now been defined as Preset 1.

Recall Preset

For example, to seek Preset 1 using an HJZTP controller:

1. Press **1**.
2. Press **Preset**. The camera moves at the maximum speed to the previously defined Preset 1.

The user may also select Presets 1–4 by single key presses using the keys labeled Preset 1 to 4.

Preset Tours

Caution Continuous Preset Tour operation for extended periods of time (more than 8 hours) is not recommended. Continuous operation results in increased zoom lens failure and maintenance expense. Similarly, avoid setting auto focus to continuous.

Preset Tours function the same for VCL protocol as described in *Preset Tours*, page *43*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*.

When using VCL protocol, Preset Tours must be programmed using the on-screen setup menu. The on-screen setup menus are accessed by sending a Preset 90 command to the ACUIX.

1. Press and hold ‘Lock’, then press ‘F6’ (‘Menu’) and then press ‘aux’ to enter the ACUIX dome menu.
2. Use the tilt down function on the joystick until `6 Function Programming` is highlighted, and then press **Iris Open**.
3. Push the tilt down function on the joystick until `2 Program a Preset Tour` is highlighted, and then press **Iris Open**.
4. Use the tilt up function on the joystick until the desired Preset Tour number (**1**–**16**) displays, and then press **Iris Open**.
5. Use the tilt up and down and the pan left and right functions of the controller to move between fields.

Table 4-3 Preset Tour Programming Fields

FIELD	Usage
NUM (number)	Move the cursor to the desired field and press **Iris Open** to activate. Use the tilt up and down functions of the controller to change the value. If the field is more than one digit, each digit can be changed individually by placing the cursor on the digit and using the tilt up or down function.
PRESET	Selectable from **0** to **70**, **74** and **100** to **160**. Presets 71–73, and 75–99 are reserved for special functions and cannot be entered in a Preset Tour. When the field has the desired number, press **Iris Open** to select the number. If a reserved Preset is entered in the field, Iris Open is not accepted. Iris Open also moves the cursor to the next field.
VELOCITY	The Velocity field is the pan and tilt speed for the ACUIX to go to the Preset (1 to 480°/second). The default is 480°/second.
DWELL	The Dwell Time is how long the ACUIX waits before it goes to the next Preset in the list (0 to 99 seconds).

Note Inserting Presets: To insert a Preset between Presets, position the cursor on the second Preset and press **Focus Near** to insert a line.

Deleting Presets: To delete a Preset, place the cursor on the Preset line and press **Focus Far**. The entire PreShot line is deleted.

6. When you are finished entering Presets, press **Iris Close**. The cursor moves to `S = Save`.
7. Press **Iris Open** to save the Preset Tour. To exit without saving, use the pan left function to move the cursor to `E = Exit` and press **Iris Open**.

Run Preset Tour

When the ACUIX is set for VCL protocol there are special Presets reserved for running Preset Tours.

Preset Tours 1–3

Preset Tours 1, 2, and 3 can be started using Preset commands **87**, **88**, and **89**, respectively.

Example: To start Preset Tour 2, send a Preset 88 command.

Preset Tours 1–16

Preset Tours 1–16 can be started using Preset command **78**.

1. Push the joystick up or down to scroll through the Preset Tour numbers until the desired Preset Tour number displays. To move between the digit fields move the joystick left or right.
2. Press **Iris Open** to select the Preset Tour number displayed.
3. To exit the menu without running a tour, press **Iris Close**.

When an ACUIX receives a command to run a Preset Tour, the ACUIX goes to the first Preset programmed in the Preset Tour at maximum velocity (480°/second) for the programmed dwell time, then goes to the next Preset in the Preset Tour at the programmed velocity for the specified dwell time, and so on. When a Preset Tour is running continuously, the ACUIX goes from the last Preset to the first Preset at the programmed velocity. The amount of time the ACUIX takes to go to each Preset depends on the programmed velocity and the distance to the next Preset's pan and tilt coordinates. The velocity is programmable between 1° to 480° per second.

Stop a Preset Tour

- Take manual control (pan, tilt, zoom, or focus) of the ACUIX.

Note The Iris Open/Close commands will not stop a Preset Tour.

- Send the ACUIX to a Preset.
- Start a Mimic Tour or a different Preset Tour.
- Execute any other command addressed to that ACUIX.

Sector IDs

Sector IDs function the same for VCL protocol as described in *Sector IDs*, page *49*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*.

When using VCL protocol Sector IDs must be programmed using the on-screen setup menu.

1. Press and hold ‘Lock’, then press ‘F6’ (‘Menu’) and then press ‘aux’ to enter the ACUIX dome menu.
2. Use the tilt down function on the joystick until `6 Function Programming` is highlighted, and then press **Iris Open**.
3. Use the tilt down function on the joystick until `5 Program Sector` is highlighted, and then press **Iris Open**.
4. Use the tilt up function on the joystick until the desired Sector ID number (**1**–**16**) displays, and then press **Iris Open**. Use the pan left and pan right functions to move between digits, if necessary.
5. Press **Focus Near** to go to PTZ mode.
6. Position the video to the lower left corner of the Sector.
7. Press **Focus Far** to return to the programming menu.
8. Press **Iris Open**.
9. Press **Focus Near** to go to PTZ mode.
10. Position the video to the upper right corner of the Sector.
11. Press **Focus Far** to return to the programming menu.
12. Press **Iris Open**.
13. Program another Sector ID or press **Iris Close** to exit programming.

Privacy Zones

Privacy Zones function the same for VCL protocol as described in *Privacy Zones*, page *51*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*.

Caution VCL protocol does not provide password protection for Privacy Zones as described for Diamond protocol. Privacy Zones are programmed through the on-screen setup menus. For password protection, the password feature (described in *Chapter 6, ACUIX Password Feature*) must be enabled.

Note Upon powering up, the ACUIX dome will automatically find home so the dome can then run Presets and so on as they were programmed. If a Privacy Zone is enabled, no video will be shown during homing, as your Privacy Zones are not recognized until ACUIX has reached home. Video will display once the dome has reached its home setting, unless a Privacy Zone overlaps with the home setting.

When using VCL protocol, Privacy Zones must be programmed using the on-screen setup menu.

1. Position the camera so the area to be covered by the Privacy Zone is viewed on the monitor.
2. Press and hold ‘Lock’, then press ‘F6’ (‘Menu’) and then press ‘aux’ to enter the ACUIX dome menu.
3. Use the tilt down function on the joystick until `6 Function Programming` is highlighted, and then press **Iris Open**.
4. Use the tilt down function on the joystick until `6 Program Privacy Zone` is highlighted, and then press **Iris Open**.
5. Use the tilt up function on the joystick until the desired Privacy Zone number (**1**–**32**) displays, and then press **Iris Open**. Use the pan left and pan right functions to move between the digits, if necessary.
6. Use the joystick tilt up and down functions to heighten the Privacy Zone box and the joystick pan left and right functions to widen the box.
7. When the box is the desired size, press **Iris Open**.
8. Program another Privacy Zone or press **Iris Close** to exit programming.

Mimic Tours

Mimic Tours operate the same as described for Honeywell Diamond protocol in *Mimic Tours*, page *47*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*.

When the ACUIX is set for VCL protocol the Presets are reserved for programming and running Mimic Tours.

Programming Mimic Tours

Mimic Tours 1–3

Presets 83, 84, and 85 have been reserved for programming Mimic Tours 1, 2, and 3.

1. Send a **Preset 83** command on the controller to program Mimic Tour 1, send a **Preset 84** command for Mimic Tour 2, send a **Preset 85** command for Mimic Tour 3.
2. The ACUIX counts down from 120 to 0. During the 120 second countdown, pan and tilt the ACUIX and adjust the lens zoom setting as desired. The ACUIX stores the PTZ commands in the order they were performed during the 120 seconds.
3. Wait for the countdown to reach 0 or send a **Preset 86** command to end the programming mode. The message `Program Mimic Tour Complete` displays. The ACUIX stores the PTZ commands in the order you entered them between the time you started the programming mode until you entered the **Preset 86** command.

Mimic Tours 1–16

Preset 77 has been reserved for programming Mimic Tours 1–16.

1. Send the ACUIX to **Preset 77**.
2. Use the joystick tilt up and down function to scroll through the Mimic Tour numbers until the desired Mimic Tour number displays. Use the joystick pan left and right to move between the digits, if necessary.
3. Press **Iris Open**.
4. The ACUIX counts down from 120 to 0. During the 120 second countdown, pan and tilt the ACUIX and adjust the lens zoom setting as desired. The ACUIX stores the PTZ commands in the order they were performed during the 120 seconds.
5. Wait for the countdown to reach 0 or send a **Preset 86** command to end the programming mode. The message `Mimic Tour Complete` displays. The ACUIX stores the PTZ commands in the order you entered them between the time you started the programming mode until you entered the **Preset 86** command.

Mimic Tour Operation

Mimic Tours 1–3

Preset commands 80, 81, and 82 are reserved for running Mimic Tours 1, 2, and 3, respectively. The ACUIX, where the Mimic Tour is stored, must be the control camera on the system controller. The ACUIX continues to run the Mimic Tour from beginning to end.

Enter a **Preset 80** command on the controller to run Mimic Tour 1, enter a **Preset 81** command to run Mimic Tour 2 or a **Preset 82** command to run Mimic Tour 3.

Mimic Tours 1–16

Preset command 76 is reserved for running Mimic Tours 1–16.

1. Send the ACUIX to **Preset 76**.
2. Use the joystick tilt up and down function until the desired Mimic Tour number displays. Use the joystick pan left and right functions to move between the digits, if necessary.
3. Press **Iris Open**.

Stop a Mimic Tour

Stop the Mimic Tour by manually controlling the ACUIX or by sending the ACUIX a Preset, Preset Tour, or another Mimic Tour command.

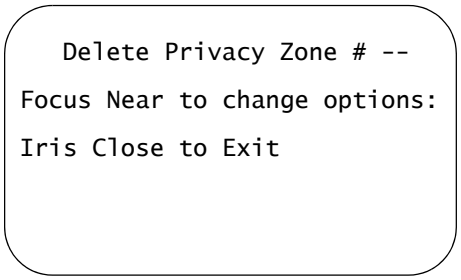
Note The Iris Open/Close commands will not stop a Mimic Tour.

Deleting Privacy Zones, Presets, Preset Tours, and Sectors

The programming for Privacy Zones, Presets, Preset Tours, and Sectors can be deleted using the on-screen setup menus. Existing programming does not have to be deleted to be reprogrammed. You can simply reprogram the coordinates for an existing Privacy Zone, Preset, or Sector by following the programming procedures.

1. Press and hold ‘Lock’, then press ‘F6’ (‘Menu’) and then press ‘aux’ to enter the ACUIX dome menu.
2. Press the joystick down until 6 `Function Programming` is highlighted and then press **Iris Open**.

3. Press the joystick down until 7 `Delete PS/PT/PZ/Sector` is highlighted, and then press **Iris Open**.
4. Press **Focus Near** until the desired function (Privacy Zone, Preset, Preset Tour, or Sector) displays.
5. Use the tilt up function on the joystick until the desired number displays. Use the pan left and pan right functions to move between the digits, if necessary.



6. Press **Iris Open**. If deletion of the programming was successful, the message `Delete Success` displays on the monitor. If the selected function and number (Preset, Preset Tour, Privacy Zone, or Sector) was not programmed, it cannot be deleted, and the message `Does Not Exist` displays on the monitor.
7. To exit, press **Iris Close**.

5

Operation and Programming with IntelliBus™ Protocol

When ACUIX is set to IntelliBus protocol, and is network connected to a PC-based DVR, such as the Honeywell Rapid Eye™ DVR, you can:

- Download an ACUIX configuration to a PC for later use
- Upload an ACUIX configuration to another ACUIX of the same camera model
- Upgrade the firmware to one or more ACUIX PTZ domes in your network

For detailed information on how to upload and download configuration files and upgrade firmware to an ACUIX, please refer to the *Rapid Eye™ System Administrator's Guide*.

Factory Default Switch Settings

:

Protocol	IntelliBus
Baud rate	38 400
Parity	1
Address	8
Termination	None

Configuration Upload/Download

When ACUIX is set to IntelliBus protocol (see *IntelliBus™*, page *25*), the ACUIX configuration save feature can be used for replacement of faulty domes. The configuration can be saved on a PC and later uploaded to a replacement dome in case the original dome fails. However, the ACUIX configuration has camera specific parameters so the configuration uploads (retrieving data from a faulty dome) and downloads (sending data to a new dome) should be done only between two ACUIX units that have the same camera model.

Caution Do not upload an ACUIX configuration file from one model of dome camera to another. For example, the configuration from an ACUIX dome camera with an FCB EX48C camera assembly should not be uploaded to an ACUIX dome camera with a VK-S654 camera assembly.

For detailed information on how to upload and download configuration files to an ACUIX, please refer to the *Rapid Eye™ System Administrator's Guide*.

Configuration Default

Whenever a camera is changed, the configuration is defaulted. To retain user settings, save the configuration to a PC and then upload the saved configuration to the ACUIX dome.

Configuration Data Saving

After completing the user programming of the ACUIX unit (presets, mimic tours, preset tours, and on-screen setup menus), you can upload the configuration data to a PC for safekeeping.

For detailed information on how to upload a configuration file to a PC, please refer to the *Rapid Eye™ System Administrator's Guide*.

Firmware Upgrade

You can upgrade firmware to the ACUIX dome.

For detailed information on how to upgrade firmware to an ACUIX, please refer to the *Rapid Eye™ System Administrator's Guide*.

6

ACUIX Password Feature

The ACUIX features password protection for accessing the on-screen setup menus. This feature can be enabled or disabled. If enabled on the ACUIX, the user must enter a 4-digit Personal Identification Number (PIN) to access the on-screen setup menus. When enabled, all users can manually control (pan, tilt, zoom, focus, iris) and automatically control (Preset, Preset Tour, Mimic Tour) the ACUIX.

The Privacy Zone password that applies when using Diamond or IntelliBus protocol can be reset to the default password through the password feature menu. This password only applies if the ACUIX is set for Diamond or IntelliBus protocol. All Privacy Zone programming can also be deleted through this menu.

Enabling the Password Feature

The password feature is accessed using a Preset command.

1. Ensure you have manual control (pan/tilt) of the ACUIX in which you want to enable the password feature and the video from the same ACUIX can be viewed on a monitor.
2. Send the ACUIX to **Preset 75**.

   The password on-screen menu displays.

   a. Move the joystick up and down to enter the Supervisor's password (1000 = Supervisory default). Move the joystick left and right to move the cursor between digits.

   b. Press **Iris Open**.

   c. Move the joystick up or down to position the cursor on 1 User Login PIN.

   d. Press **Iris Open** to change disabled to enabled.

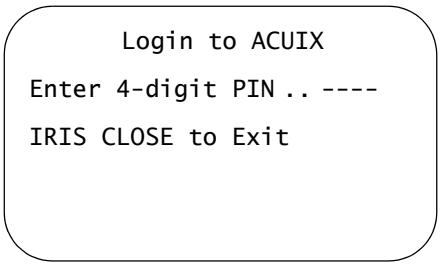
   e. Press **Iris Close** to exit.

```
ADMINISTRATOR LOGIN SCREEN

  Enter 4-digit PIN ----

  Use ↑↓ Keys to enter PIN

  IRIS CLOSE to Exit
  IRIS OPEN to Enter
```

```
      PASSWORD SETTINGS
1 User Login PIN ... DISABLED
2 Change PIN
3 Reset Privacyzone Password
4 Delete All Privacyzone

IRIS CLOSE to Exit
```

Logging On

If the password feature is enabled, and the user tries to access the ACUIX on-screen setup menus, the Login Screen displays.



1. Enter the user's 4-digit PIN. Move the joystick up or down to select numbers for each digit. Move the joystick left or right to move between digits.
2. Press **Iris Open** to accept the password and log in to the ACUIX.
3. Press **Iris Close** to exit the login screen without logging in.

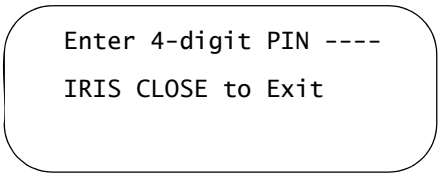
Table 6-1 Default User PINs

User	PIN
0 (Supervisor)	1000

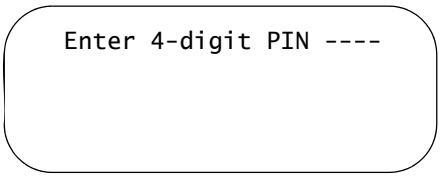
Once a user enters a valid 4-digit PIN, the user can access the ACUIX setup menus.

Changing the 4-Digit PIN

1. Send the ACUIX to **Preset 75**.
2. Enter the Supervisory 4-digit PIN (default = 1000). Move the joystick up or down to select numbers for each digit. Move the joystick left or right to move between digits.



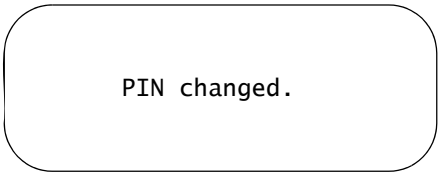
3. Press **Iris Open**.
4. Move the joystick down to position the cursor on 2 Change PIN and press **Iris Open**.
5. Move the joystick up or down to select the numbers for each digit. Move the joystick left or right to move between digits.



6. When the desired PIN number displays, press **Iris Open**.
7. Re-enter the **PIN** as in steps 4–6 above.

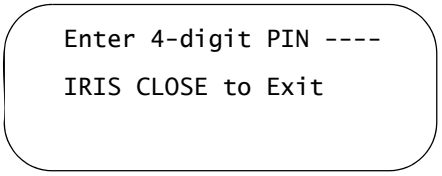
Note If you enter the wrong 4-digit number, the message `Invalid PIN, try again` displays and the ACUIX returns to the Enter PIN screen.

8. Press **Iris Open**. The message `PIN changed` displays briefly and the display returns to the PASSWORD SETTINGS menu.
9. Perform another option or press **Iris Close** to exit and return to normal operation.



Resetting Privacy Zone Password (Diamond or IntelliBus Protocols)

1. Send the ACUIX to **Preset 75**.
2. Enter the Supervisory 4-digit PIN (default = 1000). Move the joystick up or down to select numbers for each digit. Move the joystick left or right to move between digits.

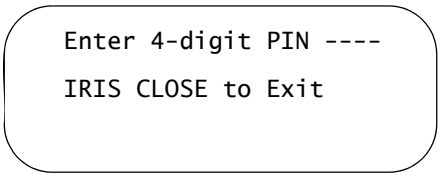


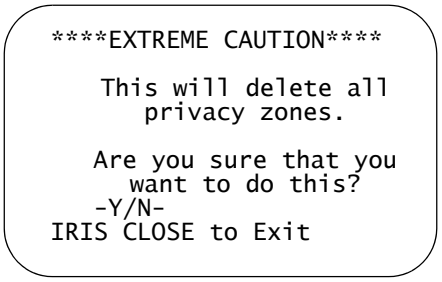
3. Press **Iris Open**.
4. Move the joystick down to position the cursor on `3 Reset Privacyzone Password`. The password is reset to the factory default password (blank). To enter a blank password, press **Enter** at the password prompt.

Delete Privacy Zone Programming

To delete all Privacy Zone programming, perform the following procedure:

1. Send the ACUIX to **Preset 75**.
2. Enter the Supervisory 4-digit PIN (default = 1000). Move the joystick up or down to select numbers for each digit. Move the joystick left or right to move between digits.
3. Press **Iris Open**.
4. Move the joystick down to position the cursor on `4 Delete All Privacyzone` and press **Iris Open**.
5. Select **Y** to delete all Privacy Zones. Select **N** to cancel the operation. Move the joystick left or right to position the cursor on Y or N and press **Iris Open**.
6. Press **Iris Close** to exit the menu.





7

On-Screen Setup Menus

Introduction

The ACUIX features on-screen menus for setting up the control features, camera, and enabling and programming special features. The on-screen setup menus can be accessed from a joystick controller and are displayed on the monitor where the ACUIX video displays.

Special Presets are pre-programmed for accessing the on-screen setup menus when using Honeywell VCL or 3rd party protocols.

Control/Video Requirements

1. The ACUIX dome being set up must be selected as the control camera on the controller.
2. The video from the ACUIX dome must be displayed on a monitor.
3. The controller must have manual control (pan and tilt) of the ACUIX dome.

Honeywell Diamond Protocol

HEGS5000/HEGS5001 Controller

When using the ACUIX dome in Honeywell Standard mode, the HEGS5000 or HEGS5001 controller is recommended. To access the on-screen setup menus using the HEGS5000 or HEGS5001 controller, perform the following procedure:

1. To access the ACUIX setup menus from the HEGS5000/HEGS5001, you must be logged in as a Master user on the controller.
2. Press **Dome Menu**.
3. Press **Enter** to access the Dome Setup menu. The on-screen menu displays on the monitor where the ACUIX video is viewed.

Note If password protection is enabled on the ACUIX, you must log into the ACUIX with a supervisory password.

4. To access a submenu, press the number beside the menu option. The numbers either toggle between the available choices or call up another menu.
5. If character entry is required in a field, press **+** or **-** until the desired character displays on the LCD screen, and then press **Character Select**. The controller sends the character to the ACUIX.
6. Press **Clear**/**Manual** to exit any ACUIX menu. Once you are out of the on-screen setup menus on the monitor, press **Menu ESC** to exit the menus on the LCD display and return to controlling the camera.

Note The HEGS5000/HEGS5001 controller does not support reverse polarity.

HJZTP Joystick Controller

The HJZTP controller can also be used with the Diamond protocol. Perform the following procedure to access the ACUIX on-screen setup menus:

1. A user must be logged in as User Level 1 on the controller to access the ACUIX on-screen menus.
2. Access the ACUIX dome menu by pressing and holding **Lock**, followed by **F6** (**Menu**).
3. With SETUP flashing on the LCD screen, press **Aux**.

Note If password protection is enabled on the ACUIX, you must log into the ACUIX with a supervisory password.

When using Diamond protocol, the following keys are used to navigate within the on-screen menus:

- Use the direction arrow keys, F1 (▲) F2 (▼) F3 (◀) F4 (▶), to maneuver through the menus, along with pressing the corresponding number on the keyboard to enter sub-menus.
- Once in the setup menu, the Camera and Press buttons can be used to toggle through available characters and pressing **Aux** sends the selected character to the dome.
- Pressing the Counter key jumps the selection between upper case and lower case letters. If a symbol character is being displayed when the Counter key is pressed, the selection jumps to a lower case **a**.
- Press and hold **fn** then press **Counter** to jump to symbol characters when letter characters are being displayed.
- Press **monitor** to send BACKSPACE to the dome to delete the previous character.
- Press and hold **fn** then press **monitor** to send the space character, which is also available between Z and a.
- Press **wash** to send INSERT to the dome to insert a line.
- Press **wipe** to send DELETE to the dome to delete a line.
- Press **F5** (**enter**) to send ENTER to the ACUIX dome menu.
- Press **F6** (**menu**) to send ESC to the ACUIX dome menu.
- Press **sequence** to send S to the ACUIX dome for saving settings.
- Press **Aux** in list menus to display the next page of items.
- Press **lock** to exit OSD and LCD menus and return the dome and keyboard to normal operation.
- The keyboard also shuts down the menus if there has been no keyboard activity for over one minute.

Honeywell VCL Protocol

HJZTP Joystick Controller

When using the ACUIX dome in Honeywell VCL mode, the HJZTP controller is recommended. Perform the following procedure to access the ACUIX on-screen setup menus:

1. A user must be logged in as User Level 1 on the controller to access the ACUIX on-screen menus.
2. Access the ACUIX dome menu by pressing and holding **Lock**, followed by **F6** (Menu).

3. With SETUP flashing on the LCD screen, press **Aux**.

Note If password protection is enabled on the ACUIX, you must log into the ACUIX with a supervisory password.

When using Honeywell VCL protocol, the following keys are used to navigate within the on-screen menus:

- Use the direction arrow keys, F1 (▲) F2 (▼) F3 (◀) F4 (▶), to maneuver through the menus, along with pressing the corresponding number on the keyboard to enter sub-menus.
- Once in the setup menu, the Camera and Preset buttons can be used to toggle through available characters and pressing **Aux** sends the selected character to the dome.
- Pressing the **Counter** key jumps the selection between upper case and lower case letters. If a symbol character is being displayed when the Counter key is pressed, the selection jumps to a lower case **a**.
- Press and hold **fn** then press **Counter** to jump to symbol characters when letter characters are being displayed.
- Press **monitor** to send BACKSPACE to the dome to delete the previous character.
- Press and hold **fn** then press **monitor** to send the space character, which is also available between **Z** and **a**.
- Press **wash** to send INSERT to the dome to insert a line
- Press **wipe** to send DELETE to the dome to delete a line.
- Press **F5** (enter) to send ENTER to the ACUIX dome menu.
- Press **F6** (menu) to send ESC to the ACUIX dome menu.
- Press **sequence** to send S to the ACUIX dome for saving settings.
- Press **Aux** in list menus to display the next page of items.
- Press **lock** to exit OSD and LCD menus and return the dome and keyboard to normal operation.
- The keyboard also shuts down the menus if there has been no keyboard activity for over one minute.

Honeywell VCL Coax Control Protocol

If the ACUIX is set to VCL Coax control, the HMAX082/HMAX162 matrix switcher and HKJMMTP controller is required. Refer to the operation and programming manual for this system.

3rd Party Protocols

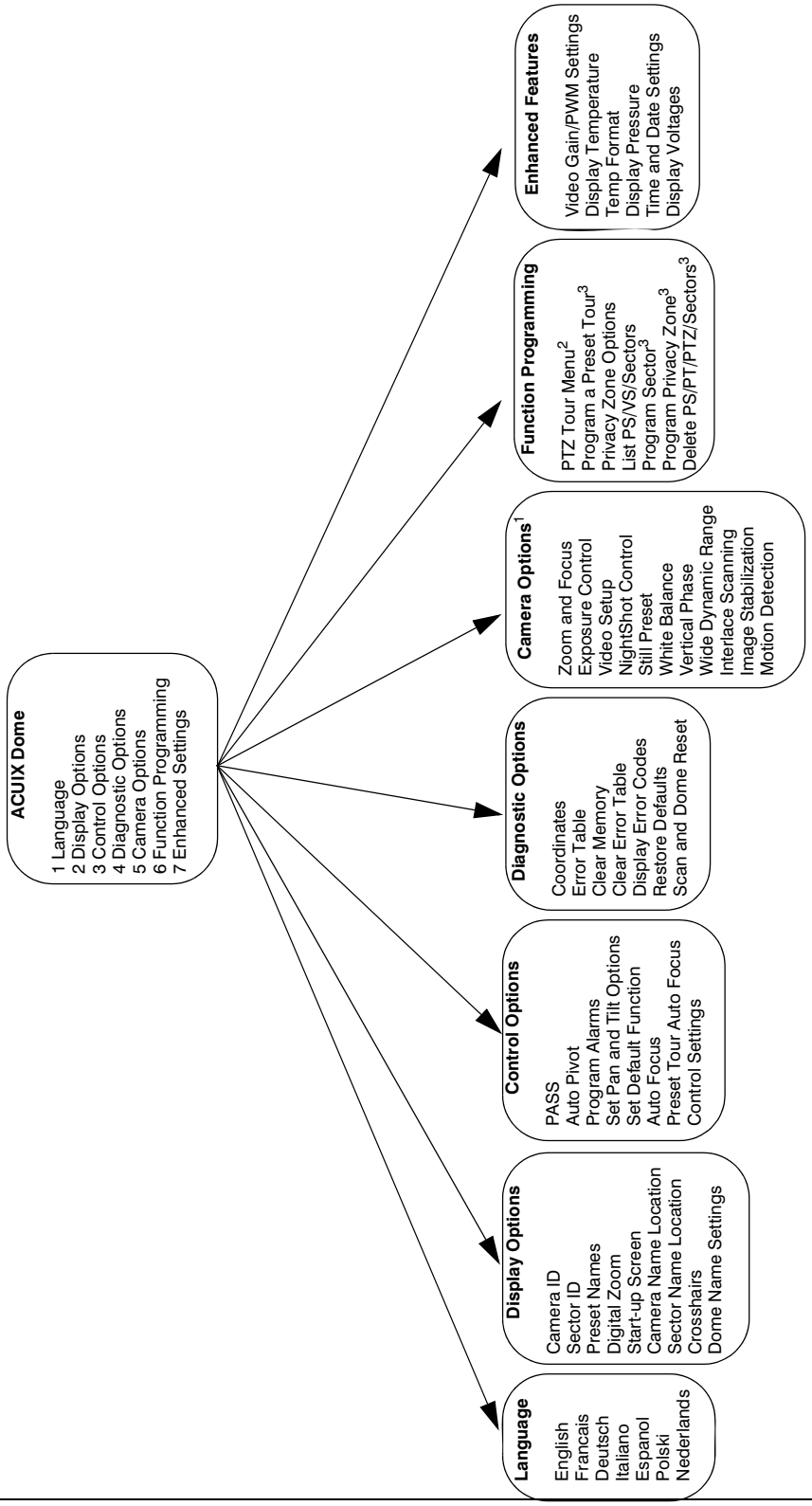
The ACUIX dome supports the following 3rd party protocols:

- Pelco P
- Pelco D

When using the ACUIX in any of the supported 3rd party protocols, perform the following procedure to access the ACUIX on-screen setup menus:

1. Send the ACUIX dome to **Preset 90**. Refer to the specific controller's manual for sending Preset commands.
2. Use the joystick up, down, left, and right functions on the controller to move the cursor to the desired option.
3. Use the **Iris Open** function to select an option.
4. Use the pan left and right commands (if applicable) to move horizontally between fields in a table.
5. Use the tilt up and down commands (if applicable) to move vertically between fields in a table.
6. When a field requires text entry, press **Iris Open** to activate the field, move the joystick up or down until the desired character displays and then press **Iris Open** again.
7. Use the **Iris Close** function to exit (**ESC** to exit) menus.

Menu Tree



[1]Camera Options are dependent on the camera model installed.

[2]Standard protocol only.

[3]VCL/Pelco P&D protocols only.

Main Menu

When the setup menus are accessed, the main menu is the first menu displayed. The camera model installed in the ACUIX displays. In this example, the VK-S654 is installed.

The screens shown in this chapter are displayed when the ACUIX is set for Standard protocol except where noted in the Function Programming Menu.

If the ACUIX is set for VCL protocol, `ESC to Exit` becomes `Iris Close to Exit`. Move the joystick up or down to highlight a menu option and then press **Iris Open** to select the option.

All future instructions assume you have the main menu or a submenu of the main menu displayed.

The screens in this document show the default settings.

```
          ACUIX Dome
Camera..............VK-S654
---------------------------
1 Language. . . . .English
2 Display Options
3 Control Options
4 Diagnostic Options
5 Camera Options
6 Function Programming
7 Enhanced Settings
ESC to Exit
```

```
          ACUIX Dome
Camera..............VK-S654
---------------------------
1 Language. . . . .English
2 Display Options
3 Control Options
4 Diagnostic Options
5 Camera Options
6 Function Programming
7 Enhanced Settings
IRIS CLOSE to Exit
```

Selecting the Language

Select **1** repeatedly from the main setup menu until the desired language (English, Francais, Deutsch, Italiano, Espanol, Polski, or Nederlands) displays in the field. The on-screen options are displayed in the language selected. **English** is the default language.

Display Options

Select **2** from the main setup menu to set up the video Display Options.

```
        DISPLAY OPTIONS

1 Camera Msg  . . . . . . ON
2 Sectors . . . . . . . . ON
3 Preset Names  . . . . . ON
4 Digital Zoom Msg  . . .OFF
5 Start-up Screen Msg . . ON
6 Change Camera Name Loc.
7 Change Sector Name Loc.
8 Crosshairs  . . . . . .OFF
9 Dome Name Settings
ESC to Exit
```

Camera Message

Select **1** from the Display Options menu to toggle the camera ID display **ON** (default) or **OFF**. The camera display is generated by the address selection of the dome. If the address of the dome is 1, the camera ID display is `CAM 0001`; if the address of the dome is 50, the camera ID display is `CAM 0050`.

Sectors

Select **2** from the Display Options menu to toggle the Sector titles **ON** (default) or **OFF**. The sector title is programmed by the user when programming a sector.

Preset Names

Select **3** from the Display Options menu to toggle the Preset names **ON** (default) or **OFF**. If set to ON, the Preset title is added to the video signal when the ACUIX dome is sent to the Preset. The title displays at the top of the monitor. If using Standard protocol, the Preset name location can be changed when programming the Preset. See *Program Preset*, page *38*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*. If set to OFF, the ACUIX dome goes to the Preset, but the title is not added to the video signal.

Digital Zoom Message

Select **4** from the Display Options menu to display the actual digital zoom magnification. Selecting 4 toggles the value between **ON** and **OFF** (default). If set to ON, the digital zoom setting displays on the right side of the monitor on the same line as the camera ID display. If the camera name location is changed, the digital zoom setting display location is also changed.

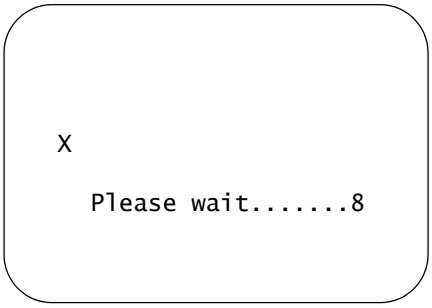
Start-up Screen Message

Select **5** from the Display Options menu to turn the start-up screen display **ON** (default) or **OFF**.

If the start-up screen display is set to ON, the ACUIX displays the standard screens when the unit is powered down and back up.

```
    ---- ACUIX Dome ----
Protocol ..... Diamond
9600 baud no parity-8bits
Camera ......... Model
Honeywell Video Systems

DOMEApp date version B0
FPGABit date version B1
Please wait......8

          CAM-0006 M
```

If the startup screen is set to OFF, an alternate screen with an X displays upon power up.



Change Camera Name Location

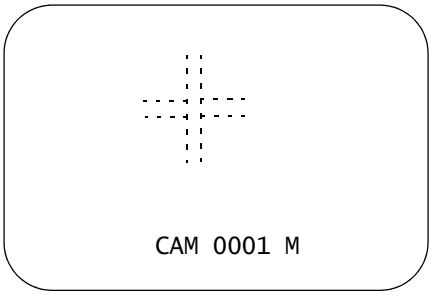
Select **6** from the Display Options menu to change the position of the camera ID display. Use the up and down arrow keys (joystick up and down when using VCL protocol) to position the camera ID. When the camera ID is in the desired location, press **Enter** (**Iris Open** when using VCL protocol).

Change Sector Name Location

Select **7** to change the position of the Sector ID title display. Use the up and down arrow keys (joystick up and down when using VCL protocol) to position the Sector ID. When the Sector ID is in the desired location, press **Enter** (**Iris Open** when using VCL protocol).

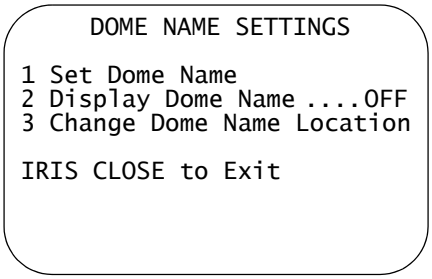
Crosshairs

Select **8** from the Display Options menu to display crosshairs on the video display. This is useful when using the Pan Offset feature. Selecting **8** toggles the crosshairs display **OFF** (default) and **ON**. If turned on, the crosshairs are displayed when you exit the setup menus.



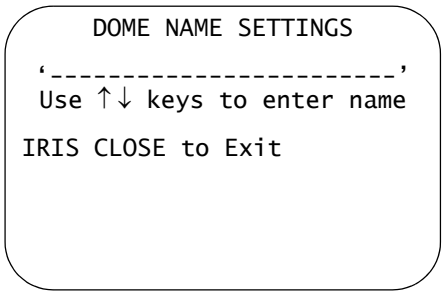
Dome Name Settings

Select **9** to access the Dome Name Settings menu. From this menu, a 24-alphanumeric name can be programmed for the dome, the name display can be turned **ON** or **OFF**, and the location of the dome name on the monitor can be programmed.



Set Dome Name

1. Select **1** to program a 24-alphanumeric name for the dome.
2. Move the joystick up and down to select the characters. Move the joystick left or right to position the cursor as desired.
3. Press **Iris Open** when you are finished setting the Dome Name.

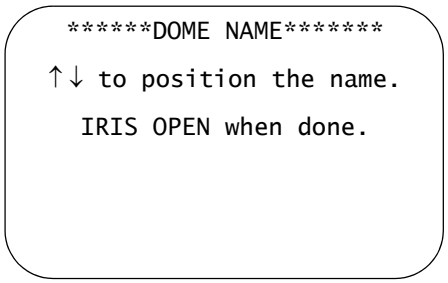


Display Dome Name

Select **2** to toggle the dome name display **ON** or **OFF** (default). If set to ON, the programmed dome name displays on the monitor.

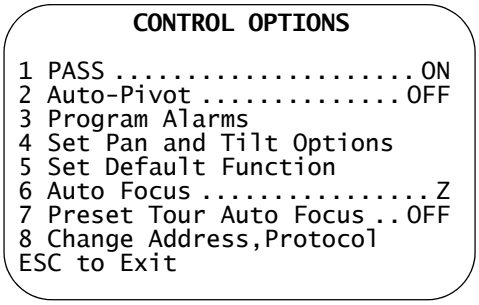
Change Dome Name Location

Select **3** to change the location of the dome name on the monitor. The default position is on the top left of the monitor.



Control Options

Select **3** from the Main menu to set the Control Options. Setting the Control Options for the ACUIX dome includes operation of the pan and tilt, auto focus, programming alarms, programming the default function, and defining the startup state of the dome.



PASS

If the **PASS** function is ON, the pan and tilt speed range is a function of the lens zoom angle. As the lens is zoomed in, the maximum pan and tilt speeds are reduced and the low speed control is expanded.

To toggle PASS **ON** (default) or **OFF**, select **1** from the Control Options menu.

Example: When the ACUIX dome is set at 12X zoom, the pan and tilt functions are very slow.

Auto-Pivot

If the Auto-Pivot feature is on, the pan and tilt unit automatically pans the camera 180° when the camera reaches vertical. This feature is used to assist the operator in tracking an individual that passes directly under the camera.

To toggle Auto-Pivot **ON** or **OFF** (default), select **2** from the Control Options menu.

To perform this function:

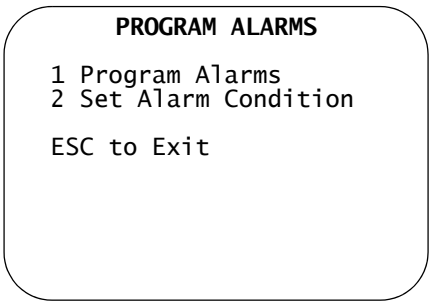
1. Position the camera lens so it is not vertical.
2. Using the joystick on the controller, tilt the camera down until the camera lens is vertical (pointing at the floor) and continue tilting down with the controller.
3. The pan and tilt unit pans the camera 180° and then begins to tilt up. It continues to tilt up as long as the controller tilt function remains in the down position. When the ACUIX reaches its tilt up limit, the dome returns to normal operation.

If the controller is returned to its neutral position before the ACUIX reaches its tilt up limit, the ACUIX returns to normal operation.

Program Alarms

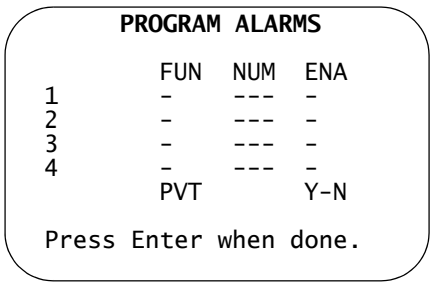
The ACUIX has four alarm inputs for normally open or closed dry contacts. When a contact changes from its normal state, an alarm occurs. Alarms can be enabled or disabled. The ACUIX can be programmed to go to a Preset, start a Preset Tour, or start a Mimic Tour when an alarm occurs and the alarm is enabled.

Select **3** from the Control Options menu to program the alarms. The Program Alarms screen displays.

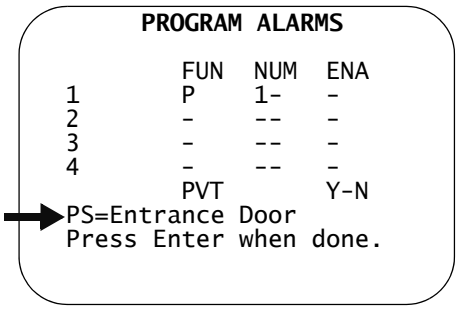


Program Alarms

Select **1** from the Program Alarms menu to enable/disable alarms and to define the action to be performed when a contact is in an alarm state.



1. Position the cursor on the FUN field using the up, down, left, or right arrow keys. If using VCL protocol, use the joystick up, down, left, and right functions.
2. Select the character (P, V, or T) for the desired function; P=Preset, V=Preset Tour, or T=Mimic Tour. The function displays on the screen as PS=, PT=, or MT=, respectively.
3. Enter a number in the NUM field. If the function is programmed, the title appears on the screen. For example, if P (Preset) 1 is entered and it has been programmed with the title, Entrance Door, `PS = Entrance Door` displays on the screen. If Preset 1 is entered, and it has not been programmed, `PS = Does Not Exist` displays on the screen. If a Preset is reserved for a special ACUIX function; `PS = PS Reserved` displays.



4. Position the cursor on the ENA field and enter a Y (enabled) or N (disabled).

Note If an alarm is disabled, the ACUIX does not respond to a change of state in the alarm contact. The ACUIX does not perform the programmed Preset, Preset Tour, or Mimic Tour. If a Preset, Preset Tour, or Mimic Tour is not programmed for an alarm, the ACUIX does not respond to a change of state in the contact.

5. Press **Enter** when you are finished programming alarms.

See *Table 7-1* for field entry.

Table 7-1 Program Alarm Field Entry

Field	Usage
FUN (function)	Enter function to perform when alarm occurs (P = Preset, V = Preset Tour, T = Mimic Tour).
NUM (number)	Enter the number of the Preset, Preset Tour, or Mimic Tour.
ENA (enable)	Enter Y to enable or N to disable the alarm.

Table 7-2 Alarm States

If:	Then:
Alarm is disabled	The ACUIX ignores a change of state in the alarm input.
Alarm is enabled and not programmed	The ACUIX ignores a change of state in the alarm input.
Alarm is enabled and programmed	The ACUIX performs the action programmed for the alarm input when a change of state occurs. The ACUIX adds AL and the alarm number to the video signal. AL remains on the video until all alarms are acknowledged. The alarm status displays on-screen on the same line as the Camera ID display.
More than one alarm occurs	The ACUIX performs the action for the first alarm and adds the other alarm numbers to the video in numerical order. When the first alarm is acknowledged, the ACUIX performs the action for the next alarm with the lowest number. For example, alarm contacts 2, 4, and 3 go into alarm in the order stated. The monitor display appears as AL-234. The ACUIX performs the action programmed for alarm 2. AL continues to be displayed until all alarms are acknowledged and then is removed from the display. When alarm 2 is acknowledged, the number 2 is removed from the alarm display and the ACUIX performs the programmed action for alarm 3. When alarm 3 is acknowledged, the number 3 is removed from the alarm display and the ACUIX performs the programmed action for alarm 4.

Note An alarm can be acknowledged before the contact returns to normal; however, the ACUIX will not respond to the alarm again until the contact has returned to normal and gone into alarm again.

Set Alarm Condition

Select **2** from the Program Alarms menu to set the alarm condition.

Select the alarm number to toggle its alarm condition between **OPEN** or **CLOSE**. For example, selecting **3** toggles the condition for alarm number 3 **OPEN** or **CLOSE**.

```
SET ALARM CONDITION

ALARM #      CONDITION
  1            CLOSE
  2            CLOSE
  3            CLOSE
  4            CLOSE

ESC to Exit
```

Table 7-3 Alarm Input Configuration

If:	Then:
The alarm condition is set to Open	When the contact opens, an alarm occurs.
The alarm condition is set to Close	When the contact closes, an alarm occurs.

Once the alarm condition is set for each alarm input, press **ESC** to exit the menu.

Set Pan and Tilt Options

Select **4** from the Control Options menu to set the pan and tilt manual control options.

```
PAN AND TILT OPTIONS

1 Manual Speed deg/s .. 480
2 Pan Reverse ......... OFF
3 Tilt Reverse ........ OFF
4 -5 Deg Tilt Limit ... OFF
5 Find Home on Startup  OFF
6 Pan Offset
7 Startup State Restore OFF
ESC to Exit
```

Manual Speed Deg/s

Select **1** from the Pan and Tilt Options menu to change the manual pan and tilt speeds. The maximum tilt speed is half of the maximum pan speed. Select **1** to toggle through the available options: 120°/sec, 240°/sec, or 480°/sec (default).

Pan Reverse

Select **2** to toggle Pan Reverse **ON** or **OFF** (default). See *Table 7-4* for more information.

Tilt Reverse

Select **3** to toggle Tilt Reverse **ON** or **OFF** (default). See *Table 7-4* for more information.

Table 7-4 Pan and Tilt Reverse Operation

If:	Then:
Pan Reverse is set to on	A left pan command causes the ACUIX to pan right. A right pan command causes the ACUIX to pan left.
Tilt Reverse is set to on	A tilt up command causes the ACUIX to tilt down. A tilt down command causes the ACUIX to tilt up.

–5 Degree Tilt Limit

Select **4** to toggle the –5 Degree Tilt Limit **ON** or **OFF** (default). If set to on, an operator can position the ACUIX tilt 5 degrees above horizontal.

Find Home on Startup

Each unit has a factory-set mechanical Home position. The receiver board uses the home position as a reference point for the pan and tilt positions.

Select **5** in the Pan and Tilt Options menu to turn Find Home on Startup **ON** or **OFF**. If changing from OFF (default) to ON, a message displays to confirm your selection. Select Y (yes), when prompted, to turn this feature On. To leave this feature Off, select N (no), when prompted.

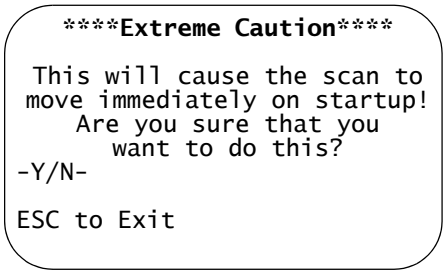


Table 7-5 Find Home Operation

If:	Then:
Find Home on Startup is set to off (default)	When an ACUIX receives control data with its address the first time after power-up, the ACUIX finds home, and then performs the control command.
Find Home on Startup is set to on	The ACUIX finds home after the initial startup delay of 15 seconds has counted down.

An operator can send an ACUIX to its home position from the HEGS5000/5001 controller:

1. Press **Run Menu** until `Find Home` displays on the LCD screen.
2. Press **Enter**. The controller sends out the data to send the control camera to its mechanical home position.

Pan Offset

Select **6** from the Pan and Tilt Options menu to access the Pan Offset Setup menu.

The Pan Offset feature is useful when a new ACUIX is installed in a dome and the programming from the existing ACUIX is transferred to the new ACUIX using the upload/download feature (see *Chapter 5, Operation and Programming with IntelliBus™ Protocol*). The alignment of the new ACUIX may not be exactly the same as the old ACUIX, causing the programmed positions of the Presets to be off. Preset 0 is used to define the location of the pan setting.

1. Select **1** to toggle the Offset **ON** or **OFF**. For the ACUIX to adjust the positioning of the ACUIX to the programmed pan offset, the offset must be set to ON.
2. Once Offset is ON, perform the following steps to set the Pan Offset:

Note You must know the original positioning of Preset 0.

a. Exit (**ESC**) out of the ACUIX setup menus until you have manual control of the ACUIX.

b. Send the ACUIX to **Preset 0**. If it does not go to the previously known position for Preset 0, the offset function cannot be used.

c. Using the controller, position the ACUIX where Preset 0 should be.

d. Access the ACUIX Main menu, select **3** (Control Options), then select **4** (Pan and Tilt Options), and then select **6** (Pan Offset).

e. Select **2** to set the Pan Offset. To test the setting, reposition the ACUIX, then send the ACUIX to **Preset 0**. The ACUIX should return to the position you have programmed in step c.

f. Press **ESC** to exit the Pan and Tilt Options menu.

Startup State Restore

If the ACUIX loses power, the function the ACUIX was performing at the time can be restored when power is returned. For example, this feature is turned on and the ACUIX was performing a Preset Tour when it lost power. When power is restored, the ACUIX will find home and then start the Preset Tour. The default setting is OFF. If the ACUIX loses power, it will operate as defined in *Find Home on Startup* on page *97*.

Select **7** in the Pan and Tilt Options menu to toggle **ON** and **OFF**. If changing from OFF (default) to ON, a message displays to confirm your selection. Select Y (yes), when prompted, to turn this feature On. To leave this feature Off, select N (no), when prompted.

```
   ****Extreme Caution****

This will move the dome to
previous shutdown position
on startup.

    Are you sure that you
       want to do this?
-Y/N-

ESC to Exit
```

Set Default Function

Select **5** from the Control Options menu to set the default function. The Default Function can be enabled or disabled.

To set the Default Function, enter values in the fields as defined in *Table 7-6* and select **Enter** when done.

```
  DEFAULT FUNCTION SETUP

FUN    NUM    DLY    ENA
-      ---    --:--  -
PVT          MIN:SEC Y-N

Press Enter when done.
```

Note If the VK-654 is installed in the ACUIX dome and motion detection is enabled, the default function is automatically disabled.

Table 7-6 Default Function Field Entry

Field	Usage
FUN (function)	Enter the function to perform after being idle for the specified delay time. P = Preset, V = Preset Tour, T = Mimic Tour. The function displays on the screen as PS=, PT=, or MT=, respectively.
NUM (number)	Enter the Preset number (1–160 with some exceptions), Preset Tour number (1–16), or Tour number (1–16). Depending on the protocol setting of the ACUIX and the control system being used, specific Presets may be used for special setup and control functions and are not available for the default function. Refer to *Table 7-4*, *Pre-programmed Presets* in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol*, and *Table 4-2*, *Pre-programmed Presets ACUIX (VCL)* in *Chapter 4, Operation and Programming with Honeywell VCL Protocol* for reserved Preset numbers. If the function is programmed, the title appears on the screen. For example, if P (Preset) 1 is entered and it has been programmed with the title, Entrance Door, `PS = Entrance Door` displays on the screen. If Preset 1 is entered, and it has not been programmed, `PS = Does Not Exist` displays on the screen.
DLY (delay)	Enter the amount of time (minutes: seconds) the ACUIX should be idle before performing the default function. The maximum delay is 99 minutes and 59 seconds.
ENA (enable)	Select Y to enable or N to disable the default function.

Table 7-7 Default Function Operation

If:	Then:
Default Function is disabled	ACUIX remains at its present position until it receives a control command.
Default Function is enabled, and the ACUIX is idle for the programmed Delay setting	The ACUIX performs the function (Preset, Preset Tour, or Mimic Tour) programmed in the default function setup menu after the programmed delay with no activity.
Alarms are present and the ACUIX reaches the Delay setting	The ACUIX automatically acknowledges the current alarm, resets its delay timer, and then processes the next alarm in numerical order. The ACUIX processes all alarms in this manner before performing the default function.

Auto Focus

Select **6** from the Control Options menu to set up the operation of the Lens Auto Focus. Selecting **6** toggles between the options: **OFF**, **Z** (default), and **PTZ**.

The minimum focus distance is set at 1.0 meter (3.3 ft) from the camera lens in both manual and automatic focus mode.

Table 7-8 Auto Focus Operation

Value	Usage
OFF	Turns the Auto Focus feature off. The lens must be manually focused.
Z	The lens auto focuses whenever the zoom setting is changed. This is the recommended setting for normal operation.
PTZ	The lens auto focuses whenever the pan, tilt, or zoom positions are changed.

Preset Tour Auto Focus

Select **7** to toggle the Preset Tour Auto Focus feature **ON** or **OFF** (default).

Table 7-9 Preset Tour Auto Focus Operation

If:	Then:
Preset Tour Auto Focus is on	The lens auto focuses when going to a Preset while running a Preset Tour.
Preset Tour Auto Focus is off	The lens goes directly to the focus position stored for each Preset while running the Preset Tour. It does not auto focus. This is the recommended setting.

Change Address, Protocol

This menu display is determined by the setting of DIP Switch SW5/8. If SW5/8 is set to **ON**, the current address and protocol settings can be viewed, but cannot be changed.

If SW5/8 is set to **OFF**, then the address, baud rate, and protocol can be changed.

```
ADDRESS, PROTOCOL CHANGE MENU
  Settings Change “DISABLED*

1 Change Camera Address ....1
2 Change Protocol ....DIAMOND
3 Change Baud Rate ......9600
4 Change Parity .........EVEN

ESC to Exit
```

Caution Changing these settings can cause loss of communication between the controller and the ACUIX.

Change Camera Address

1. Select **1** to change the camera address.
2. Move the joystick up and down to select a new camera address (0000–9999). Move the joystick left or right to move between digits, if necessary.

```
ADDRESS, PROTOCOL CHANGE MENU
  Settings Change "ENABLED*

1 Change Camera Address .... 1
2 Change Protocol .... DIAMOND
3 Change Baud Rate ..... 9600
4 Change Parity ..... EVEN

IRIS CLOSE to Exit
```

Note Do not go above the limit of the controller as this may result in you losing control of the dome.

3. Press **Iris Open**.

Note If you change the address of the ACUIX, you must change the control camera on the controller to match the new address in order to change any other menu options or control the ACUIX.

Change Protocol

Select **2** to toggle between the available protocol settings: **DIAMOND**, **MAXPRO**, **VCL 485**, **VCL UTC**, **Pelco P**, **Pelco D**, **IBUS**, or **AD**.

Change Baud Rate

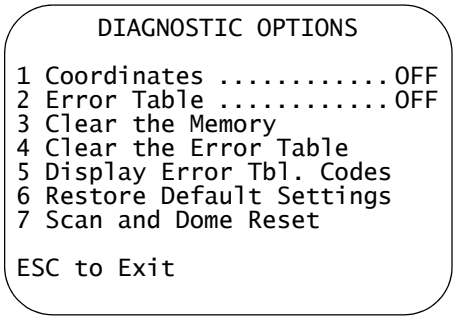
Select **3** to toggle between the available baud rate settings: **600**, **1200**, **2400**, **4800**, **9600**, **19200**, **38400**, **57600**, or **115200**.

Change Parity

Select **4** to toggle between the available parity settings: **EVEN**, **ODD**, or **NONE**. A

Diagnostic Options

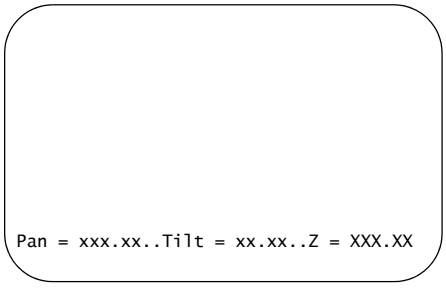
Select **4** from the Main Menu to access the Diagnostic Options menu. Diagnostic menus are designed for assisting service technicians in troubleshooting.



Coordinates

Selecting **1** toggles the Pan and Tilt Coordinates display **ON** or **OFF** (default).

When you exit programming, the coordinates are displayed. The pan and tilt coordinates are displayed in degrees.



Error Table

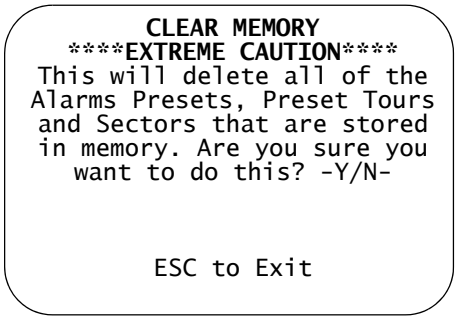
The error table lists the 64 bytes (two digit hexadecimal number) that have been entered into the error table. Some errors are represented by single bytes (2 digits) and some are represented by 2 bytes (4 digits). Not all entries are actual errors—some are indications of such things as normal power down and power up operations. (The codes used in the error table can be seen by selecting option `5 Display Error Tbl. Codes`).

Select **2** to turn the Error Table display **ON** or **OFF** (default).

Clear the Memory

Select **3** to Clear the Memory.

Select Y to clear the memory, N to cancel, and **ESC** to exit.



Note Clearing the memory does not clear the language selection or programmed Privacy Zones.

Note When using Diamond protocol and a HJZTP controller you cannot clear the memory from the Clear Memory menu.

Clear the Error Table

Select **4** to Clear the Error Table.

The ACUIX keeps track of the last 64 bytes of errors and events that occurred during operation of the unit. Selecting **4** clears the table.

```
ERROR TABLE HAS BEEN CLEARED
```

Display Error Table Codes

Select **5** from the Diagnostic Options menu to display a list of the error and event table codes.

```
    Error and Event Codes
00 - Corrupted memory
01 - Proc low voltage reset
02 - Proc bus error
03 - Proc address error
04 - Proc illegal instruction
05 - Proc zero divide
06 - Proc privilege violation
07 - Proc spurious interrupt
08 - Four ESC reset
09 - Pan motor error
10 - Corrupted data to camera
11 - Camera data queue overrun
21 - Command queue overrun
22 - Packet framing error
C0 - Receive queue overrun
Cx - bit0-Byte parity error
     bit1-Byte framing error
     bit2-Byte noise error
     bit3-Byte overrun error
D0 - Byte timeout error
D8 - Packet parity error
EE - RESET, following byte
     gives type of reset
     bit1-System Reset
     bit2-Loss of Clock Reset
     bit4-Bus Fault Reset
     bit5-Watchdog Reset
     bit6-Power ON Reset
     bit7-External Reset
```

Note If the ACUIX receives a 00 corrupted memory error code, the ACUIX automatically clears the memory and resets all default settings. All user programming (Presets, Preset Tours, Mimic Tours, Sector IDs, and Privacy Zones) is deleted.

In the Cx code, the last hexadecimal digit is made up as follows:

Table 7-10 Cx Code Last Hexadecimal Digit

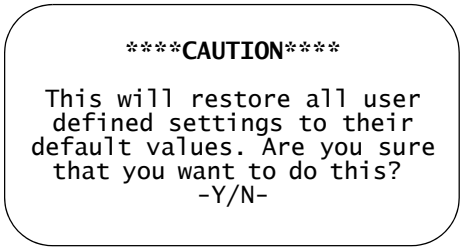
bit#				
3	**2**	**1**	**0**	**Hexadecimal Digit**
0	0	0	0	0
0	0	0	1	1
0	0	1	0	2
0	0	1	1	3
0	1	0	0	4
0	1	0	1	5
0	1	1	0	6
0	1	1	1	7
1	0	0	0	8
1	0	0	1	9
1	0	1	0	A
1	0	1	1	B
1	1	0	0	C
1	1	0	1	D
1	1	1	0	E
1	1	1	1	F

Therefore, this error code can represent multiple errors.

The EE error code includes the following byte (2 digit) hexadecimal number where the right hand digit is represented as in the above table and the left hand digit is represented as in the above table with bit 0 = bit 4, bit 1 = bit 5, bit 2 = bit 6, and bit 3 = bit 7.

Restore Default Settings

Select **6** to restore all default settings for displays, alarms, camera settings, and diagnostic settings to the factory default values. Select Y to restore all defaults or N to cancel and return to the Diagnostic Options menu.



Scan and Dome Reset

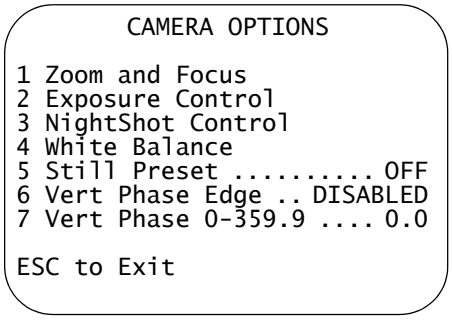
Select **7** to reset the scan and dome. This resets the ACUIX the same as if power had been removed and then restored.

This can also be used to cause the ACUIX to find home.

Camera Options, 18X WDR & True Day/Night and 26X WDR, True/Day Night Camera (FCB-EX490D and FCB-EX990D Respectively)

Note The information in this section applies to both the 18X and 26X cameras, unless otherwise specified.

Select **5** from the Main menu to access the Camera Options menu.



Caution This menu is for qualified technical personnel only. Changing the Camera Options can make the video unusable. Restore the default settings to bring video back.

Zoom and Focus

Select **1** to set the lens Zoom and Focus Options.

```
ZOOM AND FOCUS OPTIONS

1 Max Digital Zoom Mag .. 12x
2 Manual Zoom Spd 0-8 ..... 6


ESC to Exit
```

Max Digital Zoom Mag

Select **1** to set the Maximum Digital Zoom setting. Selecting **1** toggles through available values: **1x**, **2x**, **4x** or **12x** (default).

Manual Zoom Speed

Select **2** to set the Manual Zoom Speed. The Manual Zoom Speed is the speed the joystick moves the zoom lens. The lens manual zoom speed ranges from **0** (slow) to **7** (fast). Selecting **8** makes the zoom speed proportional to the angular position of the joystick knob.

The default value is **6**.

Enter a new value and select **Enter**.

Exposure Control

Select **2** to setup the lens Exposure Control options.

The selections that display NA do not apply to this camera.

```
EXPOSURE CONTROL

1 NA
2 Exposure Level .......... 7
3 NA
4 NA
5 NA
6 NA
7 NA
8 Backlight Comp ........ OFF
ESC to Exit
```

Auto Exposure Level

Select **2** to change the Auto Exposure Level.

Auto Exposure Level is only operational when the unit is in Auto Exposure mode.

1. Enter a value from **0** (dark/outdoor application) to **14** (bright/indoor application). The default value is **7**.
2. Select **Enter**.

Backlight Compensation

Select **8** to toggle Backlight Compensation **ON** or **OFF**. Backlight Compensation is only operational when the unit is in Auto Exposure mode.

NightShot Control

Select **3** to setup the NightShot Control Options. The default settings are shown to the right.

```
    NIGHTSHOT CONTROL OPTIONS

1 NightShot Mode ........... MAN
2 NightShot ................ OFF
3 Activate NightShot . 28dB 1/30s
4 Deactivate NightShot28dB 1/60s

ESC to Exit
```

NightShot Mode

Select **1** to toggle between **MANUAL** and **AUTO** operation.

Note NightShot mode is only operational when the unit is in Auto Exposure mode.

NightShot

If NightShot is in manual mode, select **2** to toggle the NightShot **ON** or **OFF**. Selecting **2** manually moves the IR block filter in and out.

If NightShot is in **AUTO** mode, this feature is disabled.

Activate NightShot

Select **3** to toggle between the available gain and shutter speed values for activating NightShot mode. To be functional, NightShot must be in **AUTO** mode. The activation setting cannot be greater than the deactivation setting. This guarantees that there will always be some deadband between the activate and deactivate levels. The amount of deadband can be adjusted to prevent the ACUIX from oscillating between the NightShot activated and deactivated modes.

Gain Settings (depending on camera):
0dB, 2dB, 4dB, 6dB, 8dB, 10dB, 12dB, 14dB, 16dB, 18dB, 20dB, 22dB, 24dB, 26dB, 28dB.

Shutter Speed Settings:
PAL cameras = 1/3 sec, 1/6 sec, 1/12 sec, 1/25 sec, or 1/50 sec
NTSC cameras = 1/4 sec, 1/8 sec, 1/15 sec, 1/30 sec, or 1/60 sec

Deactivate NightShot

Select **4** to toggle between the available gain and shutter speed values for deactivating NightShot mode. See *Activate NightShot*, page *107*, for available settings. The deactivation setting cannot be less than the activation setting.

White Balance

Select **4** from the Camera Options menu to set the White Balance Control options. The default settings are shown to the right.

```
WHITE BALANCE CONTROL

1 High Light WB Mode....AUTO
2 Low Light WB Mode.....AUTO
3 Enter High Light 28dB 1/60s
4 Enter Low Light.28dB 1/30s
5 Manual White Balance...OFF
6 NA
7 NA
ESC to Exit
```

High Light WB Mode

Select **1** to toggle between the available settings for the High Light level white balance mode. The available settings are **AUTO** (default), **ATW**, **Indoor**, and **Outdoor**.

Table 7-11 High Light White Balance Mode Settings

Setting	Description
Auto	Auto Tracing White Balance with limitations on R and B gain (3,200°K to 6,000°K). Use this setting to avoid fixing single color scenes as white.
ATW	Auto Tracing White Balance (2,000°K to 10,000K°). The camera tries to turn the dominant color within the temperature color range to white.
Indoor	The indoor mode sets the white balance to 3200°K.
Outdoor	The outdoor mode sets the white balance to 5800°K.

Low Light WB Mode

Select **2** to toggle between the available settings for the Low Light level white balance mode. The available settings are **AUTO** (default), **ATW**, **Indoor**, and **Outdoor** (see *Table 7-11* for an explanation of values).

Enter High Light

Select **3** to toggle between the available gain settings (0–28dB) and shutter speeds to set the point where the unit switches to High Light level white balance mode.

Shutter Speed Settings:
PAL cameras = 1/3 sec, 1/6 sec, 1/12 sec, 1/25 sec, or 1/50 sec
NTSC cameras = 1/4 sec, 1/8 sec, 1/15 sec, 1/30 sec, or 1/60 sec

The High Light level mode cannot be set lower than the Low Light level mode.

Enter Low Light

Select **4** to toggle between the available gain settings (0–28dB) and shutter speeds to set the point where the unit switches to Low Light level white balance mode.

Shutter Speed Settings:
PAL cameras = 1/3 sec, 1/6 sec, 1/12 sec, 1/25 sec, or 1/50 sec

NTSC cameras = 1/4 sec, 1/8 sec, 1/15 sec, 1/30 sec, or 1/60 sec

The Low Light level mode cannot be set higher than the High Light level mode.

Manual White Balance

Select **5** to choose between **ON** and **OFF** for Manual White Balance control.

If Manual White Balance is ON, menu options 1–4 do not apply and change to NA, while menu options 6 and 7 become available.

```
WHITE BALANCE CONTROL

1 High Light WB Mode ..... NA
2 Low Light WB Mode ...... NA
3 Enter High Light ....... NA
4 Enter Low Light ........ NA
5 Manual White Balance ... ON
6 Red Gain ............... 200
7 Blue Gain .............. 200
ESC to Exit
```

Red Gain

Select **6** to set the Red Gain. The Red Gain option is only available if Manual White Balance is **ON**. Enter a value between **0** (low) and **255** (high) and select **Enter**. The default value is **200**.

Blue Gain

Select **7** to set the Blue Gain. The Blue Gain option is only available if Manual White Balance is **ON**. Enter a value between **0** (low) and **255** (high) and select **Enter**. The default value is **200**.

Still Preset

Select **5** to toggle Still Preset **ON** or **OFF** (default).

Table 7-12 Still Preset Operation

If:	Then:
Still Preset is on (video is frozen)	Video is frozen between Presets. The video remains at the current Preset until the ACUIX arrives at the next Preset, and then switches the video. An asterisk displays to the left of the camera ID when the ACUIX is moving between Presets. If an operator manually controls the ACUIX, the Still Preset function is disabled until the ACUIX is sent to another Preset.
Still Preset is off (video is unfrozen)	Video returns to normal operation.

Vertical Phase 0–359.9

1. Select **6** from the Camera Options menu to enable or disable the Vertical Phase Edge for line locking the camera. Selecting **6** toggles between **ENABLED** and **DISABLED**. If you select **ENABLED**, you can set the Vertical Phase from **0** to **359.9**.
2. If you selected **ENABLED**, select **7** to change the Vertical Phase.

Enter a number from **0** to **359.9** and press **Enter**.

Camera Options, 35X WDR & True Day/Night Camera with Image Stabilization and Motion Detection (VK-S654)

Select **5** from the Main menu to access the Camera Options menu.

```
        CAMERA OPTIONS

1 Max Digital Zoom Mag .. 12X
2 Exposure Control
3 Video Setup
4 White Balance
5 Still Preset .......... OFF
6 Vert Phase Edge .. DISABLED
7 Vert Phase 0-359.9 .... 0.0
8 Image Stabilization ... OFF
9 Motion Detection ....... ON

ESC to Exit
```

Caution This menu is for qualified technical personnel only. Changing the Camera Options can make the video unusable. Restore the default settings to bring video back.

Maximum Digital Zoom

Select **1** from the Camera Options menu to toggle between the available options to set the lens Maximum Digital Zoom. The available values are **1x**, **2x**, **4x**, and **12x** (default).

Note If Image Stabilization is enabled, the digital zoom is restricted to 2x.

Exposure Control

Select **2** from the Camera Options menu to setup the lens Exposure Control options.

```
EXPOSURE CONTROL

1 Auto AE Mode ........... AE
2 Manual AE Mode ....... Iris

AE Exposure Mode Features
NightShot Control ....... MAN
Auto NS Sensitivity ...... NA
Digital Slow Shutter .... OFF

ESC to Exit
```

1. Select **1** to change the Auto Exposure Mode. This setting applies when the controller and the camera lens are in auto iris mode. If the controller is set to manual iris, the auto iris mode is disabled, and the lens iris is in manual mode. Selecting **1** toggles between the available modes of operation. The settings for each mode are displayed below the menu options. The default Auto Exposure Mode is **AE**. The following modes and settings are available:

Table 7-13 Auto Exposure Control Mode Settings

Auto AE Mode Settings	
NightShot Control	MAN
Auto NightShot Sensitivity	NA
Digital Slow Shutter	OFF
Auto AER1 Mode Settings	
NightShot Control	AUTO
Auto NightShot Sensitivity	HIGH
Digital Slow Shutter	OFF
Auto AER2 Mode Settings	
NightShot Control	AUTO
Auto NightShot Sensitivity	MID
Digital Slow Shutter	OFF
Auto AE+ Mode Settings	
NightShot Control	MAN
Auto NightShot Sensitivity	NA
Digital Slow Shutter	AUTO
Auto AER+1 Mode Settings	
NightShot Control	AUTO
Auto NightShot Sensitivity	HIGH
Digital Slow Shutter	AUTO
Auto AER-5 Mode Settings	
NightShot Control	AUTO
Auto NightShot Sensitivity	MID

Table 7-13 Auto Exposure Control Mode Settings

Digital Slow Shutter	AUTO
Auto AER+3 Mode Settings	
NightShot Control	AUTO
Auto NightShot Sensitivity	LOW
Digital Slow Shutter	AUTO

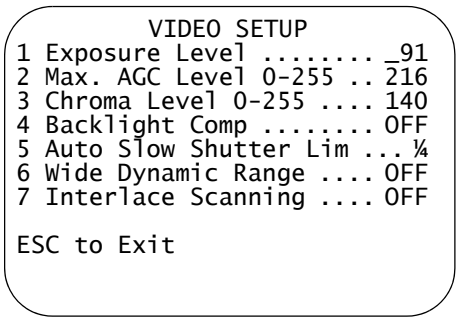
2. Select **2** to change the Manual AE Mode. Pressing **2** toggles between the available settings: **Iris**, **Gain**, or **Shutter**. This setting applies when the controller is set to manual iris mode.

Table 7-14 Manual Exposure Modes

Setting	Description
Iris (default setting)	The iris function is controlled manually and the camera controls the gain and shutter automatically.
Gain	The gain is manually controlled and the camera controls the iris and shutter automatically.
Shutter	The shutter is controlled manually, and the camera controls the iris and gain automatically.

Video Setup

Select **3** from the Camera Options menu to access the Video Setup menu. The default settings are shown to the right.



1. Select **1** to change the Exposure Level. The default setting is **91**; 0 = dark to 255 = bright. Enter a number between **0** and **255**, then press **Enter**.
2. Select **2** to change the Maximum AGC Level. The default setting is **216**.
   High level (255) = bright picture, noise in picture.
   Low level (0) = dim picture, no noise.
   Enter a number between **0** and **255**, then press **Enter**.
3. Select **3** to change the Chroma Level. The default setting is **140**.
   0 = no color
   255 = color is saturated
   Enter a number between **0** and **255**, then press **Enter**.
4. Select **4** to toggle the Backlight Compensation **ON** or **OFF**. The Backlight Compensation is only operational when the unit is in Auto Exposure Mode and the Wide Dynamic Range is off.

5. Select **5** to set the Auto Slow Shutter Limit. Selecting **5** toggles between the available settings.

Table 7-15 Auto Slow Shutter Limits

NTSC
1/60
1/30
1/15
1/8
1/4 default
1/2

6. Select **6** to toggle the Wide Dynamic Range **ON** or **OFF**. The default setting is **OFF**. The Wide Dynamic Range is only functional if the camera is in auto iris mode. The Wide Dynamic Range scans the video and sets the exposure level so it is balanced between the bright areas and dark areas in the video.
7. Select **7** to toggle Interlace Scanning **ON** and **OFF**. If you set to **ON**, the Wide Dynamic Range and Motion Detection features of the camera are disabled. Select **Y** (yes) to set to On or N (no) to leave it set to Off.
8. When you are finished setting up the video, send an **ESC** command to the ACUIX. The display returns to the Camera Options menu.

```
This will Disable
WDR & Motion Detection.
  Are you sure that you
      want to do this?
  -Y/N-

  ESC to Exit
```

White Balance

Select **4** from the Camera Options menu to set the camera White Balance.

1. Select **1** to toggle the White Balance **ON** or **OFF**. If the Manual White Balance is set to **ON**, the Red Gain and Blue Gain settings can be changed.
2. If you set the Manual White Balance to **ON**, select **2** to change the Red Gain setting. The default setting is **128**. Enter a number between **0**–**511**, then press **Enter**.

```
        White Balance

1 Manual White Balance .. OFF
2 Red Gain 0-511 ........ 128
3 Blue Gain 0-511 ....... 128


ESC to Exit
```

3. If you set the Manual White Balance to **ON**, select **3** to change the Blue Gain setting. The default setting is **128**. Enter a number between **0**–**511**, then press **Enter**.

Note You can change the Red and Blue Gain settings when the Manual White Balance is set to **OFF**, but the settings do not take affect until the Manual White Balance is set to **ON**.

When you are finished setting up the White Balance, press **ESC**. The display returns to the Camera Options menu.

Still Preset

Select **5** from the Camera Options menu to turn Still Preset **ON** or **OFF** (default).

Table 7-16 Still Preset Operation

If:	Then:
Still Preset is on (video is frozen)	Video is frozen between Presets. The video remains at the current Preset until the scan arrives at the next Preset, and then switches the video. An asterisk displays to the left of the camera ID when the ACUIX is moving between Presets. If an operator manually controls the ACUIX, the Still Preset function is disabled until the ACUIX is sent to another Preset.
Still Preset is off (video is unfrozen)	Video returns to normal operation.

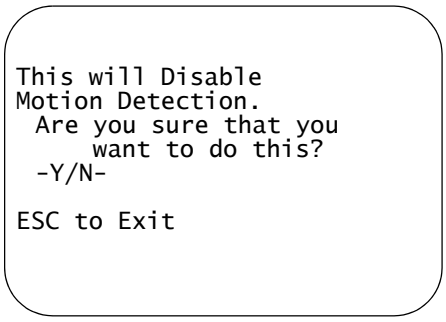
Vertical Phase 0–359.9

1. Select **6** from the Camera Options menu to enable or disable the Vertical Phase Edge for line locking the camera. Selecting **6** toggles between **DISABLED** (default) and **ENABLED**. If you enable the Vertical Phase Edge, you can set the Vertical Phase from **0** to **359.9**.
2. If enabled, select **7** to change the Vertical Phase.
3. Enter a number from **0** to **359.9** and press **Enter**.

When you are finished setting up the camera and lens, press **ESC** to exit the Camera Options menu. The screen returns to the Main Setup menu. Select another menu option or press **ESC** to exit the setup mode.

Image Stabilization

1. Select **8** to toggle the Image Stabilization feature **ON** or **OFF** (default). If you select **ON**, the motion detection feature is disabled.
   a. Select 5Hz or 10Hz to turn Image Stabilization on.
   b. Select OFF to turn Image Stabilization off.



Note Selecting OFF disables motion detection.

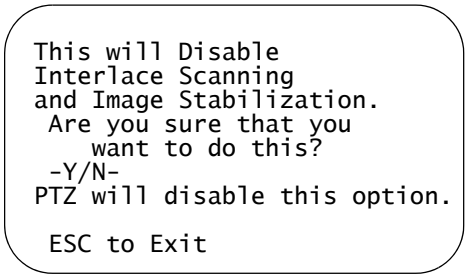
2. Press **ESC** to return to the Camera Options menu and leave Image Stabilization off.

When Electronic Image Stabilization (EIS) is enabled, the camera reduces the area of the CCD that is scanned. This causes the video displayed on the monitor to appear to have zoomed in. When the dome undergoes a pan or tilt operation, electronic Image Stabilization is disabled while the camera moves, and then re-enables after the camera has stopped moving for a five second period.

Note When Image Stabilization is enabled, the Digital Zoom is limited to 2x.

Motion Detection

1. Select **9** to turn Motion Detection **ON** or **OFF** (disabled). If Motion Detection is ON, Interlace Scanning and Image Stabilization are automatically disabled. If Motion Detection is enabled, the default function is also disabled.



Note If Motion Detection is enabled and an operator sends a command to the ACUIX, Motion Detection is automatically disabled and the operator must access the setup menu to re-enable it.

2. Select Y (yes) to turn Motion Detection on, select N (no) to leave Motion Detection off.
3. Select **ESC** to exit the menu and return to the Camera Options menu.

   If Motion Detection is enabled and motion is detected, the message `Motion Detected` is added to the video signal. The message remains on the video until the ACUIX receives a pan, tilt, or zoom command. Motion detection is automatically disabled as soon as motion is detected to avoid multiple triggers of motion detection from the same event. Motion detection is again enabled after a one minute delay of any Motion Detect Event. If the ACUIX is using IntelliBus protocol, for each Motion Detect Event an IntelliBus `Motion Detect` message is sent to the IntelliBus master.

   If Motion Detection is enabled and manual Pan/Tilt/Zoom operation is in progress, Motion Detection is disabled and will re-enable 30 seconds after the PTZ operation has concluded.

Function Programming

Select **6** in the Main menu to access additional programming options.

The protocol setting determines the function programming available to the user. If a function is not available for a specific protocol, NA displays next to the number.

```
      FUNCTION PROGRAMMING

1 PTZ Mimic Tour Menu
2 Program a Preset Tour
3 Privacy Zone Options
4 List PS/VS/Sectors
5 Program Sector
6 Program Privacy
7 Delete PS/PT/PZ/Sector
ESC to Exit
```

Mimic Tour (Honeywell Diamond Protocol Only)

This menu option is only displayed when the ACUIX DIP switches are set to Honeywell Standard protocol. When set to Honeywell VCL mode, this option is NA (not applicable). See *Programming Mimic Tours*, page *71*, in *Chapter 4, Operation and Programming with Honeywell VCL Protocol* for more information on programming Mimic Tours.

Select **1** in the Function Programming menu to program, run, or delete a PTZ (pan, tilt, zoom) Mimic Tour.

```
        PTZ MIMIC TOURS
1 Run a Tour
2 Program a Mimic Tour
3 Delete a Mimic Tour


ESC to Exit
```

Run a Tour

Select **1** in the PTZ Mimic Tours menu to run a tour. Enter the Tour number (**1**–**16**) and press **Enter**. If the Tour is programmed, it will run.

If the Tour is not programmed, the message `Does Not Exist` appears on the top of the display.

Program a Mimic Tour

1. Select **2** in the PTZ Mimic Tours menu to program a Tour. Enter a Tour number (**1**–**16**) and press **Enter**.
2. The ACUIX counts from 120 to 0 seconds. You have 120 seconds to pan and tilt the ACUIX and adjust the lens zoom setting. The ACUIX saves the PTZ commands performed during the 120 seconds. When the scan reaches 0, it displays `Program Mimic Tour Complete`.
3. To save the Mimic Tour select the **ESC** (clear/manual) key on the controller when you are finished programming the Tour. The ACUIX saves the PTZ commands you entered between the time you started the programming mode until you selected **ESC**.

Delete a Mimic Tour

Select **3** in the PTZ Mimic Tours menu to delete a Tour. Enter the Tour number (**1**–**16**) and press **Enter**.

The display returns to the PTZ Mimic Tour menu. Select another Mimic Tour option or select **ESC** to return to the main programming menu.

Program a Preset Tour (Honeywell VCL and Supported 3rd Party Protocols)

This menu option is only displayed when the ACUIX DIP switches are set to Honeywell VCL, Pelco P, or Pelco D protocol. When set to Honeywell Standard mode, this option is NA (not applicable). See *Program Preset Tours*, page *43*, in *Chapter 4, Operation and Programming with Honeywell VCL Protocol* for more information on programming Preset Tours using Standard protocol.

1. Position the cursor on **2** in the Function Programming menu and press **Iris Open** to program a Preset Tour.
2. Use the tilt up function on the joystick until the desired Preset Tour number (**1**–**16**) displays, then press **Iris Open**.
3. Move the joystick up, down, left, or right to move between fields.

```
Preset Tour Number --
     ↑↓  to scroll
Press Iris Open when done

ESC to Exit
```

```
    Program Preset Tour n
NUM  PRESET  VELOCITY DWELL
1     --       ---      --
2     --       ---      --
3     --       ---      --
4     --       ---      --
5     --       ---      --
6     --       ---      --
7     --       ---      --
D = Delete E = Exit S = Save

ESC to Exit
```

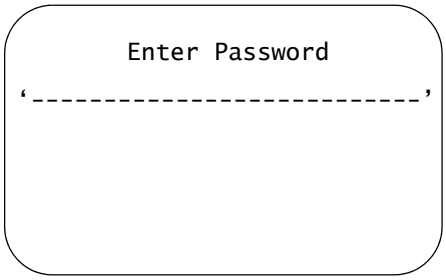
Table 7-17 Preset Tour Field Entries

Field	Usage
NUM (number)	Using the joystick, move the cursor to the desired field and press **Iris Open** to activate. Use the joystick up and down functions to change the value. If the field is more than one digit, each digit can be changed individually by placing the cursor on the digit and using the joystick up or down function.
PRESET	Selectable from **0** to **70**, **74**, and **100** to **160**. Presets **71**–**73**, and **75**–**99** are reserved for special functions and cannot be entered in a Preset Tour. When the field has the desired number, press **Iris Open** to select the number. **Iris Open** also moves the cursor to the next field.
VELOCITY	The Velocity field is the pan and tilt speed for the scan to go to the Preset entered (**1** to **480**°/second). The default setting is **480**°/second.
DWELL	The Dwell time is how long the ACUIX waits before it goes to the next Preset in the list (**0** to **99** seconds). **Note** It is not recommended to select no delay (0 seconds).

4. Inserting Presets: To insert a Preset between Presets, position the cursor on the second Preset and press **Focus Near** to insert a line.
5. Deleting Presets: To delete a Preset, place the cursor on the Preset line and press **Focus Far**. The entire Preset line is deleted.
6. When you are finished entering Presets, press **Iris Close**. The cursor moves to `S = Save`.
7. Press **Iris Open** to save the Preset Tour. To exit without saving, move the joystick left to move the cursor to `E = Exit` and press **Iris Open**.
8. To delete a Preset Tour, move the joystick left to move the cursor to `D = Delete`, and then press **Iris Open**.

Privacy Zone Options (All Protocols)

Select **3** from the Function Programming menu to access the Privacy Zone Options menu. If the ACUIX is set for Diamond or IntelliBus protocol, a password must be entered. If the ACUIX is set for VCL, Pelco P, or Pelco D protocols, the Privacy Zone Options menu displays.



1. Enter the Privacy Zone password. The default password is blank. If the ACUIX is set for VCL, or Pelco P/D protocols, this step is skipped.

Note If using the default password, press **Enter** at the password prompt.

2. Press **Enter**.

```
PRIVACY ZONE OPTIONS MENU

1 Change Priv Zone Priority
2 Enable/Disable Privacy Zone
3 Privacy Zone Color ..BLACK


ESC to Exit
```

Note If no Privacy Zones are programmed, the message `No Programmed Privacy Zones` displays when the user attempts to access any of the Privacy Zone options.

Change Priv Zone Priority

1. Select **1** to change the Privacy Zone Priority. This is useful if Privacy Zones overlap.

   In the example to the right, Privacy Zones 1, 2, and 3 are prioritized in order.

2. To change the priority of a Privacy Zone, enter the current priority of the Privacy Zone you want to change in the Change Priority field, and then enter the priority you want to change it to.

```
PRIVACY ZONE PRIORITY MENU

PRIORITY PZ_NAME      ZONE_ID
1 Privacy 1               1
2 Privacy 2               2
3 Privacy 3               3

Change Priority _-- to --

ESC to Exit
```

For example, change Priority 3 (Privacy Zone 3) to Priority 1 (Privacy Zone 3):

1. Enter **3** (for Priority 3) in the first Change Priority field and press **Enter**.
2. Enter **1** (for Priority 1) in the second Change Priority field and press **Enter**.

   The priorities change so Privacy 3 is now at Priority 1 and Privacy 1 is at Priority 2 and Privacy 2 is at Priority 3.

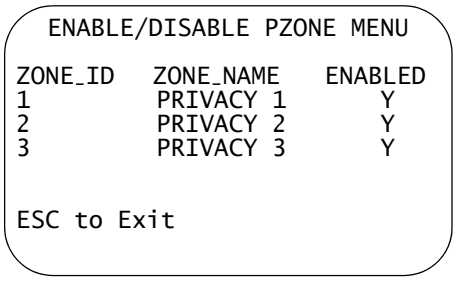
   Continue changing priorities until the Privacy Zones are listed in the desired order of priority.

3. Press **ESC** when Privacy Zone priorities are completed.

```
PRIVACY ZONE PRIORITY MENU

PRIORITY PZ_NAME      ZONE_ID
1 Privacy 3               3
2 Privacy 1               1
3 Privacy 2               2

Change Priority -- to --

ESC to Exit
```

Enable/Disable Privacy Zone

1. Select **2** to enable or disable programmed Privacy Zones. By default, all Privacy Zones are enabled.
2. Select **Y** (yes) for enabled or **N** (no) for disabled in the Enabled field.
3. To move between the rows on the same page, move the joystick up or down. To move between pages (if there are more than 6 Privacy Zones) move the joystick left or right.



If a Privacy Zone is disabled, the programming is saved, but the video is not blanked when the ACUIX moves into the programmed Privacy Zone area.

Privacy Zone Color

Select **3** to toggle between the available colors (**BLACK**, **WHITE**, and **BLUR**) of the Privacy Zone block.

List PS/PT/Sectors (All Protocols)

1. Select **4** to view the List Menu.
2. If the listing is multiple pages, use the page up and page down commands on your controller to view the next pages.

   When the last item in a listing displays, an `END of DIRECTORY` message displays.
3. Enter **ESC** to exit any of the listing displays.

Presets

Select **1** to view a listing of all programmed Presets and their titles.

Preset Tours

Select **2** to view a listing of all programmed Preset Tours and their titles.

Sectors

Select **3** to view a listing of all Sectors IDs and their titles.

Program Sector (Honeywell VCL and Supported 3rd Party Protocols)

This menu option is only displayed when the ACUIX DIP switches are set to Honeywell VCL, Pelco P, or Pelco D protocol. When set to Honeywell Standard mode, this option is NA (not applicable). See *Program Sector IDs*, page *49*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol* for more information on programming Sectors.

1. Select **5** to program a Sector. Move the joystick down until 5 is highlighted and then press **Iris Open**.
2. Move the joystick up until the desired Sector ID number (**1**–**16**) displays. Move the joystick left and right to move between the digits, if necessary.
3. Press **Iris Open**.
4. Move the joystick up or down to enter a 24-alphanumeric name for the Sector. This name displays on the video whenever the ACUIX is viewing any portion of the programmed Sector. Move the joystick left or right to position the cursor.
5. When the desired name displays, press **Iris Open**.
6. Press **Focus Near** to go to PTZ mode.
7. Position the video to the lower left corner of the Sector.
8. Press **Focus Far** to return to the programming menu.
9. Press **Iris Open**.
10. Press **Focus Near** to go to PTZ mode.
11. Position the video to the upper right corner of the Sector.
12. Press **Focus Far** to return to the programming menu.
13. Press **Iris Open**. If the upper right tilt position is below the lower left tilt position, the message `Illegal Tilt Direction` displays. Repeat steps 5–10 or press **Clear**/**Manual** to cancel the operation and return to manual operation.
14. Program another Sector ID or press **Iris Close** to exit programming.

Program Privacy Zone (Honeywell VCL and Supported 3rd Party Protocols)

This menu option is only displayed when the ACUIX DIP switches are set to Honeywell VCL, Pelco P, or Pelco D protocol. When set to Honeywell Standard mode, this option is NA (not applicable). See *Privacy Zones*, page *51*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol* for more information on programming Privacy Zones.

Note Upon powering up, the ACUIX dome will automatically find home so the dome can then run Presets and so on as they were programmed. If a Privacy Zone is enabled, no video will be shown during homing, as your Privacy Zones are not recognized until ACUIX has reached home. Video will display once the dome has reached its home setting, unless a Privacy Zone overlaps with the home setting.

Note It is necessary to position the camera so the area to be covered by the Privacy Zone is viewed on the monitor prior to accessing the on-screen setup menus.

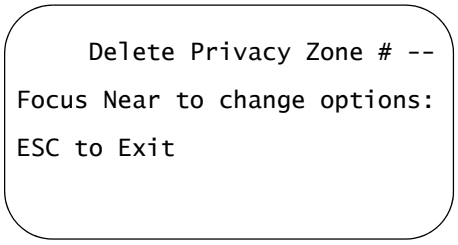
1. Move the joystick down until `6 Program Privacy Zone` is highlighted, and then press **Iris Open**.
2. Move the joystick up until the desired Privacy Zone number (**1**–**32**) displays. Move the joystick left and right to move between the digits, if necessary.
3. Press **Iris Open**.
4. Move the joystick up or down to enter a 24-alphanumeric name for the Privacy Zone. This name displays on the video whenever the ACUIX is viewing any portion of the Privacy Zone. Move the joystick left or right to position the cursor.
5. When the desired name displays, press **Iris Open**.
6. Move the joystick up and down to increase or decrease the height of the Privacy Zone box and the left and right to increase or decrease the width of the box.
7. When the box is the desired size, press **Iris Open**.
8. Program another Privacy Zone or press **Iris Close** to exit programming.

Delete PS/PT/PZ/Sectors (Honeywell VCL and Supported 3rd Party Protocols)

This menu option is only displayed when the ACUIX DIP switches are set to Honeywell VCL, Pelco P, or Pelco D protocol. When set to Honeywell Standard protocol, this option is NA (not applicable). See *Program Preset Menu Commands*, page *39*, in *Chapter 3, Operation and Programming with Honeywell Diamond Protocol* for more information on deleting Presets, *Preset Tour Commands*, page *44*, in *Chapter 3* for more information on deleting Preset Tours, *Sector ID Commands*, page *50*, in *Chapter 3* for more information on deleting Sector IDs, and *Privacy Zones*, page *51*, in *Chapter 3* for more information on deleting Privacy Zones.

From this option, Presets, Preset Tours, Privacy Zones, and Sectors can be deleted.

1. Move the joystick down until `7 Delete PS/PT/PZ/Sector` is highlighted, and then press **Iris Open**.
2. Press **Focus Near** until the desired function (Privacy Zone, Preset, Preset Tour, or Sector) displays.
3. Move the joystick up or down until the desired number displays. Move the joystick left and right to move between the digits, if necessary.



4. Press **Iris Open**. If deletion of the programming was successful, the message `Delete Success` displays on the monitor. If that function (Preset, Preset Tour, Privacy Zone, or Sector) was not programmed, it cannot be deleted, and the message `Does Not Exist` displays on the monitor.

Enhanced Settings

Select **7** in the Main menu to access the Enhanced Features menu.

```
      ENHANCED FEATURES
1 Video Gain/PWM Settings
2 Display Temperature ... OFF
3 Temp. Format ... FAHRENHEIT
4 Display Pressure ..... OFF
5 Time & Date Settings
5 Display Supply Voltages


ESC to Exit
```

Video Gain/PWM Settings

Select **1** in the Enhanced Features menu to access the Video Gain/PWM Settings Menu.

```
 VIDEO GAIN/PWM SETTINGS MENU

1 Video Gain (UTP) ....... OFF
2 Lift PWM Level 0-100 .... NA
3 Gain PWM Level 0-100 .... NA
4 Char White Level 0-100 .. 50

ESC to Exit
```

Video Gain (UTP)

Select **1** to toggle the Video Gain (UTP) **OFF** (default) or **ON**. This feature is for use in setting the cabling distances when running the video on unshielded twisted pair (UTP) wiring. Turn this feature on to adjust the Lift and Gain levels of the video.

Lift PWM Level 0–100

If the Video Gain (UTP) is turned **ON**, the Lift PWM (Pulse Width Modulation) Level can be adjusted. The Lift setting boosts the high frequency in the video to compensate for high frequency losses caused by capacitive roll-off of the cable distance. The longer the distance of UTP wiring, the higher the setting.

1. Select **2** to change the current setting.
2. Enter the desired setting, between **0**–**100**.

Table 7-18 Recommended Lift Settings for Cable Lengths

Cable Length	Lift Setting
1200+ ft (365+ m)	100
900 ft (275 m)	80
600 ft (183 m)	40
300 ft (91 m)	25

3. Press **Enter**.

Gain PWM Level 0–100

If the Video Gain (UTP) is turned **ON**, the Gain PWM (Pulse Width Modulation) Level can be set. The Gain setting amplifies the video to compensate for the resistance of the cable.

1. Select **3** from the Video Gain/PWM Setting Menu to change the current setting.
2. Enter the desired setting, between **0**–**100**.

Table 7-19 Recommended Gain Settings for Cable Lengths

Cable Length	Gain Setting
1200+ ft (365+ m)	55
900 ft (275 m)	42
600 ft (183 m)	35
300 ft (91 m)	25

3. Press **Enter**.

Char White Level 0–100

The Char White PWM (Pulse Width Modulation) Level is used to brighten or darken the characters in the on-screen displays. The default setting is **50**.

1. Select **4** from the Video Gain/PWM Settings Menu to change the current setting.
2. Enter a value from **0** (dark) to **100** (bright).
3. Press **Enter**.

Caution Bright values can burn the phosphor in some monitors. The character images may remain on the monitor due to the burning of the phosphor.

Display Temperature

Select **2** from the Enhanced Features menu to turn the Temperature Display **ON** or **OFF** (default). This feature displays the temperature of the ACUIX. If the Temperature Display is turned on, it appears in the lower left corner of the video.

Temperature Format

Select **3** from the Enhanced Features menu to toggle between temperature formats: **FAHRENHEIT** (default) and **CELCIUS**.

Display Pressure

Select **4** from the Enhanced Features menu to turn the ACUIX pressure display **ON** or **OFF** (default). The pressure displays in pounds per square inch (psi). If the pressure display is turned on, it appears in the lower right corner of the video.

Time & Date Settings

Select **5** from the Enhanced Features menu to access the Time and Date Settings Menu.

```
  TIME & DATE SETTINGS MENU
1 Display Time ..........OFF
2 Display Date ..........OFF
3 Time Format ..... 24 Hours
4 Change Time ..... 05:25:05
5 Change Date ... 27-Sep-2006


ESC to Exit
```

Display Time

Select **1** to toggle the time display **OFF** (default) and **ON**. If the time display is turned on, it appears on the bottom of the video in the middle left of the screen in HH:MM:SS AM or PM for 12-Hour format or HH:MM:SS for 24-hour format. If the temperature or pressure display is turned on as well, the time displays in HH:MM format.

Display Date

Select **2** to toggle the date display **OFF** (default) and **ON**. If the date display is turned on, it appears on the bottom of the video in the middle right of the screen in DD-MMM-YYYY format. If the temperature or pressure displays are turned on as well, the date displays in DD-MMM format.

Time Format

Select **3** to toggle the Time Format between **24 Hours** (default) and **12 Hours**. If the 12-hour format is selected, the time displays as HH:MM:SS AM or PM. If the 24-hour format is selected the time displays as HH:MM:SS.

Change Time

1. Select **4** to change the current time setting.
2. Enter the new time as HH:MM:SS (hours:minutes:seconds).

Note When editing the time, the time must be entered in 24-hour format.

3. Press **Enter** to change to the new time or press **ESC** to leave the time as originally displayed.

Change Date

1. Select **5** to change the current date setting.
2. Enter the new date in YYYY-MM-DD format.
3. Press **Enter** to change to the new date or press **ESC** to leave the date as originally displayed.

Display Voltages

This display is for diagnostic purposes. The ACUIX monitors the 15V supply used to operate the camera and the 3.3V supply used to operate the PC boards.

Select **6** to view the actual levels of the monitored power supplies. An example display is shown to the right.

```
        SUPPLY VOLTAGES
Supply Level    Actual Level

15V Supply      14.8V
3.3V Supply     3.26V

ESC to Exit
```

A

Troubleshooting

Technical Support

Prior to calling Honeywell technical support, refer to the following topics for possible solutions to problems with your ACUIX dome. To contact the Honeywell Video Systems technical support team, call 1-800-796-2288 (North America only) or send an e-mail to HVSsupport@honeywell.com.

Any equipment returned to Honeywell Video Systems for warranty or service repair must have a Return Material Authorization (RMA) number. The RMA number must be clearly marked on all return packages and internal paperwork.

Problem: No Video

Possible Solutions:

1. Verify power to all pieces of equipment in the system.
2. Check the fuse (F1) on the interface board in the housing to verify it has not blown.
3. If multiple ACUIX units are installed with a video switcher:
   a. Make sure the camera is called up on a monitor at the controller.
   b. Bypass the switcher and connect the video from the ACUIX directly to a monitor. If video is present, verify the video connection to the switcher is correct.
4. Power down all system components for 15 seconds and then re-apply power.
5. Make sure the video cabling is connected properly:
   a. If you are using a coaxial cable, connection is made at the BNC connector in the housing. Verify SW2 on the interface board in the housing is positioned toward the selection dot (normal coax operation).

b. If you are using unshielded twisted pair wiring for video, verify the wiring is connected properly at the terminal strip J4, pin 1 (video +) and pin 2 (video -). Verify SW2 on the interface board in the housing is positioned away from the selection dot (UTP video balun enabled).

6. If there are multiple ACUIX units in the system, exchange one of the pan and tilt camera assemblies from another housing. Set the address of the exchanged unit to the existing unit. Call up the camera on the controller. If video is present, the problem is isolated to the pan and tilt camera assembly.
7. If video does not appear after startup, check to see if you have any Privacy Zones enabled. Video will be blanked when ACUIX is finding home if there are Privacy Zones enabled. Video will display once the dome has reached its home setting, unless a Privacy Zone overlaps with the home setting.

Problem: General Video Problems (Video Over UTP Only)

Video is Inverted

Swap the video + and video - wires of the UTP cabling on the video connections at one end only; either the ACUIX terminations or the monitor terminations.

Video is Poor

Adjust the video Lift and Gain PWM settings in the ACUIX on-screen setup menus. The Lift setting boosts the high frequency in the video to compensate for high frequency losses caused by capacitive roll-off of the cable distance. The Gain setting amplifies the video to compensate for the resistance of the cable.

1. Access the on-screen setup menus (Dome Setup menu if using Diamond protocol or **Preset 90** if using MAXPRO mode, VCL, or 3rd party protocols).
2. Select **7 Enhanced Settings**.
3. Select **1 Video Gain/PWM Settings**. The Lift Level can be adjusted from **0**–**100**. The Gain Level can also be adjusted from **0**–**100**.
4. Experiment with these settings until a quality picture is visible.

Problem: Video, But No Control

1. Ensure the controller is addressed to the correct ACUIX unit. Each unit has a unique camera address used for controlling it.
2. Ensure the three rotary switches on the receiver board are set to the proper camera number (address).

   SW1 - units digit

   SW2 - tens digit

   SW3 - hundreds digit

   SW4 - thousands digit
3. Ensure DIP switches SW5 and SW6 are set for the correct protocol, baud rate, and parity. The ACUIX must be set the same as the control equipment.
4. Power down all system components for 15 seconds and then re-apply power to reset the ACUIX. Manually control the ACUIX and verify that the ACUIX finds home.
5. Wiring:
   a. Make sure that the data wiring is connected at the terminal strip in the housing.
   b. Make sure that any bare wires are not touching each other.
   c. Make sure that the wire insulation is stripped back far enough for a good connection.
6. If there are multiple ACUIX units in the system, exchange the pan and tilt camera assembly in question with a pan and tilt camera assembly from another housing. Set the address of the exchanged camera assembly to the existing unit. Call up the ACUIX at the controller. If control returns, the problem is isolated to the pan and tilt camera assembly.

Problem: Lens Out of Optical Focus

1. Verify the lens cap is not on the camera. A translucent cap may be in place and could blur the video if not removed.
2. Send the ACUIX to **Preset 98**. This pre-programmed Preset resets the camera lens.
3. This can also be caused by dirt, oil, grease, fingerprints, and so on, that have accumulated on the lens or lower dome. Check the lens and dome and clean them, if needed.

Caution Use extreme caution when cleaning the lens and dome so you do not scratch their optical surfaces. Prepare a washed-out cotton cloth or lens cleaning paper with alcohol or lens cleaning liquid. Clean by moving spirally from the lens center towards its rim. Repeat until completely clean.

Problem: Cannot Find Home or Does Not Go to a Preset

1. Verify that the pan and tilt rotates freely with no interference from wiring.
2. Verify the pan and tilt belts are on their associated sprockets and are not loose.

Problem: Pan and Tilt is Jerky

1. Verify that the pan and tilt rotates freely with no interference from wiring.
2. Verify both data lines are connected.
3. A motor may be defective or the wiring to the motor may be broken.

Problem: Video Zooms For No Reason

When you are using the VK-S654 (35X True Day/Night with Wide Dynamic Range) camera and Electronic Image Stabilization (EIS) is enabled, the camera reduces the area of the CCD that is scanned. This causes the video displayed on the monitor to appear to have zoomed in. When the dome undergoes a pan or tilt operation, Electronic Image Stabilization is disabled while the camera moves, and then re-enables after the camera has stopped moving for a five second period. This is the normal function of the VK-S654 camera with EIS enabled and cannot be changed.

B

Specifications

ACUIX Housings

Table B-1 Housing Specifications

Specification	Indoor Pendant Housing	Outdoor Pendant Housing	In-ceiling Housing
Housing Height	7.5 in. (190.5 mm)	7.5 in. (190.5 mm)	6.7 in. (170.21 mm)
Housing Diameter	9.25 in. (235 mm)	10.0 in. (254 mm)	8.13 in. (206.45 mm)
Housing Flange Diameter	9.25 in. (235 mm)	9.25 in. (235 mm)	8.0 in. (203.2 mm)
Housing Material	Aluminum	Aluminum	Aluminum
Lower Dome Diameter	7.5 in. (191 mm)	7.5 in. (191 mm)	7.5 in. (191 mm)
Lower Dome Material	Acrylic and Polycarbonate	Acrylic and Polycarbonate	Acrylic and Polycarbonate
Mounting Method	1.5” NPT	1.5” NPT	1.5" NPT
IP Rating	--	IP66	--
NEMA Rating	--	NEMA 4X	--
Operating Voltage	24 VAC ± 10%	24 VAC ± 10%	24 VAC ± 10%
Operating Current	1.9A	2.5A	1.9A
Operating Temperature	0° to 50°C (32° to 122°F)	-40° to 50°C (-40° to 122°F)	0° to 50°C (32° to 122°F)
Operating Humidity	0 to 95%, non-condensing	0 to 95%, non-condensing	0 to 95%, non-condensing
Storage Temperature	-40° to +60°C (-40° to +140°F)	-40° to +60°C (-40° to +140°F)	-40° to +60°C (-40° to +140°F)

ACUIX Cameras

The ACUIX product line offers the following cameras:

HDXA High resolution Color camera with an 18X optical zoom (48° wide angle and 2.8° telephoto).

HDXB: High resolution Wide Dynamic Range, Day/Night camera with an 18X optical zoom (48° wide angle and 2.8° telephoto).

HDXF: High resolution Wide Dynamic Range, True Day/Night camera with a 26X optical zoom (54° wide angle and 2.2° telephoto).

HDXG: High resolution Day/Night camera with a 35X optical zoom (55.8° wide angle and 1.7° telephoto).

Table B-2 Camera Specifications

CAMERA	HDXA	HDXB	HDXF	HDXG
Image Sensor	1/4" type EX-view HAD CCD	1/4" type EX-view HAD CCD	1/4" type EX-view HAD CCD	1/4" type Progressive scan CCD
Lens	18X optical zoom, f = 4.1 mm (wide) to 73.8 mm (tele), F1.4 to F3.0	18X optical zoom, f = 4.1 mm (wide) to 73.8 mm (tele), F1.4 to F3.0	26X optical zoom, f = 3.5 (wide) to 91 mm (tele), F1.6 to F3.8	35X optical zoom, f = 3.4 (wide) to 119 mm (tele), F1.4 to F4.2
Removable IR Filter	No	Yes	Yes	Yes
Horizontal Resolution	> 470 TVL (NTSC)	> 470 TVL (NTSC)	>530 TVL (NTSC)	> 540 TVL (NTSC)
Electronic Image Stabilization (EIS)	No	No	No	Yes
EIS Suppression Ratio	n/a	n/a	n/a	12 dB
Digital Zoom	12X (216X total zoom)	12X (216X total zoom)	12X (312X total zoom)	12X (420X total zoom)
Angle of View	48° (wide end) to 2.8° (tele end)	48° (wide end) to 2.8° (tele end)	54° (wide end) to 2.2° (tele end)	55.8° (wide end) to 1.7° (tele end)
Minimum Illumination	0.7 lux	0.7 lux, 0.01 lux (IR filter removed)	1.0 lux, 0.09 lux (IR filter removed)	0.5 lux, 0.05 lux (IR filter removed)
S/N Ratio	> 50 dB	> 50 dB	> 50 dB	> 50 dB
Wide Dynamic Range	No	No	Yes	Yes

Table B-2 Camera Specifications (cont'd)

CAMERA	HDXA	HDXB	HDXF	HDXG
Electronic Shutter	1/1 to 1/10,000 sec	1/1 to 1/10,000 sec	1/4 to 1/10000 sec (NTSC) 1/3 to 1/10000 sec (PAL)	1/2 to 1/30,000 sec
White Balance	Auto, ATW, Indoor, Outdoor, Manual	Auto, ATW, Indoor, Outdoor, Manual	Auto, ATW, Indoor, Outdoor, Manual	Auto, Indoor, Outdoor, Manual
AE Control	Auto, Manual, Exposure Level, Backlight Compensation	Auto, Manual, Exposure Level, Backlight Compensation	Auto, Manual, Wide Dynamic Range (WDR), Exposure Level, Backlight Compensation	Auto, Manual, Exposure Level, Backlight Compensation
Backlight Compensation	On/Off/Auto	On/Off/Auto	On/Off/Auto	On/Off/Auto
Focusing System	Auto/Manual	Auto/Manual	Auto/Manual	Auto/Manual

Pan and Tilt Specifications

Table B-3 Pan and Tilt Specifications

Pan Speed	Variable Pan speed can be programmable between 1–480°/sec.
Tilt Speed	Variable Tilt speed can be programmable between 1–240°/sec.
Preset Speed	< 0.5 seconds to any Preset
Preset Accuracy	± 0.1°

Operating/Programming Specifications

- Remote firmware download via IntelliBus™ protocol:
  - Download firmware from PC to Dome
  - Remote upload/download of configuration data
- Fast setup with remote upload of all Preset and Tour information to replacement camera via IntelliBus™ protocol
- Presets—protocol dependent:
  - Diamond—148 user-defined Presets (0–70, 80–97, 100–160)
  - VCL—97 user-defined Presets (0–70, 100–127)
- Freeze frame between Presets
- 24-character label for each Preset
- 16 Preset Tours of up to 64 Presets each
- 16 Mimic Tours, up to 2 minutes each, for a total of 32 minutes of Mimic Tours
- Patented Flashback function allows for quick recall of the previous set scene
- 32 total Privacy Zones; 8 can be simultaneously active
- 16 zones (programmable in size); can be labeled with up to 24 characters each
- Programmable locations of labels and on-screen displays
- Camera title overlay, 24 user-definable characters
- On-screen pan/tilt/zoom coordinate display
- 3 programmable actions after a user-defined period of non-activity:
  - Camera will go to a Preset location chosen by the user
  - Camera will call a Preset Tour chosen by the user
  - Camera will call a Mimic Tour chosen by the user
- Password protection—on-screen displays only—1 user (supervisor)
- Data line polarity detection for standard protocol
- 4 alarm inputs
- PASS function—continually alters pan and tilt speeds in proportion to the depth of the zoom
- Auto flip rotates the dome 180° at the bottom of tilt travel
- Remote address, protocol, baud rate, and parity selection (enabled via DIP switch)
- Diagnostic information is available locally and via remote access
- Multi-language menus (Chinese, English, French, German, Italian, Portuguese and Spanish)
- Supports all Honeywell protocols: IntelliBus™, Diamond, VCL protocols and MAXPRO mode
- Emulates Pelco P and D protocols

ACUIX Lower Dome

The ACUIX has four different polycarbonate lower domes available. The choices allow you to balance camera discretion with available light.

Table B-4 Lower Dome Light Loss Specifications

Dome Material	Light Loss
Clear Polycarbonate	None
Smoked Polycarbonate	Approximately 1/2 f-stop
Chrome Mirrored Polycarbonate	Approximately 2 f-stop
Gold Mirrored Polycarbonate	Approximately 2 f-stop

Regulatory Specifications

Table B-5 Regulatory Specifications

Emissions	FCC: Part 15 Class A
Immunity	CE: EN0082-1
Safety	ETL listed IEC 600065:2001 ANSI/UL 60065-1 CAN/CSA C22.2 No. 60065-03

C

Pelco Emulation

Purpose

This appendix describes the operation of ACUIX Mimic Tours when the ACUIX is set for Pelco protocol and controlled using a Pelco keyboard.

ACUIX Mimic Tour Operation

The Pelco keyboard has the ability to run Pattern Tours 0, 1, and 2. The Pelco keyboard also has a key labeled Pattern that sends out a command to perform Pattern Tour 0.

The ACUIX Mimic Tours numbered 1, 2, and 3 are mapped to Pelco's Pattern Tours numbered 0, 1, and 2, respectively.

Table C-1 ACUIX Mimic Tours Mapped to Pelco Pattern Tours

Pelco Pattern Tour Number	ACUIX Mimic Tour Number
0	1
1	2
2	3

When Pattern Tour 0 is run from the Pelco keyboard, the ACUIX displays `Tour 0` even though it is internally mapped to Mimic Tour 1.

D

Digital Video Recorder Integration

Purpose

This appendix describes the required protocols for using an ACUIX PTZ dome camera with a Honeywell digital video recorder (DVR).

DVR and Camera protocols

Honeywell DVRs must be configured to use the protocols in the following table to ensure the ACUIX PTZ dome system functions correctly.

Table D-1 Protocol settings for ACUIX PTZ dome camera system

DVR	DVR Protocol	Camera Protocol	Controller
HRXD	Diamond protocol	Diamond protocol	HEGS5000
HRXD	Diamond/VCL protocol	Diamond/VCL protocol	HJZTP
Fusion	HD6 protocol	MAXPRO Mode	–
Rapid Eye™	KD6 protocol	MAXPRO Mode	–

For more information about the DVRs, see the user manuals included in the release material for the specific DVR.

Index

Numerics

A

B

C

D

R

S

T

U

V

W

Z

Honeywell Video Systems (Head Office)
2700 Blankenbaker Pkwy, Suite 150
Louisville, KY 40299, USA
www.honeywellvideo.com
☏ +1.800.796.2288

Honeywell Security Australia Pty Ltd.
Unit 5, Riverside Centre, 24-28 River Road West
Parramatta, NSW 2150, Australia
www.honeywellsecurity.com/au
☏ +61.2.8837.9300

Honeywell Security Asia Pacific
33/F Tower A, City Center, 100 Zun Yi Road
Shanghai 200051, China
www.asia.security.honeywell.com
☏ +86 21.2527.4568

Honeywell Security Asia
Flat A, 16/F, CDW Building, 388 Castle Peak Road
Tsuen Wan, N.T., Hong Kong
www.asia.security.honeywell.com
☏ +852.2405.2323

Honeywell Security France
Parc Gutenberg, 8, Voie La Cardon
91120, Palaiseau, France
www.honeywell.com/security/fr
☏ +33.01.64.53.80.40

Honeywell Security Italia SpA
Via della Resistenza 53/59
20090 Buccinasco
Milan, Italy
www.honeywell.com/security/it
☏ +39.02.48880551

Honeywell Security España
Mijancas 1. 3ª Planta
P.Ind. Las Mercedes
28022 Madrid, Spain
www.honeywell.com/security/es
☏ +34.902. 667.800

Honeywell Video Systems Northern Europe
Netwerk 121
1446 WV Purmerend, The Netherlands
www.honeywell.com/security/nl
☏ +31.299.410.200

Honeywell Systems Group
Aston Fields Road, Whitehouse Ind Est
Runcorn, Cheshire, WA7 3DL, UK
www.honeywell.com/security/uk
☏ +44 (0)1928 756999

Honeywell Security South Africa
Unit 6 Galaxy Park, 17 Galaxy Avenue
Linbro Park, P.O. Box 59904
2100 Kengray, Johannesburg, South Africa
www.honeywell.co.za
☏ +27.11.574.2500

Honeywell Security Deutschland
Johannes-Mauthe-Straße 14
D-72458 Albstadt, Germany
www.security.honeywell.com/de
☏ +49.74 31.8 01.0

Honeywell Security Poland
Chmielewskiego 22a, 70-028
Szczecin, Polska
www.ultrak.pl
☏ +48.91.485.40.60

Honeywell Security Czech Republic
Havránkova 33, Brno
Dolní Heršpice, 619 00, Czech Republic
www.olympo.cz
☏ +420.543.558.111

Honeywell Security Slovakia Republic
Vajnorská 142, 83104 Bratislava
Slovakia
www.olympo.sk
☏ +421.2.444.54.660

Honeywell

www.honeywellvideo.com
+1.800.796.CCTV (North America only)
HVSsupport@honeywell.com

Document 800-01023 – Rev A – 02/08