American Dynamics
A Tyco International Company

Matrix Keyboard

ADTTE

Operator's Manual

8000-2675-02 Rev. E

American Dynamics
A Tyco International Company

ADTTE
Matrix Keyboard

Operator's Manual

Thank you for using American Dynamics products. We support our products through an extensive and worldwide network of dealers. The dealer, through whom you originally purchased this product, is your point of contact if you have a need for service or support. Our dealers are fully empowered to provide the very best in customer service and support. Dealers should contact American Dynamics at (800) 507–6268 or (561) 912-6259 or on the web at www.americandynamics.net.

EQUIPMENT MODIFICATION CAUTION

Equipment changes or modifications not expressly approved by Sensormatic Electronics Corporation, the party responsible for FCC compliance, could void the user's authority to operate the equipment and could create a hazardous condition.

FCC COMPLIANCE

This equipment complies with Part 15 of the FCC rules for Class A digital devices when installed and used in accordance with the instruction manual. Following these rules provides reasonable protection against harmful interference from equipment operated in a commercial area. This equipment should not be installed in a residential area as it can radiate radio frequency energy that could interfere with radio communications, a situation the user would have to fix at their own expense.

WARRANTY DISCLAIMER

Sensormatic Electronics Corporation makes no representation or warranty with respect to the contents hereof and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose.

NOTICE: The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

LIMITED RIGHTS NOTICE

For units of the Department of Defense, all documentation and manuals were developed at private expense and no part of it was developed using Government Funds. The restrictions governing the use and disclosure of technical data marked with this legend are set forth in the definition of “limited rights” in paragraph (a) (15) of the clause of DFARS 252.227.7013. Unpublished - rights reserved under the Copyright Laws of the United States.

TRADEMARK NOTICE

Touch Tracker, American Dynamics, and the American Dynamics logo are trademarks or registered trademarks of Sensormatic Electronics Corporation. Other product names mentioned herein may be trademarks or registered trademarks of Sensormatic or other companies. The trademarks, logos, and service marks displayed on this document are registered in the United States [or other countries]. Any misuse of the trademarks is strictly prohibited and Tyco International Ltd. will aggressively enforce its intellectual property rights to the fullest extent of the law, including pursuit of criminal prosecution wherever necessary. All trademarks not owned by Tyco International Ltd. are the property of their respective owners, and are used with permission or allowed under applicable laws.

Product offerings and specifications are subject to change without notice. Actual products may vary from photos. Not all products include all features. Availability varies by region; contact your sales representative.

COPYRIGHT NOTICE

American Dynamics

6600 Congress Avenue

Boca Raton, FL 33487 U.S.A.

SOFTWARE LICENSE AGREEMENT

A Software License Agreement appears in Appendix A of this manual. Please read it carefully. Using the ADTTE matrix keyboard software indicates that you accept the terms and conditions of this agreement.

PREFACE

Before You Begin

The Operator's Manual explains the features, operation, and application of the ADTTE Touch Tracker matrix keyboard (ADTTE matrix keyboard). It explains the tasks that can be performed when using this product as part of your system.

Using This Manual

This manual is organized as follows:

- ***Chapter 1: ADTTE Matrix Keyboard Overview*** describes the keyboard and its use. It also identifies buttons found on the keypad.
- ***Chapter 2: Getting Started*** describes the fields on the keyboard LCD. It also includes information about using the keyboard lock and passwords.
- ***Chapter 3: Everyday Tasks*** discusses how you use the keyboard to control cameras. This chapter also includes instructions setting up shots, working with patterns, acknowledging alarms, and controlling auxiliaries.
- ***Chapter 4: Utilities and Advanced User Tasks*** describes system utilities that can be run from the keyboard. These utilities include setting the language, arming or disarming monitors, displaying the main menu of the switching system, displaying the firmware version, and adjusting keyboard settings.
- ***Appendix A: Software License*** explains the terms and conditions associated with the use of this product.

Text Conventions

This book uses text in different ways to identify different kinds of information.

Italics	Used for terms specific to keyboard and text that requires emphasis.
`Monospace`	Used for LCD messages and prompts, as well as items that you select from the LCD menu.
Bold	Used for names of buttons on the keypad, for example, **Menu.**

Note: Special notes appear in boxes like these.

Related Documents

Installation of the ADTTE matrix keyboard is covered in the Installation Instructions (part number 8000-2675-01).

If you cannot find the answers in this document about performing a specific task with your keyboard, refer to the system operating instructions. The operating instructions provide information about which features, such as satellite sites and user login, the keyboard supports. Keep in mind that some features may not be implemented at your facility.

Contact your sales representative if you need additional copies of the Operator's Manual or any other support documentation. The part number for the Operator's Manual is 8000-2675-02. Use this number when ordering additional copies.

Support Services

Various support services are available to help you get the most from your ADTTE matrix keyboard.

- If you have a question about controller operation and cannot find the answer in this manual, consult with your supervisor.
- If you experience a problem with the ADTTE matrix keyboard, contact the dealer through whom you originally purchased this product for service or support.
- Visit the American Dynamics web site for the latest product documentation and information. The web site address is **www.americandynamics.net**.

TABLE OF CONTENTS

N O T E S :

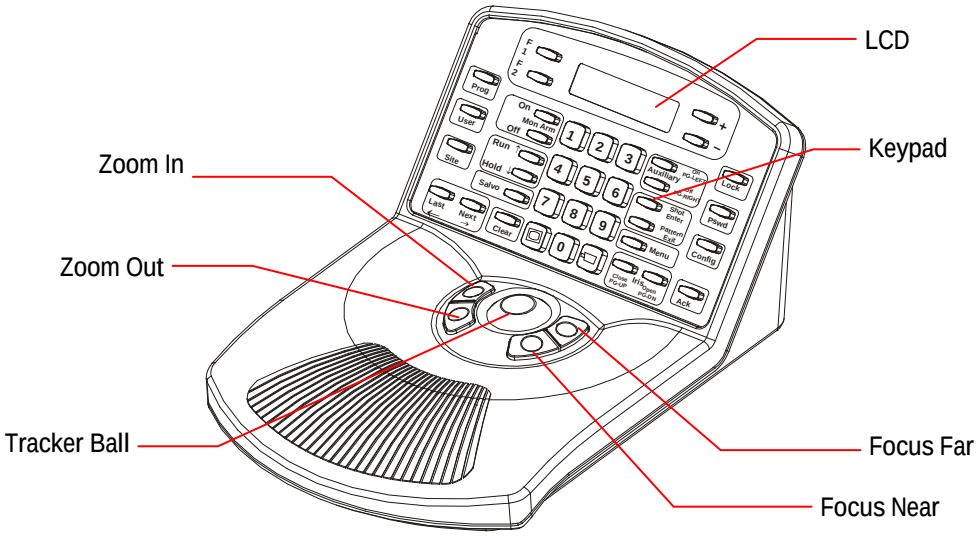
CHAPTER 1

ADTTE Matrix Keyboard Overview

The ADTTE matrix keyboard (Touch Tracker) is a video control station that provides the same functions as the AD2079 System Keyboard. It is compatible with all current models of American Dynamics switches. It allows you to operate cameras installed around your facility. You may also control auxiliaries, such as lights and door locks, if your system is configured with those features.

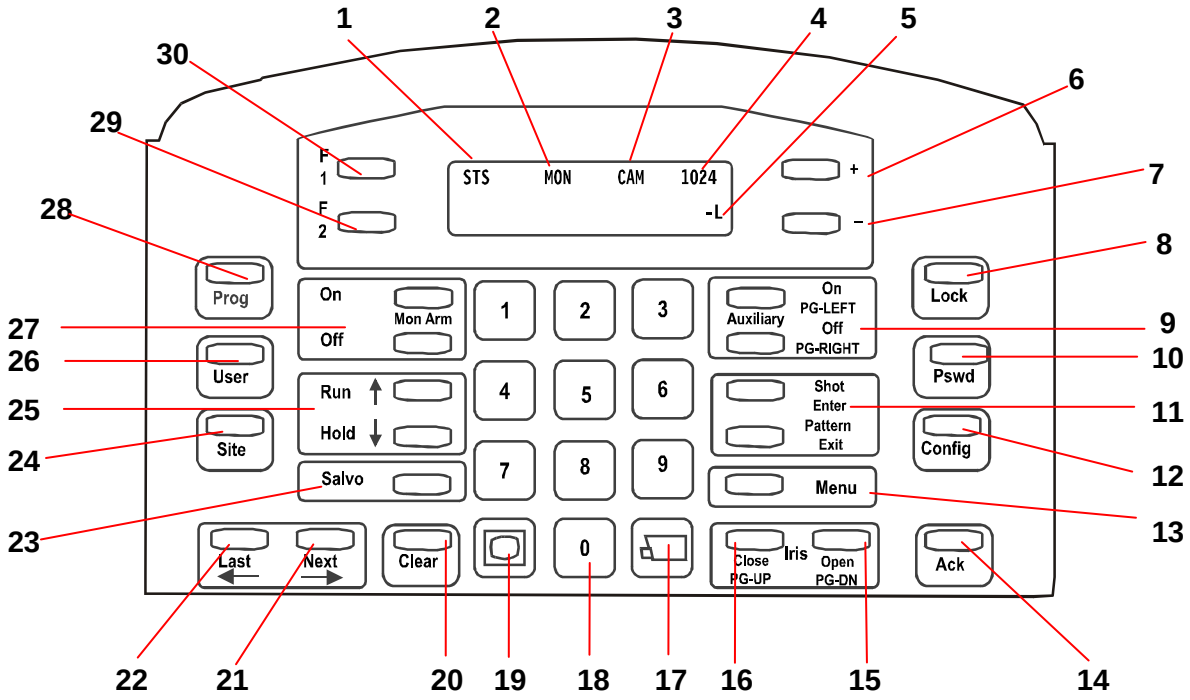
Figure 1-1 identifies the features of the ADTTE matrix keyboard:

Figure 1-1: ADTTE matrix keyboard features



Feature	Function
LCD	Displays status information, the selected monitor and camera numbers, and keyboard lock status. It also displays system prompts and messages.
Keypad	Enables selection of monitors and cameras, as well as call up of pre-programmed camera movements. It also provides for camera iris control, auxiliary control, and the ability to clear system alarms.
Focus buttons	Controls the selected camera’s focus near and focus far functions.
Zoom buttons	Controls the selected camera’s zoom in and zoom out functions.
Tracker Ball	Provides variable speed control of the selected camera's pan and tilt functions.

Keypad Overview



1. ***Site field*** shows the status of the connected switching system. See the appropriate operating instructions for additional information.
2. ***Monitor field*** shows the number of the monitor controlled by the keyboard.
3. ***Camera field*** shows the number of the camera controlled by the keyboard.
4. ***Entry field*** shows the numbers being entered on the keypad (see item 18).
5. ***Status field*** shows the current operating state of the system. During normal operation, “P” appears in this field. During system menu programming, “M” appears in this field. When the keyboard lock is enabled, “L” appears in this field; if blank, the keyboard lock is disabled.
6. **+** is used with the **Config** button to increase selected keyboard settings.

   When used with the ***Shot*** function, enables programming of the preset.
7. **–** is used with the **Config** button to decrease selected keyboard settings.

   When used with the ***Shot*** function, enables recall of the preset.
8. **Lock** button toggles the state of the keyboard lock when used with the password. See Chapter 2 for specific instructions.

   When used with camera selection, this button toggles the camera control lock. See Chapter 3 for specific instructions.

9. **Auxiliary On (PG-Left) / Auxiliary Off (PG-Right)** buttons activate and deactivate features such as lights, locks, or alarms that can be controlled by the keyboard. See Chapter 3 for additional information.

   These buttons also serve as the ***Page Left*** and ***Page Right*** functions during menu programming.

10. **Pswd** button sets or changes the keyboard lock password. There are two types of passwords: Permanent and User Defined. See Chapter 2 for specific instructions.

11. **Shot (Enter) / Pattern (Exit)** buttons create and display pre-defined scenes from a specified camera.

    The **Shot** button serves as the ***Enter*** function during menu programming. The **Pattern** button serves as the ***Exit*** function during menu programming.

12. **Config** button is used to adjust special keyboard settings, such as backlighting and key click volume.

13. **Menu** button is used to call up the main menu of the attached switching system. When the switching is displayed, the keyboard's menu programming functions become available. This button is under keyboard lock protection.

14. **Ack** button acknowledges system alarms. The keyboard beeps until the alarm is acknowledged.

15. **Iris Open (PG-DN)** button adjusts the brightness of a scene by allowing additional light into the camera controlled by the keyboard. See Chapter 3 for more information.

    This button also serves as the ***Page Down*** function during menu programming.

16. **Iris Close (PG-UP)** button adjusts the brightness of a scene by allowing less light into the camera controlled by the keyboard. See Chapter 3 for more information.

    This button also serves as the ***Page Up*** function during menu programming.

17. **Camera** button () calls a specified camera's input to the monitor that is currently controlled by the keyboard. See Chapter 3 for specific instructions.

18. **Numeric Keypad** is used to enter numbers associated with monitors, cameras, passwords, and users.

19. **Monitor** button () calls a specified monitor to be controlled by the keyboard. Refer to Chapter 3 for specific instructions.

20. **Clear** button erases numbers entered on the numeric keypad (see 18) before pressing an action key, such as **Camera**, **Monitor**, or **Pswd**.

21. **Next (→)** button displays the next camera's input in a monitor tour or alarm tour that is currently on hold.

    This button also serves as the ***Cursor Right*** function during menu programming.

22. **Last (←)** button displays the previous camera's input in a monitor tour or alarm tour that is currently on hold.

    This button also serves as the ***Cursor Left*** function during menu programming.

23. **Salvo** displays a pre-defined group (salvo) of camera inputs on a group of contiguous monitors, beginning with the currently selected monitor. See the system operating instructions for additional information.

24. **Site** button controls satellite systems. Refer to the system operating instructions for additional information.

25. **Run (↑) / Hold (↓)** buttons are used with predefined monitor tours, universal tours, or alarm tours. **Run** starts a tour. **Hold** halts the tour.

    In addition, these buttons serve as the ***Cursor Up/Down*** function during menu programming.

26. **User** button allows authorized users to log on to the system. See the system operating instructions for additional information.

27. **Mon Arm On / Mon Arm Off** buttons are used to enable or disable system alarms from appearing on monitors. See the appropriate operating instructions for specific instructions. This feature is under keyboard lock protection.

28. **Prog** button is used to program monitor tours and other system programming features. See the system operating instructions for additional information. This button is under keyboard lock protection.

29. **F2** button is a function key whose use is determined by the system to which it is connected. See the system operating instructions for additional information.

30. **F1** button is a function key whose use is determined by the system to which it is connected. See the system operating instructions for additional information.

    This button also serves to set the baud rate and display the firmware version of the keyboard. For more information, see Chapter 4.

CHAPTER 2

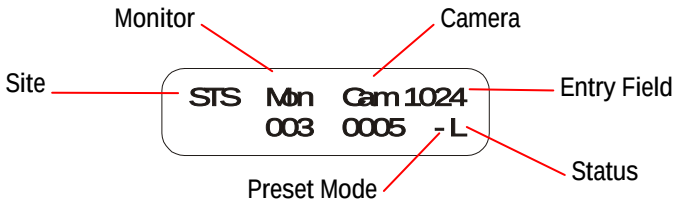
Getting Started

This chapter provides an overview of the fields displayed on the LCD. It explains how to determine if the keyboard lock is enabled, as well as providing instructions for locking or unlocking the keyboard. It also explains how to set or change the user-defined password.

LCD Display Overview

The keyboard display is a 2-line by 16-character backlit LCD (liquid crystal display). It serves the same purpose as the four LED displays on the AD2078 system keyboard. In addition, it provides a field for identifying the lock status of the system.

The LCD is divided into six functional areas: site, monitor, camera, entry field, status, and preset mode. The following illustration provides an overview of the LCD.



Field	Description
Site (STS)	Three-digit field that provides the status of the connected switching system.
Monitor (MON)	Three-digit field that shows the currently selected monitor number.
Camera (CAM)	Four-digit field that shows the currently selected camera number.
Entry Field	Four-digit field that displays the numbers entered from numeric keypad.
Status	One-character field that shows the current state of the system. “P” appears during normal operation, “M” appears during system menu programming, and “L” appears when the keyboard lock is enabled.
Preset Mode	One-character field that shows the current state of the “Shot” function. Either “–” (Shot recall) or “+” (Shot programming) appears in this field.

Understanding the Keyboard Lock Feature

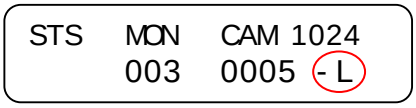
The keyboard lock feature prevents unauthorized use of the matrix keyboard advanced features. When “L” appears in the lower right corner of the LCD, operators cannot access certain system features. The features that cannot be accessed are **Program Shot**, **Program Pattern**, **Mon Arm On**, **Mon Arm Off**, **Prog**, **Menu**, and the dual function menu programming keys, such as **PG-UP** and **Enter**.

Enabling and Disabling the Keyboard Lock

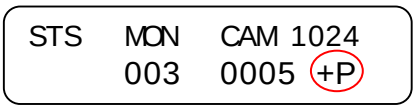
The keyboard lock feature is enabled or disabled by entering the password. For more information about the password, refer to "Working with Passwords" in this chapter.

1. Enter the numeric password and press **Lock** button.
2. Look at the lower right corner of the LCD to determine the lock status.

“L” indicates lock is enabled.



“P” indicates lock is disabled.



3. Repeat steps 1 and 2 to toggle the keyboard lock.

Note: When the keyboard lock is disabled, **+P** or **-P** appears in the lower right corner.

- **+P** means that programming of shots can be performed.
- **-P** means that recall of shots can be performed.

Pressing the **+** or **-** buttons (located to the right of the LCD) switches between the modes.

Working with Passwords

Passwords allow you to limit access to advanced features of the ADTTE matrix keyboard, such as arming/disarming monitors and the dual function menu programming keys. Passwords may be 1 to 4 digits in length and may be any number between **0-9998**. The default password is factory set to **1953**. To limit access to the advanced features of the keyboard, change this password using the **Pswd** button. See ***Setting or Changing the Password*** for instructions.

I M P O R T A N T

If the default password is not changed, anyone who knows it may gain access to the advanced features of the keyboard. To prevent unauthorized access to the advanced features, ***change the password***. Provide the new password to authorized users only.

Avoid using the following passwords for security purposes:

0 - 9	**1111**	**5555**
1234	**2222**	**6666**
4321	**3333**	**7777**
0000	**4444**	**8888**

Passwords such as these may be easily guessed and compromise system security.

Setting or Changing the Password

This procedure allows you to change the password. When setting the password for the first time, you must first enter the default password. For information about the default password, see ***Working with Passwords***.

To set or change the password:

1. Press the **Pswd** button. `Enter Old PSWD` appears on the LCD.
2. Enter the current password and press **Pswd**. `Enter New PSWD` appears on the LCD.
3. Enter the new password and press **Pswd**. `ReEnter PSWD` appears on the LCD.
4. Enter the new password again. Press **Pswd** when finished. `Successful PSWD` appears on the LCD if the change was successful.
5. Press **Clear** to refresh the LCD.

Note: The keyboard beeps if the password change was unsuccessful. The LCD refreshes and displays the status fields. If this happens, return to step 1 and repeat the process.

N O T E S :

CHAPTER 3

Everyday Tasks

This chapter describes everyday tasks that users can perform with the matrix keyboard. It explains how to control the zoom, focus, and iris settings for the selected camera. It explains how to program and recall Shots and Patterns to simplify surveillance activities. It also explains procedures for acknowledging alarms and controlling auxiliaries.

In This Chapter

Selecting Monitors

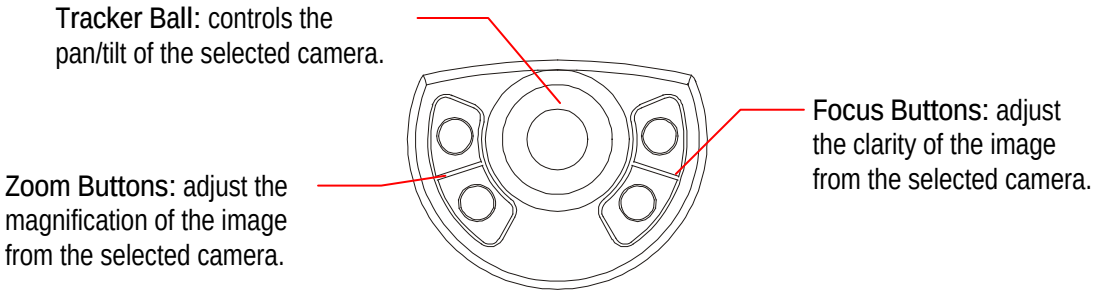
Monitors display the video from the cameras installed around your facility. Each monitor has an identification number associated with it. To select a monitor, use the number buttons to enter the monitor number, and then press  **(Monitor button)**. Once a monitor has been selected by the keyboard, its identification number appears in the `MON` field of the LCD. This monitor is referred to as the ***called monitor***.

The number of monitors available to display video input is determined by your system configuration. Refer to the appropriate operating instructions to determine the number of monitors supported.

Controlling Cameras

Each camera installed at your facility has a unique identification number. To control a camera, you must first select the camera with the matrix keyboard. Then you can control the zoom, focus, iris, pan and tilt of the selected camera. Figure 3-1 identifies the location of the pan/tilt, zoom and focus controls on the matrix keyboard.

Figure 3-1: Pan/Tilt, Zoom and Focus Controls



The number of cameras that can be controlled by the matrix keyboard depends upon the system configuration. Refer to the system operating instructions for additional information about the number of cameras supported by your system.

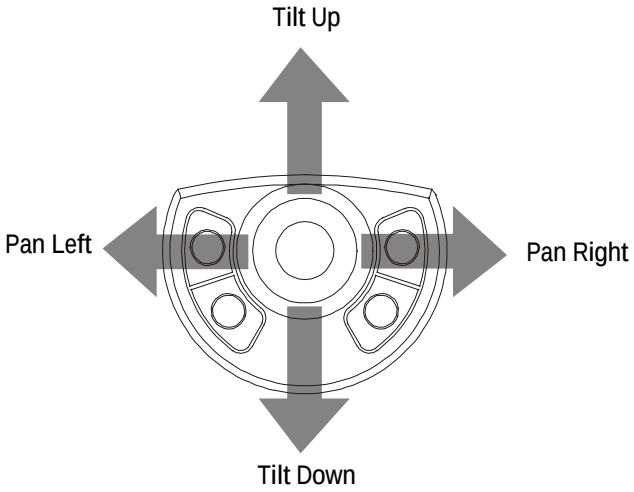
Selecting Cameras

Each camera has a unique number associated with it. To select a camera, use the number buttons to enter the camera number, then press **(Camera button)**. The video from the camera appears on the called monitor, and the camera number appears in the bottom left corner of the monitor. Once a camera has been selected by the matrix keyboard, its number appears in the bottom left corner of the LCD.

Controlling Pan and Tilt

Once you have selected a camera, you can manually control the movement of that camera using the Tracker Ball. ***Pan*** is side-to-side camera movement. ***Tilt*** is up and down camera movement. Figure 3-2 illustrates the Tracker Ball movement associated with pan and tilt control.

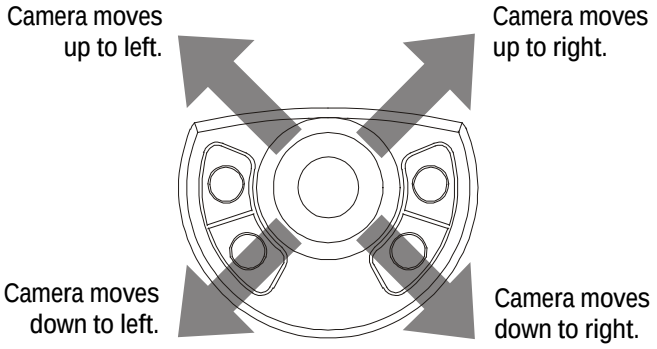
Figure 3-2: Tracker Ball pan/tilt movement.



Moving the Tracker Ball to the right pans the camera to the right. Moving the Tracker Ball to the left pans the camera to the left. Moving the Tracker Ball up or down tilts the camera to the appropriate angle.

Simultaneous pan and tilt camera movement can be achieved by moving the Tracker Ball diagonally. Moving the Tracker Ball diagonally up and to the right adjusts the camera up and to the right. Figure 3-3 illustrates controlling diagonal camera movement.

Figure 3-3: Controlling diagonal camera movement.

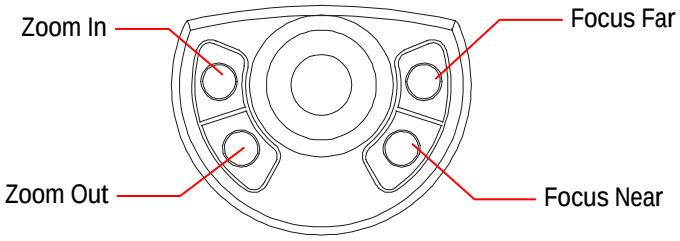


For cameras that support the variable speed features of the matrix keyboard, the speed that the camera moves is proportional to how far the Tracker Ball moves from its center position. If the Tracker Ball moves slightly to the right, the camera pans slowly to the right. As the Tracker Ball moves farther to the right, the camera's panning speed increases until it reaches its maximum speed. The camera continues to move until the Tracker Ball is in the center position.

Controlling Zoom and Focus

Once you have selected a camera, you can control its zoom and focus settings. Figure 3-4 illustrates the location and function of the zoom and focus buttons:

Figure 3-4: Zoom and Focus Controls



Adjusting Zoom Settings

Zoom refer to the adjustment of the magnification of the camera lens to make an object appear closer (larger) or farther away (smaller). The zoom buttons are located to the left of the Tracker Ball. By pressing the **Zoom In** button, the camera's image appears to move closer to the object. By pressing the **Zoom Out** button, the camera's image appears to move away from the object. If you quickly press and release a zoom button, only a slight visible change appears on the monitor. The longer a Zoom button is pressed, the more noticeable the response.

Adjusting Focus Settings

Focus refers to the process of adjusting the clarity of a scene or an object, as seen through a camera. The focus buttons are located to the right of the Tracker Ball. If the object that you want to see clearly is farther away than the current focus setting, press the **Focus Far** button. If the object that you want to see clearly is closer than the current focus setting, press the **Focus Near** button. You will see the picture on the monitor become either sharper or more distorted. Like the zoom buttons, the focus buttons react based on the length of time the button is pressed. The longer a focus button is pressed, the more noticeable the response.

Controlling Iris Settings

Normally, the camera's auto gain function and the auto/manual iris function control the brightness of the picture. Occasionally the darkness or brightness of the image displayed on the monitor requires adjustment. The iris control buttons regulate the brightness or darkness of the image.

To brighten the picture, press the **Iris Open** button. To darken the picture, press the **Iris Close** button. The **Iris Open** and **Iris Close** buttons are located to the right of  **(Camera button)**.

Note: Some domes support the ***resume Auto Iris /Auto Focus*** command. Press the **Iris Open** and **Iris Close** buttons simultaneously to issue the command. ***The command is available only on domes that support this function.***

Stepping Through the Cameras

Most systems allow you to manually step through the camera entries programmed into the Sequence/Tour (if so programmed) by pressing the **Next** and **Last** buttons. Refer to the appropriate operating instructions to determine if this feature is available on your system.

The **Next** and **Last** buttons are located to the left of  **(Monitor button)**.

Locking and Unlocking Cameras

After calling a pan/tilt camera to view and control on a system monitor, press the **Lock** button to prevent other operators from controlling the movements of the camera. Other operators may call the locked camera, but they cannot control its movements.

Regardless of keyboard prioritization, only the keyboard that locks a camera can unlock it. To unlock the camera, call the camera to the monitor and press the **Lock** button again.

I M P O R T A N T

The matrix keyboard itself provides no visual indicator that a camera has been locked. However, the keyboard produces an audible tone if an attempt is made to move the locked camera on all but the original keyboard—if audible alerts are enabled. The selected video monitor also displays the status message “LOCKED”.

If you forget which keyboard has locked a camera, locate all keyboards and perform a simple control test on each for that camera. The keyboard that does not produce any error messages is the keyboard responsible for locking the camera.

If the locked condition persists, contact Technical Support for instructions on performing a “warm” reset on the switcher. This causes the switcher to release all locked cameras. This type of reset should not be confused with a complete “System Reset” which restores all system settings to factory defaults.

Working with Shots

A *shot* is a programmed video scene, based on a specific pan, tilt, zoom and focus setting that can be recalled automatically. Shots are also referred to as *presets* or *targets*. Depending upon your system, you can have multiple pre-defined shots. Refer to the system operating instructions for additional information.

Setting Up Shots

Note: Shot programming is under keyboard lock protection. Refer to the "Keyboard Lock Feature" in Chapter 2 for information about disabling the keyboard lock.

You can overwrite an existing shot without warning using the following procedure. Use caution to ensure that you do not overwrite a shot that you want to keep.

To program a shot:

1. If the LCD displays **L**, enter the keyboard lock password and press **Lock**. This switches the keyboard to programming mode.
2. Press the **+** button (located next to the upper right corner of the LCD). This switches the keyboard **Shot** function to "set" mode.
3. Enter the camera number and press  **(Camera button)** to select the camera.
4. Adjust the camera using the Tracker Ball, zoom, focus, and iris controls until the scene that you want to save appears on the monitor.
5. Enter the shot number (1-96) and press **Shot** to save the scene.

When finished programming, enter the keyboard lock password and press **Lock** to prevent unauthorized access to the programming features.

Viewing Preset Shots

Note: If the lower right corner of the LCD displays **+P**, you must press **–** (located next to lower right corner of LCD) to switch the keyboard **Shot** function to "recall" mode.

Use the **Shot** button to call up the preset shots that have been defined for cameras.

To display a preset shot:

1. Enter the camera number and press  **(Camera button)**.
2. Enter the shot number and press **Shot**.

The camera immediately points to the preset shot, and adjusts zoom and focus automatically.

Working with Patterns

IMPORTANT

The procedures discussed in this section are supported by the AD168 Matrix Switcher / Controller System equipped with a Control Code Module (CCM). Other matrix switchers may not support pattern programming in this manner. Refer to the appropriate operating instructions for information about pattern programming.

A *pattern* is a sequential series of pan, tilt, zoom, and focus movements from a single programmable dome. You "teach" the dome a combination of these movements that can be replayed automatically. Each programmable dome supports up to three patterns.

Two variables restrict the length and complexity of a pattern:

- Number of camera commands
- Time

Each time you move the camera in any direction, change the zoom or focus settings, or adjust the iris, you have issued camera commands. The three patterns for a dome can collectively consist of up to 98 camera commands.

There is also a time constraint on patterns. A single pattern cannot have a duration longer than 6 minutes and 50 seconds. Even if a pattern has only two camera commands in it, the pattern will stop recording once its duration time has elapsed.

Patterns are programmed in real-time. This means that the camera is remembering every programming command you make at the time interval that you issue the commands. For example, if you let the camera sit still for 20 seconds during programming, the camera pauses for 20 seconds when the pattern runs. The 20 seconds of "non-motion time" is part of the pattern.

Programming Patterns

Tip: Pattern programming is under keyboard lock protection. Refer to the "Keyboard Lock Feature" in Chapter 2 for information about disabling the keyboard lock.

You can overwrite an existing pattern using the following procedure. Use caution to ensure that you do not overwrite a pattern that you want to keep.

To program a pattern:

1. Enter the camera number and press  **(Camera button)**.
2. Pan and tilt the camera to the starting point of the Pattern. Adjust the zoom and focus if necessary.
3. Enter the pattern number (1-3) and press **Pattern**.

   The pattern number (`P-1`, `P-2`, or `P-3`) appears on the LCD.
4. Press **Prog**.
5. Move the camera around and create a logical, usable Pattern. The camera can collectively incorporate up to 98 camera commands, and each Pattern can be up to 6 minutes and 50 seconds long.
6. When you finish the pattern, press **Ack** to save the programming.

Running Patterns

1. Enter the camera number and press  **(Camera button)**.
2. Enter the pattern number (1-3) and press **Pattern**.

   The pattern number (P-1, P-2, or P-3) appears on the LCD.
3. Do one of the following:
   - Press **Run** to run the pattern *one time*. The pattern stops when it finishes.
   - Press **Ack** to run the pattern repeatedly. The pattern automatically restarts when it finishes. To stop the repeating pattern, issue a camera command (pan, tilt, zoom, focus or iris open/close).

Holding Patterns

When you place a pattern on “hold”, you cause the pattern to move to its starting position and wait until you are ready to run it. To hold a pattern, do the following:

1. Enter the monitor number and press  **(Monitor button)**. This monitor will show the pattern.
2. Enter the camera number and press  **(Camera button)** for the camera whose pattern you want to run.
3. Enter the pattern number (1-3) and press **Pattern**.

   The pattern number (`P-1`, `P-2`, or `P-3`) appears on the LCD.
4. Press **Hold**. This moves the camera to the starting position for the selected pattern.

   When you are ready to run the pattern, follow the instructions for running patterns. See *Running Patterns* on page 3-8.

Clearing Patterns

Tip: Clearing Patterns is under keyboard lock protection. Refer to the “Keyboard Lock Feature” in Chapter 2 for information about disabling the keyboard lock.

You can clear an existing pattern using the following procedure. Use caution to ensure that you do not clear a pattern that you want to keep.

---

1. Enter the camera number and press  **(Camera button)**.
2. Press **Prog**.
3. Enter the pattern number (1-3) and press **Pattern**.

   The pattern number (`P-1`, `P-2`, or `P-3`) appears on the LCD.
4. Press **Clear**. This permanently removes the selected pattern.

Running Monitor Tours

A *monitor tour* is a selected sequence of camera video inputs, with selected dwell times, to be displayed on the called monitor. The **Prog** button is used to define the monitor tour. The **Run** button is used to initiate the monitor tour. The **Prog** button is under keyboard lock protection; all users can access the **Run** button.

Depending on the system setup and monitor tour selected, the monitor either continuously displays a series of video inputs or displays a sequence and holds on a selected camera input. To pause the monitor tour, press the **Hold** button. This will allow you to use the **Next** and **Last** buttons to manually step through the series of cameras in the tour. To restart the tour, press **Run**.

Because the matrix keyboard works with all current models of American Dynamics switches, you should refer to the system operating instructions for more information about setting up and running monitor tours.

Universal (System) Tours

Another type of tour that your system may support is the *Universal Tour*. A universal tour is a programmed sequence of cameras with assigned dwell times, presets, auxiliaries, and connect next designations. This is also known as the *System Tour*. For more information about the universal tour, refer to the appropriate operating instructions.

To run a universal tour:

1. Enter the monitor number and press  **(Monitor button)**.
2. Enter the tour number and press **Run**.
3. Press **Ack** within 3 seconds to start the tour.

Once the universal tour is running, the **Next**, **Last**, and **Hold** buttons operate in the same manner as with the monitor tour. Refer to *Running Monitor Tours* on page 3-10.

Running Salvos

A *salvo* displays a pre-defined group (salvo) of camera inputs to a group of contiguous monitors, beginning with the presently controlled monitor. The **Salvo** button is used to initiate the display of the cameras input.

To run a salvo:

1. Enter the number of the first (lowest numbered) monitor where you want the salvo to begin display. Press  **(Monitor button)**.
2. Enter the salvo number and press **Salvo**.

The selected salvo displays on the group of monitors.

Acknowledging Alarms

Your system can be configured to handle multiple alarms. Each alarm can be configured to automatically call up video and initiate an auxiliary, such as an audible alarm. In addition, whenever an alarm is triggered, the keyboard beeps, signaling an active alarm.

To acknowledge an active alarm, press the **Ack** button. Continue to press the **Ack** button until all active alarms have been cleared.

Refer to the appropriate operating instructions to determine the number of alarms your system can handle, as well as to determine how many alarms can be active at one time.

If a monitor is armed for alarm display, the **Run**, **Hold**, **Next**, and **Last** buttons are used to control the alarm sequence (Alarm Tour). The following table describes the how to control the alarm tour.

Button	Description
Run	Starts the tour of alarm inputs currently in an abnormal state.
Hold	Pauses the Alarm Tour.
Next	Steps forwards through an Alarm Tour that is on hold
Last	Steps backwards through an Alarm Tour that is on hold.
Ack	Clears the alarm for the video displayed on the alarm monitor.

For information about arming and disarming alarm monitors, refer to *Chapter 4, Utilities and Advanced User Tasks*.

Auxiliary Control

An *auxiliary* is a device, such as a light, audible alarm, or door lock, that can be controlled using the matrix keyboard. Auxiliaries may also be initiated automatically in response to an alarm. The **Auxiliary On** and **Auxiliary Off** buttons are used to control the operation of both momentary and latched auxiliaries.

A *momentary auxiliary* remains active as long as its control button is pressed. An example of a momentary auxiliary is a door that remains unlocked as long as the **Auxiliary On** button is pressed. When the button is released, the door returns to its locked state.

A *latched auxiliary* remains active until it is deactivated using the appropriate off switch. An example of latched auxiliary is a light. When the **Auxiliary On** button is pressed, the light is turned on. When the **Auxiliary Off** button is pressed, the light is turned off.

To activate an auxiliary:

1. Enter the auxiliary number.
2. Press **Auxiliary On**.

If this is a *momentary* auxiliary, you must press **Auxiliary On** as long as you want the auxiliary activated.

To deactivate a latched auxiliary:

1. Enter the auxiliary number.
2. Press **Auxiliary Off**.

Viewing Satellite Sites

A *site* is a complete closed caption television (CCTV) surveillance system, providing both local and remote control of resources within a satellite network. If your facility supports satellite site switching capabilities, the **Site** button accesses the satellite sites.

Because the keyboard works with all current models of American Dynamics switches, you should refer to the appropriate operating instructions for more information about using the Site feature.

Setting Up Users

Users are people authorized to operate the keyboard. Users are generally classified by their privilege level on the system. Some users may have access to only the basic system functions, such as selecting cameras and monitors. Other users may have access to the more advanced features of the system, such as arming and disarming monitors. Once users have been set up, the **User** button allows authorized personnel to log in to the system. The user must enter both a user code and passcode to log in to the system.

Because the keyboard works with all current models of American Dynamics switches, refer to the appropriate operating instructions for information about setting up users.

CHAPTER 4

Utilities and Advanced User Tasks

This chapter describes tasks that should only be performed by advanced users of the matrix keyboard. These tasks include setting the language, arming and disarming monitors, displaying the main menu of the switching system, and displaying the firmware version. Many of these tasks are under keyboard lock protection.

In This Chapter

Selecting the Language

The LCD information on your matrix keyboard can be displayed in a number of languages, including:

- English
- German
- French
- Spanish
- Portuguese
- Italian

To change the language setting:

1. Enter **35**, and press **Config**.
2. Press **Next** to scroll through the language choices.
3. Press **Ack** when the correct language choice appears on the LCD.

The keyboard resets. After keyboard resumes operation, messages on the LCD appear in the selected language.

Arming / Disarming Monitors

Note: This function can only be performed with the keyboard lock disabled. To disable the keyboard lock, refer to Chapter 2 “Getting Started.”

When a monitor is armed, the camera video associated with an alarm for that monitor appears when an alarm has been triggered.

To arm a monitor:

1. Enter the monitor number and press  **(Monitor button)**.
2. Enter the display/clearance type, and press **Mon Arm On**.

Once a monitor is armed for alarm display, the **Run**, **Hold**, **Next**, and **Last** buttons are used to control the Alarm Tour. The following table explains how to control the Alarm Tour.

Button	Description
Run	Starts the tour of alarm inputs currently in an abnormal state.
Hold	Pauses the Alarm Tour.
Next	Steps forwards through an Alarm Tour that is on hold
Last	Steps backwards through an Alarm Tour that is on hold.

When a monitor is disarmed, the alarm video does not display on the selected monitor.

To disarm a monitor:

1. Enter the monitor number and press  **(Monitor button)**.
2. Enter the display/clearance type, then press the **Mon Arm Off** button.

For more information about arming/disarming monitors or Alarm Tours, refer to the matrix switcher operating instructions.

Displaying the Switching System Main Menu

Note: This function can only be performed with the keyboard lock disabled. To disable the keyboard lock, refer to *Chapter 2, Getting Started*.

The **Menu** button allows you to view the main menu of the attached switching system. When the main menu for the switching system has been displayed, the functions associated with the dual function buttons are enabled. These functions are:

- **PG-DN** displays the next page of menu system.
- **PG-UP** displays the previous page of the menu system.
- **PG-Left** displays the page to the left of the current menu.
- **PG-Right** displays the page to the right of the current menu.
- ← **(Cursor Left)** moves the cursor left one character.
- → **(Cursor Right)** moves the cursor right one character.
- ↑ **(Cursor Up)** moves the cursor up one line.
- ↓ **(Cursor Down)** moves the cursor down one line.
- **Enter** saves the information entered in the menu.
- **Exit** closes the current menu returns to the previously displayed screen.

When finished using the main menu, press **Menu**. The dual function buttons return to their normal operating mode.

For information about the locations of the dual function buttons, refer to ***Chapter 1, ADTTE Matrix Keyboard Overview***. For information about what tasks can be performed from the main menu, refer to the appropriate system's operating instructions.

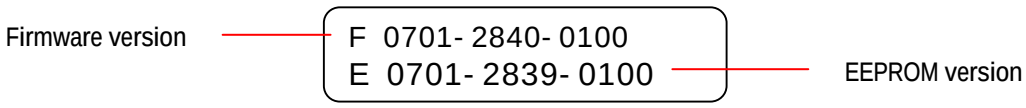
Displaying the Firmware Version

Firmware is the computer instructions programmed into the matrix keyboard. It is unlikely that you will ever need to know the firmware version of the keyboard. However, if you should experience a problem with the keyboard, you may need to provide information about the firmware version.

To display the firmware version:

1. Enter **100** and press **F1**.

   Firmware information appears on the LCD.



   - Information appearing after the “F” is the Flash version.
   - Information appearing after the “E” is the EEPROM version.

2. Press **Clear** to refresh the LCD display.

Setting the Baud Rate

The matrix keyboard supports four baud rates: 1200, 2400, 4800, and 9600 baud. The default setting for the baud rate is 1200.

! IMPORTANT

If you set the baud rate incorrectly, the keyboard will not operate. Be sure the baud rate is set to the correct value.

To change the baud rate setting:

1. Enter the baud rate value (1200, 2400, 4800 or 9600).
2. Press **F1** (located to left of the LCD).

No prompts appear on the screen to inform you that the baud rate has been changed.

Adjusting LCD Backlighting

To adjust the LCD backlighting:

1. Enter **1** and press **Config**.
2. Use the **+** and **–** buttons (located to the right of the LCD) to adjust the backlighting.
   - Press **+** to make the LCD backlighting brighter.
   - Press **–** to make the LCD backlighting dimmer.
3. When the backlighting is at the preferred level, press **Clear** to refresh the LCD.

Adjusting Key Click Volume

To adjust the key click volume:

1. Enter **2** and press **Config**.
2. Use the **+** and **–** buttons (located to the right of the LCD) to adjust the volume.
   - Press **+** to make the key click volume louder.
   - Press **–** to make the key click volume softer.
3. When the volume is at the preferred level, press **Clear** to refresh the LCD.

Setting Key Click Sound On / Off

To turn the key click sound on or off:

1. Enter **3** and press **Config**.
2. The display shows the current setting for the key click.
   - `Key Click On` appears on the LCD when enabled.
   - `Key Click Off` appears on the LCD when disabled.
3. Enter **3** and press **Config**. This changes the setting.
4. When key click is at the preferred setting, press **Clear** to refresh the LCD.

N O T E S :

APPENDIX A

Software License Agreement

1. General. Software is being licensed to the Customer pursuant to the following terms and conditions, which supplement any purchase or lease agreement (the "Equipment Agreement") between Customer and Sensormatic Electronics Corporation ("SEC"). By accepting receipt of, or by using, such Software, the Customer agrees to be bound by the terms of this Software License Agreement (the "License Agreement"). The term “Software” means all computer programs, instructions, data and databases, in any form or on any media, supplied by SEC (or its suppliers) to Customer and all current and future versions, revisions, updates, upgrades and new releases thereof. Except as otherwise provided in this License Agreement, the terms and conditions of the Equipment Agreement apply to the Software, the related technical and user manuals ("Documentation") and the license provided herein.

2. License. SEC licenses the Software and the Documentation to Customer, for the license fee(s) set forth (or included in the product prices set forth) in the Equipment Agreement and subject to the terms and conditions of this License Agreement. The license is non-exclusive and is limited by the terms of this License Agreement. Customer may not transfer the license except to a party to whom the equipment is transferred and then only with the written consent of SEC. The Software and Documentation are being licensed and not sold or leased to Customer. SEC or its suppliers who have authorized SEC to sublicense certain of the Software and Documentation retain ownership of the Software and Documentation. The Software is being licensed for use only on (i) a single computer (A) owned or leased by Customer and identified in the Equipment Agreement or (B) otherwise identified in the Documentation as compatible with the Software, or (ii) a back-up machine if and so long as such computer becomes temporarily inoperable.

3. Term. The term of the license is perpetual, except that it will terminate automatically if Customer sells or otherwise disposes of the Software or its related equipment or Customer breaches any provision of this License Agreement or the Equipment Agreement. If the license terminates, SEC will have the right to take possession of all copies of the Software and Documentation in the possession of Customer or to require Customer to destroy all such copies and certify such destruction in writing to SEC.

4. Ownership. Customer agrees and acknowledges that (i) SEC (or its suppliers) is the sole owner of the Software and Documentation (including all copies thereof, in whatever form or media, delivered to or made by Customer) and all patent, copyright and other intellectual property rights with respect thereto and (ii) the Software and Documentation constitute valuable trade secrets, confidential information and proprietary properties of SEC and its suppliers. Accordingly, Customer agrees that it will have no rights in the Software or Documentation other than those granted under this License Agreement and agrees to abide by the restrictions on its use of the Software and Documentation set forth in Section 5 of this License Agreement.

5. Use and Copies. Customer may use the Software and Documentation only in conjunction with the other equipment identified in the Equipment Agreement, as part of the access control, closed circuit television or other security system being acquired from SEC and for Customer's internal business purposes. SEC will furnish the Software to Customer solely in object code form.

Customer may make up to 2 copies of the Software solely for back-up and archival purposes. Customer will not remove or modify the copyright and other proprietary notices and legends of SEC and its suppliers contained in the Software and Documentation and will reproduce all such notices and legends on all copies of the Software made by Customer. Customer may not make copies of the Documentation, but may obtain additional copies of the Documentation from SEC at its established rates. Except as permitted above, copying of the Software and Documentation is forbidden.

Customer will not sell, assign, sublicense or transfer this license or sell or otherwise transfer the Software or Documentation (or any portion thereof) to others. Customer will maintain the Software and Documentation in confidence and not disclose any data or other information contained in the Software or Documentation to any party, except for Customer's employees and agents who require access to the Software for the purposes of Customer's internal business and who use it in accordance with the terms of this License Agreement. Customer will not use the Software for the provision of time-sharing services to others. Customer will not modify the Software or decompile, disassemble or otherwise reverse engineer the Software and will not have the right to create derivative works of the Software, including, without limitation, translated or localized versions of the Software. Customer will not export or re-export the Software or the Documentation or any portion thereof without appropriate United States or foreign governmental licenses.

Customer will implement appropriate measures, such as the requirement that employees and others permitted access to the Software enter into appropriate non-disclosure agreements, to satisfy its obligations hereunder and, generally, will treat the Software and Documentation with the same degree of care and confidentiality which Customer provides for its own confidential information. Customer acknowledges that it may be held legally responsible for any copyright infringement or trade secret violation that is caused, in whole or in part, by its failure to abide by the terms of this License Agreement. Since unauthorized transfer, use or disclosure of the Software and Documentation would diminish their value to SEC and its suppliers, who would have no adequate remedy at law if Customer breaches its obligations under this License Agreement, SEC and its suppliers (who are direct and intended beneficiaries of this License Agreement) will be entitled to injunctive relief, in addition to such other remedies and relief that would be available to them in the event of such a breach.

6. Limited Warranty; Limitation of Liability. The provisions of the Equipment Agreement respecting maintenance and warranty will not apply to the Software or the Documentation, unless specifically stated otherwise and agreed to in writing by both parties. SEC's sole warranties with respect to the Software and Documentation are that (i) SEC has title to the Software and Documentation and/or the right to grant Customer the license set forth in this License Agreement and (ii) the magnetic media on which the Software is recorded is free from defects in materials and workmanship under normal use. SEC's sole obligation under this warranty will be to replace any defective media returned to it free of charge. The period of this warranty will be 12 months from the date of the Equipment Agreement (the “Warranty Period”).

   EXCEPT AS SET FORTH IN THIS SECTION 6, SEC DISCLAIMS ANY WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE SOFTWARE OR THE DOCUMENTATION OR THEIR OPERATION OR USE, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR USE. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION DOES NOT APPLY IN SUCH STATES. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

SEC AND ITS SUPPLIERS, EMPLOYEES, AGENTS AND FRANCHISEES WILL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR OTHER DIRECT OR INDIRECT DAMAGES (FOR LOSS OF BUSINESS INFORMATION OR PROFITS OR OTHERWISE) SUFFERED BY CUSTOMER, ANY OF ITS EMPLOYEES OR AGENTS OR ANY OTHER PERSON ARISING OUT OF OR IN CONNECTION WITH THE USE OR INABILITY TO USE THE SOFTWARE OR THE DOCUMENTATION, OR THE MAINTENANCE OR SUPPORT THEREOF, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SEC neither assumes nor authorizes any employee, agent or franchisee to assume for SEC any other liability in connection with the license, use or performance of the Software or Documentation.

Customer is solely responsible for the selection of the Software to achieve Customer's intended results, for the conformity of the computer on which the Software is run to SEC's specifications or requirements and for the maintenance of such computer in good working order and repair. SEC's suppliers do not warrant the Software, assume any liability regarding the use of the Software or undertake to provide any maintenance, support or information regarding the Software.

7. U.S. Government Restricted Rights. The Software and Documentation are provided with restricted rights. Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraphs (c)(1)(ii) of the Rights in Technical Data and Computer Software Clause of Department of Defense Federal Acquisition Supplement (DFARS) 252.227-7013 or in subparagraph (g)(3)(i) of Federal Acquisition Regulations (FAR) 52.227-14, Alternate III, as applicable.

8. Indemnity. SEC will defend and hold Customer harmless from any claim, action, suit or proceeding brought against Customer to the extent that it is based on a claim that the use of the Software, as such, in accordance with this License Agreement and not as a result of the combination thereof with any other article, computer software or process, constitutes an infringement of any United States patent or copyright or the violation of any trade secret, if SEC is notified thereof promptly after its commencement and is given control of the defense thereof and any negotiations for its settlement and full cooperation by Customer.

   SEC will pay all damages and costs awarded against Customer in connection with any such claim, except that SEC will not be liable for any amounts paid under any compromise or settlement made without its consent. If the Software is either claimed or held to infringe or violate any patent or copyright, SEC may, at its sole option and expense, and Customer will permit SEC to, procure for Customer the right to continue using the Software or modify it so that it becomes non-infringing or replace it with a non-infringing counterpart. If neither of such alternatives is available on terms which are reasonable in SEC's judgment, Customer will return all copies of the Software and Documentation in the possession of Customer to SEC, at SEC's request, and SEC will refund a reasonable portion of the license fees paid by Customer to SEC. This Section 8 sets forth SEC's entire liability regarding infringement and the like.

N O T E S :

GLOSSARY

alarm	The system's response when a camera input changes from its normal state to its abnormal state (if the system has been configured to respond to such a condition). When an alarm is triggered, the keyboard beeps until you acknowledge the alarm via the **Ack** button.
automatic system function	A system operation that, once you program it, can be initiated automatically via the matrix keyboard. Shots, monitor tours, and alarms are examples of automatic system functions.
auxiliary	Devices such as lights, audible alarms, door locks, that can be controlled via the keyboard. Auxiliaries can also be initiated automatically in response to an alarm when they have been configured to do so. See also *latched auxiliary* and *momentary auxiliary*.
called monitor	The monitor that displays the video that is being controlled by the keyboard.
camera command	A directive issued to the camera via the keyboard—a pan, tilt, zoom, focus, or iris command.
camera control mode	The condition of the keyboard when an operator is manually selecting or controlling cameras, selecting a monitor, displaying shots, and running a monitor tour.
default password	The password that is preset at the factory. It is used initially to set the user-defined password. See also *keyboard lock* and *user defined password*.
dual function keys	Keypad buttons used for both system control and menu programming. An example of a dual function key is **Iris Open** (**PG-DN**). When in normal operating mode, pressing Iris Open causes the iris of the selected camera to increase its size. When in menu programming mode (by pressing **Menu**), pressing **Iris Open** (**PG-DN**) displays the next page of the displayed menu.
dwell time	The amount of time that an event within the monitor tour will remain on the monitor before it is replaced by another event.
fixed shot	The view of whatever a camera happens to be “looking at” when it is called up on the monitor.
focus	The process of adjusting the clarity of a scene or an object, as seen through a camera.
input	A device such as a smoke detector or twilight sensor that, when configured to do so, can trigger an alarm when it undergoes a change in state. See also *auxiliary*.
iris	The camera component that determines how much light enters the camera. By adjusting the iris, you can adjust the brightness and darkness of the video on the monitor.
keyboard lock	A feature of the keyboard that prevents unauthorized use of certain functions of the system. When the keyboard lock is enabled, “L” appears in the lower right corner of the LCD. The keyboard lock is enabled or disabled by using the password. See also *default password* and *user defined password*.
keypad	The portion of the keyboard containing the buttons that enable you to call up an individual camera, control a camera's iris, display shots, run Monitor Tours, and arm or disarm monitors.

latched auxiliary	An auxiliary that remains active until it is deactivated using the appropriate off switch. An example of latched auxiliary is a light. When the Auxiliary On button is pressed, the light is turned on. When the Auxiliary Off button is pressed, the light is turned off. See also *auxiliary* and *momentary auxiliary*.
LCD	Liquid Crystal Display. The portion of the keyboard that enables you to view which the status of the connected switch, the monitor and camera currently being controlled, the numbers entered from the keypad, and the state of the keyboard lock feature. In addition, the LCD displays system prompts when setting the password.
Matrix keyboard	The video control station that provides you with easy access to various video control features. It is functionally equivalent to the AD2079 system keyboard. Also called the Touch Tracker.
momentary auxiliary	An auxiliary that is active as long as its control button is pressed. An example of a momentary auxiliary is a door that remains unlocked as long as the Auxiliary On button is pressed. When the button is released, the door returns to its locked state. See also *auxiliary* and *latched auxiliary*.
monitor	The screen where camera video is displayed.
monitor tour	A collection of video inputs with specified dwell times that are displayed one after the other on the called monitor. It provides a broad surveillance of a facility.
pan	Side-to-side camera movement. Moving the Tracker Ball left or right permits you to pan the selected camera.
programmable camera	A camera that can be programmed to perform automatic functions.
salvo	A group of pre-defined camera inputs displayed on a group of contiguous monitors, beginning with the currently controlled monitor.
shot	A preset view from a camera that can be automatically and instantaneously displayed on a monitor, regardless of where that camera is currently pointing.
tilt	Up and down camera movement. Moving the Tracker Ball up or down permits you to tilt the selected camera.
toggle	To alternate the current state of the keyboard lock feature.
Tracker Ball	The portion of the keyboard that enables you to pan and tilt the camera.
universal (system) tour	A programmed sequence of cameras with assigned dwell times, presets, auxiliaries, and connect next designations.
user defined password	The password that is set or changed using the Pswd button on the keyboard. It is used to enable or disable the keyboard lock. See also *default password* and *keyboard lock*.
utility	A menu selection that either assists you in self-help system diagnostics, or provides you with a convenience feature for system operation. The utilities are accessed via special keystrokes.
zoom	To adjust the magnification of the camera lens to make an object appear closer (larger) or farther away (smaller).

INDEX

– U –

– V –

– Z –

Please visit our website for more information
www.americandynamics.net

8000-2675-02 Rev E